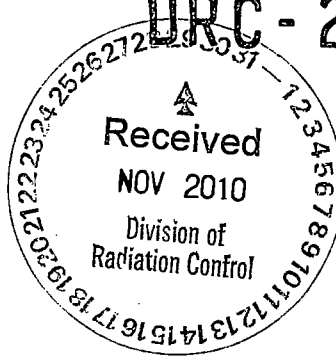


DRC-2010-006184



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November 24, 2010

Mr. Rusty Lundberg  
Co-Executive Secretary  
Utah Water Quality Board  
Utah Department of Environmental Quality  
195 North 1950 West  
P.O. Box 144810  
Salt Lake City, UT 84114-4820

Re: **Transmittal of 3rd Quarter 2010 Chloroform Monitoring Report  
Groundwater Quality Discharge Permit UGW370004 White Mesa Uranium Mill**

Dear Mr. Lundberg:

Enclosed are two copies of the White Mesa Uranium Mill Chloroform Monitoring Report for the 3rd Quarter of 2010 as required by the Groundwater Quality Discharge Permit UGW370004, as well as two CDs each containing a word searchable electronic copy of the report.

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

Yours very truly,

  
DENISON MINES (USA) CORP.

for Jo Ann Tischler

Director, Compliance and Permitting

CC: Ron F. Hochstein  
David C. Frydenlund  
Harold R. Roberts  
David E. Turk  
Kathy Weinel



**White Mesa Uranium Mill**  
**Chloroform Monitoring Report**

**State of Utah**  
**Notice of Violation and Groundwater Corrective Action Order UDEQ**  
**Docket No. UGQ-20-01**

**3rd Quarter**  
**(July through September)**  
**2010**

Prepared by:

**Denison Mines (USA) Corp.**  
1050 17<sup>th</sup> Street, Suite 950  
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**November 24, 2010**

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## **1.0 INTRODUCTION**

The presence of chloroform was initially identified in groundwater at the White Mesa Mill (the "Mill") as a result of split sampling performed in May 1999. The discovery resulted in the issuance of State of Utah Notice of Violation ("NOV") and Groundwater Corrective Action Order ("CAO") State of Utah Department of Environmental Quality ("UDEQ") Docket No. UGQ-20-01, which required that Denison Mines (USA) Corp. ("DUSA") submit a Contamination Investigation Plan and Report pursuant to the provisions of UAC R317-6-6.15(D).

The frequency of chloroform sampling, which was initially performed on a monthly basis, was modified on November 8, 2003. Since that time all chloroform contaminant investigation wells have been sampled on a quarterly basis.

This is the Quarterly Chloroform Monitoring Report for the third quarter of 2010 as required under the NOV and CAO. This Report also includes the Operations Report for the Long Term Pump Test at MW-4, TW4-19, TW4-15 (MW-26), TW4-20, and TW4-4 for the quarter.

## **2.0 CHLOROFORM 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. Chloroform samples and measurements taken during this reporting period (July through September), are discussed in the remainder of this section.

#### **2.1.1 Chloroform Monitoring**

Quarterly sampling for chloroform monitoring parameters is currently required in the following wells:

TW4-1	TW4-10	TW4-21
TW4-2	TW4-11	TW4-22
TW4-3	TW4-12	TW4-23
TW4-4	TW4-13	TW4-24
TW4-5	TW4-14	TW4-25
TW4-6	TW4-16	MW-4
TW4-7	TW4-18	MW-26 (TW4-15)
TW4-8	TW4-19	MW-32 (TW4-17)
TW4-9	TW4-20	TW4-26



Table 1 provides an overview of all wells sampled during the current period, along with the date samples were collected from each well, and the date(s) which analytical data were received from the contract laboratory. Table 1 also identifies equipment rinsate samples collected, as well as sample numbers associated with the deionized (DI) field blank and any required duplicates. Four wells (TW4-1, TW4-16, TW4-22, and TW4-24) were resampled during this period for all constituents due to turbidity issues.

As indicated in Table 1, chloroform monitoring was performed in all of the required chloroform monitoring wells.

### **2.1.2 Parameters Analyzed**

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

- Chloroform
- Chloromethane
- Carbon tetrachloride
- Methylene chloride
- Chloride
- Nitrate plus Nitrite as Nitrogen

Use of analytical methods is consistent with the requirements of the Chloroform Investigation Monitoring Quality Assurance Program (the "Chloroform QAP") attached as Appendix A to the White Mesa Uranium Mill Groundwater Monitoring Quality Assurance Plan ("QAP").

### **2.1.3 Groundwater Head 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"):

- The quarterly groundwater compliance monitoring wells.
- Existing monitoring well MW-4 and all of the temporary chloroform investigation wells.
- Piezometers – P-1, P-2, P-3, P-4 and P-5.
- MW-20 and MW-22.
- Nitrate monitoring 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 data in the summary sheet under Tab D.

In addition, weekly and monthly depth to groundwater measurements were taken in MW-4, TW4-15 (MW-26), TW4-19, TW4-20, and, commencing regularly on March 1, 2010 for TW4-4, as part of the long term pumping test for MW-4.

## **2.2 Sampling Methodology and Equipment and Decontamination Procedures**

DUSA completed, and transmitted to UDEQ on May 25, 2006, a revised QAP for sampling under the Mill's GWDP. While the water sampling conducted for chloroform investigation purposes has conformed to the general principles set out in the QAP, some of the requirements in the QAP were not fully implemented prior to UDEQ's approval, for reasons set out in correspondence to UDEQ dated December 8, 2006. Subsequent to the delivery of the December 8, 2006 letter, DUSA discussed the issues brought forward in the letter with UDEQ and has received correspondence from UDEQ about those issues. In response to UDEQ's letter and subsequent discussions with UDEQ, DUSA has incorporated changes in chloroform Quality Assurance ("QA") procedures in the form of the Chloroform QAP, which is a separate Appendix A to the QAP. The Chloroform QAP describes the differing needs of the chloroform investigation program, and is an attachment to the GWDP QAP where QA requirements for the chloroform investigation are addressed. On June 20, 2009 the Chloroform QAP was modified to require that the quarterly chloroform reports include additional items specific to DUSA's ongoing pump testing and chloroform capture efforts.

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

### **2.2.1 Well Purging and Depth to Groundwater**

A list of the wells in order of increasing chloroform 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 chloroform contamination.

Before leaving the Mill office, the portable pump and hose are rinsed with DI water. Mill personnel then proceed to the first well which is the well with the lowest concentration of chloroform based on the previous quarter's sampling results. Well depth measurements are taken and the two casing volumes are calculated for those wells which do not have a dedicated pump (measurements are made using the same instrument used for the monitoring wells under the Mill's GWDP). If the well has a dedicated pump, it is pumped on a set schedule per the remediation plan and is considered sufficiently evacuated to immediately collect a sample; however, if a pumping well has been out of service for 48 hours or more, DUSA will follow the purging requirements outlined in Section 6.2.7(d)(v) of the QAP. The dedicated pump is used to collect parameters and to collect the samples. If the well does not have a dedicated pump, a Grundfos pump (9 - 10 gpm pump) is then lowered to the screened interval in the well and purging is started. The purge rate is established for the well by using a calibrated 5 gallon bucket. The purging of the well is completed per Section 6.2.5 of the QAP. In wells where the

portable pump is used, a disposable bailer is used to collect the samples the day following purging activities. After each use, the portable pump is decontaminated and a rinsate sample is collected prior to reuse at the next sample location. This purging process is repeated at each well location moving from least contaminated to the most contaminated well. All wells are capped and secured prior to leaving the sampling location.

### **2.2.2 Sample Collection**

Samples are collected as described above. In all cases, on days when samples will be collected, a cooler with ice is prepared. The trip blank is also gathered at that time (the trip blank for these events is provided by the Analytical Laboratory). Once Mill Personnel arrive at the well sites, labels are filled out for the various samples to be collected. All personnel involved with the collection of water and samples are then outfitted with rubber gloves. Chloroform investigation samples are collected by means of disposable bailers.

Mill personnel use a disposable bailer to sample each well that does not have a dedicated pump. The bailer is attached to a reel of approximately 150 feet of nylon rope and then lowered into the well. After coming into contact with the water, the bailer is allowed to sink into the water in order to fill. Once full, the bailer is reeled up out of the well and the sample bottles are filled as follows:

- Volatile Organic Compound (“VOC”) samples are collected first. This sample consists of three 40 ml vials provided by the Analytical Laboratory. The VOC sample is not filtered and is preserved with HCl;
- A sample for nitrate/nitrite is then collected. This sample consists of one 250 ml. bottle which is provided by the Analytical Laboratory. The nitrate/nitrite sample is also not filtered and is preserved with H<sub>2</sub>SO<sub>4</sub>;
- A sample for chloride is then collected. This sample consists of one 500 ml. bottle which is provided by the Analytical Laboratory. The chloride sample is also not filtered and is not chemically preserved.

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

### **2.3 Field Data**

Attached under Tab B are copies of all Field Data Worksheets that were completed during the quarter for the chloroform contaminant investigation monitoring wells identified in paragraph 2.1.1 above, and Table 1.



## **2.4 Depth to Groundwater Data and Water Table Contour Map**

Attached under Tab C are copies of the Depth to Water Sheets for the weekly monitoring of MW-4, TW4-15 (MW-26), TW4-19, TW4-20, and commencing regularly on March 1, 2010, TW4-4, as well as the monthly depth to groundwater data for chloroform contaminant investigation wells measured during the quarter that are not included in Tab D. Depth to groundwater measurements which were utilized for groundwater contours are included on the Quarterly Depth to Water Worksheet at Tab D of this report, along with the kriged groundwater contour map for the current quarter generated from this data. In review of the Quarterly Depth to Water Worksheet (which is not the field data sheet contemplated by the QAP) it was noted that the millimeters of mercury (MMHG) that is, the barometric pressure, was not recorded for the quarter. This measurement is not required by either the Permit or the QAP and as such there is no effect on the data collected and no corrective action is required. All of the water level measurements used for the contour map were collected within 5 days of each other as indicated by the measurement dates in the summary sheet under Tab D. A copy of the kriged groundwater contour map generated from the 2nd quarter 2010 data is provided under Tab E.

## **2.5 Laboratory Results**

### **2.5.1 Copy of Laboratory Results**

All analytical results were provided by Energy Laboratories ("EL"). Table 1 lists the dates when analytical results were reported to the QA Manager for each well or other sample.

Results from analysis of samples collected for the third quarter chloroform contaminant investigation are provided under Tab H of this Report. Also included under Tab H are the results of analyses for duplicate samples and rinsate samples for this sampling effort, as identified in Table 1, as well as results for trip blank analyses required by the Chloroform QAP.

### **2.5.2 Regulatory Framework**

As discussed in Section 1.0, above, the NOV and requirements of the CAO triggered a series of actions on DUSA's part. In addition to the monitoring program, DUSA has equipped five wells with pumps to recover impacted groundwater, and has initiated recovery of chloroform from the perched zone. The fifth well, TW4-4, was installed in January 2010, and commenced pumping on January 31, 2010. It was not fully equipped for flow measurement until March 31, 2010, when pumping and groundwater capture flowrates and totals were first recorded.

Sections 4 and 5, below, interpret the groundwater level and flow information, contaminant analytical results, and pump test data to assess effectiveness of DUSA's chloroform capture program.

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

The QA Manager performed a QA/Quality Control (“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 methods and data. Identification of field QC samples collected and analyzed is provided in Section 3.1. Discussion of adherence to Mill sampling Standard Operating Procedures (“SOPs”) is provided in Section 3.2. Analytical completeness review results are provided in Section 3.3. The steps and tests applied to check laboratory data QA/QC are discussed in Sections 3.4.4 through 3.4.9 below.

The analytical laboratory has provided summary reports of the analytical quality 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 H. Results of review of the laboratory QA/QC information are provided under Tab I and are 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 chloroform investigation program consist of one field duplicate sample for each 20 samples, a trip blank for each shipped cooler which contains VOCs, one DI Field Blank (DIFB) and rinsate samples.

During the third quarter of 2010, two duplicate samples were collected as indicated in Table 1. The duplicates were sent blind to the analytical laboratory and analyzed for the same parameters as the chloroform wells.

Three trip blanks were provided by Energy Laboratories and returned with the quarterly chloroform monitoring samples.

Rinsate samples were also collected between well samples where nondedicated purging equipment was used. Rinsate samples were labeled with the name of the subsequently purged well with a terminal letter “R” added (e.g. TW4-7R). The results of these analyses are included with the routine analyses under Tab H.

In addition, one DIFB, while not required by the Chloroform QAP, was collected and analyzed for the same constituents as the well samples and rinsate samples.



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

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

One site procedure requiring clarification was noted during the QA Manager's review of the field data. As previously stated, a list of the wells in order of increasing chloroform contamination (based on the previous quarter's data) is generated quarterly to determine the order for purging prior to sampling. The QAP wording implies that the samples will be collected in the same order. Chloroform wells are purged in order of least contaminated to most contaminated to preclude cross-contamination. Sampling order may deviate slightly from the generated list. This deviation does not affect the samples for 2 reasons: 1) the continuously pumped wells have dedicated pumps and cross-contamination is not possible; 2) wells are sampled with disposable bailers and cross-contamination resulting from the sampling process is not possible. This deviation does not affect the quality or usability of the data as there is no increase in cross-contamination resulting from sampling order. DUSA intends to propose an amendment to address this in the next revision of the QAP.

### **3.3 Analyte Completeness Review**

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

### **3.4 Data Validation**

The QAP and GWDP identify the data validation steps and data QC checks required for the chloroform monitoring program. Consistent with these requirements, the QA Manager performed the following evaluations: a field data QA/QC evaluation, a holding time check, a receipt temperature check, an analytical method check, a reporting limit evaluation, a trip blank check, a QA/QC evaluation of sample duplicates, a QC Control Limit check for Analyses and blanks including the DIFB and a rinsate sample check. Each evaluation is discussed in the following sections. Data check tables indicating the results of each test are provided under Tab I.

#### **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 as indicated by the

measurement dates in the summary sheet under Tab D. The results of this quarter's review of field data are provided under Tab I.

Based upon this review, all non-pumping wells conformed to the QAP requirement to evacuate two well casing volumes before sampling except TW4-2, TW4-7, TW4-14, and TW4-26. All of these wells were pumped to dryness before two casing volumes were evacuated. In each case, representative samples of formation water were collected after the wells were allowed to recover. In addition, TW4-1, TW4-6, TW4-10, and TW4-13 were pumped to dryness after 2 casing volumes were evacuated.

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 required Relative Percent Difference ("RPD") (other than the wells that were pumped to dryness and the wells which are continually pumped, for which this requirement does not apply), except as follows.

The review of the field sheets for compliance with QAP requirements resulted in the observations noted below. The requirements in Section 6.2.7 of the QAP specifically state that field parameters must have stabilized to within 10% over at least 2 consecutive measurements. 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.

Six wells did not meet the requirement for the stabilization of turbidity within 10% RPD. TW4-2, TW4-6, TW4-10, TW4-14, and TW4-26 were purged to dryness prior to the achievement of stabilization for turbidity. TW4-19 is a continuously pumped well. As previously stated, the continuously pumped wells are excluded from the QAP goals and requirements because, if a well is continuously pumped, it is pumped on a set schedule per the remediation plan and is considered sufficiently evacuated to immediately collect a sample. For continuously pumped wells, the field parameters are therefore collected for information purposes only.

Twenty four turbidity measurements exceeded the QAP's 5 NTU goal. Of the 24 wells, seven wells were pumped to dryness and five are continuously pumped wells. The seven wells that are pumped to dryness and the five continuously pumped wells are excluded from the QAP goals.

DUSA'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, DUSA is currently implementing a groundwater monitoring well redevelopment program. The redevelopment program has reviewed the available turbidity data for the Chloroform wells and has developed a list of wells that have or will undergo redevelopment utilizing

several strategies. The redevelopment strategies include additional surging and bailing and overpumping as necessary. At the completion of the redevelopment program, DUSA will review the redevelopment data and summarize the status of the Chloroform wells. Redevelopment results will be discussed with DRC in an effort to come to a consensus regarding any additional redevelopment steps and/or future turbidity considerations for the Chloroform wells at the Mill site.

One other field parameter was outside of the QAP requirement for 10% stabilization criteria. The temperature measurement in TW4-10 had an RPD of 52.39% because TW4-10 was purged to dryness prior to the achievement of stabilization.

### **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 I. 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 which specifies that samples be received at 6°C or lower. Sample temperatures checks are provided in Tab I. 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 Chloroform QAP. Analytical method checks are provided in Tab I. All methods were consistent with the requirements of the Chloroform 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 Chloroform QAP. Reporting Limit Checks are provided under Tab I. All analytes were measured and reported to the required reporting limits, except 26 sets of sample results (25 wells, and 1 duplicate) had the reporting limit raised for at least one analyte due to matrix interference and/or sample dilution. In all cases the reported value for the analyte was higher than the increased detection limit.

### **3.4.6 Trip Blank Evaluation**

All trip blank results were reviewed to identify any VOC contamination resulting from transport of the samples. Trip blank checks are provided in Tab I. All trip blank results were less than detection level for all VOC analytes.



### 3.4.7 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 reported detection limit and the RPD is greater than 20%. The additional duplicate information is provided for information purposes.

All analytical results except for carbon tetrachloride and chloroform in sample/duplicate pair TW4-21/TW4-65 were within the 20% RPD acceptance limits. The chloroform result is compliant with the QAP because the reporting limit for that analyte in that sample was raised to 100 ug/L and both results are not greater than 5 times the reporting limit. The RPD is included for information purposes only. The carbon tetrachloride results are both greater than 5 times the reporting limit. The data are, however, within the acceptable allowable error limits of the methods and as such do not affect the usability of the data. Results of the RPD test are provided in Tab I.

### 3.4.8 Rinsate Sample Check

Rinsate sample checks are provided in Tab I.

#### Chloroform

A review of the analytical results reported for rinsate samples indicated that five rinsate samples contained chloroform. The rinsate sample chloroform levels ranged from 1.1 to 8.2 ug/L. A DIFB was analyzed and was reported as nondetect.

A comparison of the rinsate concentration levels to the QAP requirements – that rinsate sample concentrations of the sampling equipment be one order of magnitude lower than that of the actual well – indicated that all five of the samples met these criteria for chloroform. This criterion however, is inappropriate for the rinsate sample data collected during the chloroform sampling program because rinsate samples are collected from the decontaminated portable pump used for well purging, and the pump is not used for sample collection. As stated in Section 2.2.1, wells that do not have a dedicated pump are purged using a portable pump. In wells where the portable pump is used for purging, a disposable bailer is used to collect the samples the day following purging activities.

Rinsate samples collected from the portable pump may be indicative of possible cross-contamination resulting from pump usage during the purging process under the Mill's sampling program the rinsate blank sample results are not directly applicable to the sample results due to the use of different equipment (disposable bailers) for the sample

collection. The pump used for purging does not come into contact with the samples at any time during the sample collection process. Any chloroform left in the well from pump cross-contamination is reduced or negated by the influx of formation water into the well in the time after purging and prior to sampling. Because samples are collected the day following purging and using different equipment the cross-contamination resulting from the pump use or decontamination fluids is not applicable to the sample results because the pump does not contact the samples. As noted in previous reports, an investigation into the source of the chloroform and nitrate contamination present in the rinsate blanks has been ongoing. Below are the results of the source investigations, and corrective actions are detailed in Section 6.2.

As previously stated, chloroform has been present in the rinsate blanks in previous quarters. Based on the investigation into the source of chloroform, DUSA believes that the potential source for the chloroform present in the rinsate blanks may have been identified. The data collected during the source investigations are as follows:

- Review of the chloroform detections has shown that there is no correlation between the rinsate blank concentrations and the sample concentrations in the wells sampled prior to or subsequent to a rinsate blank sample (*Chloroform Monitoring Report 2<sup>nd</sup> Quarter 2010, August 30, 2010*).
- Chloroform is occasionally present in the DIFB, but the concentrations are not consistent, and the presence of chloroform in the DIFB is also not consistent.
- Chloroform presence in the rinsate blanks is higher, both in the number of rinsate blank samples with chloroform as well as the concentrations themselves, on days of high usage of the DI water system.
- It is known from EPA studies that chloroform is frequently a byproduct of the chlorination process in potable water supplies.

Based on these findings, DUSA believes the chloroform contamination in the DI water is most likely the result of chlorination of the intake water used for the DI system. There are multiple sources which cite the creation of chloroform as a byproduct of chlorination, and two of them are: (*EPA – Basic Information about Disinfection Byproducts in Drinking Water: Total Trihalomethanes, Haloacetic Acids, Bromate and Chlorite and Water Research Net etc.*). For convenience, the two sources cited herein are attached as Tab N to this report. The chloroform is most likely the result of the chlorination of the potable water at the Mill which is subsequently fed to the DI system. The water is free of chloroform prior to chlorination, as it is tested by the Utah Department of Health, Division of Epidemiology and Laboratory Services on a routine basis. The chlorine added reacts with the naturally occurring organic and inorganic materials in the water.

The DI system is designed to remove the chloroform; however, due to the large volume of DI water processed through the system during the chloroform sampling events (e.g. 1050 gallons on the first day of sampling third quarter 2010) to accommodate the decontamination needs, breakthrough appears to occur under heavy usage when the system is “stressed”. Removal of chloroform and other organics is accomplished by the “activated carbon” portion of the DI system. The performance of this portion of the DI

system is directly proportional to the volume of water treated and, due to the large volumes of water treated in a short time, the system becomes “stressed” and performance decreases resulting in chloroform “breakthrough”. This is supported by the chloroform data for the rinsate blanks for second quarter 2010 as well as the rinsate data from this sampling period. In the second quarter 2010, the chloroform concentrations in the rinsate blanks increased from the beginning of the sampling event to the end. Also in second quarter 2010 there were rinsate blanks with detections associated with samples that were nondetect. In the third quarter 2010, the rinsate blanks collected at the beginning of the period had no chloroform, however; later in the sampling program there were chloroform detections in the rinsate blanks – the result of the DI system breakthrough. Lastly, breakthrough is suspected as the pH of the rinsate blanks changes over the course of the sampling period indicating a change in the overall system operation.

Corrective actions and verification actions are described in Section 6.2.

### Nitrate

In addition, six rinsate samples had reported low level concentrations of nitrate. A DIFB was analyzed and was reported as nondetect for nitrate. A comparison of the rinsate 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 one sample did not meet this criterion. In this case the rinsate sample reported detections and the subsequent sample results were nondetect. As previously stated, the criteria to compare the rinsate sample results to the well sample results are inappropriate for the rinsate sample data collected during the chloroform investigation for the reasons stated above.

The nitrate levels reported in the rinsate samples for this investigation are similar to the nitrate rinsate sample concentrations reported for the previous nitrate sampling programs. Data collected for this ongoing investigation are as follows:

- The nitrate concentrations in the rinsate samples from both the chloroform sampling program and the nitrate sampling program are just at or slightly above the detection limit and are not dependent on or affected by the previous sample concentrations.
- The presence of nitrate in both the chloroform and nitrate sampling programs indicates that the contamination is due to external factors such as the nitric acid rinse during the decontamination process and potential contamination issues associated with the use of nitrile gloves in the presence of nitric acid.
- Nitrate was detected in a minimum of samples collected for the third quarter 2010 nitrate sampling program.

The introduction of chloroform into the DI system is suspected of contributing to the chloroform in the rinsate blank samples due to the large volumes of water treated in a short time to accommodate the decontamination needs. It appears as if the contamination in the rinsate blanks is not due to cross-contamination from the purging process. The investigation into the nitrate in the rinsate blanks is continuing, with additional focus on



the nitrile glove usage in the presence of nitric acid as well as the rinsate collection process. Nitric acid introduced during the decontamination process is the single highest possible source of nitrate ions. However, there may be some contribution of nitrate from the decontamination process and/or the nitrile gloves. To address these issues, the decontamination process and rinsate collection process are being reviewed to determine if the nitrile gloves in combination with the nitric acid wash used during the decontamination process are causing the nitrate detections in the rinsate blanks.

Corrective actions are described in Section 6.2.

### **3.4.9 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, DUSA'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-specified acceptance limits, or that the case narrative sufficiently explains any deviation from these limits. Results of this quantitative check are provided in Tab I.

All lab QA/QC results met these specified acceptance limits except as noted below.

The QAP Section 8.1.2 requires that an MS/MSD (referred to as Duplicate Spike [Matrix spike] in the QAP) 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 DUSA 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 chloroform samples are within acceptable laboratory limits for all regulated compounds except as indicated in Tab I. The recoveries which are above the laboratory established acceptance limits do not affect the quality or usability of the data because the recoveries above the acceptance limits are indicative of matrix interference. The QAP requirement to analyze a MS/MSD pair with each analytical batch was met and as such the data are compliant with the QAP.

The QAP specifies that surrogate compounds shall be employed for all organic analyses, but the QAP does not specify acceptance limits for surrogate recoveries. The analytical data associated with the routine quarterly sampling met the requirement specified in the QAP. The information from the Laboratory QA/QC Summary Reports indicates that the surrogate recoveries for all quarterly chloroform samples were within acceptable laboratory limits for all surrogate compounds except as indicated in Tab I. The surrogate recoveries that were outside of acceptance limits above the upper limit or that had a high recovery, indicate a high bias to the individual sample results. A high bias means that reported results will tend to be more conservative or higher than actual levels. There was one reported surrogate result which was below the lower acceptance limits. These results indicate a potential low bias to the individual sample results only. There is no effect on the quality or usability of the data because there are multiple surrogates added to each sample and all other surrogates were within limits. Furthermore, there are no QAP requirements for surrogate recoveries.

The information from the Laboratory QA/QC Summary Reports indicates that the LCS recoveries were within acceptable laboratory limits for all LCS compounds except for chloromethane in one analytical batch. As indicated on Tab I, the LCS recoveries were above the upper acceptance limit and as such indicate a high bias to the sample results associated with that LCS. A high bias to the sample results is a more conservative approach to site assessment. It is important to note that there is no QAP requirement for LCS recovery assessment.

#### **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 D. The data from this tab has been interpreted (kriged) and plotted in a water table contour map, provided under the same tab.

Also included under Tab D is a groundwater contour map of the Mill site and a more detailed map of a portion of the Mill site where the four chloroform pumping wells are located, in each case with hand-drawn stream tubes, depicting hydraulic capture from the pumping

The contour maps are based on the September 29, 2010 data for all wells.

###### **4.1.2 Comparison of Current Groundwater Contour Maps to Groundwater Contour Map for Previous Quarter**

The groundwater contour map for the Mill site for the second quarter of 2010, as submitted with the Chloroform Monitoring Report for the second quarter of 2010, is attached under Tab E.

A comparison of the water table contour maps for the third quarter of 2010 to the water table contour maps for the previous (second) quarter indicates similar patterns of drawdown related to pumping of MW-4, MW-26 (TW4-15), TW4-4, TW4-19 and TW4-20. Water levels and water level contours for the site have not changed significantly since the last quarter, except for a few locations. Pumping at TW4-4, which began in the first quarter of 2010, has depressed the water table near TW4-4, but does not yet appear to have measurably affected water levels at adjacent wells.

A reported decrease in water level of approximately 6 feet occurred in well TW4-21. A reported decrease in water level of approximately 26 feet occurred in pumping well TW4-19, and a reported increase in water level of approximately 14 feet occurred in pumping well TW4-4. Water level changes at other pumping wells were less than 5 feet.

Water level fluctuations at pumping wells MW-4, MW-26 (TW4-15), TW4-4, TW4-19, and TW4-20 are due in part to fluctuations in pumping conditions just prior to and at the time the measurements are taken. The largest decrease (increase in drawdown) of approximately 26 feet occurred in well TW4-19 and the largest increase (decrease in drawdown), of approximately 14 feet, occurred at TW4-4.

#### **4.1.3 Hydrographs**

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

#### **4.1.4 Depth to Groundwater Measured and Groundwater Elevation**

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

#### **4.1.5 Evaluation of the Effectiveness of Hydraulic Capture**

Perched water containing chloroform has been removed from the subsurface by pumping MW-4, MW-26 (TW4-15), TW4-4, TW4-19, and TW4-20. The primary purpose of the pumping is to reduce total chloroform mass in the perched zone as rapidly as is practical. Pumping wells upgradient of TW4-4 were chosen for pumping because 1) they are located in areas of the perched zone having relatively high permeability and saturated thickness, and 2) high concentrations of chloroform were detected at these locations. The relatively high transmissivity of the perched zone in the vicinity of these pumping wells results in the wells having a relatively high productivity. The combination of relatively high productivity and high chloroform concentrations allows a high rate of chloroform mass removal. TW4-4 is located in a downgradient area having relatively high chloroform concentrations but relatively small saturated thickness, and at a transition from relatively high to relatively low permeability conditions downgradient of TW4-4 as indicated by hydraulic testing of TW4-4, TW4-6, and TW4-26 during the third quarter. Pumping TW4-4 helps to reduce the rate of chloroform migration in this downgradient



portion of the plume and to mitigate the increase in chloroform concentrations downgradient of TW4-4 (for example, at TW4-6).

The impact of pumping is indicated by the water level contour maps attached under Tabs D and E. Cones of depression have developed in the vicinity of MW-4, MW-26 (TW4-15), TW4-19, and TW4-20 which continue to remove significant quantities of chloroform from the perched zone. The water level contour maps indicate that effective capture of water containing high chloroform concentrations in the vicinity of these pumping wells is occurring. Overall, the combined capture of MW-4, MW-26 (TW4-15), TW4-19, and TW4-20 has not changed significantly since the last quarter. As noted in Section 4.1.2, a decrease in water level (increase in drawdown) of approximately 26 feet occurred at TW4-19, and an increase in water level (decrease in drawdown) of approximately 14 feet occurred at TW4-4. The increase in drawdown at TW4-19 has increased the apparent capture zone of this well relative to other nearby pumping wells. TW4-4 has apparently not been pumped long enough for a well-defined capture zone to develop.

Chloroform concentrations exceeding 70 µg/L exist at some locations downgradient of pumping wells (for example, at TW4-6, located immediately downgradient of TW4-4), where the lower permeability and relatively small saturated thickness of the perched zone significantly limits the rate at which chloroform mass can be removed by pumping. By removing mass and reducing hydraulic gradients, thereby reducing the rate of downgradient chloroform migration, and allowing natural attenuation to be more effective, pumping at the productive, upgradient locations has a beneficial effect on this downgradient chloroform. Pumping at TW4-4 was implemented during the first quarter of 2010 to improve capture in this downgradient area to the extent allowable by the lower productivity conditions presumed to exist in this area.

## **4.2 Review of Analytical Results**

### **4.2.1 Current Chloroform Isoconcentration Map**

Included under Tab J of this Report is a current chloroform isoconcentration map for the Mill site.

### **4.2.2 Chloroform Concentration Trend Data and Graphs**

Attached under Tab K is a table summarizing values for all required parameters, chloride, nitrate/nitrite, carbon tetrachloride, chloroform, chloromethane, and methylene chloride, for each well over time.

Attached under Tab L are graphs showing chloroform concentration trends in each monitor well over time.

### **4.2.3 Interpretation of Analytical Data**

Comparing the analytical results to those of the previous (second) quarter, as summarized in the table included under Tab K, the following observations can be made:

- a) Chloroform concentrations have increased by more than 20% in the following wells compared to last quarter: TW4-7 and TW4-21;
- b) Chloroform concentrations have decreased by more than 20% in the following wells compared to last quarter: TW4-10, TW4-22, and new well TW4-26;
- c) Chloroform concentrations have remained within 20% in the following wells compared to last quarter: MW-4, TW4-1, TW4-2, TW4-4, TW4-5, TW4-6, TW4-11, TW4-15, TW4-18, TW4-19, TW4-20, and TW4-24;
- d) TW4-3, TW4-8, TW4-9, TW4-12, TW4-13, TW4-14, TW4-16, TW4-23, and TW4-25 remained non-detect; and
- e) MW-32 (TW4-17) increased from non-detect to 4.3 µg/L.

As indicated, third quarter chloroform concentrations at most wells were within 20% of the values reported for the wells during the second quarter, suggesting that variations are within the range typical for sampling and analytical error. Wells TW4-7, TW4-10, TW4-21, and TW4-22, which had changes in concentration greater than 20%, are located adjacent to pumping wells MW-4, MW-26 (TW4-15), TW4-19, and TW4-20, respectively. Fluctuations in concentrations at these wells likely result in part from changes in pumping at the adjacent wells.

Pumping well TW4-20 had the highest detected chloroform concentration. Since the last quarter, the chloroform concentration in TW4-20 decreased from 18,000 µg/L to 15,000 µg/L, the concentration in adjacent pumping well TW4-19 increased from 1,800 µg/L to 2,000 µg/L, the concentration in nearby well TW4-21 increased from 210 to 390 µg/L, and the concentration in nearby well TW4-22 decreased from 540 µg/L to 340 µg/L. Wells TW4-23 and TW4-25 remained non-detect for chloroform, and the concentration in well TW4-24 increased slightly from 1.7 µg/L to 1.8 µg/L. TW4-24, located west of TW4-22, and TW4-25, located north of TW4-21, bound the chloroform plume to the west and north.

The chloroform concentration in TW4-6 increased from 590 µg/L to 630 µg/L. TW4-6, installed in the second quarter of 2000, was the most downgradient temporary perched well prior to installation of temporary well TW4-23 in 2007 and temporary well TW4-26 in the second quarter of 2010, and remained outside the chloroform plume until the first quarter of 2009. TW4-6 likely remained outside the chloroform plume between the time of installation and the fourth quarter of 2008 due to a combination of 1) slow rates of downgradient chloroform migration in this area due to low permeability conditions and the effects of upgradient chloroform removal by pumping, and 2) natural attenuation. TW4-23 and new well TW4-26 (with a chloroform concentration of 5.2 µg/L) bound the chloroform plume to the south.



The slow rate of chloroform migration in the vicinity of TW4-6 is demonstrated by comparing the rate of increase in chloroform at this well to the rate of increase in the nearest upgradient well TW4-4. Concentrations at TW4-4 increased from non-detect to more than 2,200 µg/L within only 2 quarters whereas 16 quarters were required for concentrations in TW4-6 to increase from non-detect to only 81 µg/L. This behavior is consistent with hydraulic tests performed at TW4-4, TW4-6, and TW4-26 during the third quarter of 2010 that indicate a nearly two order of magnitude decrease in permeability downgradient of TW4-4. Chloroform migration rates in the vicinity of new well TW4-26 are also expected to be relatively low due to upgradient pumping and low permeability conditions.

Wells MW-32 (TW4-17) and TW4-26 are located immediately downgradient of the chloroform plume. The concentration in MW-32 (TW4-17) increased from non-detect to 4.3 µg/L, and the concentration in TW4-26 decreased from 13 µg/L to 5.2 µg/L. Slight expansion and contraction of the chloroform plume boundaries in response to changes in upgradient pumping are expected to impact the concentrations at these wells. Furthermore, because TW4-26 was installed in May 2010, some of the fluctuation in concentration may result from lack of stabilization.

## **5.0 LONG TERM PUMP TEST AT MW-4, TW4-15 (MW-26), TW4-19, TW4-20, AND TW4-4 OPERATIONS REPORT**

### **5.1 Introduction**

As a part of the investigation of chloroform contamination at the Mill site, DUSA has been conducting a Long Term Pump Test on MW-4, TW4-19, TW4-15 (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. The following information documents the operational activities during the quarter.

### **5.2 Pump Test Data Collection**

The long term pump test for MW-4 was started on April 14, 2003, followed by the start of pumping from TW4-19 on April 30, 2003, from TW4-15 (MW-26) on August 8, 2003, from TW4-20 on August 4, 2005, and from TW4-4 on January 31, 2010. Personnel from Hydro Geo Chem, Inc. were on site to conduct the first phase of the pump test and collect the initial two days of monitoring data for MW-4. DUSA personnel have gathered subsequent water level and pumping data.

Analyses of hydraulic parameters and discussions of perched zone hydrogeology near MW-4 has been provided by Hydro Geo Chem in a separate report, dated November 12, 2001, and in the May 26, 2004 *Final Report on the Long Term Pumping Test*.

Data collected during the quarter included the following:

- Measurement of water levels at MW-4, TW4-19, TW4-15 (MW-26), and TW4-20 and, commencing regularly on March 1, 2020, 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.

### **5.3 Water Level Measurements**

Beginning August 16, 2003, the frequency of water level measurements from MW-4, TW4-15 (MW-26), and TW4-19 was reduced to weekly. From commencement of pumping TW4-20, and regularly after March 1, 2010 for TW4-4, water levels in these wells have been measured weekly. Depth to groundwater in all other chloroform contaminant investigation wells is monitored monthly. Copies of the weekly Depth to Water monitoring sheets for MW-4, TW4-15 (MW-26), TW4-19, TW4-20 and TW4-4 and the July and August monthly Depth to Water monitoring sheets for all of the chloroform contaminant investigation wells are included under Tab C. Monthly depth to water measurements for September are recorded in the Field Data Worksheets included under Tab B.

### **5.4 Pumping Rates and Volumes**

Table 2 summarizes the recovered mass of chloroform by well per quarter and historically since the inception of the chloroform recovery program for the five currently-active pumping wells.

#### **5.4.1 MW-4**

Approximately 79,859 gallons of water were pumped from MW-4 during the quarter. The average pumping rate from MW-4, when the pump was pumping, was approximately 4.3 gpm throughout the quarter. The well is not pumping continuously, but is on a delay device. The well purges for a set amount of time and then shuts off to allow the well to recharge. Water from MW-4 was transferred to the Cell 1 evaporation pond through a pipeline installed specifically for that purpose. During the week of July 13, 2010, flow measurements were not collected and the well did not pump as the power to the well was disrupted due to the hydrogeologic testing of TW4-4. Power on the circuit was disrupted which affected TW4-4 as well as MW-4.

#### **5.4.2 TW4-19**

Approximately 116,899 gallons of water were pumped from TW4-19 during the quarter. The average pumping rate from TW4-19, when the pump was pumping, was approximately 5.1 gpm throughout the quarter. The pump in this well is operating on a delay. It pumps for approximately one and a half minutes and then is off for two to three minutes. Water from TW4-19 was directly transferred to the Cell 1 evaporation pond through a pipeline installed specifically for that purpose. The weeks of August 23, and August 30, 2010 pump problems were noted in this well. In both instances the well was not properly pumping. The pump was replaced by the time of the next measurement on September 7, 2010 to address the problems.

#### **5.4.3 TW4-15 (MW-26)**

Approximately 63,850 gallons of water were pumped from TW4-15 (MW-26) during the quarter. The average flow rate from TW4-15, when the pump was pumping, was approximately 5.2 gpm throughout the quarter. The well is not pumping continuously, but is on a delay device. The well now purges for a set amount of time and then shuts off to allow the well to recharge. The water is directly transferred to the Cell 1 evaporation pond through a pipeline installed specifically for that purpose.

#### **5.4.4 TW4-20**

Approximately 39,098 gallons of water were pumped from TW4-20 during the quarter. The average flow rate from TW4-20, when the pump was pumping, was approximately 1.9 gpm throughout the quarter. The well is not purging continuously but is on a delay device. The well pump is set on a water elevation device. When the water reaches a set point, the pump turns on until the water level drops to another set point. The water is directly transferred to the Cell 1 evaporation pond through a pipeline installed specifically for that purpose.

#### **5.4.5 TW4-4**

Approximately 76,916 gallons were pumped from TW4-4 during the quarter. The average flow rate, when the pump was pumping, was 8.5 gpm. The well is not pumping continuously, but is set on a water elevation device. When the water reaches a set point, the pump turns on until the water level drops to another set point. The water is directly transferred to the Cell 1 evaporation pond through a pipeline installed specifically for that purpose. During the week of July 13, 2010, flow measurements were not collected and the well did not pump as the power to the well was disrupted due to the hydrogeologic testing of this well. Power on the circuit was disrupted which affected TW4-4 as well as MW-4.



## **5.5 Mass Removed**

Chloroform removal was estimated as of the first quarter 2007. Since that estimation the mass removed by well for each quarter has been compiled in Table 2 below, indicating that a total of 511.5 pounds of chloroform have been removed to date.

## **5.6 Inspections**

Denison has submitted an *Operations and Maintenance Plan, Chloroform Pumping System, White Mesa Mill, Blanding, Utah*, Revision 2.1 to UDEQ for approval. Upon approval of that plan, the Mill will commence documenting its required inspections of the operational status of the chloroform pumping wells on an inspection form. An example of the form as well as completed reports for the quarter will be included in future Chloroform reports upon approval by UDEQ. At the time of the publication of this report approval of the *Operations and Maintenance Plan, Chloroform Pumping System, White Mesa Mill, Blanding, Utah*, Revision 2.1 had not been received.

Operational problems in the pumping wells are summarized above.

## **5.7 Conditions That May Affect Water Levels in Piezometers**

No significant amount of water was added to any of the three wildlife diversion ponds during the quarter.

## **6.0 CORRECTIVE ACTION REPORT**

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

### **6.1 Rinsate Sample Chloroform and Nitrate Levels**

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

##### Rinsate Chloroform and Nitrate Levels

##### Chloroform

Chloroform has been present in the rinsate blanks in previous quarters and an investigation has been ongoing. Based on the results of the investigation DUSA believes that the potential source for the chloroform present in the rinsate blanks has been identified. Review of the chloroform detections has shown that there is no correlation between the rinsate blank concentrations and the sample concentrations in the wells associated with the rinsate blanks (*Chloroform Monitoring Report 2<sup>nd</sup> Quarter 2010, August 30, 2010*). The chloroform present in the rinsate blanks is most likely present in the DI water and is not the result of inadequate decontamination of the purging pump. The chloroform contamination in the DI water is most likely the result of chlorination of the intake water used for the DI system.

## Nitrate

DI water used for decontamination does not show the presence of nitrate. Contamination does not appear to be related to the nitrate presence in the preceding well that was purged. Rinsate samples following high concentration wells appear to be the same as rinsate samples following low concentration wells. Rinsate samples following purging of uncontaminated wells appear to also be contaminated with nitrate. Presence of nitrate in the rinsate samples is not consistent from one sampling event to the next.

### **Assignment of Responsibility for Investigation of the Problem**

The problem is currently under investigation by the QA Manager.

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

#### Rinsate Sample Chloroform and Nitrate Levels

The QA Manager plans to implement a testing program to confirm the source(s) which are introducing chloroform into the sampling and/or rinsate process. As discussed above, and based on evaluations to date, chloroform is most likely entering the rinsate blanks from the chlorination process. The DI system is showing signs of breakthrough at times of high usage.

To address the nitrate contamination, DUSA will continue investigating additional conditions which may be causing the nitrate contamination by mobilizing nitrogen compounds present in nitrile gloves (such as leaching from the gloves by the nitric acid). In addition, DUSA has requested in the revised QAP, submitted June 4, 2010, the removal of the nitric acid rinse step when samples are not collected for heavy metals, which will effectively remove the source of nitrate. DUSA will proceed with the removal of that step only upon approval of the QAP revision.

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

#### Rinsate Sample Chloroform and Nitrate Levels

During the fourth quarter chloroform sampling event UDEQ personnel were present and observed the rinsate blank collection procedures. UDEQ personnel provided recommended changes, which include the reduction of rinsate blanks to once daily and the daily reuse of soap/nitric acid decontamination fluids. These changes will reduce significantly the amount of DI water needed to implement the sampling program. The reduction in DI water usage will reduce the "load" on the DI system and eliminate the breakthrough of chloroform. This change was implemented during the fourth quarter chloroform sampling program. The QA Manager has completed a preliminary review of the fourth quarter data and, based on the data received to date, the changes in the decontamination program have reduced the chloroform contamination in the DI system.

A proposed QAP revision will be prepared to address the changes to the decontamination procedures and the frequency of rinsate blank sample collection.

The nitrate source is most likely the nitric acid rinse used during decontamination procedures, however, additional conditions which may be contributing to the nitrate detections in the rinsate blanks are being investigated. The additional items for investigation include the leachability of nitrogen ions from nitrile gloves and the decontamination/rinsate procedure itself.

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

#### Rinsate Chloroform and Nitrate Levels

It will be the joint responsibility of the Director, Compliance and Permitting, and the Mill's sampling staff to implement the changes and to assess the data to determine if it has corrected the problems.

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

#### Rinsate Chloroform and Nitrate Levels

Implementation to verify the chloroform source(s) was started in previous quarters. Systematic review of the issue has been ongoing and has been completed. DUSA believes the source has been identified and that changes suggested by DRC will address the sources identified. Data collected during the fourth quarter (and possibly other future quarters) will be reviewed to determine if additional engineering options need to be considered. Nitrate sources will be removed after the removal of the nitric acid rinse from the decontamination procedure when heavy metals are not collected (assuming requisite changes to the QAP submitted June 4, 2010 are approved by the Executive Secretary). Additive effects from the decontamination/rinsate procedure and the contribution from the use of nitrile gloves in the presence of nitric acid are being investigated to determine additional factors which may be increasing nitrate contamination.

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

Verification that chloroform contamination has been eliminated will occur upon receipt of at least the fourth quarter 2010 data. Additional data collection may be required and will be discussed in the fourth quarter 2010 report. Verification of nitric acid as the source of the nitrate contamination cannot be completed until the Executive Secretary approval of the June 4, 2010 QAP revision is received.

## **6.2 Assessment of Previous Quarter's Corrective Actions**

The third quarter 2010 report identified three corrective actions, which are: turbidity measurements which exceeded the 10% RPD requirement; depth to water measurements



not being consistently recorded; and chloroform and nitrate contamination in the rinsate blanks.

Chloroform and nitrate contamination in the rinsate blanks is discussed above in Section 6.1.

The consistent recording of depth to water measurements has been corrected, and there are no deviations noted during this sampling program for the third quarter 2010. As such the corrective action is considered appropriate and complete as evidenced by the field data sheets included as Tab B to this report.

Turbidity corrective actions are ongoing with the monitoring well redevelopment program at the Mill. The data collected during the redevelopment program will be presented to UDEQ under separate cover and discussed to determine the resolution of the turbidity issues discussed in the UDEQ letters dated June 1, 2010 and June 24, 2010.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

The water level contour maps for the third quarter, 2010 indicate that effective capture of water containing high chloroform concentrations in the vicinity of pumping wells MW-4, MW-26 (TW4-15), TW4-19, and TW4-20 is occurring. TW4-4 has apparently not been pumped long enough for a well-defined capture zone to develop in the vicinity of this well.

Third quarter chloroform concentrations at most wells were within 20% of the values reported for the wells during the second quarter, suggesting that variations are within the range typical for sampling and analytical error. Changes in concentration greater than 20% occurred in wells TW4-7, TW4-10, TW4-21, TW4-22, and new well TW4-26; the concentration in well MW-26 (TW4-17) increased from non-detect to 4.3 µg/L.

Fluctuations in concentrations at wells TW4-7, TW4-10, TW4-21, TW4-22 likely result in part from changes in pumping at adjacent wells MW-4, MW-26 (TW4-15), TW4-19, and TW4-20, respectively. Fluctuations in concentrations at wells MW-32 (TW4-17) and TW4-26, each located immediately downgradient of the chloroform plume, likely result from slight expansion and contraction of the chloroform plume boundaries in response to changes in upgradient pumping. Furthermore, because TW4-26 was installed in May 2010, some of the fluctuation in concentration may result from lack of stabilization. Between the second and third quarters, the concentration in TW4-26, which is the most downgradient temporary well, decreased from 13 µg/L to 5.2 µg/L.

The highest chloroform concentration was detected at pumping well TW4-20. Between the second and third quarters of 2010, the chloroform concentration in TW4-20 decreased from 18,000 µg/L to 15,000 µg/L, the concentration in adjacent pumping well TW4-19 increased from 1,800 µg/L to 2,000 µg/L, the concentration in nearby well TW4-21 increased from 210 to 390 µg/L, and the concentration in nearby well TW4-22 decreased from 540 µg/L to 340 µg/L. Fluctuations in concentrations in these wells are likely related to their location near the suspected former office leach field source area in

addition to variations in pumping in TW4-20 and nearby wells. Regardless of these measured fluctuations in chloroform concentrations, sampling of temporary wells TW4-24 (located west of TW4-22) and TW4-25 (located north of TW4-21), indicates these wells remain outside the chloroform plume and thus bound the plume to the west and north. Chloroform was not detected at TW4-25, and was detected at a concentration of 1.8 µg/L at TW4-24.

The chloroform concentration at well TW4-6 increased from 590 to 630 µg/L. TW4-6, which remained outside the plume until the first quarter of 2009, is located within the southernmost portion of the plume. Although fluctuations in concentrations have occurred, this well likely remained outside the chloroform plume between installation in the second quarter of 2000 and the fourth quarter of 2008 due to a combination of 1) slow rates of downgradient chloroform migration in this area due to low permeability conditions and the effects of upgradient chloroform removal by pumping, and 2) natural attenuation. Chloroform remained non-detect at downgradient temporary well TW4-23. TW4-23 and new well TW4-26 (with a chloroform concentration of 5.2 µg/L) bound the chloroform plume to the south.

Continued pumping of MW-4, MW-26 (TW4-15), TW4-19, and TW4-20 is recommended. Pumping these wells, regardless of any short term fluctuations in concentrations detected at the wells (such as at TW4-20), helps to reduce downgradient chloroform migration by removing chloroform mass and reducing average hydraulic gradients, thereby allowing natural attenuation to be more effective. Continued pumping at TW4-4 is also recommended to improve capture of chloroform to the extent practical in the southern portion of the plume where low permeability conditions exist.

## **8.0 ELECTRONIC DATA FILES AND FORMAT**

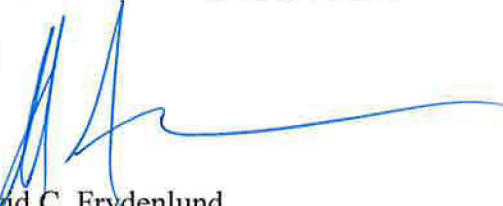
DUSA has provided to the Executive Secretary an electronic copy of all laboratory results for groundwater quality monitoring conducted under the chloroform contaminant investigation during the quarter, in Comma Separated Values (CSV) format. A copy of the transmittal e-mail is included under Tab M.

## 9.0 SIGNATURE AND CERTIFICATION

This document was prepared by Denison Mines (USA) Corp. on November 24, 2010.

DENISON MINES (USA) CORP.

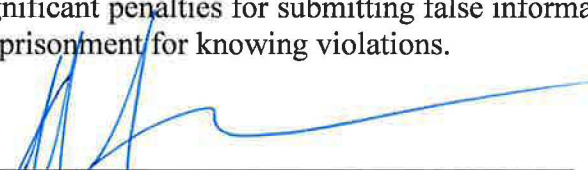
By:



David C. Frydenlund  
Vice President, Regulatory Affairs and Counsel

Certification:

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



---

David C. Frydenlund  
Vice President, Regulatory Affairs and Counsel  
Denison Mines (USA) Corp.

## Tables



Table 1: Summary of Well Sampling for the Period

Well	Sample Date	Date of Lab Report
MW-4	8/16/2010	9/8/2010*
TW4-1	8/24/2010	9/8/2010*
TW4-1R	8/23/2010	9/8/2010*
TW4-2	8/18/2010	9/8/2010*
TW4-2R	8/17/2010	9/8/2010*
TW4-3	8/10/2010	9/3/2010
TW4-3R	8/9/2010	9/3/2010
TW4-4	8/16/2010	9/8/2010*
TW4-5	8/11/2010	9/3/2010
TW4-5R	8/10/2010	9/3/2010
TW4-6	8/12/2010	9/3/2010
TW4-6R	8/11/2010	9/3/2010
TW4-7	8/18/2010	9/8/2010*
TW4-7R	8/17/2010	9/8/2010*
TW4-8	8/11/2010	9/3/2010
TW4-8R	8/10/2010	9/3/2010
TW4-9	8/11/2010	9/3/2010
TW4-9R	8/10/2010	9/3/2010
TW4-10	8/12/2010	9/3/2010
TW4-10R	8/11/2010	9/3/2010
TW4-11	8/12/2010	9/3/2010
TW4-11R	8/11/2010	9/3/2010
TW4-12	8/10/2010	9/8/2010
TW4-12R	8/9/2010	9/8/2010
TW4-13	8/10/2010	9/8/2010
TW4-13R	8/9/2010	9/3/2010
TW4-14	8/10/2010	9/3/2010
TW4-14R	8/9/2010	9/3/2010
TW4-15	8/16/2010	9/8/2010*
TW4-16	8/24/2010	9/17/2010
TW4-16R	8/23/2010	9/17/2010
TW4-17	8/16/2010	9/8/2010*
TW4-18	8/12/2010	9/3/2010
TW4-18R	8/11/2010	9/3/2010
TW4-19	8/16/2010	9/8/2010*
TW4-20	8/16/2010	9/8/2010*
TW4-21	8/12/2010	9/3/2010
TW4-21R	8/11/2010	9/3/2010
TW4-22	8/24/2010	9/17/2010
TW4-22R	8/23/2010	9/17/2010
TW4-23	8/10/2010	9/3/2010
TW4-23R	8/9/2010	9/3/2010
TW4-24	8/24/2010	9/17/2010
TW4-24R	8/23/2010	9/17/2010
TW4-25	8/10/2010	9/3/2010
TW4-25R	8/9/2010	9/3/2010
TW4-26	8/11/2010	9/3/2010
TW4-26R	8/10/2010	9/3/2010
TW4-60	8/17/2010	9/8/2010*
TW4-65	8/12/2010	9/3/2010
TW4-70	8/16/2010	9/8/2010*

All sample locations were sampled for Carbon Tetrachloride, Chloromethane, Methylene Chloride, Chloride and Nitrogen

"R" following a well number designates a rinsate sample collected prior to purging of the well of that number.

TW4-60 is a DI Field Blank, TW4-65 is a duplicate of TW4-21, and TW4-70 is a duplicate of TW4-17.

\* Data were reported 9/8/2010. A revised report was submitted 10/22/2010.

Highlighted wells are continuously pumped.

Table 2 Chloroform Mass Removal Per Well Per Quarter

<b>Quarter</b>	<b>MW-4</b>	<b>MW4-15</b>	<b>MW4-19</b>	<b>MW4-20</b>	<b>TW4-4</b>	<b>Quarter Totals</b>
Q1 2007	36.8	12.9	150.2	87.0	NA	286.9
Q2 2007	1.4	0.1	0.0	2.5	NA	4.0
Q3 2007	2.2	0.8	2.9	3.1	NA	9.0
Q4 2007	1.7	1.0	3.1	4.8	NA	10.6
Q1 2008	1.7	0.4	4.6	7.2	NA	13.8
Q2 2008	1.3	0.5	3.2	9.9	NA	14.8
Q3 2008	1.2	0.3	15.9	9.3	NA	26.8
Q4 2008	1.3	0.3	20.7	0.4	NA	22.7
Q1 2009	1.7	0.4	4.3	3.6	NA	10.0
Q2 2009	6.8	0.2	3.7	2.8	NA	13.5
Q3 2009	1.5	0.4	11.1	5.5	NA	18.5
Q4 2009	4.8	0.6	17.8	26.1	NA	49.4
Q1 2010	0.9	0.4	2.7	0.4	NA	4.5
Q2 2010	1.5	1.0	6.8	5.9	1.4	16.5
Q3 2010	1.3	1.2	2.0	4.9	1.3	10.6
<b>Well Totals (pounds)</b>	<b>66.0</b>	<b>20.5</b>	<b>248.9</b>	<b>173.4</b>	<b>2.8</b>	<b>511.5</b>

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Tab A

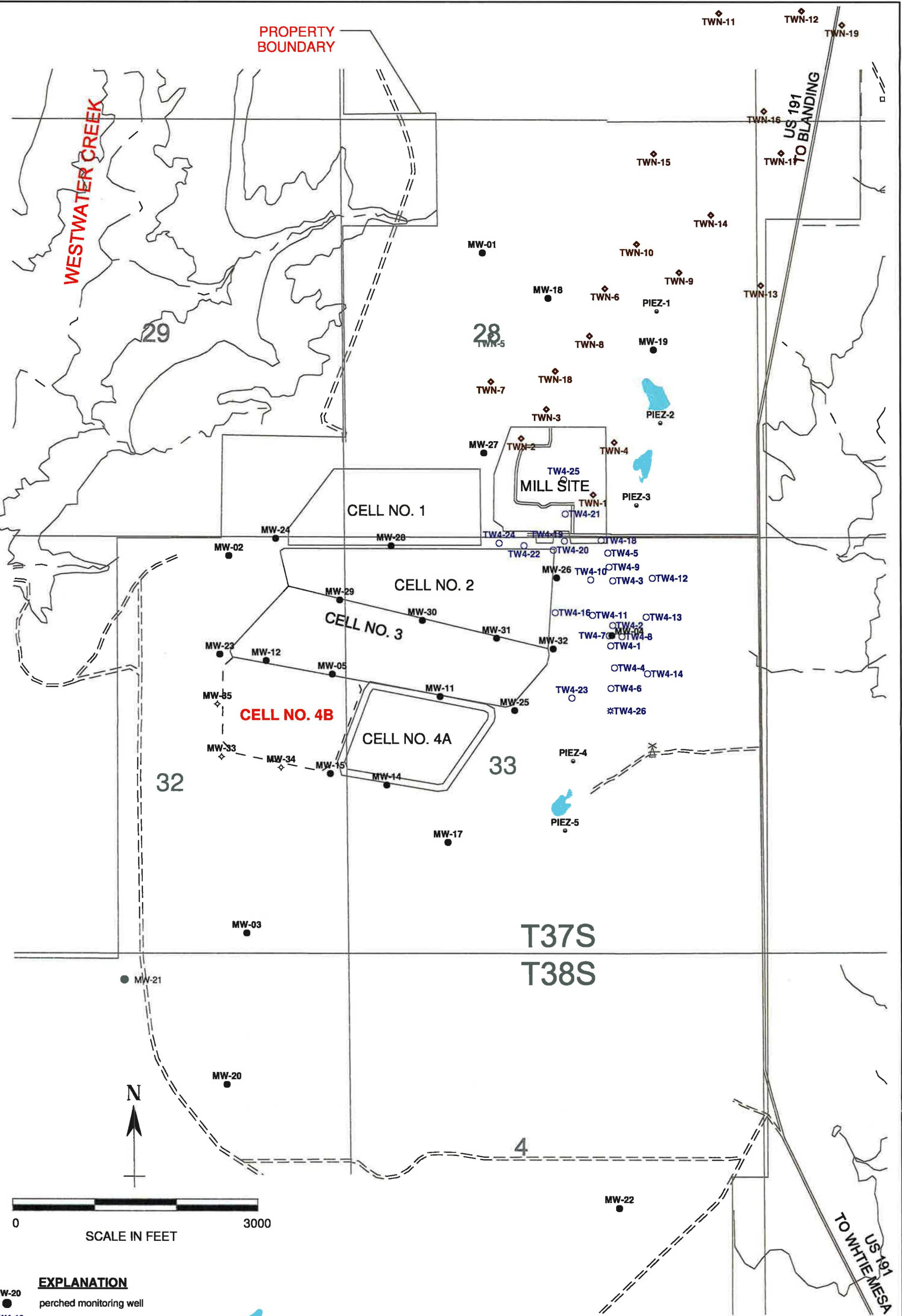
Site Plan and Perched Well Locations White Mesa Site



PROPERTY  
BOUNDARY

WESTWATER CREEK

US 191  
TO BLANDING



US 191  
TO WHITE MESA

- EXPLANATION**
- MW-20 ● perched monitoring well
  - TW4-19 ○ temporary perched monitoring well
  - PIEZ-1 ◐ perched piezometer
  - TWN-1 ◆ temporary perched nitrate monitoring well
  - TW4-26 ✱ temporary perched monitoring well installed May, 2010
  - MW-34 ◐ perched monitoring well installed August/September, 2010

wildlife pond



**HYDRO  
GEO  
CHEM, INC.**

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

APPROVED	DATE	REFERENCE	FIGURE
SJS		H:/718000/nov10/welloc10.srf	

Tab B

Order of Sampling and Field Data Worksheets

# Order of Contamination for 3rd Quarter 2010 Chloroform Purging Event

Well	Sample time	Chloroform Levels	Rinsate date/time	Water level	Well Depth
TW4-3	<u>8-10-2010 0627</u>	ND	8-9-10 <del>0830</del> 0841	_____	97
TW4-12	<u>8-10-2010 0746</u>	ND	8-4-10 0928	_____	101.5
TW4-13	<u>8-10-2010 0756</u>	ND	8-9-10 1026	_____	102.5
TW4-14	<u>8-10-2010 0806</u>	ND	8-9-10 1226	_____	93
TW4-17	<u>8-16-2010 1340</u>	ND		_____	130 Bladder pump
TW4-23	<u>8-10-2010 0640</u>	ND	8-9-10 1306	_____	114
TW4-25	<u>8-10-2010 0607</u>	ND	8-9-10 1411	_____	134.8
TW4-8	<u>8-11-2010 0648</u>	ND	8-10-10 0840	_____	125
TW4-9	<u>8-11-2010 0632</u>	ND	8-10-10 0927	_____	120
TW4-24	<u>8-11-2010 0604</u>	1.7	8-10-10 1018	_____	112.5
TW4-16	<u>8-11-2010 0721</u>	2.1	8-10-10 1100	_____	142
TW4-5	<u>8-11-2010 0617</u>	12	8-10-10 1250	_____	120
TW4-26	<u>8-11-2010 0704</u>	13	8-10-10 1414	_____	86
TW4-18	<u>8-12-2010 0720</u>	29	8-10-10 0753	_____	137.5 <del>Cont. Pumping</del>
TW4-21	<u>8-12-2010 0730</u>	210	8-11-10 0843	_____	121
TW4-10	<u>8-12-2010 0757</u>	220	8-11-10 0930	_____	113
TW4-22	<u>8-12-2010 0748</u>	540	8-11-10 1014	_____	113.5
TW4-6	<u>8-12-2010 0807</u>	590	8-11-10 1056	_____	97.5
TW4-11	<u>8-12-2010 0818</u>	820	8-11-10 1251	_____	100
TW4-7	<u>8-15-2010 0827</u>	1100	8-17-10 0836	_____	120
TW4-1	<u>8-18-2010 0837</u>	1600	8-17-10 0920	_____	110
TW4-19	<u>8-16-2010 0958</u>	1800		_____	125 Cont. Pumping
TW4-15	<u>8-16-2010 1415</u>	1900		_____	122.5 Cont. Pumping
TW4-4	<u>8-16-2010 1052</u>	2000		_____	112 Cont. Pumping
MW4	<u>8-16-2010 1033</u>	2100		_____	124 Cont. Pumping
TW4-2	<u>8-18-2010 0817</u>	3300	8-17-2010 1003	_____	120
TW4-20	<u>8-16-2010 1222</u>	18000		_____	106 Cont. Pumping
TW4-60	D.I. Blank	8-17-2010 1430			
TW4-65	Duplicate	8-12-2010 0730			
TW4-70	Duplicate	8-16-2010 1340			

Comments:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

WV

*[Handwritten signatures and initials]*

④

TW4-1 110  
8-24-10 1245

1 R 1535 8-23-10

②

TW4-16 142  
8-24-10 1232

16 R 0957 8-23-10

③

TW4-22 119.5  
8-24-10 1221

22 R 1234 8-23-10

①

TW4-24 112.5  
8-24-10 1210

24 R 0835 8-23-10



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TRAD MW 4 Sample Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bonnet) Grundfos *continuous purging*

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event 2009-19

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 124

Depth to Water Before Purging 70.37 Casing Volume (V) 4" Well (.653h)

Conductance (avg) \_\_\_\_\_ 4" Well (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Cloudy Bar/Temp (at time of sampling event) 35.2

Time: 1028 Gal. Purged \_\_\_\_\_ Time: 1031 Gal. Purged \_\_\_\_\_

Conductance 2004 Conductance 2008

pH 6.63 pH 6.67

Temperature 17.92 Temperature 15.25

Redox Potential (Eh) 334 Redox Potential (Eh) 335

Turbidity 0 Turbidity 0

Time: 1031 Gal. Purged \_\_\_\_\_ Time: 1032 Gal. Purged \_\_\_\_\_

Conductance 1958 Conductance 1920

pH 6.69 pH 6.69

Temperature 15.23 Temperature 15.21

Redox Potential (Eh) 336 Redox Potential (Eh) 338

Turb. 0 Turb. 0



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ N/A

**Pumping Rate Calculation**

Flow Rate (Q), in gpm \_\_\_\_\_  
 S/60 = \_\_\_\_\_  
 Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ N/A

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A

Type of Sample	Sample Taken (circle)	Sample Volume (Filter or Filtered)	Filtered (circle)	Preservative Added (circle)
VOCS	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	25 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
<u>Chloride</u>				

Comments Arrived on site at 1027. Turner Halliday & Garris Palmer on site for Purge. ~~Start pumping at 1030. Pumping well for a total of 15 minutes.~~ Take 1110 and 4 sets of parameters. Samples were pulled at 1033. Left site at 1035. Continuous pumping well. Water was clear.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-1 Sampler Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) 8-~~23~~<sup>24</sup>-2010

Well Purging Equip Used: XPump or Baller Well Pump (if other than Bennett) Grundfos

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-1R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth 110

Depth to Water Before Purging 63.17 Casing Volume (V) 4" Well: 30.57 (.653h)

Before Sample 63.43 3" Well: 27 (.367h)

Conductance (avg) \_\_\_\_\_ Turbidity (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Weather Cond. Partly cloudy HxT/Amb. Temp. (prior to sampling event) 25°C

Time: 1349 Gal. Purged 80 Time: 1350 Gal. Purged 78

Conductance 2142 Conductance 2140

pH 6.10 pH 6.12

Temperature 15.00 Temperature 15.00

Redox Potential (Eh) 395 Redox Potential (Eh) 395

Turbidity 15.2 Turbidity 15.7

Time: 1351 Gal. Purged 80 Time: 1353 Gal. Purged 90

Conductance 2153 Conductance 2157

pH 6.16 pH 6.18

Temperature 14.88 Temperature 14.84

Redox Potential (Eh) 396 Redox Potential (Eh) 397

Turb. 10.8 Turb. 10.0



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged ~~Volume Purged (Gallons or Liters)~~ 131 Gallons Well Ran dry

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V) 6 casing volumes  
 SAGD = = 10 T = 2V/Q = 6.11 Min 18.34 Min

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated 131

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (circle)	Sample Volume (Indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	60 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> X <input type="checkbox"/> N
				If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1340. Tanner & Gurnin on site for purge.  
 Purge Began at 1343. Purged Well for a total of 13 Minutes and  
 6 seconds. Well Ran dry. Water was mostly clear throughout purge. DTW  
 After purge was 98.91. Purge ended at 1356. Left site at 1401.  
 Arrived on site at 1236. Tanner & Gurnin on site for sampling event.  
 Took DTW Then Bailed samples at 1245. Left site at 1248.



TW4-1

	100	110	120	130
Spc	2161	2162	2166	Run dry
PH	6.21	6.22	6.28	
Temp	14.82	14.83	14.82	
orp	399	401	405	
Turb.	55.1	181.3	196.8	

**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-1 R Sampler Name and initials Tanner Holiday, Gavin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-22

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ 2" Well: N/A (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Amb. Temp. (prior to sampling event) 25°C

Time: 12:53 Gal. Purged: 145 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 1.9 Conductance \_\_\_\_\_

pH 7.11 pH \_\_\_\_\_

Temperature 25.38 Temperature \_\_\_\_\_

Redox Potential (Eh) 346 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Rinsate B4 TW4-1



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Parged ~~When Field Parameters are Achieved~~ 150

Pumping Rate Calculation

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) N/A  
 $S/60 =$   $T = 2V/Q =$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Circle)	Sample Volume (ml) or other Unit as specified below	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiological	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
chloride				

Comments Arrived on site at 1316. Tanner & Garris Present for Rinsate and sampling event. Rinsate began at 1318. Pumped 50 Gallons of Acid Water, 50 Gallons Soap Water, and 50 Gallons of DI Water. Rinsate ended and samples collected at 1335. Left site at 1337.

Rinsate B4 TW4-1



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-2 Sampler Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-17-2010 and Sampling (if different) 8-18-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event None

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 µMHO/cm Well Depth 120

Depth to Water Before Purging 67.43 Casing Volume (V) 4" Well: 34.32 (.653h)  
Before Sample 67.93 3" Well: 67.8 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Sunny Bar/Amb. Temp. (prior to sampling event) 24.4

Time: 1014 Gal. Purged: 30 Time: 1017 Gal. Purged: 30

Conductance 2570 Conductance 2579

pH 6.57 pH 6.56

Temperature 15.08 Temperature 15.02

Redox Potential (Eh) 451 Redox Potential (Eh) 450

Turbidity 44.1 Turbidity 62.9

Time: 1018 Gal. Purged: 50 Time: 1019 Gal. Purged: 60

Conductance 2756 Conductance 2817

pH 6.58 pH 6.58

Temperature 14.93 Temperature 14.92

Redox Potential (Eh) 448 Redox Potential (Eh) 448

Turb. 55.2 Turb. 62.1

well ran dry after  
6 min 26 sec.



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 62 Well Ran dry

Pumping Rate Calculation

Flow Rate (Q), in gpm \_\_\_\_\_  
 S/60 = = 10  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 $T = 2V/Q =$  6.86 Min

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ 1.82

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ 62

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (ml)	Filtered (Y/N)	Preservative Added (Y/N)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	340 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologics	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 1010. Turner, Holliday & Garcia Palmer on site for Purge. Purge began at 1013. Purged well for a total of 6 Minutes & 26 Seconds. Well Ran dry and purge ended at 1019. Water was mostly clear throughout purge. DTW after purge was 98.96. Left site at 1020.  
 Arrived on site at 0811. Turner & Garcia on site for sampling. Eval. took 0812 and bailed samples at 0817. Left site at 0819.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-2R Sampler Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-17-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-1

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4' Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Sunny Env/Amb Temp (prior to sampling event) 23°C

Time: 10:00 Gal. Purged: 1.00 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 3.0 Conductance \_\_\_\_\_

pH 6.91 pH \_\_\_\_\_

Temperature 22.46 Temperature \_\_\_\_\_

Redox Potential (Eh) 418 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE  
BH TW4-2



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

Purging Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 SAGD = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (Indicate other than as specified)	Filtered (circle)	Preservative Added (circle)
VOCs	<input type="checkbox"/> Y <input type="checkbox"/> N	500 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> (N)  If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 0945. Turner Holliday & Garin Palmer on site for Rinsate and sampling event. Rinsate began at 0947. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1003. Left site at 1006.

Rinsate 134 TW4-2



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-3 Sample Name and initials Tanner Halliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-3R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 97

Depth to Water Before Purging 48.56 Casing Volume (V) 4" Well 31.63 (.653h)  
Before Sample 48.47 3" Well 228 (.367h)

Conductance (avg) \_\_\_\_\_ pH of water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Sunny Humid. Temp. (prior to sampling event) 21° C

Time: 0834 Gal. Purged 50 Time: 0835 Gal. Purged 30

Conductance 1749 Conductance 1717

pH 6.46 pH 6.49

Temperature 14.56 Temperature 14.50

Redox Potential (Eh) 423 Redox Potential (Eh) 426

Turbidity 32.5 Turbidity 9.4

Time: 0901 Gal. Purged 40 Time: 0902 Gal. Purged 50

Conductance 1743 Conductance 1732

pH 6.53 pH 6.55

Temperature 14.56 Temperature 14.51

Redox Potential (Eh) 427 Redox Potential (Eh) 428

Turb. 8.5 Turb. 8.3



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 70 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/60 = = 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = 6.32 Min \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (Circle)	Sample Volume (Indicate if other than as specified below)	Filtered (Circle)	Preservative Added (Circle)
VGICs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
Chloride				

Comments Arrived on site at 0832. Turner Holliday & Garcia Palmer on site for Purge. Purge began at 0857. Purged well for a total of 7 Minutes. Water was mostly clear throughout Purge. Purge ended at 0904. Left site at 0907. DTW After purge 91.08

Arrived on site at 0615. Turner Holliday present for sampling event. Took DTW and then samples were Bailed at 0627. Left site at 0630.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-3R Sampler Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) N/A

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

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

pH Buffer 7.0 7.0 pH Buffer 4.0 H<sub>2</sub>O

Specific Conductance 998 µMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ 1" Well: N/A (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Sunny Bar/Atm Temp (prior to sampling event) \_\_\_\_\_

Time: 08:00 Gal. Purged 0.00 Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 9.2 Conductance \_\_\_\_\_

pH 9.06 pH \_\_\_\_\_

Temperature 22.73 Temperature \_\_\_\_\_

Redox Potential (Eh) 73 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE  
BH TW4-3





Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (ml or L)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiological	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1,000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 0820. Tanner Holliday & Garrin Palmer on site for Rinsate and sampling event. Rinsate began at 0825. Pumped 50 gallons of Acid water, 50 gallons of soap water and 50 gallons of DI water. Rinsate ended and samples collected at 0831. Left site at 0844.

Rinsate BY TW4-3



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-4 Samples  
Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event M&H

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 µMHO/cm Well Depth 112

Depth to Water Before Purging 68.82 casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Amb. Temp (Closest to sampling event) 26°C

Time: 10:11 Gal. Purged \_\_\_\_\_ Time: 10:13 Gal. Purged \_\_\_\_\_

Conductance 2421 Conductance 2427

pH 6.45 pH 6.43

Temperature 15.04 Temperature 15.60

Redox Potential (Eh) 253 Redox Potential (Eh) 260

Turbidity 2.1 Turbidity 8.0

Time: 10:20 Gal. Purged \_\_\_\_\_ Time: 10:51 Gal. Purged \_\_\_\_\_

Conductance 2423 Conductance 2423

pH 6.40 pH 6.39

Temperature 14.96 Temperature 14.94

Redox Potential (Eh) 266 Redox Potential (Eh) 268

Turb. 8.0 Turb. 8.2



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ N/A

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/60 = \_\_\_\_\_ N/A Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ N/A

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A

Name of Certified Analytical Laboratory if Other Than Bergy Labs \_\_\_\_\_ N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (Initial Volume and Residuals)	Filtered (Circle)	Preservative Added (Circle)
VOCs	Y N	250 ml	Y (N)	HCL (Y) N
Nutrients	(Y) N	100 ml	Y (N)	H2SO4 (Y) N
Heavy Metals	Y N	250 ml	Y N	HNO3 Y N
All Other Non-Radiologic	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1,000 ml	Y N	H2SO4 Y N
Other (specify)	(Y) N	Sample volume	Y (N)	Y (N)
<u>Chloride</u>				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 1041. Turner Halliday & Garcia Palmer on site for Purge. ~~Did not begin at 1041. Pumping for a total of 10 minutes.~~ Took 070 Then 4 sets of Parameters. Samples were pulled at 1052. Left site at 1054. Water was clear. Continuous pumping well.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 5 Sampler Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) 8-11-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-SR

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 120

Depth to Water Before Purging 54.81 Casing Volume (V) 4" Well: 42.56 (.653h)

0.5" Dia. Sample 54.77 Well: 253 (.367h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Effluent Temp (if other sampling event) 28°C

Time: 1305 Gal. Purged 35 Time: 1307 Gal. Purged 40

Conductance 1763 Conductance 1741

pH 6.53 pH 6.54

Temperature 15.43 Temperature 15.42

Redox Potential (Eh) 376 Redox Potential (Eh) 377

Turbidity 66.8 Turbidity 49.2

Time: 1308 Gal. Purged 70 Time: 1309 Gal. Purged 80

Conductance 1739 Conductance 1732

pH 6.55 pH 6.56

Temperature 15.41 Temperature 15.40

Redox Potential (Eh) 379 Redox Potential (Eh) 383

Turb. 65.5 Turb. 68.8



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 90 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 SAGD = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ 8.51 Min. \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ A/A \_\_\_\_\_

Type of Sample	Sample Taken (circle)	Sample Volume (Indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOC	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nitrates	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiolabels	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Chloride				

Comments Arrived on site at 1258. Turner Halliday & Garcia Palmer on site for Purge. Purge began at 1301. Purged well for a total of 9 Minutes. Water was a little Murky. Purge ended at 1310, DTW after Purge was 60.61. Arrived on site at 0609. Turner present for sampling event. Took DTW then Samples. Bailed at 0617. Left site at 0619.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-5R <sup>Sample</sup> Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-16

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (653h)

Conductance (avg) \_\_\_\_\_ pH (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly cloudy Bar/Amb Temp (prior to sampling event) 28°C

Time 12:45 Gal. Purged 190 Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 3.5 Conductance \_\_\_\_\_

pH 7.58 pH \_\_\_\_\_

Temperature 24.39 Temperature \_\_\_\_\_

Redox Potential (Eh) 536 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE BH TW4-5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 SAGD = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (circle)	Sample Volume (indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	Y N	500 ml	Y (N)	HCl (X) N
Nutrients	Y N	100 ml	Y (N)	H <sub>2</sub> SO <sub>4</sub> (Y) N
Heavy Metals	Y N	250 ml	Y N	HNO <sub>3</sub> Y N
All Other Non-Radiologic	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1,000 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Other (specify) <u>Chloride</u>	(Y) N	Sample volume	Y (N)	(N)
				If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1232. Turner Holliday & Garin Palmer on site for Rinsate and sampling event. Rinsate began at 1234. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1250. Left site at 1250.

Rinsate BY TW4-5



**ATTACHMENT I**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 6 Sample Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) 8-12-2010

Well Purging Equip Used:  pump or  bailer  Well Pump (if other than Bennett) Ground Gas

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-6R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 97.50

Depth to Water Before Purging 70.89 Casing Volume (V) 4" Well 17.37 (.653h)  
Before Sample 71.43 Well 27.8 (.367h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Amb Temp (prior to sampling event) 28°C

Time: 12:15 Gal. Purged \_\_\_\_\_ Time: 12:15 Gal. Purged \_\_\_\_\_

Conductance 3427 Conductance 3542

pH 6.42 pH 6.48

Temperature 19.91 Temperature 16.78

Redox Potential (Eh) 445 Redox Potential (Eh) 436

Turbidity 228.6 Turbidity 243.8

Time: 12:19 Gal. Purged 3.0 Time: 12:20 Gal. Purged 3.0

Conductance 3566 Conductance 3500

pH 6.62 pH 6.70

Temperature 15.78 Temperature 15.52

Redox Potential (Eh) 432 Redox Potential (Eh) 428

Turb. 138.0 Turb. 99.6

Pumped Well Dry!  
 4 min 38 sec.



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 44 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 SAGD = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ 3.47 Min \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Hachery Labs \_\_\_\_\_ A/A \_\_\_\_\_

Type of Sample	Sample Taken (Circle)	Sample Volume (minutes for 1.5 liter minimum)	Filtered (Circle)	Preservative Added (Circle)
VOG	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nitrates	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO3 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiological	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Chloride				

Comments Arrived on site at 1213. Tanner Halliday & Garcia Palox on site for Purge. Purge began at 1217. Purged well for a total of 4 Minutes & 38 Seconds. Pumped well dry. Water was dirty with sand particles. Purge ended at 1221. DTW After Purge was 95.39. Bottom of pump had some clay/sand like particles on it when pulled from well. Left site at 1228.  
 Arrived on site at 0800. Tanner & Garcia present for sampling event. Took DTW Then Bailed samples at 0807. Left site at 0809.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-6R Sampler Name and initials Tanner Halliday, Gressin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-22

pH Buffer 7.0 7.0 pH Buffer 4.0 H<sub>2</sub>O

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ 4" Well: 22 (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly cloudy Env/Amb Temp (prior to sampling event) 25°C

Time: 10:15 Gal. Purged: 0 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 2.0 Conductance \_\_\_\_\_

pH 7.67 pH \_\_\_\_\_

Temperature 25.07 Temperature \_\_\_\_\_

Redox Potential (Eh) 328 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE BH TW4-6



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 3/60 = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Bergy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (indicate if other than as specified above)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nitrates	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	HNO3 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
AP Other Non-Radiological	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1037. Turner Holliday & Garcin Palmer on site for Rinsate and Sampling event. Rinsate began at 1040. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1056. Left site at 1055.

Rinsate 134 TW4-6



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-7 Sample: Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-17-2010 and Sampling (if different) 8-18-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-7R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 nMHOS/cm Well Depth 120

Depth to Water Before Purging 67.38 Casing Volume (V) 4" Well: 34.36 (653h)  
8.5" Well: 67.71 (367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Sunny Env'l Air Temp (prior to sampling event) 23°C

Time: 05:33 Gal. Purged: 39 Time: 05:50 Gal. Purged: 72

Conductance 1621 Conductance 1629

pH 6.78 pH 6.80

Temperature 14.95 Temperature 14.79

Redox Potential (Eh) 288 Redox Potential (Eh) 290

Turbidity 15.9 Turbidity 20.4

Time: 05:51 Gal. Purged 50 Time: 05:52 Gal. Purged 60

Conductance 1625 Conductance 1691

pH 6.80 pH 6.80

Temperature 14.76 Temperature 14.75

Redox Potential (Eh) 292 Redox Potential (Eh) 295

Turb. 43.7 Turb. 42.5

Well Ran dry  
after 6 Min + 33 seconds



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 64 Well Rm 2W

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = 10 T = 2V/Q = 6.87 Min

Number of casing volumes evacuated (if other than two) 1.84

If well evacuated to dryness, number of gallons evacuated 64

Name of Certified Analytical Laboratory if Other Than Energy Labs A/A

Type of Sample	Sample Taken (circle)	Sample Volume (include units)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologics	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative

Comments Arrived on site at 0842. Turner Holliday & Garris Palmer on site for Purge. Purge began at 0846. Purged well for a total of 6 Minutes, 33 seconds. Well Rm 2W! Water was clear throughout purge. DTW after purge was 99.61, Left site at 0856. Purge ended at 0852.  
 Arrive on site at 0820. Turner & Garris on site for sampling Strat. Tank DTW Then Bailed samples at 0827. Left site at 0829



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4 - 7R Name and initials Tanner Holliday, Garcin Palmer

Date and Time for Purging 8-17-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event Tw4-15

pH Buffer 7.0 pH Buffer 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4<sup>th</sup> Well N/A (653h)

Conductance (avg) \_\_\_\_\_ 1<sup>st</sup> Well 221 (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Sunny Rx/1 Amb Temp (prior to sampling event) 22°C

Time: \_\_\_\_\_ Gal. Purged 0 Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 3.4 Conductance \_\_\_\_\_

pH 7.50 pH \_\_\_\_\_

Temperature 22.81 Temperature \_\_\_\_\_

Redox Potential (Eh) 350 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE BH TW4-7



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 S/60 = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (Indicate Filtered/Unfiltered) (ml)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	240ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	240ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input checked="" type="radio"/> Y <input type="radio"/> N	240ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1,000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 0817. Tanner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 0820. Pumped 50 gallons of Acid water, 50 gallons of soap water and 50 gallons of DI water. Rinsate ended and Samples collected at 0836. Left site at 0838.

Rinsate B4 TW4-7



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-8 Sampler  
 Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) 8-11-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-8R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu\text{MHOS}/\text{cm}$  Well Depth 125

Depth to Water Before Purging 66.94 Casing Volume (V) 4" Well: 37.91 (.653h)  
67.32 2" Well: 22.1 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather/Cloud Partly Cloudy Bar/Atm Temp (before sampling event) 23.0c

Time: 0859 Gal. Purged: 50 Time: 0855 Gal. Purged: 50

Conductance 3291 Conductance 3084

pH 6.76 pH 6.77

Temperature 14.97 Temperature 14.97

Redox Potential (Eh) 113 Redox Potential (Eh) 129

Turbidity 53.8 Turbidity 56.8

Time: <u>0855</u>	Gal. Purged	<u>60</u>	Time: <u>0856</u>	Gal. Purged	<u>70</u>	<u>80</u>	<u>90</u>	<u>100</u>
						<u>0857</u>	<u>0858</u>	<u>0859</u>

Conductance 3270 Conductance 3266 3269 3259 3261

pH 6.78 pH 6.78 6.79 6.79 6.78

Temperature 14.93 Temperature 14.95 14.89 14.86 14.82

Redox Potential (Eh) 135 Redox Potential (Eh) 145 156 161 165

Turb. 43.4 Turb. 75.0 77.4 53.2 52.8



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 100 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GO = = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ 7.58 M. ✓ \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Lab \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (Circle)	Sample Volume (Indicate Container Multiplier Specified Below)	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiocesium	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
Chloride				

Comments Arrived on site at 0846. Tanner Halliday & Garris Palmer on site for Purge. Purge began at 0849. Purged well for a total of 10 Minutes. Took an extra few minutes to get stable parameters. Achieved stable parameters after Ten Minutes. Purge ended at 0859 water was Murky. Left site at 0905.  
 Arrived on site at 0639. Tanner present for sampling event. Took 05w then Bailed samples at 0648. Left site at 0650



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-8R Sampler  
Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) N/A

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

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 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (653h)

Conductance (avg) \_\_\_\_\_ Well \_\_\_\_\_ (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Bh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Amb. Temp. (before sampling event) 23.9

Time 08:34 Gal. Purged 1.0 Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 4.8 Conductance \_\_\_\_\_

pH 7.97 pH \_\_\_\_\_

Temperature 23.34 Temperature \_\_\_\_\_

Redox Potential (Bh) 308 Redox Potential (Bh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Bh) \_\_\_\_\_ Redox Potential (Bh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE BH TW4-8



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) N/A  
 $SAG = \frac{2V}{Q} = \frac{2 \times 150}{10} = 30$   $T = \frac{2V}{Q} = \frac{2 \times 150}{10} = 30$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (g/s)	Sample Volume (ml/gal/liters)	Filtered (g/s)	Preservative Added (g/s)
Vegetables	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	500ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HClO <sub>2</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiolitics	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 0820. Tanner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 0823. Pumped 50 Gallons of Acid water. 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 0840. Left site at 0842.

Rinsate BY TW4 - 8



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 9 Sampler  
Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) 8-11-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-9R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 µMHOS/cm Well Depth 100.0 ft

Depth to Water Before Purging 53.43 Casing Volume (V) 4" Well: 43.47 (.653h)

Before Sample 53.44 3" Well: 23.1 (.367h)

Conductance (avg) \_\_\_\_\_ pH of Water in \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Humidity Temp (prior to sampling event) 24.1

Time: 0945 Gal. Purged 50 Time: 0945 Gal. Purged 50

Conductance 2423 Conductance 2450

pH 6.40 pH 6.43

Temperature 14.86 Temperature 14.88

Redox Potential (Eh) 370 Redox Potential (Eh) 370

Turbidity 54.1 Turbidity 42.5

Time: 0947 Gal. Purged 70 Time: 0948 Gal. Purged 80

Conductance 2432 Conductance 2466

pH 6.41 pH 6.41

Temperature 14.89 Temperature 14.84

Redox Potential (Eh) 370 Redox Potential (Eh) 371

Turb. 51.2 Turb. 56.5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 90

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 SAGD = = 10 T = 2V/Q = 8.69 Min

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Bergy Labs N/A

Type of Sample	Sample Filtered (Yes/No)	Sample Volume (minutes for the amount specified)	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	150 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiological	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1,000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 0938. Turner Holliday & Garris Pater on site for Purge. Purge began at 0940. Purged well for a total of 9 Minutes. Water was mostly clear throughout Purge. Purge ended at 0949. DTW after Purge 71.41 left site at 0953. Arrived on site at 0623. Turner present for sampling event. Took DTW then Bailed samples at 0632. Left site at 0634.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-9R Sampler Name and initials Tanner Halliday, Garris Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-8

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Atm Temp. (at time of sampling event) 24°C

Time: 6:45 Gal. Purged: 110 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: 4.1 Conductance: \_\_\_\_\_

pH: 7.70 pH: \_\_\_\_\_

Temperature: 22.25 Temperature: \_\_\_\_\_

Redox Potential (Eh): 131 Redox Potential (Eh): \_\_\_\_\_

Turbidity: 0 Turbidity: \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: \_\_\_\_\_ Conductance: \_\_\_\_\_

pH: \_\_\_\_\_ pH: \_\_\_\_\_

Temperature: \_\_\_\_\_ Temperature: \_\_\_\_\_

Redox Potential (Eh): \_\_\_\_\_ Redox Potential (Eh): \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE  
GH TW4-9



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_  
 Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Biology Labs N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (mL or L)	Filtered (Y/N)	Preservative Added (Y/N)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 mL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 mL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 mL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO3 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologic	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 mL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 mL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 0908. Tanner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 0911. Pumped 50 Gallons of Acid water, 50 Gallons of soap water and 50 Gallons of DI Water. Rinsate ended and Samples collected at 0927. Left site at 0929.

Rinsate B4 TW4-9



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 10 Sampler Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) 8-12-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-10R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 113

Depth to Water Before Purging 55.64 Casing Volume (V) 4" Well: 37.45 (.653h)  
 Before Sample 55.78 1" Well: 367h

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly cloudy Env/Amb Temp (prior to sampling event) 24°C

Time: 0945 Gal. Purged 40 Time: 0945 Gal. Purged 50

Conductance 2553 Conductance 2553

pH 6.41 pH 6.42

Temperature 15.03 Temperature 14.92

Redox Potential (Rh) 347 Redox Potential (Rh) 344

Turbidity 28.6 Turbidity 44.1

Time: 0946 Gal. Purged 60 Time: 0947 Gal. Purged 70

Conductance 2774 Conductance \_\_\_\_\_

pH 6.42 pH \_\_\_\_\_

Temperature 6 2551 Temperature \_\_\_\_\_

Redox Potential (Rh) 342 Redox Potential (Rh) \_\_\_\_\_

Turb. 77.5 Turb. \_\_\_\_\_

Well ran dry  
 after 6 min 10 sec.





Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 61 61

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = 10 T = 2V/Q = 7.49 Min

Number of casing volumes evacuated (if other than two) 1.62

If well evacuated to dryness, number of gallons evacuated 61

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Circle)	Sample Volume (minutes/other units)	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	150 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiological	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 0936. Turner Holliday & Garris Palmer on site for Purge. Purge began at 0940. Purged well for a total of 6 Minutes & 10 seconds Well Ran dry. Water was a little Murky. DTW Purge ended at 0946. DTW after Purge was 98.97. Left site at 0951.  
 Arrived on site at 0751. Turner & Garris on site for sampling event. Took DTW and samples Bailed at 0757. Left site at 0759.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-10 R Sampler  
Name and initials Tanner Halliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-21

pH Buffer 7.0 7.0 pH Buffer H<sub>2</sub>O H<sub>2</sub>O

Specific Conductance 998  $\mu$ MHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4<sup>th</sup> Well N/A (.653h)

Conductance (avg) \_\_\_\_\_ Well \_\_\_\_\_ (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy RH/FAH Temp (immediate sampling event) 24<sup>o</sup>

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 1.8 Conductance \_\_\_\_\_

pH 7.78 pH \_\_\_\_\_

Temperature 22.52 Temperature \_\_\_\_\_

Redox Potential (Eh) 352 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE  
GH TW4-10



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GD = = 10  
 Time to evacuate two casing volumes (2V)  
 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (ml or other units)	Filtered (Y/N)	Preservative Added (Y/N)
VOCS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100ml	Y <input type="checkbox"/> N	HCl <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250ml	Y <input type="checkbox"/> N	ZnO <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiological	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 0910. Tanner Holliday & Garcin Palmer on site for Rinsate and Sampling event. Rinsate began at 0913. Pumped 50 Gallons of Acid water, 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 0930. Left site at 0932.

Rinsate B4 TW4-10



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-11 Sample Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) 8-12-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-11R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 µMHO/cm Well Depth 100

Depth to Water Before Purging 58.20 Casing Volume (V) 4" Well 27.29 (653h)  
Before Sample 58.86 2" Well 22.8 (367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Env/Amb Temp (prior to sampling event) 23.2

Time: 1355 Gal. Purged 30 Time: 1305 Gal. Purged 40

Conductance 1740 Conductance 1727

pH 6.75 pH 6.65

Temperature 14.98 Temperature 14.71

Redox Potential (Rh) 379 Redox Potential (Rh) 380

Turbidity 27.9 Turbidity 17.7

Time: 1304 Gal. Purged 30 Time: 1305 Gal. Purged 40 <sup>50</sup> 1307

Conductance 1703 Conductance 1694 1687 1674

pH 6.55 pH 6.63 6.65 6.64

Temperature 14.67 Temperature 14.58 14.57 14.56

Redox Potential (Rh) 380 Redox Potential (Rh) 384 376 389

Turb. 13.6 Turb. 9.8 9.9 10.1



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 61 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 SAGD = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$  \_\_\_\_\_ 5.45 Min \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Lab \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (circle)	Sample Volume (Indicate if other than specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	200ml	<input type="radio"/> Y <input checked="" type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nitrates	<input checked="" type="radio"/> Y <input type="radio"/> N	100ml	<input type="radio"/> Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input type="radio"/> Y <input checked="" type="radio"/> N	200ml	<input type="radio"/> Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="radio"/> Y <input checked="" type="radio"/> N
All Other Non-Radiologicals	<input type="radio"/> Y <input checked="" type="radio"/> N	200ml	<input type="radio"/> Y <input checked="" type="radio"/> N	No Preservative Added
Gross Alpha	<input type="radio"/> Y <input checked="" type="radio"/> N	1000 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="radio"/> Y <input checked="" type="radio"/> N
Other (specify) Chloride	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input type="radio"/> Y <input checked="" type="radio"/> N	<input type="radio"/> Y <input checked="" type="radio"/> N  If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1258. Tanner Holliday & Garcia Palmer on site for Purge. Purge began at 1301. Purged well for a total of 6 Minutes. 13 seconds. Water was Mostly clear Throughout purge. Purge ended at 1307. DTW After purge was 88.73. Left site at 1312.  
 Arrived on site at 0810. Tanner & Garcia on site for sampling event. Took DTW Then Sealed samples at 0818. Left site at 0820.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-11 R <sup>Samples</sup> Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-6

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4' Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ 3' Well: N/A (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Amb Temp (prior to sampling event) 28°C

Time: 12:10 Gal. Purged: 100 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 2.3 Conductance \_\_\_\_\_

pH 7.97 pH \_\_\_\_\_

Temperature 24.34 Temperature \_\_\_\_\_

Redox Potential (Eh) 324 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE TW4-11



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (ml) (Y/N)	Filtered (Y/N)	Preservative Added (Y/N)
VECs	Y N	100 ml	Y (N)	HCl (S) N
Nutrients	Y N	100 ml	Y (N)	H2SO4 (Y) N
Heavy Metals	Y N	250 ml	Y N	HNO3 Y N
All Other Non-Radiologicals	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H2SO4 Y N
Other (specify)	(Y) N	Sample volume	Y (N)	(N)
<u>Chloride</u>				

Comments Arrived on site at <sup>1233</sup> ~~1233~~ Turner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at ~~1233~~ 1235. Pumped 50 Gallons of Acid water, 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1251. Left site at 1254.

Rinsate B4 TW4-11



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-12 Sampler  
Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-12R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 101.5

Depth to Water Before Purging 38.37 Casing Volume (V) 4" Well: 41.22 (.653h)  
Before Sample 38.34 Well: 41.22 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Sunny Ext'l Air Temp (before sampling event) 22°

Time: 0951 Gal. Purged 35 Time: 0952 Gal. Purged 50

Conductance 969.4 Conductance 969.9

pH 6.83 pH 6.82

Temperature 14.72 Temperature 14.69

Redox Potential (Eh) 426 Redox Potential (Eh) 425

Turbidity 7.4 Turbidity 7.4

Time: 0953 Gal. Purged 70 Time: 0954 Gal. Purged 80

Conductance 969.4 Conductance 969.9

pH 6.82 pH 6.83

Temperature 14.65 Temperature 14.66

Redox Potential (Eh) 424 Redox Potential (Eh) 424

Turb. 8.8 Turb. 8.9



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 90

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) 8.24 Min  
 $S/60 =$   $T = 2V/Q =$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Circle)	Sample Volume (Indicate Volume or Method Preserved)	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	500 ml	Y <input checked="" type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nitrates	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	Y <input checked="" type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	Y <input checked="" type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1000 ml	Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
<u>Chloride</u>				

Comments Arrived on site at 0942. Turner Holliday & Gorrion Palmer on site for Purge. Purge began at 0946. Purged well for a total of 9 Minutes. Well water was mostly clear throughout purge. DTW after Purge was 30.60. Purge ended at 0955. Left site 0959.  
 Arrived on site at 0735. Turner & Gorrion on site for sampling event. Took DTW and samples were Bailed at 0746. Left site at 0748



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-12R Sample: Name and initials Tanner Halliday, Gerra Palmer

Date and Time for Purging 8-9-10 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-3

pH Buffer 7.0 7.0 pH Buffer 4.0 H<sub>2</sub>O

Specific Conductance 998 µMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (653h)

Conductance (avg) \_\_\_\_\_ 1" Well: N/A (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Sunny Bar/Atm. Temp. (for sampling event) 22°C

Time: 09:31 Gal. Purged: N/A Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 1.6 Conductance \_\_\_\_\_

pH 7.81 pH \_\_\_\_\_

Temperature 22.84 Temperature \_\_\_\_\_

Redox Potential (Eh) 390 Redox Potential (Eh) \_\_\_\_\_

Turbidity .5 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE BH TW4-12R



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm \_\_\_\_\_  
 360 = = 10  
 Time to evacuate two casing volumes (2V)  
 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume Indicate if other than specified	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H2SO4 <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	20 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	HNO3 <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input checked="" type="radio"/> Y <input type="radio"/> N	20 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1000 ml	<input checked="" type="radio"/> Y <input type="radio"/> N	H2SO4 <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input checked="" type="radio"/> Y <input type="radio"/> N	<input checked="" type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 0911. Tanner Holliday & Garrin Palmer on site for Rinsate and Sampling event. Rinsate began at 0912. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 0928. Left site at 0930.

Rinsate B4 TW4-12



**ATTACHMENT 1  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-13 Sample Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-13R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 402.5

Depth to Water Before Purging 47.12 Casing Volume (V) 4" Well: 36.46 (653h)

Conductance (avg) 47.18 1" Well: 322 (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Sunny Env/Amb Temp (prior to sampling event) 23°C

Time: 10:22 Gal. Purged 40 Time: 10:42 Gal. Purged 50

Conductance 1497 Conductance 1510

pH 6.83 pH 6.82

Temperature 15.11 Temperature 15.00

Redox Potential (Eh) 429 Redox Potential (Eh) 424

Turbidity 51.0 Turbidity 60.5

Time: 10:44 Gal. Purged 60 Time: 10:45 Gal. Purged 70

Conductance 1512 Conductance 1528

pH 6.85 pH 6.86

Temperature 14.90 Temperature 14.89

Redox Potential (Eh) 425 Redox Potential (Eh) 427

Turb. 37.8 Turb. 46.4

Well Ran dry  
 after 4th set  
 of parameters -  
 (7 Min 45 sec.)



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 78

**Pumping Rate Calculation**

Flow Rate (Q), in gpm \_\_\_\_\_  
 SAVO = 10 Time to evacuate two casing volumes (2V) 7.23  
 $T = 2V/Q =$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Bery Lab N/A

Type of Sample	Sample Taken (Check)	Sample Volume (Initial Volume, ml)	Filtered (Check)	Preservative Added (Check)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 1035. Tanner Halliday & Garris Palmer on site for Purge. Purge began at 1038. Purged well for a total of 7 Minutes 45 Seconds. Well ran dry at 1046. Water was a little Murky/dirty. Left site at 1050 DTW After purge was 99.52.

Arrived on site at 0749. Tanner & Garris on site for sampling event. DTW Took DTW then samples Bailed at 0756. Left site at 0758.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-13 R Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-12

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth N/A

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

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Sunny Bar / Air Temp (prior to sampling event) 23°C

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 3.2 \_\_\_\_\_

pH 8.25 \_\_\_\_\_

Temperature 24.10 \_\_\_\_\_

Redox Potential (Eh) 366 \_\_\_\_\_

Turbidity .1 \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_

pH \_\_\_\_\_

Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_

RINSATE  
BH TW4-13



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_  
 Volume of Water Purged 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Biology Lab N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (ml) (Y/N)	Filtered (Y/N)	Preservative Added (Y/N)
VOCs	Y N	100ml	Y N	HCl Y N
Nutrients	Y N	100ml	Y N	H2SO4 Y N
Heavy Metals	Y N	250ml	Y N	HNO3 Y N
All Other Non-Radiologicals	Y N	350ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H2SO4 Y N
Other (specify)	Y N	Sample volume	Y N	N
<u>Chloride</u>				

Comments Arrived on site at 1008. Tanner Holliday & Garcin Palmer on site for Rinsate and Sampling event. Rinsate began at 1010. Pumped 50 Gallons of Acid water. 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1026. Left site at 1029.

Rinsate B4 TW4 - 13



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-14B Sampler Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-14R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 93

Depth to Water Before Purging 88.53 Casing Volume (V) 4" Well 2.91 (.653h)

92.15 Casing Volume 2" Well 0.28 (.367h)

Conductance (avg) \_\_\_\_\_ pH \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Atm. Temp. (at time sampling event) 29°C

Time: 12:30 Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 4449 Conductance \_\_\_\_\_

pH 6.67 pH \_\_\_\_\_

Temperature 30.25 Temperature \_\_\_\_\_

Redox Potential (Eh) 385 Redox Potential (Eh) \_\_\_\_\_

Turbidity 235 Turbidity \_\_\_\_\_

Time: 4:20:30 Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Well Ran dry  
After 35 seconds  
Pumped, only  
able to Recieve  
1 set of parameters



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 3.5 well Ran dry.

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = 10 T = 2V/Q = .58 Min

Number of casing volumes evacuated (if other than two) 1.2

If well evacuated to dryness, number of gallons evacuated 3.5 Gallons

Name of Certified Analytical Laboratory if Other Than Energy Lab N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (milliliters, liters, etc.)	Filtered (Y/N)	Preservative Added (Y/N)
VOCS	(Y) N	100 ml	Y (N)	HCl (X) N
Nutrients	(Y) N	100 ml	Y (N)	H2SO4 (Y) N
Heavy Metals	Y N	200 ml	Y N	HNO3 Y N
All Other Non-Radiologicals	Y N	920 ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H2SO4 Y N
Other (specify)	(Y) N	Sample volume	Y (N)	Y (N)
<u>Chloride</u>				

Comments Arrived on site at 1231. Tanner Holliday & Garcia Palmer on site for Purge. Purge began at 1235. Purged well for a total of 35 Minutes. Well Ran dry at 1236. DTW after Purge was 92.13. Water was a little dirty. Left site at 1241.

Arrived on site at 0759. Tanner & Garcia on site for sampling Evac. Took DTW the bailed samples at 0806. Left site at 0809. Water was Dirty.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-14R Sample Name and initials Tanner Halliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-13

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Sunny BH/Amb. Temp. (temp. at sampling event) 29°

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 2.6 Conductance \_\_\_\_\_

pH 7.71 pH \_\_\_\_\_

Temperature 25.21 Temperature \_\_\_\_\_

Redox Potential (Rh) 357 Redox Potential (Rh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Rh) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE BH TW4-14



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Pumped 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than BGSy Labs N/A

Type of Sample	Sample Type (Y/N)	Sample Volume (ml)	Filtered (Y/N)	Preservative Added (Y/N)
VOCs	(Y) N	50 ml	(N) Y	HCl (X) N
Nutrients	(Y) N	100 ml	(N) Y	H2SO4 (Y) N
Heavy Metals	Y N	250 ml	Y N	HNO3 Y N
All Other Non-Radiologicals	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H2SO4 Y N
Other (specify)	(Y) N	Sample volume	Y (N)	(N)
<u>Chloride</u>				

If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 1200. Tanner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 1205. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI Water. Rinsate ended and Samples collected at 1221. Left site at 1225.

Rinsate BY TW4-14



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 15 <sup>Sampler</sup> Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-20 <sup>Continuous pumping</sup>

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu\text{MHOS/cm}$  Well Depth 122.5

Depth to Water Before Purging 85.11 Casing Volume (V) 4" Well: N/A (.653h)

Conductance (AVG) \_\_\_\_\_ 1" Well: N/A (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar / Atm. Temp. (before sampling event) 29°C

Time: 1413 Gal. Purged \_\_\_\_\_ Time: 1415 Gal. Purged \_\_\_\_\_

Conductance 3469 Conductance 3477

pH 6.33 pH 6.34

Temperature 15.25 Temperature 15.20

Redox Potential (Rh) 176 Redox Potential (Rh) 185

Turbidity 3.0 Turbidity 1.5

Time: 1413 Gal. Purged \_\_\_\_\_ Time: 1414 Gal. Purged \_\_\_\_\_

Conductance 3519 Conductance 3535

pH 6.38 pH 6.39

Temperature 15.19 Temperature 15.19

Redox Potential (Rh) 196 Redox Potential (Rh) 205

Turb. 1.3 Turb. 1.3



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged N/A

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 SAGD = 10 N/A T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Relye Labs N/A

Type of Sample	Sample Filter (Glass)	Sample Volume (Initial or Final Volume)	Filtered (Glass)	Preservative Added (Glass)
VOCS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiolitics	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 1401. Turner Halliday & Garcia Palmer  
~~SAI at the site at 1401. Turner Halliday & Garcia Palmer~~  
~~SAI at the site at 1401. Turner Halliday & Garcia Palmer~~  
 on site for sampling event.  
 Took MW. Then 4 sets of parameters were taken. Samples taken at  
 1415. Left site at 1425. Water was clear throughout purge.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**

**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010 Resample

Location (well name) TW4-16 Sample  
 Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) 8-24-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-16R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth 142

Depth to Water Before Purging 63.84 Casing Voltage (V) 4" Well: 51.03 (.653h)  
 Before Sample 63.99 3" Well: 47.7 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Cloudy Rel. Hum. Temp (prior to sampling event) 21° C

Time: 1017 Gal. Purged 100 Time: 1019 Gal. Purged 100

Conductance 3519 Conductance 3537

pH 6.45 pH 6.45

Temperature 14.89 Temperature 14.89

Redox Potential (Eh) 397 Redox Potential (Eh) 378

Turbidity 205.1 Turbidity 218.2

Time: 1019 Gal. Purged 120 Time: 1020 Gal. Purged 130

Conductance 3541 Conductance 3546

pH 6.46 pH 6.47

Temperature 14.86 Temperature 14.85

Redox Potential (Eh) 399 Redox Potential (Eh) 400

Turb. 199.5 Turb. 204.8



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged ~~Volume of Water Purged~~ 140

Pumping Rate Calculation

Flow Rate (Q), in gpm. Time to evacuate two casing volumes (2V) 6 casing volumes  
 S/60 = = 10 T = 2V/Q = 10.20 min 30.62

Number of casing volumes evacuated (if other than two) n/a

If well evacuated to dryness, number of gallons evacuated n/a

Name of Certified Analytical Laboratory if Other Than Energy Labs n/a

Type of Sample	Sample Taken (circle)	Sample Volume (indicate if other than specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	1x40 ml	Y <input type="radio"/> N	HCL <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	Y <input type="radio"/> N	H2SO4 <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	25 ml	Y <input type="radio"/> N	HNO3 <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiological	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1,000 ml	Y <input type="radio"/> N	H2SO4 <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	Y <input type="radio"/> N	<input checked="" type="radio"/> X <input type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 1003. Tanner & Gorn on site for purge.  
 Purge Began at 1007. Purged Well for a total of 14 Minutes.  
 After the 9th Minute the well was spitting, but keeping up enough to  
 continue on with purge. Water was mostly clear throughout purge.  
 Purge ended at 1021. Left site at 1027. DTW After purge was 96.01.  
 Arrived on site at 1224. Tanner & Gorn on site for sampling event.  
 Took DTW Then Bailed samples at 1232. Left site at 1234.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-16R Sampler  
Name and initials Tanner Holiday, Gavin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer  Well Pump (if other than Bonnet) Ground FS

Sampling Event Quarter Chloroform Prev. Well Sampled in Sampling Event TW4-24

pH Buffer 7.0 7.0 pH Buffer AD AD

Specific Conductance 499 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Cloudy Ext'l Air Temp (prior to sampling event) 20°C

Time: 0850 Gal. Purged: 10 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: 4.8 Conductance: \_\_\_\_\_

pH: 7.90 pH: \_\_\_\_\_

Temperature: 24.03 Temperature: \_\_\_\_\_

Redox Potential (Eh): 331 Redox Potential (Eh): \_\_\_\_\_

Turbidity: 0 Turbidity: \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: \_\_\_\_\_ Conductance: \_\_\_\_\_

pH: \_\_\_\_\_ pH: \_\_\_\_\_

Temperature: \_\_\_\_\_ Temperature: \_\_\_\_\_

Redox Potential (Eh): \_\_\_\_\_ Redox Potential (Eh): \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Rinsate B4 TW4-16



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged When Field Parameters are Measured 150

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 SAGD = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (Circle)	Sample Volume (ml) (Specify Filter)	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiologicals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<u>chloride</u>				

Comments Arrived on site at 0939. Tanner & Guerin Present for Rinsate and sampling event. Rinsate began at 0941. Pumped 50 Gallons of Acid Water, 50 Gallons Soap Water, and 50 Gallons of DI Water. Rinsate ended and samples collected at 0957. Left site at 0959.

Rinsate B4 TW4-16



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-17 <sup>Sample</sup> Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-17

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 130

Depth to Water Before Purging 76.60 Casing Volume (V) 4" Well: 24.87 (.653h)  
<sup>8-16-10 Sample 82.65</sup> 3" Well: 2.88 (.367h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Atm Temp (prior to sampling event) 23°C

Time: 1536 Gal. Purged: 67.85 Time: 1537 Gal. Purged: 67.87

Conductance 3925 Conductance 3920

pH 6.28 pH 6.27

Temperature 14.83 Temperature 14.84

Redox Potential (Eh) 153 Redox Potential (Eh) 151

Turbidity 35.8 Turbidity 13.4

Time: 1538 Gal. Purged 70.09 Time: 1539 Gal. Purged 70.30

Conductance 3976 Conductance 3974

pH 6.25 pH 6.25

Temperature 14.81 Temperature 14.81

Redox Potential (Eh) 149 Redox Potential (Eh) 148

Turb. 13.8 Turb. 13.2



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 70.52

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. 0.217 Time to evacuate two casing volumes (2V)  
 S/GO = \_\_\_\_\_ T = 2V/Q = 321.38 min

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (circle)	Sample Volume (Indicate Volume that is analyzed below)	Filtrated (circle)	Preservative Added (circle)
VOCS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100ml	Y <input checked="" type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500ml	Y <input checked="" type="checkbox"/> N	HNO3 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250ml	Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input checked="" type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 0810. Turner Halliday & Gracia Palmer on site for Purge. Purge began at 0815. Purged well for a total of 325 Minutes. Water was mostly clear throughout Purge. Purge ended samples were collected at 1340. LPA site at 1348.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name): TW4 - 18 Sample Name and initials: Tanner Holliday, Garrin Palmer

Date and Time for Purging: 8-11-2010 and Sampling (if different): 8-12-2010

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

Sampling Event: Quarterly chloroform Prev. Well Sampled in Sampling Event: TW4-18R

pH Buffer: 7.0 7.0 pH Buffer: 4.0 4.0

Specific Conductance: 998 uMHOS/cm Well Depth: 137.5

Depth to Water Before Purging: 55.96 Casing Volume (V) 4" Well: 53.24 (653h)  
Before Sample 55.89 Well: 128 (367h)

Conductance (avg): \_\_\_\_\_ pH of Water (avg): \_\_\_\_\_

Well Water Temp. (avg): \_\_\_\_\_ Redox Potential (Eh): \_\_\_\_\_ Turbidity: \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Atm Temp (at time of sampling event): 23.9

Time: 0812 Gal. Purged: 75 Time: 0815 Gal. Purged: 80

Conductance: 1639 Conductance: 1607

pH: 6.37 pH: 6.34

Temperature: 15.23 Temperature: 15.20

Redox Potential (Eh): 479 Redox Potential (Eh): 480

Turbidity: 156.1 Turbidity: 147.7

Time: 0815 Gal. Purged: 90 Time: 0816 Gal. Purged: 100 0817 80

Conductance: 1608 Conductance: 1579 1563

pH: 6.31 pH: 6.30 6.29

Temperature: 15.20 Temperature: 15.19 15.18

Redox Potential (Eh): 480 Redox Potential (Eh): 479 479

Turb. 221.2 Turb. 224.0 220.5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 110 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GO = \_\_\_\_\_ = 10 \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ 10.64 Min \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Bergy Labs \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Filter (circle)	Sample Volume (indicate volume than specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	50 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
Chloride				

Comments Arrived on site at 0801. Tanner Halliday & Garcia Palmer on site for Purge. Purge began at 0806. Purged well for a total of 11 Minutes. Water was a little murky/dirty. Purge ended at 0817. Left site at 0821. DTU after purge 56.39. Arrived on site at 0713. Tanner & Garcia on site for sampling event. Took DTU and Bailed samples at 0720. Left site at 0722.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-18R <sup>Samples</sup> Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event next 26

pH Buffer 7.0 7.0 pH Buffer 4.0 H<sub>2</sub>O

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (653h)

Conductance (avg) \_\_\_\_\_ 2" Well N/A (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Bar/Amb Temp (prior to sampling event) 23°C

Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 17 Conductance \_\_\_\_\_

pH 5.97 pH \_\_\_\_\_

Temperature 20.87 Temperature \_\_\_\_\_

Redox Potential (Eh) 986 Redox Potential (Eh) \_\_\_\_\_

Turbidity .6 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE  
BY TW4-18



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_  
 Volume of Water Pumped 150 Gallons

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Circle)	Sample Volume (Indicate if Filtered)	Filtered (Circle)	Preservative Added (Circle)
VOCS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO3 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologics	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H2SO4 <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative

Comments Arrived on site at 0735. Tanner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 0737. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 0753. Left site at 0755.

Rinsate B4 TW4-18



**ATTACHMENT 1**

154836.0

**WHITE MESA URANIUM MILL**

**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-19 Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) N/A

Well Purging Equip Used:  pump or  bailer Well Pump (if other than Bonnet) Grundfos Continuous pumping

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-17

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth: 125

Depth to Water Before Purging 67.93 Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH Buffer (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Cloudy Ext'l Amb Temp (prior to sampling event) 24°C

Time: 0953 Gal. Purged \_\_\_\_\_ Time: 0954 Gal. Purged \_\_\_\_\_

Conductance 2931 Conductance 2932

pH 6.44 pH 6.45

Temperature 17.87 Temperature 17.87

Redox Potential (Eh) 336 Redox Potential (Eh) 388

Turbidity 27.6 Turbidity 31.7

Time: 0955 Gal. Purged \_\_\_\_\_ Time: 0956 Gal. Purged \_\_\_\_\_

Conductance 2931 Conductance 2926

pH 6.46 pH 6.50

Temperature 17.88 Temperature 17.89

Redox Potential (Eh) 381 Redox Potential (Eh) 376

Turb. 25.7 Turb. 22.5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ *N/A*

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GO = \_\_\_\_\_ *(10)* Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ *N/A*

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ *N/A*

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ *N/A*

Name of Certified Analytical Laboratory if Other Than Energy Lab \_\_\_\_\_ *N/A*

Type of Sample	Sample Taken (circle)	Sample Volume (indicate units and sample size)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	240 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiolysis	<input type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	<input type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 948. Tanner Halliday & Garcia Palox on site for Purge. Purge began at 0950. ~~Purge~~ for ~~at least~~ ~~of~~ ~~minutes~~. Continuous pumping over. Took 4 sets of parameters and samples were pulled at 0958. Left site at 1000.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 20 Sample Name and initials Tanner Holliday, Guerin Palmer

Date and Time for Purging 8-16-2010 and Sampling (if different) NA

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-4

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu\text{MHOS/cm}$  Well Depth 106

Depth to Water Before Purging 69.78 Casing Volume (V) 4" Well: NA (.653h)

Conductance (avg) NA 3" Well: NA (.367h)

Well Water Temp. (avg) NA Redox Potential (Eh) NA Turbidity NA

Weather Cond: Partly cloudy Bar/Atm Temp (prior to sampling event) 28°C

Time: 12:15 Gal. Purged NA Time: 12:15 Gal. Purged NA

Conductance 2434 Conductance 3429

pH 6.07 pH 6.02

Temperature 21.76 Temperature 19.75

Redox Potential (Eh) 236 Redox Potential (Eh) 180

Turbidity 45 Turbidity 54.8

Time: 12:20 Gal. Purged NA Time: 12:21 Gal. Purged NA

Conductance 3476 Conductance 3534

pH 5.97 pH 6.02

Temperature 18.90 Temperature 18.79

Redox Potential (Eh) 190 Redox Potential (Eh) 210

Turb. 33.9 Turb. 31.4



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ *n/a*

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = \_\_\_\_\_ = *n/a* T = 2V/Q = \_\_\_\_\_ *n/a*

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ *n/a*

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ *n/a*

Name of Certified Analytical Laboratory if Other Than Bergy Labs \_\_\_\_\_ *n/a*

Type of Sample	Sample Taken (circle)	Sample Volume (indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOC	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input type="checkbox"/> N	200 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input type="checkbox"/> Y <input type="checkbox"/> N	200 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 1212. Tanner Halliday & Garcia Palmer on site for Purge. ~~Sample was taken at 1212. Then pulled samples at 1222. Left site at 1223. Water has some brown particles floating around. 4 Min. sitting in Protection case around Well.~~



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-21 Sample Name and initials Tanec Holliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) 8-12-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-21R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 121

Depth to Water Before Purging 53.36 Coating Volume (V) 4" Well 42.86 (653h)  
0.6m sample 54.87 2" Well 42.86 (367h)

Conductance (avg) \_\_\_\_\_ pH of water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity 2

Weather Cond: Partly cloudy HxT/Amb Temp (prior to sampling event) 23.9

Time: 0658 Gal. Purged 80 Time: 0659 Gal. Purged 80

Conductance 3014 Conductance 3024

pH 6.69 pH 6.72

Temperature 16.05 Temperature 16.04

Redox Potential (Eh) 446 Redox Potential (Eh) 446

Turbidity 8.9 Turbidity 9.0

Time: 0900 Gal. Purged 70 Time: 0901 Gal. Purged 80 0902 0903

Conductance 3026 Conductance 3059 3061 3069

pH 6.69 pH 6.70 6.70 6.71

Temperature 16.03 Temperature 16.02 16.01 16.01

Redox Potential (Eh) 447 Redox Potential (Eh) 448 449 449

Turb. 8.3 Turb. 7.5 7.5 7.9



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 100 \_\_\_\_\_

**Pumping Rate Calculation**

Flow Rate (Q), in gpm \_\_\_\_\_  
 S/60 = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ 8.57 Min. \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (circle)	Sample Volume (indicate bottle type)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	240 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
Chloride				

Comments Arrived on site at 0850. Turner Halliday & Garcia Palmer on site for Purge. Purge began at 0853. Purged well for a total of 10 Minutes. Water was mostly clear throughout Purge. Purge ended at 0903. Left site at 0907. DTW after purge 68.25  
 Arrived on site at 0723. Tanner & Garcia on site for sampling event. Took DTW and Bailed samples at 0730. Left site at 0734.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-21 R Sampler  
Name and initials Tanner Holladay, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-18

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Rel. Amb. Temp. (prior to sampling event) 25°C

Time: 0843 Gal. Purged: 1.0 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 2.5 Conductance \_\_\_\_\_

pH 7.53 pH \_\_\_\_\_

Temperature 20.97 Temperature \_\_\_\_\_

Redox Potential (Eh) 574 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE BH TW4-21



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filter (circle)	Sample Volume (milliliters) (circle)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	200 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiologic	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1,000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative

Comments Arrived on site at 0824. Turner Holliday & Garin Palmer on site for Rinsate and sampling event. Rinsate began at 0826. Pumped 50 gallons of Acid water 50 gallons of soap water and 50 gallons of DI water. Rinsate ended and samples collected at 0843. Left site at 0845.

Rinsate B4 TW4-21



**ATTACHMENT 1  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-22 Sampler  
 Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) 8-24-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-22R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth 113.5

Depth to Water Before Purging 54.42 Casing Volume (V) 4" Well: 38.57 (.653h)  
 Before Sample: 54.45 3" Well: 40 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Brt' Amb Temp (prior to sampling event) 25°C

Time: 1252 Gal. Purged: 20 Time: 1259 Gal. Purged: 20

Conductance 5020 Conductance 5020

pH 6.48 pH 6.50

Temperature 15.72 Temperature 15.73

Redox Potential (Eh) 459 Redox Potential (Eh) 456

Turbidity 27.9 Turbidity 57.9

Time: 1300 Gal. Purged: 100 Time: 1301 Gal. Purged: 110

Conductance 5010 Conductance 5082

pH 6.48 pH 6.53

Temperature 15.82 Temperature 15.97

Redox Potential (Eh) 456 Redox Potential (Eh) 453

Turb. 817.1 Turb. 592.5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged ~~170~~ 170

Purping Rate Calculation

Flow Rate (Q), in gpm. Time to evacuate two casing volumes (2V) 6 casing volumes  
 SAGD = = 10 T = 2V/Q = 7.71 Min 23.14 Min

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (number of casing volumes)	Filtered (circle)	Preservative Added (circle)
VOCS	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	HCL <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input type="radio"/> Y <input checked="" type="radio"/> N	250 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	HNO <sub>3</sub> <input type="radio"/> Y <input checked="" type="radio"/> N
All Other Radiologicals	<input type="radio"/> Y <input checked="" type="radio"/> N	250 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	No Preservative Added
Gross Alpha	<input type="radio"/> Y <input checked="" type="radio"/> N	1,000 ml	<input type="radio"/> Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="radio"/> Y <input checked="" type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	<input type="radio"/> Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> X <input type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 1246. Tanner & Gurn on site for purge.  
 Purge Began at 1250. Purged well for a total of 17 Minutes  
 After 9 Minutes of purge well was spluttering through the rest of purge  
 until water stabilized. Water stabilized and purge ended at 1307.  
 Water was mostly clear throughout purge. DTW After purge was 26.01  
 Left site at 1312  
 Arrived on site at 1213. Tanner & Gurn on site for sampling about. Took DTW Then Billed  
 Samples at 1221. Left site at 1234.

## TW4-22

Time/Gullog	1302 <sup>120</sup>	1303 <sup>130</sup>	1304 <sup>140</sup>	1305 <sup>150</sup>	1306 <sup>160</sup>
spc	5126	5130	5148	5142	5142
PH	6.52	6.52	6.53	6.54	6.54
Temp	15.97	15.97	15.96	15.94	15.95
ORP	451	450	449	448	447
Turb	1147.0	1191.0	973.0	968.0	914.0



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name): TW4-22R Sampler Name and initials: Tanner Holiday, Garin Palmer

Date and Time for Purging: 8-23-2010 and Sampling (if different): N/A

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

Sampling Event: Quarterly Chloroform Prev. Well Sampled in Sampling Event: Well 16

pH Buffer: 7.0 7.0 pH Buffer: 4.0 H<sub>2</sub>O

Specific Conductance: 999 uMHOS/cm Well Depth: N/A

Depth to Water Before Purging: N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg): \_\_\_\_\_ 3" Well: N/A (.367h)

Well Water Temp. (avg): \_\_\_\_\_ Redox Potential (Eh): \_\_\_\_\_ Turbidity: \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Amb. Temp (prior to sampling event): 23°c

Time: 12:33 Gal. Purged: H<sub>2</sub>O Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: 1.3 Conductance: \_\_\_\_\_

pH: 5.78 pH: \_\_\_\_\_

Temperature: 24.36 Temperature: \_\_\_\_\_

Redox Potential (Eh): 446 Redox Potential (Eh): \_\_\_\_\_

Turbidity: 0 Turbidity: \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance: \_\_\_\_\_ Conductance: \_\_\_\_\_

pH: \_\_\_\_\_ pH: \_\_\_\_\_

Temperature: \_\_\_\_\_ Temperature: \_\_\_\_\_

Redox Potential (Eh): \_\_\_\_\_ Redox Potential (Eh): \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Rinsate B4 TW4-22R



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Pumped When Field Pumping was discontinued 150

Pumping Rate Calculation

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) N/A  
 $S/60 =$  \_\_\_\_\_  $T = 2V/Q =$  \_\_\_\_\_

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Ringier Labs N/A

Type of Sample	Sample Taken (circle)	Sample Volume (Indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	Y <input type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiological	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
<u>chloride</u>				

Comments Arrived on site at 1200. Tanager & Gorrin Present for Rinsate and sampling event. Rinsate began at 1217. Pumped 50 Gallons of Acid Water, 50 Gallons Soap Water, and 50 Gallons of DI Water. Rinsate ended and samples collected at 1234. Left site at 1236.

Rinsate B4 TW4-22



Page 40 of 41  
 220 270 240  
 1394 1392 1395  
 3673 3675 3682  
 6.25 6.26 6.26  
 14.38 14.42 14.44  
 106 106 106  
 8.1 9.1 8.5  
 Stabilized

**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-23 Sample Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-23R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth (11)

Depth to Water Before Purging 66.05 Casing Volume (V) 4" Well: 31.31 (653h)

Conductance (avg) 66.15 8" Well: 228 (367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Amb Temp (prior to sampling event) 29°C

Time: 1323 Gal Purged 20

Conductance 3667

pH 6.18

Temperature 14.59

Redox Potential (Rh) 382

Turbidity 46.6

Time: 1325 Gal Purged 40

Conductance 3670

pH 6.18

Temperature 14.51

Redox Potential (Rh) 240

Turbidity 69.3

150	160	170	180	190
1334	1333	1336	1337	1338
3681	3678	3679	3682	3682
6.13	6.19	6.21	6.22	6.24
14.39	14.40	14.39	14.34	14.4
157	153	154	117	111
14.3	11.2	10.2	10.1	8.7

Time: 1324 Gal Purged 30

Conductance 3675

pH 6.18

Temperature 14.52

Redox Potential (Rh) 212

Turb. 122.3

Time: 1325 Gal Purged 60

Conductance 3672

pH 6.20

Temperature 14.49

Redox Potential (Rh) 229

Turb. 136.1

120	130	140			
1330	1331	1332	1333		
3204	3683	3674	3674	3677	
6.17	6.05	6.05	6.08	6.10	
14.45	14.44	14.44	14.36	14.42	
179	216	198	237	231	
63.8	46.7	27.6	28.3	17.4	
1326	70	1327	80	1328	9
3671		3679		3704	
6.20		6.17		6.16	
14.45		14.46		14.45	
236		149		135	
146.1		170		86.9	



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 240

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = = 10 T = 2V/Q = 6.26 Min

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Circle)	Sample Volume Indicate in the Data Specimen Label	Filtered (Circle)	Preservative Added (Circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiological	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
<u>Chloride</u>				

Comments Arrived on site at 1316. Tanner Halliday & Garris Palmer on site for Purge. Purge began at 1319. Purged well for a total of 24 Minutes. ~~DRP~~ DRP would not stabilize. at 1343 water stabilized. water was Murky with lot of Air bubbles. purge ended at 1343. Left site at 1349. DTW After purge was 99.25  
 Arrived on site at 0631 Tanner Halliday Present for sampling event. Took DTW then samples were Bailed at 0640. Left site at 0640.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4 - 23 R Sampler Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-14

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly cloudy Bar/Fair Temp (at time of sampling event) 29°c

Time: 13:55 Gal. Purged: 140 Time: \_\_\_\_\_ Gal. Purged: \_\_\_\_\_

Conductance 1.1 Conductance \_\_\_\_\_

pH 6.91 pH \_\_\_\_\_

Temperature 24.84 Temperature \_\_\_\_\_

Redox Potential (Eh) 382 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE SH TW4-23



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_  
 Volume of Water Purged 150 Gallons

Pumping Rate Calculation

Flow Rate (Q), in gpm \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/60 = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (Y/N)	Sample Volume (ml)	Filtered (Y/N)	Preservative Added (Y/N)
VOCs	Y N	300 ml	Y N	HCl Y N
Nutrients	Y N	100 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Heavy Metals	Y N	250 ml	Y N	HNO <sub>3</sub> Y N
All Other Non-Radiologicals	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1,000 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Other (specify) <u>Chloride</u>	Y N	Sample volume	Y N	(N)  If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 1249. Turner Holliday & Garin Palmer on site for Rinsate and Sampling event. Rinsate began at 1250. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI Water. Rinsate ended and Samples collected at 1306. Left site at 1309.

Rinsate 134 TW4-23



**ATTACHMENT I**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-24 Sampler Tanner Holliday, Garin Palmer  
 Name and initials

Date and Time for Purging 8-23-2010 and Sampling (if different) 8-24-2010

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

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

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth 112.5

Depth to Water Before Purging 55.85 Casing Voltage (V) 4" Well: 36.99 (.653h)  
 Before Sample 55.98 3" Well: 47.7 (.367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Rh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Cloudy Ext'l Amb Temp (prior to sampling event) 20°C

Time: 0924 Gal. Purged 70 Time: 0925 Gal. Purged 60

Conductance 8877 Conductance 8842

pH 6.40 pH 6.40

Temperature 15.03 Temperature 15.03

Redox Potential (Rh) 475 Redox Potential (Rh) 474

Turbidity 2.8 Turbidity 3.0

Time: 0926 Gal. Purged 90 Time: 0927 Gal. Purged 100 0928 110

Conductance 8976 Conductance 9014 9033

pH 6.40 pH 6.39 6.42

Temperature 15.02 Temperature 15.02 15.02

Redox Potential (Rh) 472 Redox Potential (Rh) 471 470

Turb. 3.7 Turb. 3.7 3.8



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged ~~110~~ 110

Pumping Rate Calculation

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) 7.39 6 casing volumes 22.19  
 $S/60 =$   $T = 2V/Q =$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Taken (circle)	Sample Volume (ml) (circle)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	Y <input type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input type="radio"/> Y <input type="radio"/> N	250 ml	Y <input type="radio"/> N	HNO <sub>3</sub> <input type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input type="radio"/> Y <input type="radio"/> N	250 ml	Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input type="radio"/> Y <input type="radio"/> N	1,000 ml	Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> X <input type="radio"/> N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments Arrived on site at 0911. Tanner & Gurn on site for purge.  
 Purge Began at 0917. Purged well for a total of 11 minutes.  
 Purge ended at 0928. Stabilized after 11 minutes. DTW after purge was 62.55.  
 Left site at 0935. Water was clear throughout purge.  
 Arrived on site at 1201. Tanner & Gurn on site for sampling event.  
 Took DTW Then Bailed samples at 1210. Left site at 1212.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010 Resample

Location (well name) TW4-24 R Sampler Tanner Holiday, Garvin Palmer

Date and Time for Purging 8-23-2010 and Sampling (if different) N/A

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

Sampling Event Quantity Chloroform Prev. Well Sampled in Sampling Event etc

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 999 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: cloudy Bar/Amb. Temp. (prior to sampling event) 19°C

Time: N/A Gal. Purged 140 Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 1.3 Conductance \_\_\_\_\_

pH 5.43 pH \_\_\_\_\_

Temperature 23.88 Temperature \_\_\_\_\_

Redox Potential (Eh) 491 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Rinsate B4 TW4-24



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged When Field Parameters are Measured 150

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GD = \_\_\_\_\_ = 10 T = 2V/Q = \_\_\_\_\_ N/A

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A

Type of Sample	Sample Taken (circle)	Sample Volume (indicate if other than as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	Y <input checked="" type="radio"/> N	HCl <input checked="" type="radio"/> Y <input type="radio"/> N
Nutrients	<input checked="" type="radio"/> Y <input type="radio"/> N	100 ml	Y <input checked="" type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Heavy Metals	<input checked="" type="radio"/> Y <input type="radio"/> N	200 ml	Y <input type="radio"/> N	HNO <sub>3</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
All Other Non-Radiologicals	<input checked="" type="radio"/> Y <input type="radio"/> N	250 ml	Y <input type="radio"/> N	No Preservative Added
Gross Alpha	<input checked="" type="radio"/> Y <input type="radio"/> N	1,000 ml	Y <input type="radio"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="radio"/> Y <input type="radio"/> N
Other (specify)	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N
<u>chloride</u>				

Comments Arrived on site at 0830. Tanner & Gorrin Present for Rinsate and sampling event. Rinsate began at 0835. Pumped 50 Gallons of Acid Water, 50 Gallons Soap Water, and 50 Gallons of DI Water. Rinsate ended and samples collected at 0855. Left site at 0857.

Rinsate B4 TW4-



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4 - 25 Sample Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) 8-10-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-25R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 134.8

Depth to Water Before Purging 45.64 Casing Volume (V) 4" Well: 54.22 (653h)

Before Sample 45.96 3" Well: 42.3 (367h)

Conductance (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Env. Air Temp. (prior to sampling event) 30 °C

Time: 1421 Gal. Purged 80 Time: 1422 Gal. Purged 70

Conductance 2973 Conductance 2944

pH 6.79 pH 6.79

Temperature 15.16 Temperature 15.15

Redox Potential (Eh) 409 Redox Potential (Eh) 410

Turbidity 47.0 Turbidity 47.3

Time: 1433 Gal. Purged 100 Time: 1434 Gal. Purged 110

Conductance 2455 Conductance 2949

pH 6.80 pH 6.81

Temperature 15.15 Temperature 15.13

Redox Potential (Eh) 410 Redox Potential (Eh) 411

Turb. 46.9 Turb. 47.5



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 120 \_\_\_\_\_

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_  
 SAGD = \_\_\_\_\_ = 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ 11.64 Min \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Bergy Labs \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (circle)	Sample Volume (indicate if other than specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input checked="" type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	200 ml	Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Al Other Non Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Chloride				

Comments Arrived on site at 1419. Turner Holliday & Garris Palmer on site for Purge. Purge began at 1423. Purged well for a total of 12 Minutes. Water was clear throughout purge. Purge ended at 1435. DTW after purge was 67.83. Left site at 1439.

Arrived on site at 0559. Turner Holliday Present for sampling event. Took DTW and samples were Bailed at 0607. Left site at 0610.



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-25 R Sample Name and initials Tanner Halliday, Garrin Palmer

Date and Time for Purging 8-9-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-23

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Volume (V) 4" Well N/A (.653h)

Conductance (avg) \_\_\_\_\_ pH of Water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Partly Cloudy Ext'l Amb Temp (at or near sampling event) 36°C

Time: N/A Gal. Purged N/A Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 2.9 Conductance \_\_\_\_\_

pH 6.83 pH \_\_\_\_\_

Temperature 24.74 Temperature \_\_\_\_\_

Redox Potential (Eh) 196 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSTATE GH TW4-25



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

Pumping Rate Calculation

Flow Rate (Q), in gpm. 10 Time to evacuate two casing volumes (2V) N/A  
 $SAGD = \frac{2V}{Q}$

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Lab N/A

Type of Sample	Sample Taken (circle)	Sample Volume (Initial Volume minus as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	HNO <sub>3</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
All Other Non-Radiologicals	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	250 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	No Preservative Added
Gross Alpha	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1,000 ml	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1354. Turner Holliday & Garvin Palmer on site for Rinsate and Sampling event. Rinsate began at 1355. Pumped 50 Gallons of Acid water. 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1411. Left site at 1413.

Rinsate B4 TW4 - 25



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-26 Sample Name and initials Tanner Halliday, Garin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) 8-11-2010

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-26R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 86

Depth to Water Before Purging 64.69 Casing Volume (V) 4" Well: 13.91 (.653h)  
Before Sample 64.85 4" Well: 27.8 (.367h)

Conductance (avg) \_\_\_\_\_ Discharge (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond Partly cloudy Bar/Amb Temp (prior to sampling event) 29°

Time: 1416 Gal. Purged 15 Time: 1423 Gal. Purged 15

Conductance 5363 Conductance 5153

pH 4.21 pH 4.25

Temperature 19.68 Temperature 15.98

Redox Potential (Eh) 414 Redox Potential (Eh) 439

Turbidity 94.3 Turbidity 26.9

Time: 1427 +30 Gal. Purged 15 Time: 1428 Gal. Purged 20

Conductance 5135 Conductance 5112

pH 4.26 pH 4.31

Temperature 15.70 Temperature 15.45

Redox Potential (Eh) 445 Redox Potential (Eh) 447

Turb. 55.8 Turb. 242.0

Well Ran dry  
 After 2 Min 30 Sec.



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 25 well Ran dry

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_  
 SAGD = \_\_\_\_\_ = 10  
 Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ 2.78 Min

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ 1.65

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ 25

Name of Certified Analytical Laboratory if Other Than Energy Lab \_\_\_\_\_ N/A

Type of Sample	Sample Filtered (Yes/No)	Sample Volume (ml)	Filtered (Yes/No)	Preservative Added (Yes/No)
VOCs	Y N	100ml	Y N	HCl Y N
Nutrients	Y N	100ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Heavy Metals	Y N	250ml	Y N	HNO <sub>3</sub> Y N
All Other Non-Radiologicals	Y N	250ml	Y N	No Preservative Added
Gross Alpha	Y N	1,000 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Other (specify)	Y N	Sample volume	Y N	Y N
<u>Chloride</u>				

Comments Arrived on site at 1423. Turner Halliday & Garcia Palmer on site for Purge. Purge began at 1426. Purged well for a total of 2 Minutes & 30 Seconds. Well Ran dry! Water was a little dirty. DWD APV purge was 85.39 Left site at 1433. Arrived on site at 0653. Tanner present for sampling event. Took DWD Then Bailed samples at 0704. Left site at 0706.



**ATTACHMENT 1**

**WHITE MESA URANIUM MILL**

**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter chloroform 2010

Location (well name) TW4-26 R Sample Name and initials Tanner Halliday, Garrin Palmer

Date and Time for Purging 8-10-2010 and Sampling (if different) N/A

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

Sampling Event Quarterly chloroform Prev. Well Sampled in Sampling Event TW4-5

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth N/A

Depth to Water Before Purging N/A Casing Voltage (V) 4<sup>th</sup> Well: N/A (.653h)

Conductance (avg) \_\_\_\_\_ Well \_\_\_\_\_ (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond: Partly Cloudy Bar/Atm Temp (for purging event) 29 $^{\circ}$ C

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance 27 Conductance \_\_\_\_\_

pH 7.52 pH \_\_\_\_\_

Temperature 25.78 Temperature \_\_\_\_\_

Redox Potential (Eh) 348 Redox Potential (Eh) \_\_\_\_\_

Turbidity 0 Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

RINSATE  
BY TW4-26



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged 150 Gallons

Purging Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 S/GO = = 10 T = 2V/Q = N/A

Number of casing volumes evacuated (if other than two) N/A

If well evacuated to dryness, number of gallons evacuated N/A

Name of Certified Analytical Laboratory if Other Than Energy Labs N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (note to other than specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HCL <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> N  If a preservative is used, Specify Type and Quantity of Preservative.

Comments Arrived on site at 1355. Turner Holliday & Garcin Palmer on site for Rinsate and Sampling event. Rinsate began at 1357. Pumped 50 Gallons of Acid water 50 Gallons of soap water and 50 Gallons of DI water. Rinsate ended and Samples collected at 1414. Left site at 1416.

Rinsate B4 TW4-26



**ATTACHMENT I  
 WHITE MESA URANIUM MILL  
 FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4 - 60 Sample  
 Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-17-2010 and Sampling (if different) N/A

Well Purging Equip Used: no pump or bailer Well Pump (if other than Bennet) ~~WELPUMP~~ N/A

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-2

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth         

Depth to Water Before Purging N/A Casing Volume (V) 4" Well: (.653h)

Conductance (avg)          pH of Water (avg)         

Well Water Temp (avg)          Redox Potential (Eh)          Turbidity         

Weather Cond Sunny Ext Ambient Temp (prior to sampling event) 20.2

D.I. Blank

Time	Gal. Purged	Conductance	pH	Temperature	Redox Potential (Eh)	Turbidity
1425	0	0	5.36	26.39	492	0
1426	0	0	5.39	26.35	502	0
1427	0	0	5.37	26.34	500	0
1428	0	0	5.49	26.28	493	0



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ N/A \_\_\_\_\_

Pumping Rate Calculation

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GO = \_\_\_\_\_ N/A \_\_\_\_\_ Time to evacuate two casing volumes (2V)  
 T = 2V/Q = \_\_\_\_\_ N/A \_\_\_\_\_

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Energy Labs \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Filtered (circle)	Sample Volume (ml) (circle)	Filtered (circle)	Preservative Added (circle)
VOCs	Y N	100 ml	Y (N)	HCl (Y) N
Nutrients	(Y) N	100 ml	Y (N)	H <sub>2</sub> SO <sub>4</sub> (Y) N
Heavy Metals	Y N	250 ml	Y N	HNO <sub>3</sub> Y N
All Other Non-Radiolysis	Y N	250 ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Other (specify)	(Y) N	Sample volume	Y (N)	Y (N)
<u>Chloride</u>				

Comments Arrived on site at 1420. Turner Halliday & Garris Palmer on site. ~~Flow Pump~~ ~~Basin~~ began at 1425. Purged well for a total of 5 minutes. Took 4 sets of parameters. Samples pulled at 1431. Left site at 1435.

D.I. Blank



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4 - 65 Sampler  
Name and initials Tanner Holliday, Garrin Palmer

Date and Time for Purging 8-11-2010 and Sampling (if different) 8-12-2010

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

Sampling Event Quarterly Chloroform Prev. Well Sampled in Sampling Event TW4-21R

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998  $\mu$ MHOS/cm Well Depth 121

Depth to Water Before Purging 55.36 Casing Volume (V) 4" Well: 42.86 (.653h)

Conductance (avg) 54.87 Well: 42.86 (.367h)

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Cond. Partly Cloudy Rxn/Atm Temp (prior to sampling event) 23°C

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Duplicate of TW4-21



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ 100 \_\_\_\_\_

Pumping Rate Calculation

Flow Rate (Q), in gpm \_\_\_\_\_  
 S/60 = \_\_\_\_\_ 10 \_\_\_\_\_  
 Time to evacuate two casing volumes (2V)  
 $T = 2V/Q =$  \_\_\_\_\_ 6.57 \_\_\_\_\_ Min

Number of casing volumes evacuated (if other than two) \_\_\_\_\_ N/A \_\_\_\_\_

If well evacuated to dryness, number of gallons evacuated \_\_\_\_\_ N/A \_\_\_\_\_

Name of Certified Analytical Laboratory if Other Than Biology Lab \_\_\_\_\_ N/A \_\_\_\_\_

Type of Sample	Sample Taken (circle)	Sample Volume (circle) (if prescribed below)	Filtered (circle)	Preservative Added (circle)
VOCS	Y N	250ml	Y N	HCl Y N
Nutrients	Y N	100ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Heavy Metals	Y N	250ml	Y N	HNO <sub>3</sub> Y N
All Other Non-Radiologic	Y N	250ml	Y N	No Preservative Added
Gross Alpha	Y N	1000 ml	Y N	H <sub>2</sub> SO <sub>4</sub> Y N
Other (specify) Chloride	Y N	Sample volume	Y N	Y N
				If a preservative is used, Specify Type and Quantity of Preservative:

Comments \_\_\_\_\_  
 on \_\_\_\_\_  
 of \_\_\_\_\_

Duplicate of TW4-21



**ATTACHMENT 1**  
**WHITE MESA URANIUM MILL**  
**FIELD DATA WORKSHEET FOR GROUND WATER**

Description of Sampling Event: 3<sup>rd</sup> Quarter Chloroform 2010

Location (well name) TW4-70 <sup>Sample</sup> Name and initials Tanner Holliday, Garin Palmer

Date and Time for Purging 8-16 and Sampling (if different) N/A

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

Sampling Event Quarterly Chloroform Prev. Well sampled in Sampling Event not all

pH Buffer 7.0 7.0 pH Buffer 4.0 4.0

Specific Conductance 998 uMHOS/cm Well Depth 130

Depth to Water Before Purging 76.60 Casing Volume (V) 4" Well: 34.87 (.653h)  
<sup>Before sample</sup> 82.63 Well: 26.8 (.367h)

Conductance (avg) \_\_\_\_\_ pH of water (avg) \_\_\_\_\_

Well Water Temp. (avg) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_ Turbidity \_\_\_\_\_

Weather Code Partly cloudy Env/Amb Temp (prior to sampling event) 28°C

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_ Time: \_\_\_\_\_ Gal. Purged \_\_\_\_\_

Conductance \_\_\_\_\_ Conductance \_\_\_\_\_

pH \_\_\_\_\_ pH \_\_\_\_\_

Temperature \_\_\_\_\_ Temperature \_\_\_\_\_

Redox Potential (Eh) \_\_\_\_\_ Redox Potential (Eh) \_\_\_\_\_

Turb. \_\_\_\_\_ Turb. \_\_\_\_\_

Duplicate of TW4-17



Turbidity \_\_\_\_\_ Turbidity \_\_\_\_\_

Volume of Water Purged \_\_\_\_\_ N/A

**Pumping Rate Calculation**

Flow Rate (Q), in gpm. \_\_\_\_\_  
 S/GO = \_\_\_\_\_ N/A Time to evacuate two casing volumes (2V) \_\_\_\_\_  
 T = 2V/Q = \_\_\_\_\_ N/A

Number of casing volumes evacuated (if other than two): \_\_\_\_\_ N/A

If well evacuated to dryness, number of gallons evacuated: \_\_\_\_\_ N/A

Name of Certified Analytical Laboratory if Other than Energy Labs \_\_\_\_\_ N/A

Type of Sample	Sample Filtered (circle)	Sample Volume (in liters or other unit as specified below)	Filtered (circle)	Preservative Added (circle)
VOCs	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	500 ml	Y <input checked="" type="checkbox"/> N	HCl <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Nutrients	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	100 ml	Y <input checked="" type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Heavy Metals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	HNO <sub>3</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
All Other Non-Radiologicals	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	250 ml	Y <input type="checkbox"/> N	No Preservative Added
Gross Alpha	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1,000 ml	Y <input type="checkbox"/> N	H <sub>2</sub> SO <sub>4</sub> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Other (specify) <u>Chloride</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume	Y <input checked="" type="checkbox"/> N	Y <input checked="" type="checkbox"/> N
				If a preservative is used, Specify Type and Quantity of Preservative.

Comments \_\_\_\_\_  
 on \_\_\_\_\_  
 for \_\_\_\_\_  
Duplicate of TW4 17.



**Tab C**

**Weekly and Monthly Depth to Water Data**





# Depth to Water

Date 7.13.2010 mmHg 620.268

<u>Time</u>	<u>Well</u>	<u>Depth</u>	<u>Comments</u>
1005	MW-4	62.90	Flow * Meter 194958.3
0959	TW4-15	82.52 Hang up	Flow 4.7 GPM Meter 360630
1015	TW4-19	66.54	Flow 1.9 GPM Meter 1481610
0954	TW4-20	65.41	Flow 1.7 GPM Meter 72337.1
1008	TW4-4	66.59	Flow * Meter 122035.6
*	TW4-4 Pump was pulled last week so hydrologists could perform slug test on well. Pump has not been re-set, no power hooked up.		
*	MW4 - NO Power to Well so Pump Flow rate could not be taken. Guessing power outage has to do with TW4-4 pump being pulled.		
	Water:	674229	7.12.10

Will contact Maint. to place pump on TW4-4 & Electrical Department to get power back to both TW4-4 & MW4

# Chloroform Wells

Date 7-15-2010

mmHg 624.078

<u>Time</u>	<u>Well</u>	<u>Depth</u>	<u>Comments</u>
<u>1235</u>	MW-4	<u>67.89</u>	
<u>1222</u>	TW4-1	<u>63.10</u>	
<u>1227</u>	TW4-2	<u>66.44</u>	
<u>1218</u>	TW4-3	<u>48.69</u>	
<u>1232</u>	TW4-4	<u>68.60</u>	
<u>1215</u>	TW4-5	<u>35.05</u>	
<u>1235</u>	TW4-6	<u>70.98</u>	
<u>1223</u>	TW4-7	<u>64.10</u>	
<u>1220</u>	TW4-8	<u>66.76</u>	
<u>1216</u>	TW4-9	<u>53.69</u>	
<u>1213</u>	TW4-10	<u>55.91</u>	
<u>1259</u>	TW4-11	<u>58.36</u>	
<u>1242</u>	TW4-12	<u>38.34</u>	
<u>1244</u>	TW4-13	<u>47.41</u>	
<u>1246</u>	TW4-14	<u>88.61</u>	
<u>1212</u>	TW4-15	<u>78.99</u>	
<u>1256</u>	TW4-16	<u>64.41</u>	
<u>1254</u>	TW4-17	<u>76.68</u>	
<u>1201</u>	TW4-18	<u>56.21</u>	
<u>1310</u>	TW4-19	<u>66.19</u>	
<u>1211</u>	TW4-20	<u>73.57</u>	
<u>1203</u>	TW4-21	<u>56.34</u>	
<u>1209</u>	TW4-22	<u>54.81</u>	
<u>1231</u>	TW4-23	<u>66.12</u>	
<u>1207</u>	TW4-24	<u>56.03</u>	
<u>1159</u>	TW4-25	<u>45.68</u>	
<u>1237</u>	TW4-26	<u>64.78</u>	

Entered 7.19.10 K.P.











# Depth to Water

Date 8-10 2010 mmHg \_\_\_\_\_

<u>Time</u>	<u>Well</u>	<u>Depth</u>	<u>Comments</u>
1345	MW-4	69.86	Flow 4.5 GPM Meter 221483.6
			New
1337	TW4-15	79.36	Flow 5.4 GPM Meter 380470
			Old
1410	TW4-19	66.78	Flow 1.4 GPM Meter 154836
			Old
1333	TW4-20	62.72	Flow 2.0 GPM Meter 84270.2
			New
	TW4-4	68.52	Flow 8.6 GPM Meter 147817.4
			New
		757.540	
	Water:	<del>757.540</del>	





# Chloroform Wells

Date 8-18-2010 mmHg 621 792

<u>Time</u>	<u>Well</u>	<u>Depth</u>	<u>Comments</u>
<u>1258</u>	MW-4	<u>70.61</u>	
<u>0832</u>	TW4-1	<u>63.28</u>	
<u>0814</u>	TW4-2	<u>67.43</u>	
<u>1255</u>	TW4-3	<u>48.55</u>	
<u>1304</u>	TW4-4	<u>68.85</u>	
<u>1252</u>	TW4-5	<u>54.75</u>	
<u>1306</u>	TW4-6	<u>70.96</u>	
<u>0823</u>	TW4-7	<u>67.79</u>	
<u>1256</u>	TW4-8	<u>67.21</u>	
<u>1254</u>	TW4-9	<u>53.41</u>	
<u>1250</u>	TW4-10	<u>55.70</u>	
<u>1300</u>	TW4-11	<u>58.33</u>	
<u>1313</u>	TW4-12	<u>38.43</u>	
<u>1314</u>	TW4-13	<u>47.21</u>	
<u>1316</u>	TW4-14	<u>88.56</u>	
<u>1244</u>	TW4-15	<u>83.41</u>	<u>Seaged at this level</u>
<u>1433</u>	TW4-16	<u>69.94</u>	
<u>1437</u>	TW4-17	<u>76.69</u>	
<u>1333</u>	TW4-18	<u>55.89</u>	
<u>1447</u>	TW4-19	<u>62.05</u>	
<u>1242</u>	TW4-20	<u>63.47</u>	
<u>1331</u>	TW4-21	<u>54.71</u>	
<u>1240</u>	TW4-22	<u>54.42</u>	
<u>1320</u>	TW4-23	<u>66.11</u>	
<u>1238</u>	TW4-24	<u>55.98</u>	
<u>1328</u>	TW4-25	<u>45.65</u>	
<u>1308</u>	TW4-26	<u>64.71</u>	

Entered 8-19-2010





















Tab D

Kriged Current Quarter Groundwater Contour Map, Details Map, and Depth to Water Summary

PROPERTY  
BOUNDARY

WESTWATER CREEK

US 191  
TO BLANDING

US 191  
TO WHITE MESA

29

28

32

33

T37S  
T38S

CELL NO. 1

CELL NO. 2

CELL NO. 3

CELL NO. 4B

CELL NO. 4A

MILL SITE

PIEZ-2  
5613

PIEZ-3  
5600

PIEZ-4  
5542

PIEZ-5  
5540

MW-01  
5582

MW-18  
5587

MW-19  
5604

MW-27  
5577

MW-02  
5503

MW-28  
5549

MW-29  
5612

MW-30  
5638

MW-31  
5547

MW-32  
5549

MW-23  
5493

MW-12  
5501

MW-05  
5503

MW-11  
5621

MW-25  
5538

MW-85  
5487

MW-33  
dry

MW-34  
5492

MW-15  
5493

MW-14  
5494

MW-17  
5499

MW-03  
5471

MW-21

MW-20  
5456

MW-22  
5450

TWN-15  
5584

TWN-14  
5587

TWN-10  
5585

TWN-9  
5583

PIEZ-1  
5593

TWN-13  
5587

TWN-5  
5585

TWN-7  
5560

TWN-18  
5588

TWN-3  
5603

TWN-2  
5611

TWN-1  
5577

TWN-19  
5575

TWN-20  
5560

TWN-26  
5547

TWN-32  
5549

TWN-4  
5566

TWN-24  
5548

TWN-24  
5554

TWN-4  
5555

TWN-4  
5545

TWN-4  
5538

TWN-26  
5537

PIEZ-4  
5542

PIEZ-5  
5540

PIEZ-5  
5540

PIEZ-5  
5540

PIEZ-5  
5540

PIEZ-5  
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PIEZ-5  
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PIEZ-5  
5540



SCALE IN FEET

**EXPLANATION**

- MW-22  
● 5450 perched monitoring well showing elevation in feet amsl
- 5555 temporary perched monitoring well showing elevation in feet amsl
- PIEZ-1  
● 5593 perched piezometer showing elevation in feet amsl
- TWN-4  
◆ 5605 temporary perched nitrate monitoring well showing elevation in feet amsl
- TW4-26  
✱ 5537 temporary perched monitoring well installed May, 2010 showing elevation in feet amsl
- MW-34  
◇ 5492 perched monitoring well installed August/September, 2010 showing elevation in feet amsl

NOTE: MW-4, MW-26, TW4-4, TW4-19 and TW4-20 are pumping wells

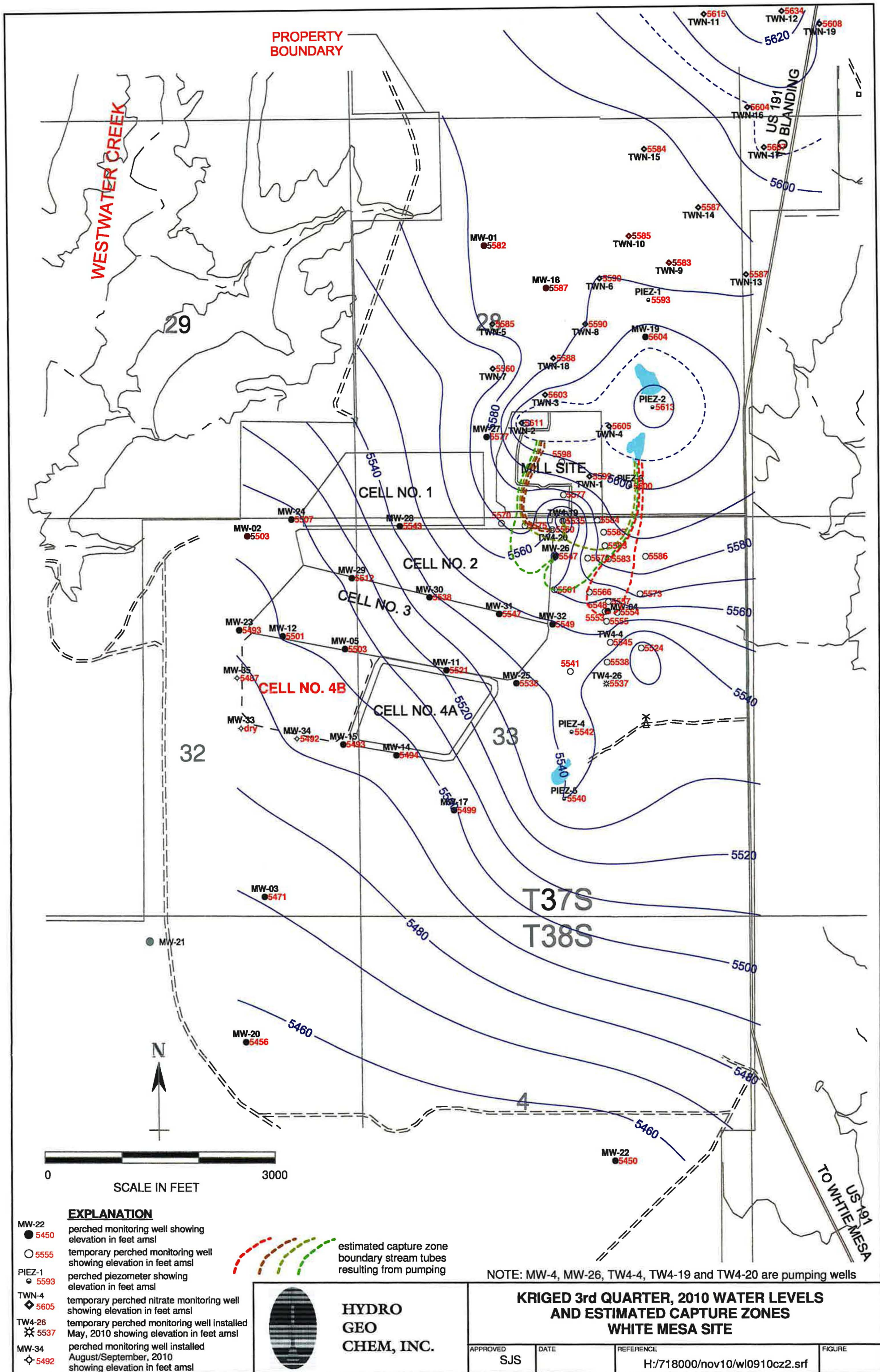


HYDRO  
GEO  
CHEM, INC.

**KRIGED 3rd QUARTER, 2010 WATER LEVELS  
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
SJS		H:/718000/nov10/wl0910.srf	





**PROPERTY BOUNDARY**

**WESTWATER CREEK**

**US 191  
BLANDING**

**US 191  
TO WHITE MESA**

**MILL SITE**

**CELL NO. 1**

**CELL NO. 2**

**CELL NO. 3**

**CELL NO. 4B**

**CELL NO. 4A**

**T37S  
T38S**

**EXPLANATION**

- MW-22 ● 5450 perched monitoring well showing elevation in feet amsl
- 5555 temporary perched monitoring well showing elevation in feet amsl
- PIEZ-1 ● 5593 perched piezometer showing elevation in feet amsl
- TWN-4 ◆ 5605 temporary perched nitrate monitoring well showing elevation in feet amsl
- TW4-26 ✖ 5537 temporary perched monitoring well installed May, 2010 showing elevation in feet amsl
- MW-34 ◆ 5492 perched monitoring well installed August/September, 2010 showing elevation in feet amsl

estimated capture zone boundary stream tubes resulting from pumping

NOTE: MW-4, MW-26, TW4-4, TW4-19 and TW4-20 are pumping wells

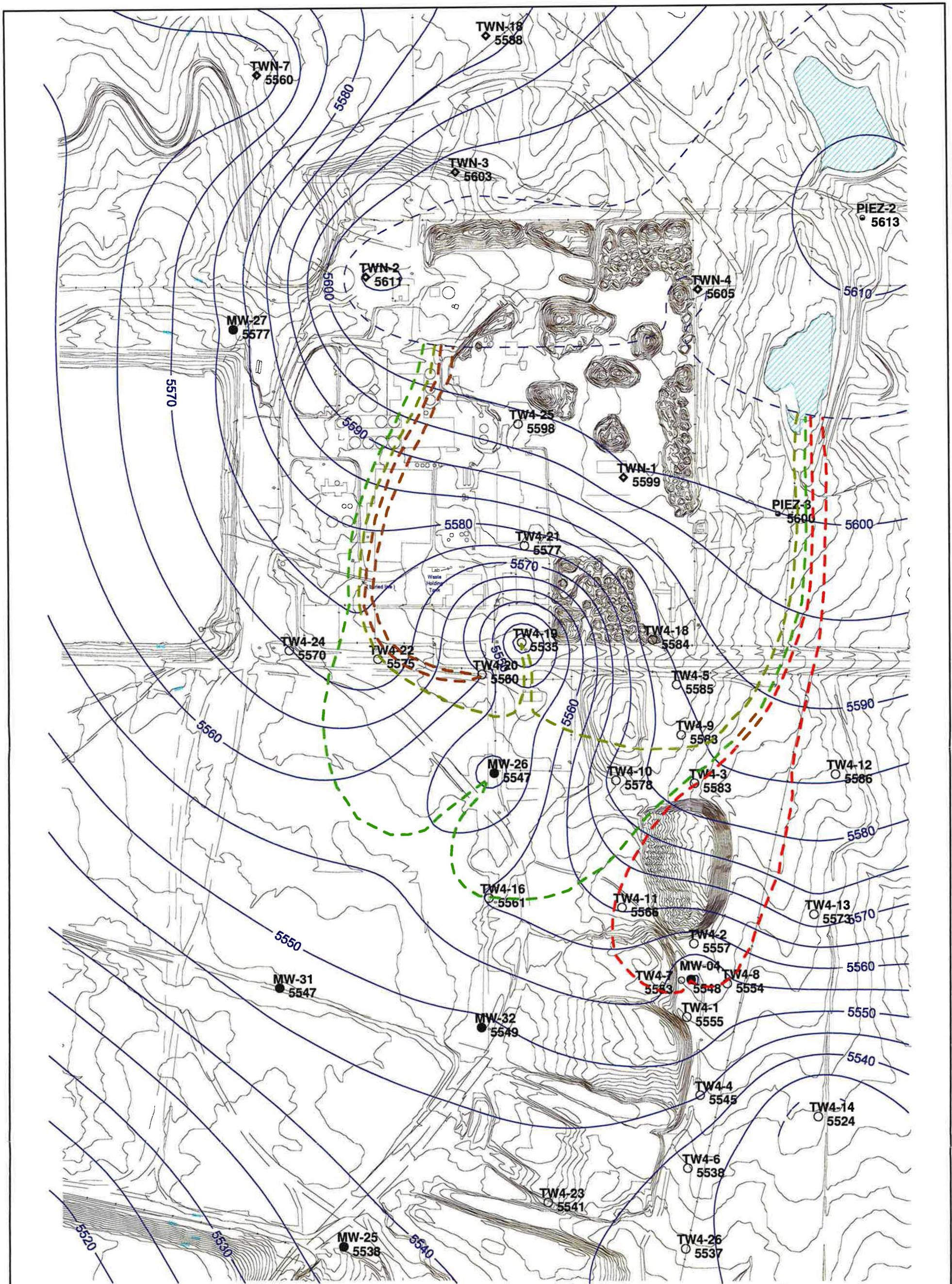


**HYDRO  
GEO  
CHEM, INC.**

**KRIGED 3rd QUARTER, 2010 WATER LEVELS  
AND ESTIMATED CAPTURE ZONES  
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
SJS		H:/718000/nov10/wl0910cz2.srf	





**EXPLANATION**

estimated capture zone boundary stream tubes resulting from pumping

- ◆ TWN-1 5599 temporary perched nitrate monitoring well showing elevation in feet amsl
- TW4-1 5555 temporary perched monitoring well showing elevation in feet amsl
- MW-32 5549 perched monitoring well showing elevation in feet amsl

NOTE: MW-4, MW-26, TW4-4, TW4-19, and TW4-20 are pumping wells



**HYDRO  
GEO  
CHEM, INC.**

**KRIGED 3rd QUARTER, 2010 WATER LEVELS  
AND ESTIMATED CAPTURE ZONES  
WHITE MESA SITE  
(detail map)**

APPROVED	DATE	REFERENCE	FIGURE
SJS		H:/718000/aug10/wl0910cz.srf	



# Quarterly Depth to Water

NAME: Tanner Holliday, Garrin Palmer

MMHG: \_\_\_\_\_

DATE: 9/29/2010

Start time: 730

Finish Time: 1442

TIME	WELL I.D.	DEPTH	TIME	WELL I.D.	DEPTH	TIME	WELL I.D.	DEPTH
922	MW-1	65.32	812	TW4-1	63.32	846	PIEZ-1	62.11
1433	MW-2	109.74	815	TW4-2	67.48	841	PIEZ-2	15.36
1359	MW-3	84.02	816	TW4-3	48.72	830	PIEZ-3	38.07
1400	MW-3A	85.57	819	TW4-4	68.25	1345	PIEZ-4	48.85
1000	MW-4	74.00	823	TW4-5	56.15	1348	PIEZ-5	44.19
1256	MW-5	106.47	827	TW4-6	70.75			
957	MW-11	89.61	1259	TW4-7	67.62	819	TWN-1	48.91
1223	MW-12	108.55	1341	TW4-8	67.06	751	TWN-2	15.32
1236	MW-14	103.83	915	TW4-9	54.67	822	TWN-3	31.64
1240	MW-15	106.53	918	TW4-10	56.39	827	TWN-4	37.28
1354	MW-17	76.22	1317	TW4-11	57.95	1917	TWN-5	69.83
914	MW-18	70.49	835	TW4-12	38.55	909	TWN-6	74.70
843	MW-19	51.22	837	TW4-13	46.77	918	TWN-7	89.43
1412	MW-20	84.11	839	TW4-14	88.40	911	TWN-8	61.74
1418	MW-22	67.27	845	TW4-15	78.02	847	TWN-9	64.20
1219	MW-23	119.31	851	TW4-16	63.48	907	TWN-10	81.56
1214	MW-24	114.65	941	TW4-17	76.41	901	TWN-11	69.60
1249	MW-25	75.02	818	TW4-18	57.67	859	TWN-12	34.51
845	MW-26	78.02	856	TW4-19	96.13	849	TWN-13	46.95
811	MW-27	51.00	905	TW4-20	69.20	852	TWN-14	63.00
950	MW-28	77.30	815	TW4-21	62.75	904	TWN-15	92.23
947	MW-29	102.49	909	TW4-22	54.12	856	TWN-16	48.42
945	MW-30	76.13	921	TW4-23	65.90	854	TWN-17	34.78
943	MW-31	69.12	925	TW4-24	55.65	825	TWN-18	57.95
941	MW-32	76.41	813	TW4-25	46.23	740	TWN-19	53.38
1442	MW-33	107.94	927	TW4-26	64.73			
1440	MW-34	DRY						
1438	MW-35	112.31						

Comments: MW-15 was found unlocked, problem was taken care of. Tanner and Garrin split up to perform depth checks so some of the times may appear to be on top of each other but there were two technicians.

Tab E

Kriged Previous Quarter Groundwater Contour Map



PROPERTY  
BOUNDARY

WESTWATER CREEK

US 191  
TO BLANDING

US 191  
TO WHITE MESA

29

32

33

T37S  
T38S

CELL NO. 1

CELL NO. 2

CELL NO. 3

CELL NO. 4A

MILL SITE

PIEZ-2

PIEZ-3

PIEZ-4

PIEZ-5

MW-01

MW-18

MW-19

MW-24

MW-28

MW-02

MW-29

MW-30

MW-31

MW-32

MW-11

MW-25

MW-15

MW-14

MW-17

MW-03

MW-21

MW-20

MW-22

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

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TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

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TWN-10

TWN-9

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TWN-8

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TWN-18

TWN-3

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TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

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TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

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TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

TWN-8

TWN-7

TWN-18

TWN-3

TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

TW4-4

TW4-26

TWN-11

TWN-12

TWN-19

TWN-16

TWN-17

TWN-15

TWN-14

TWN-10

TWN-9

TWN-13

TWN-5

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TWN-2

TWN-4

TWN-1

TW4-19

TW4-20

MW-26

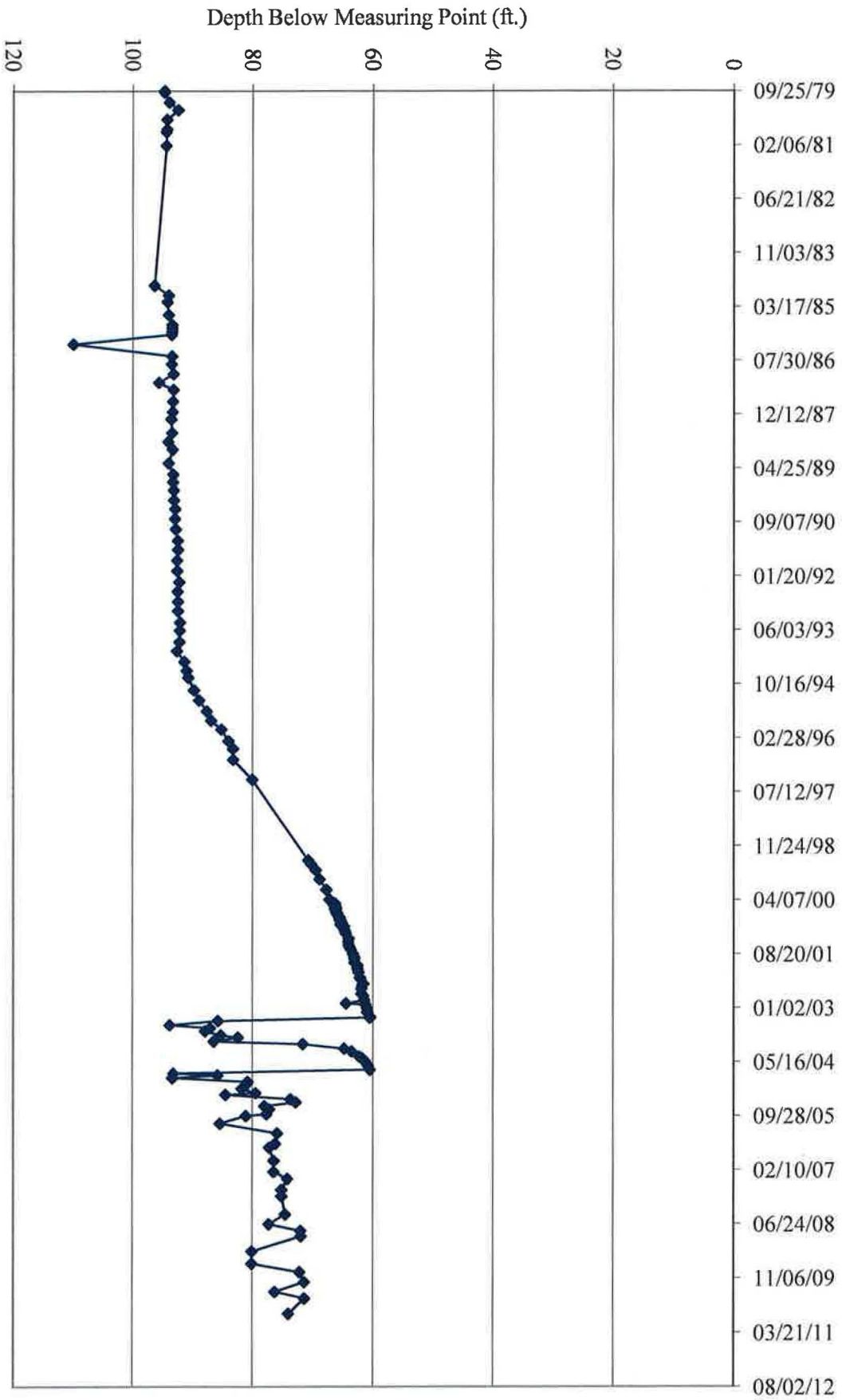
TW4-4

TW4-26

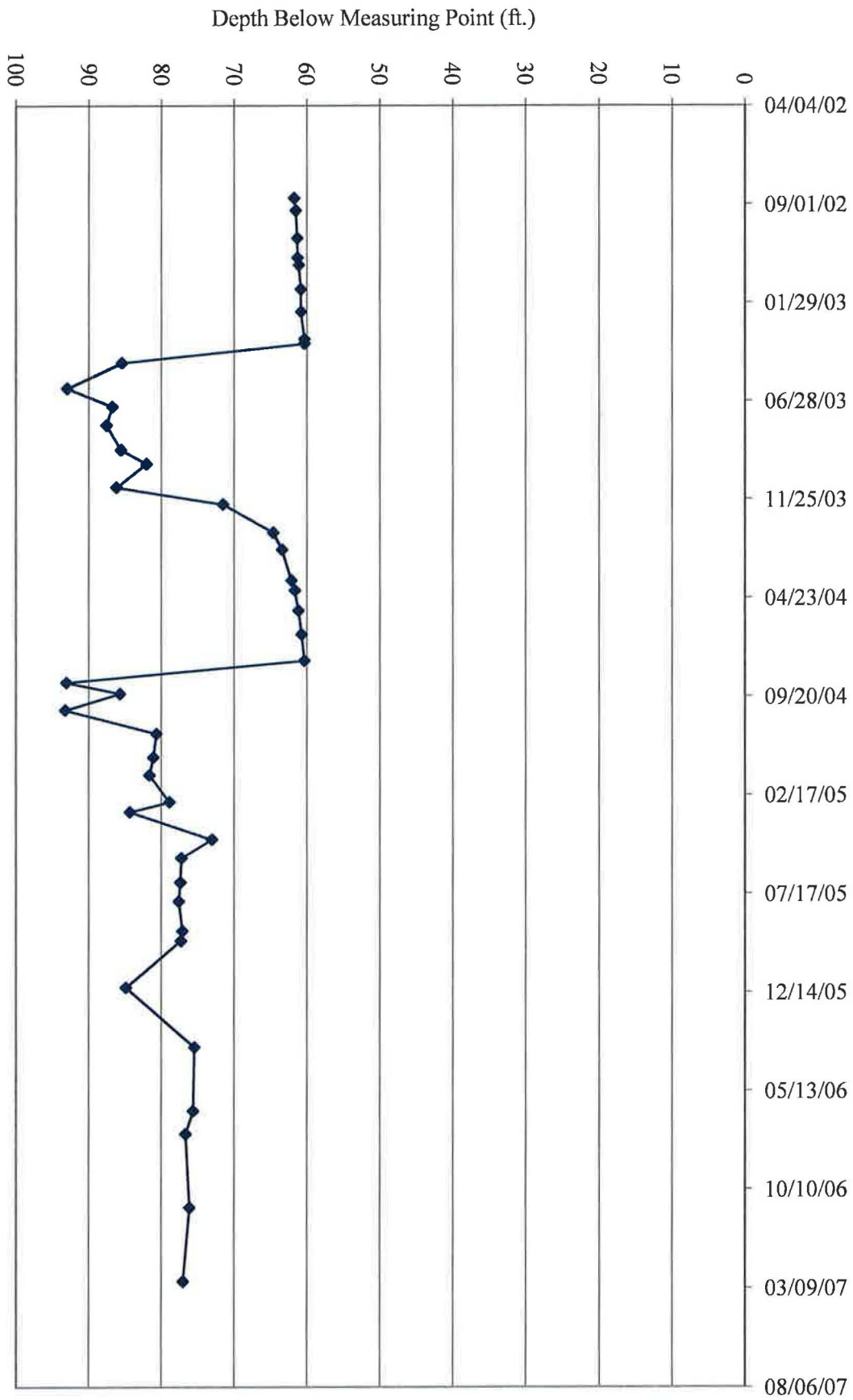
**Tab F**

**Hydrographs of Groundwater Elevations Over Time for Chloroform Monitoring Wells**

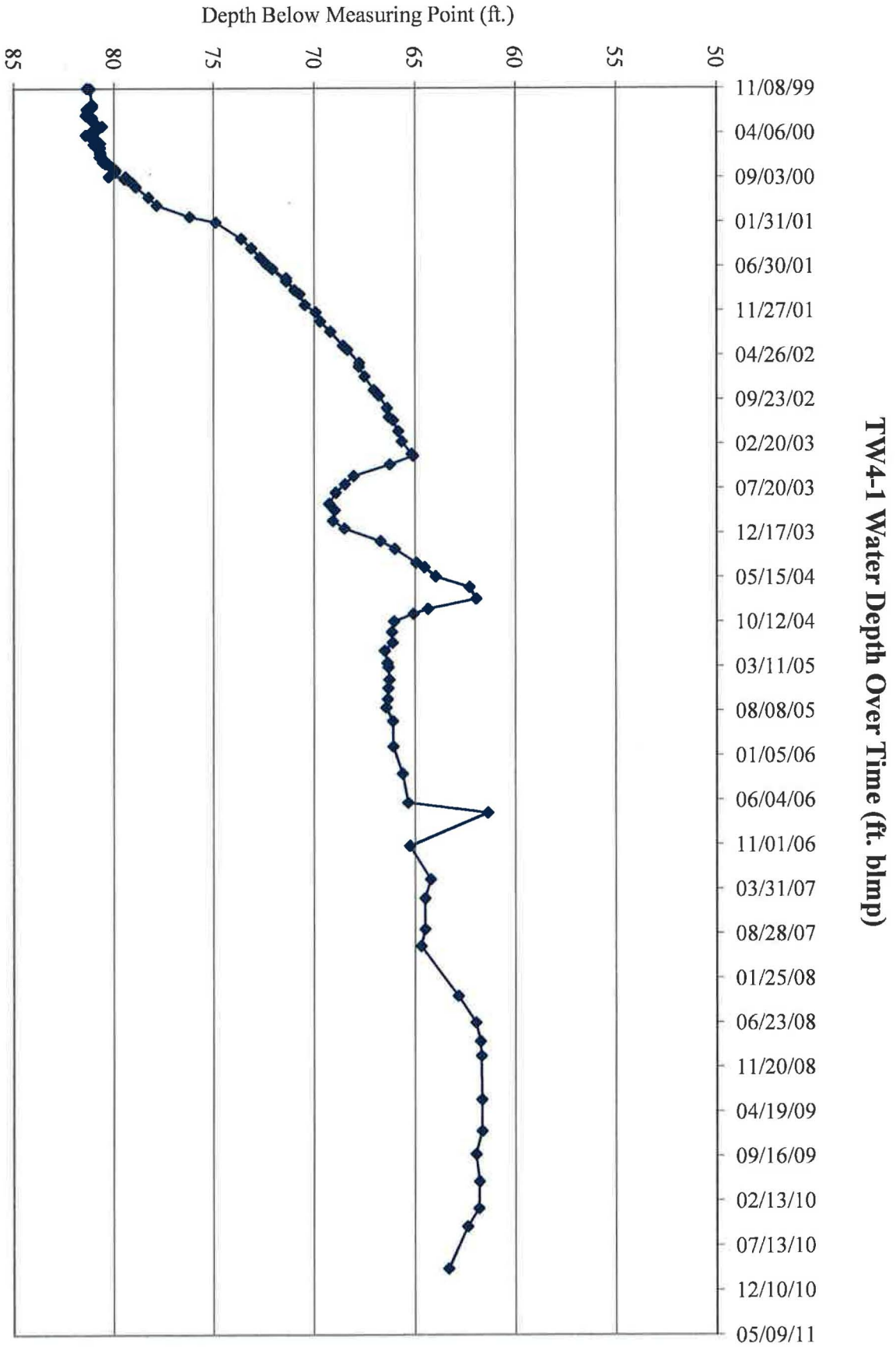


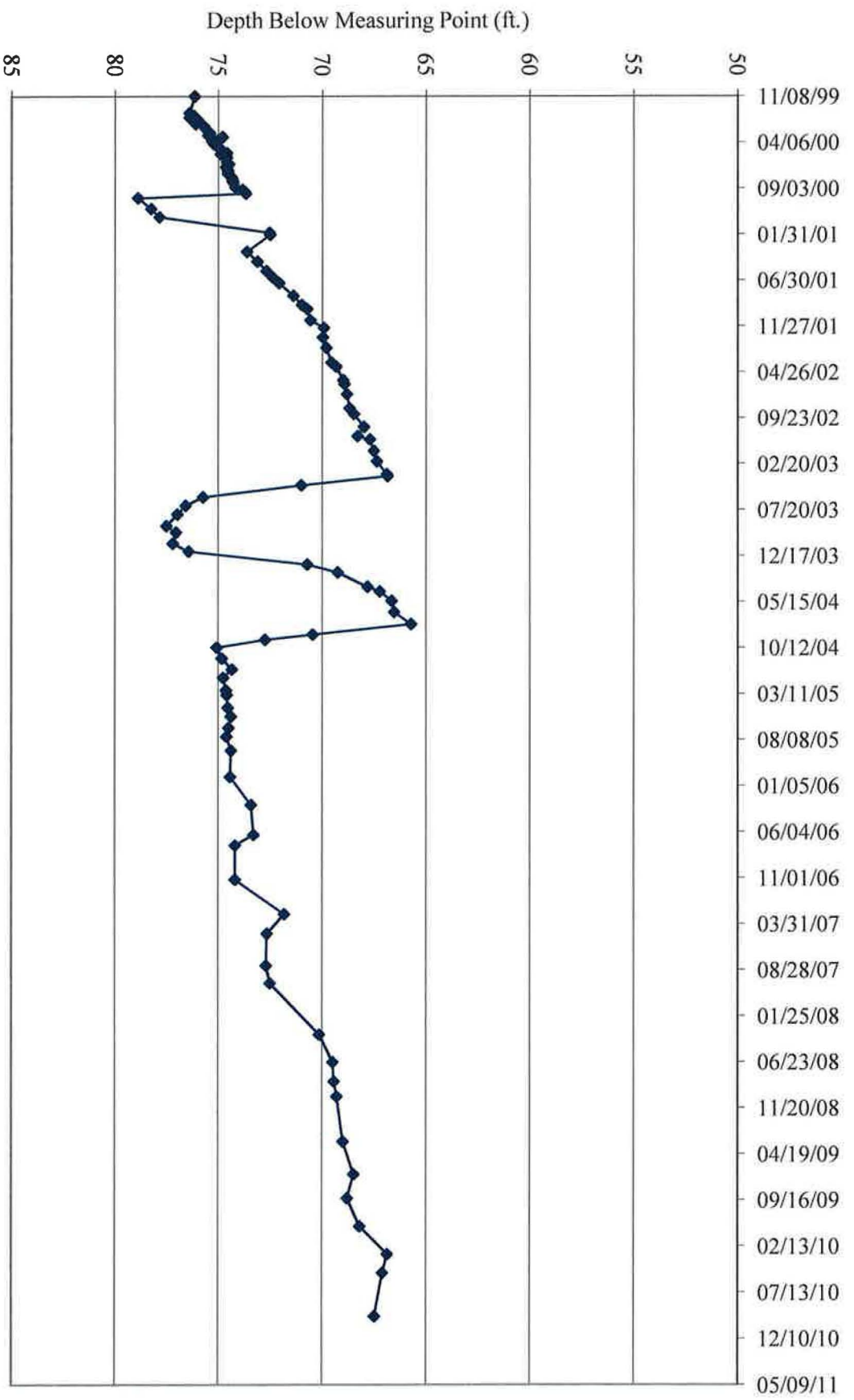


**MW-4A Water Depth Over Time (ft. blmp)**





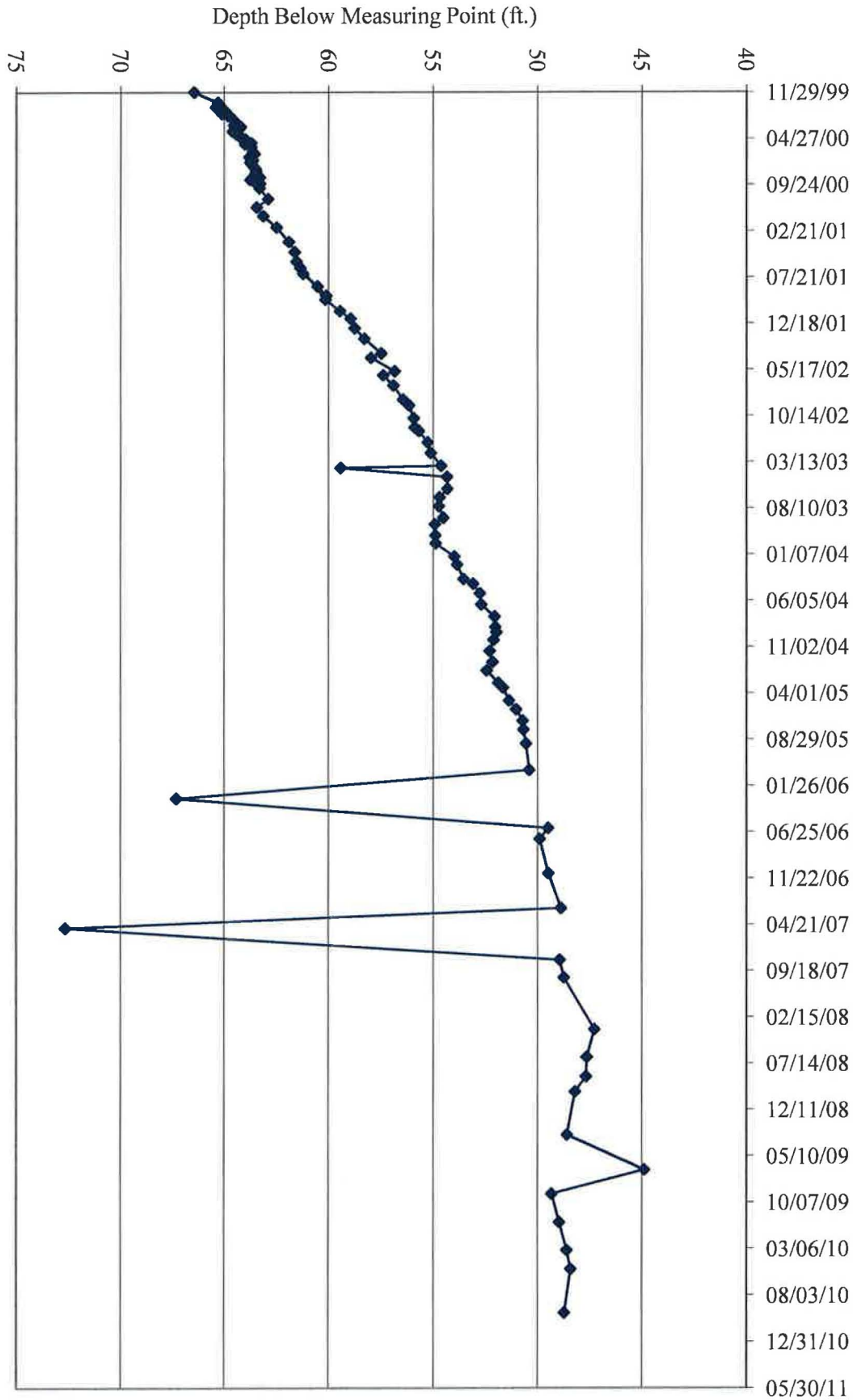


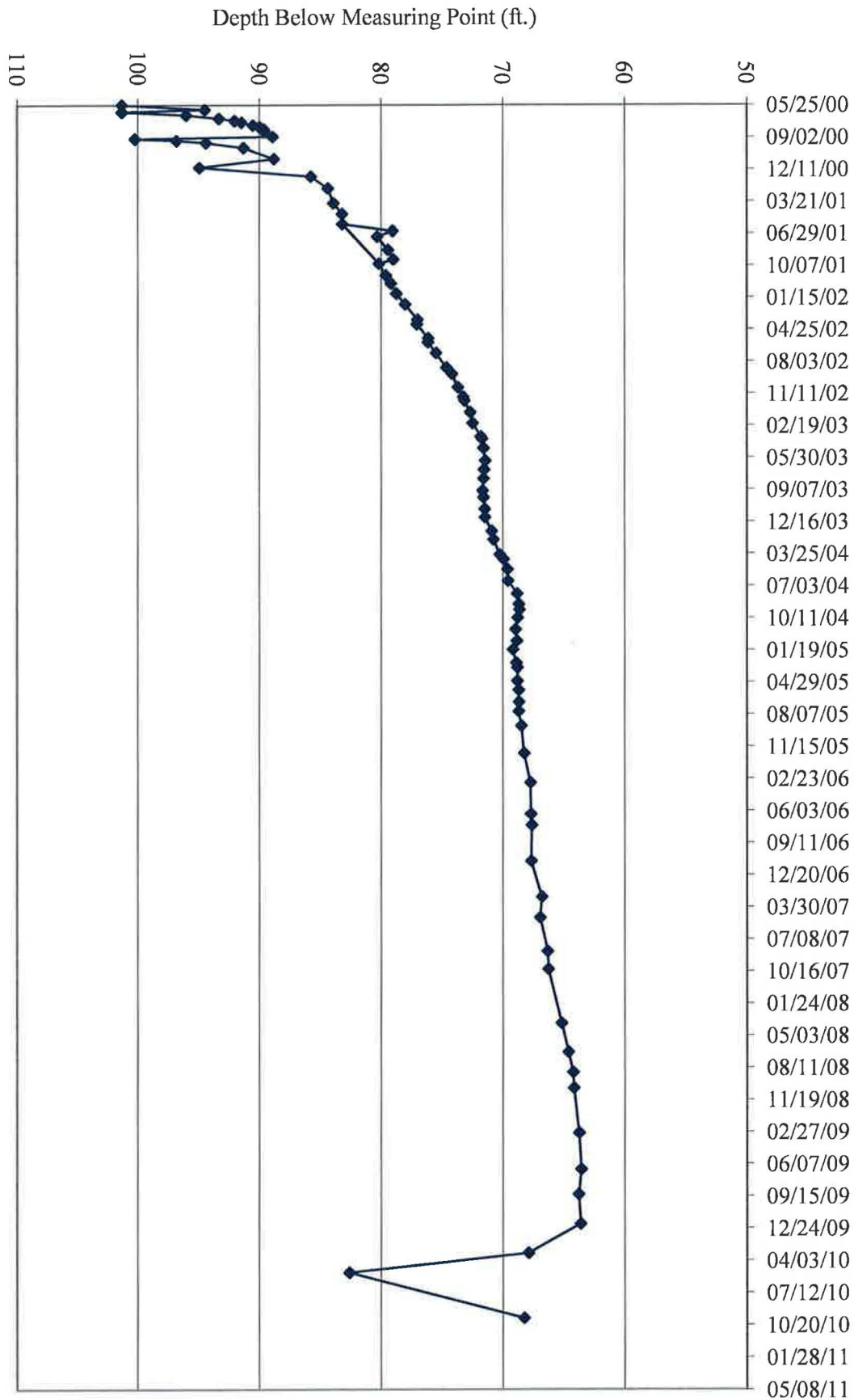


**TW4-2 Water Depth Over Time (ft. blmp)**

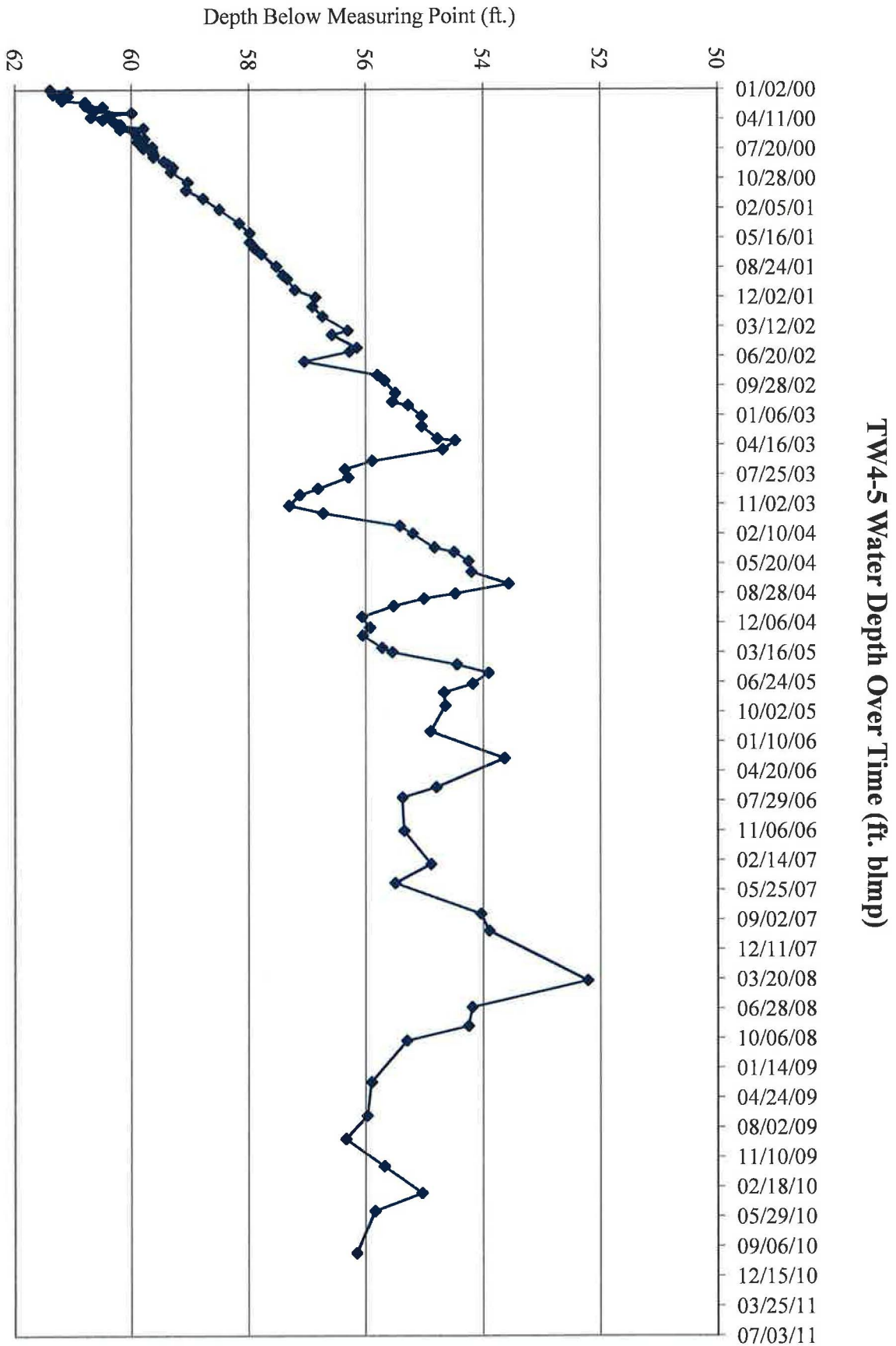


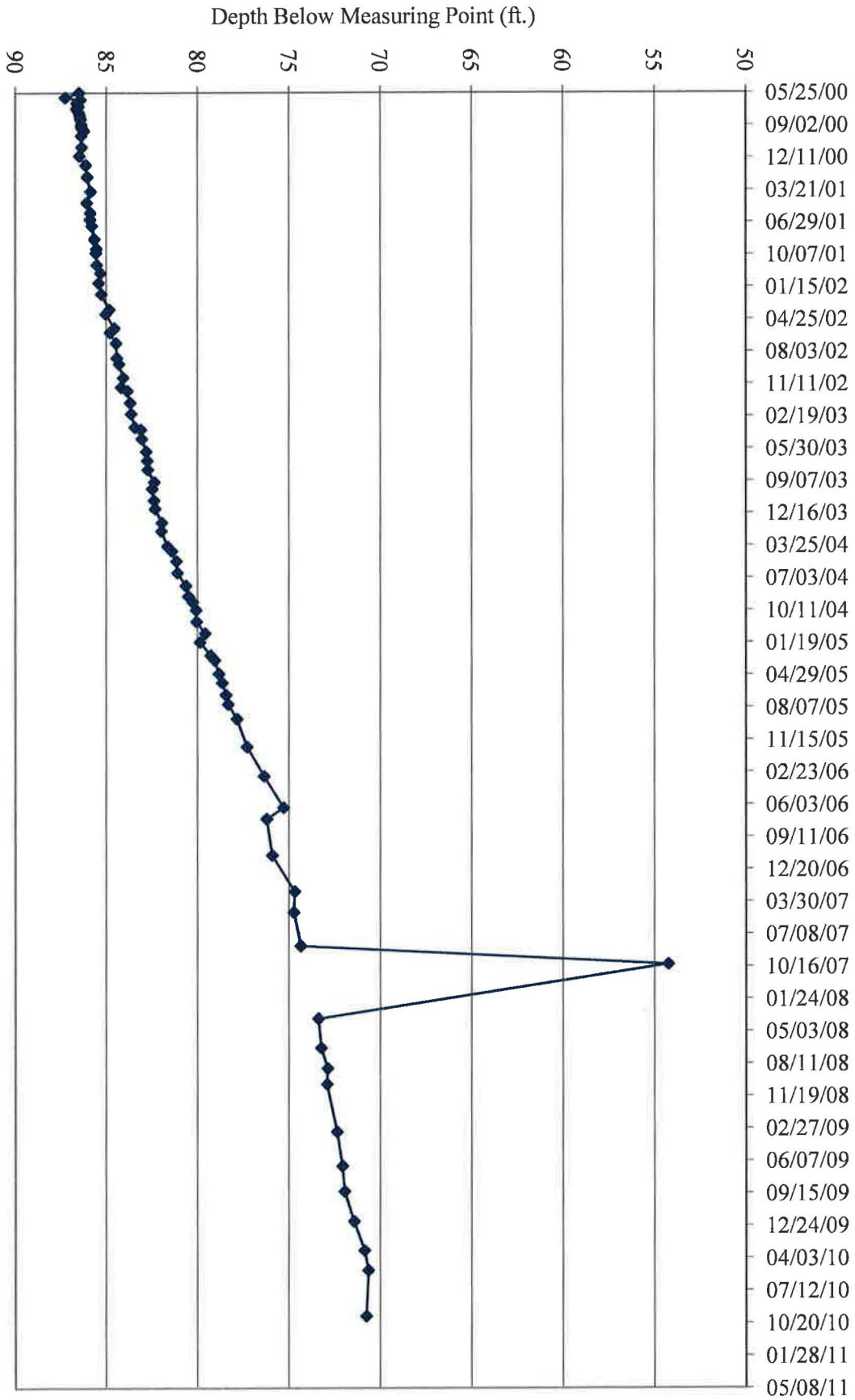
TW4-3 Water Depth Over Time (ft. blmp)



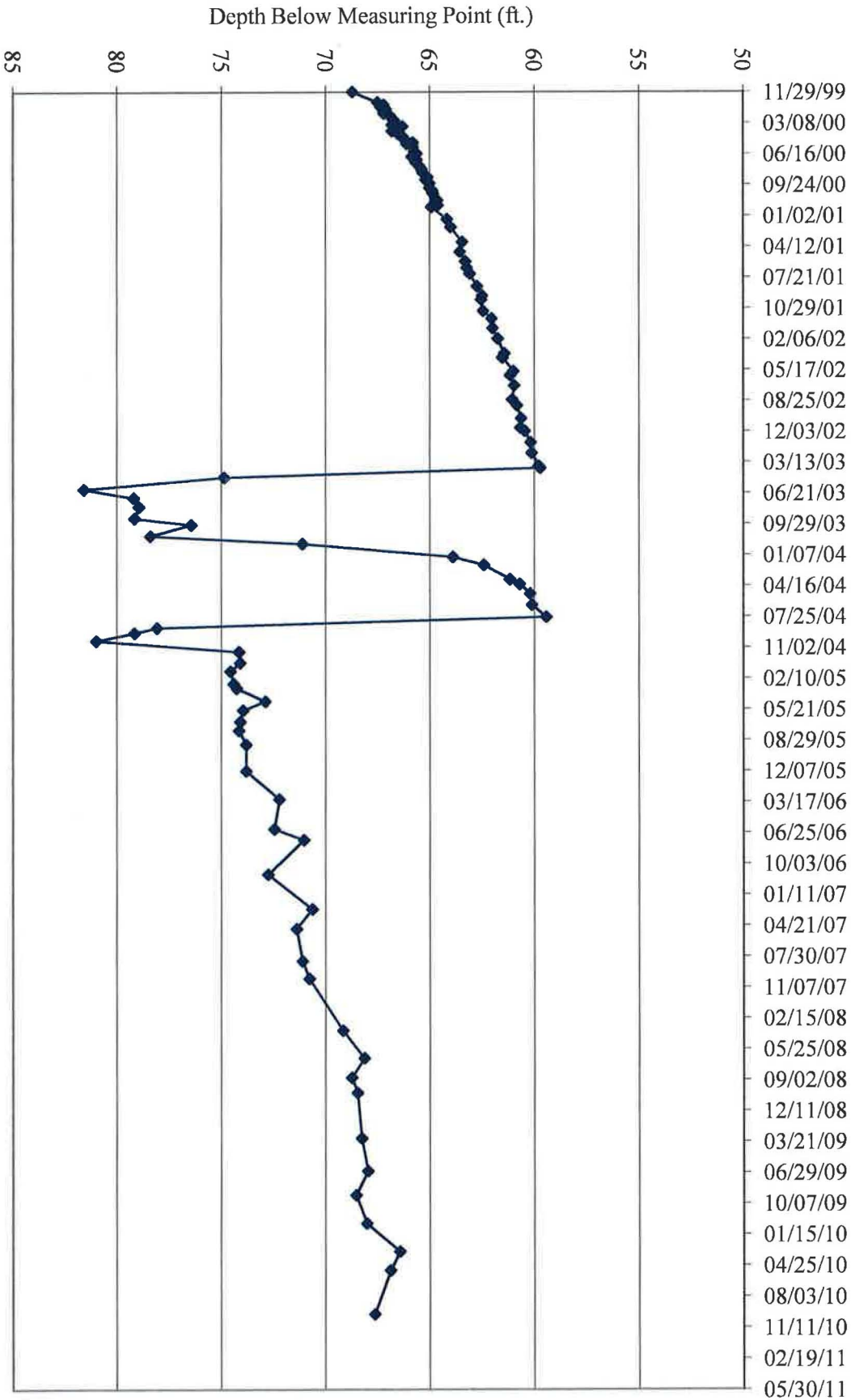


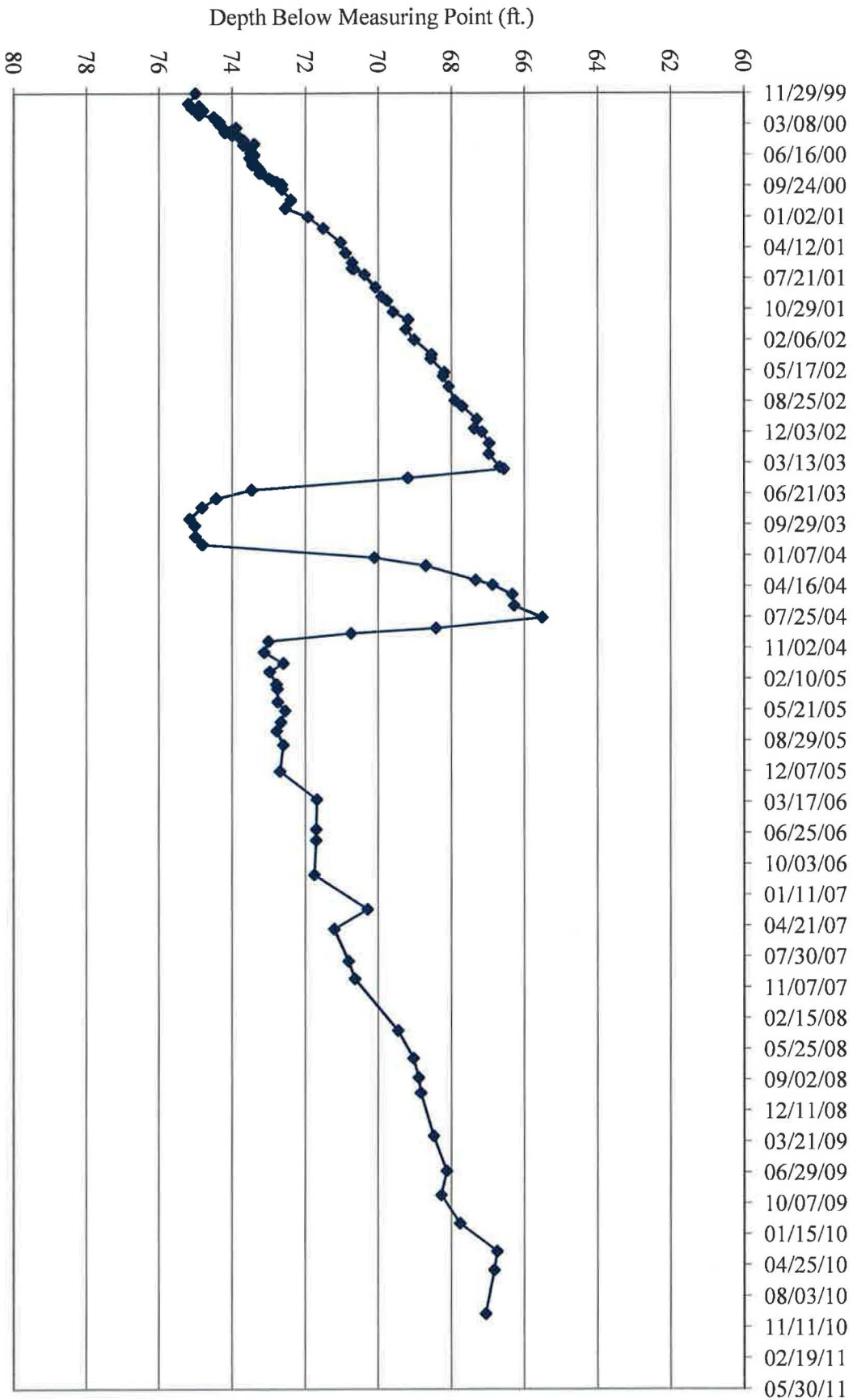






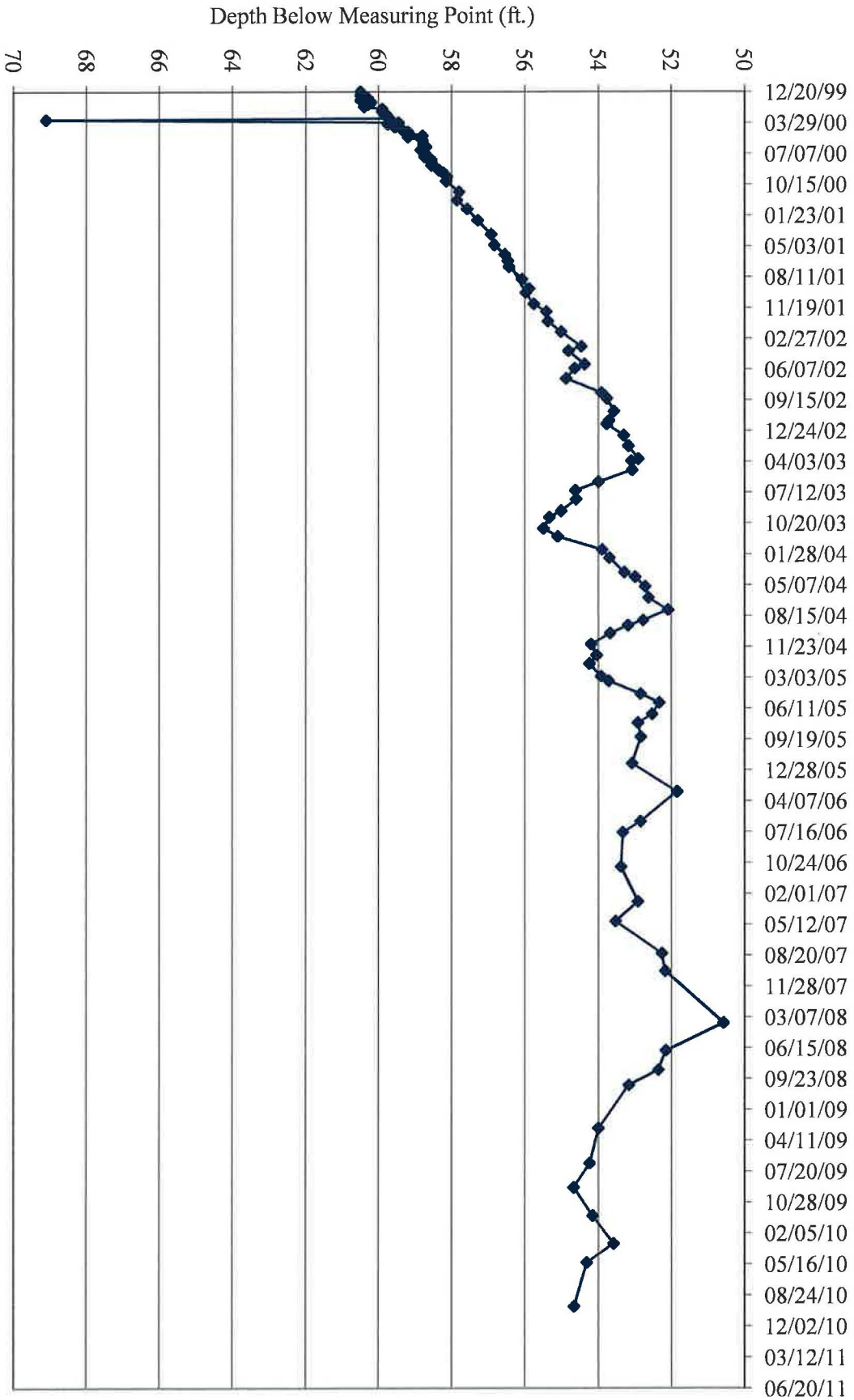


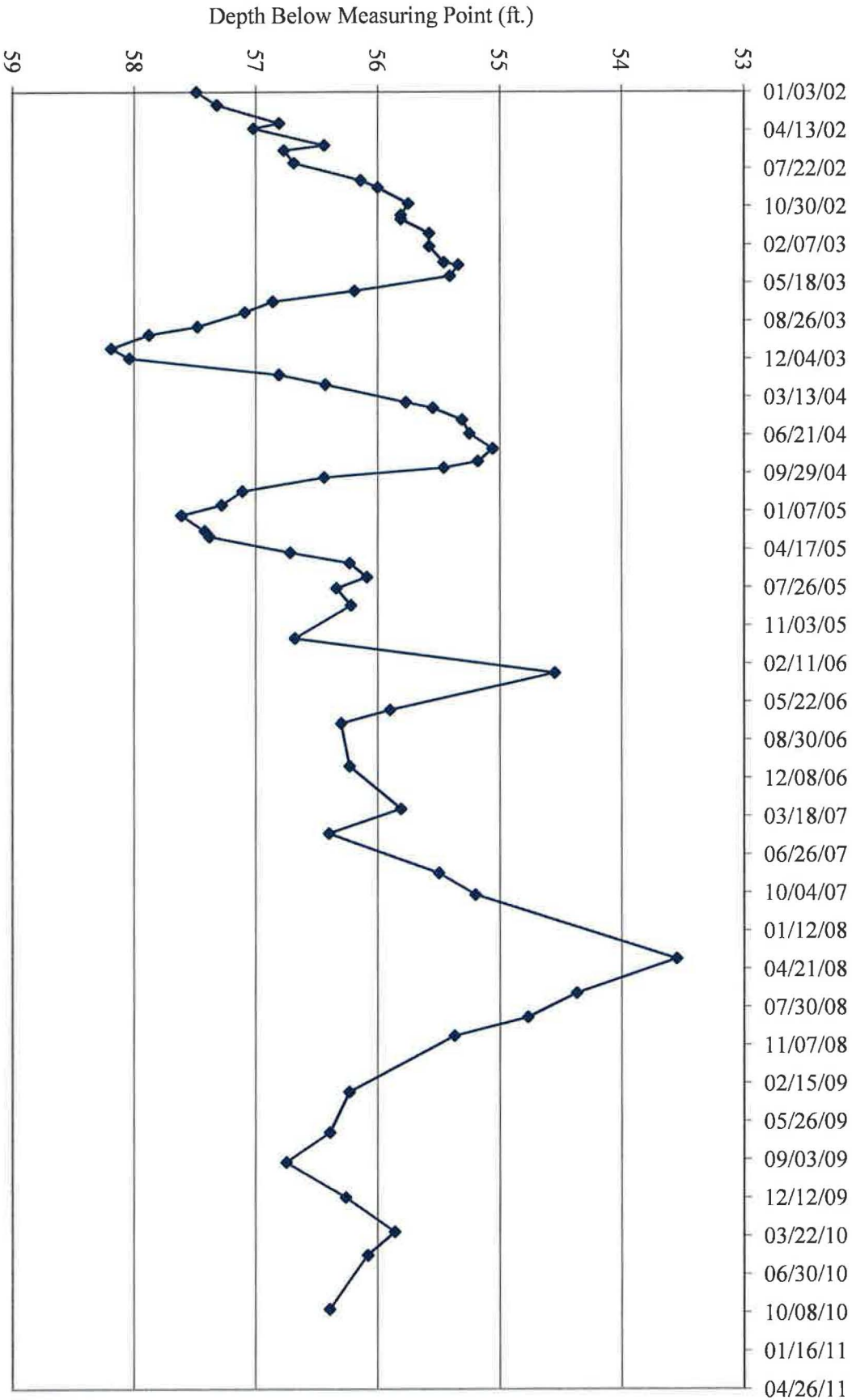




TW4-8 Water Depth Over Time (ft. blmp)

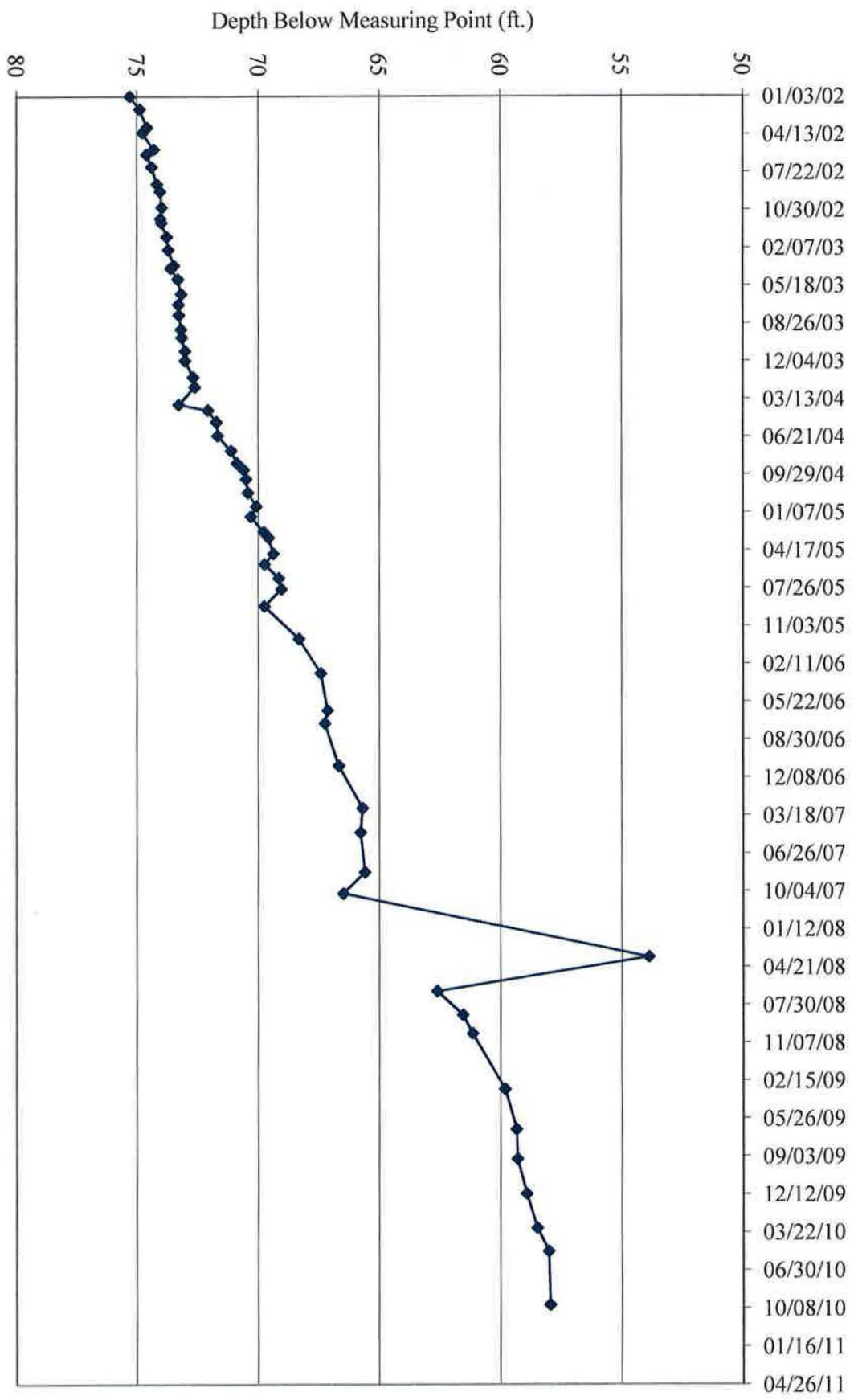




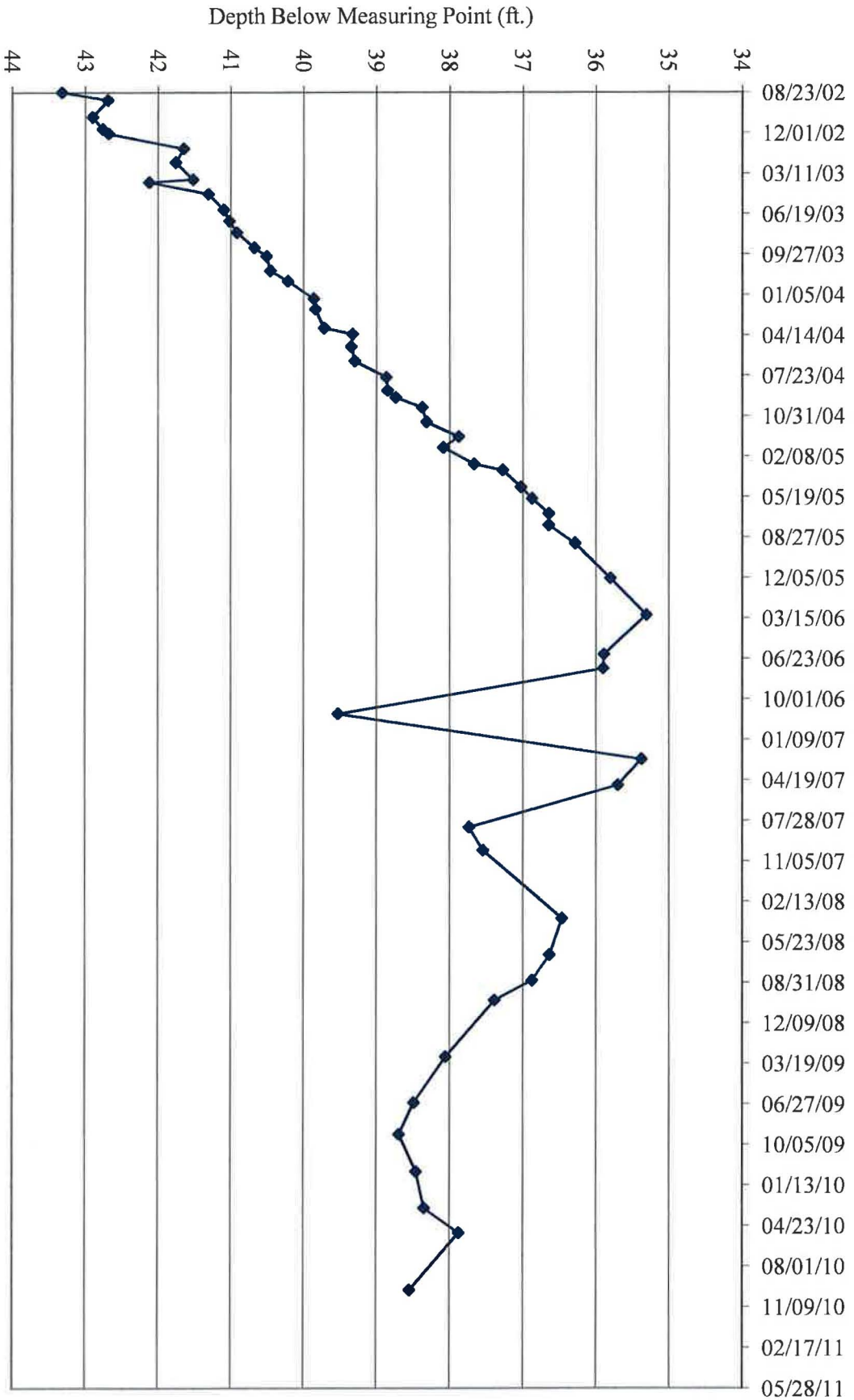




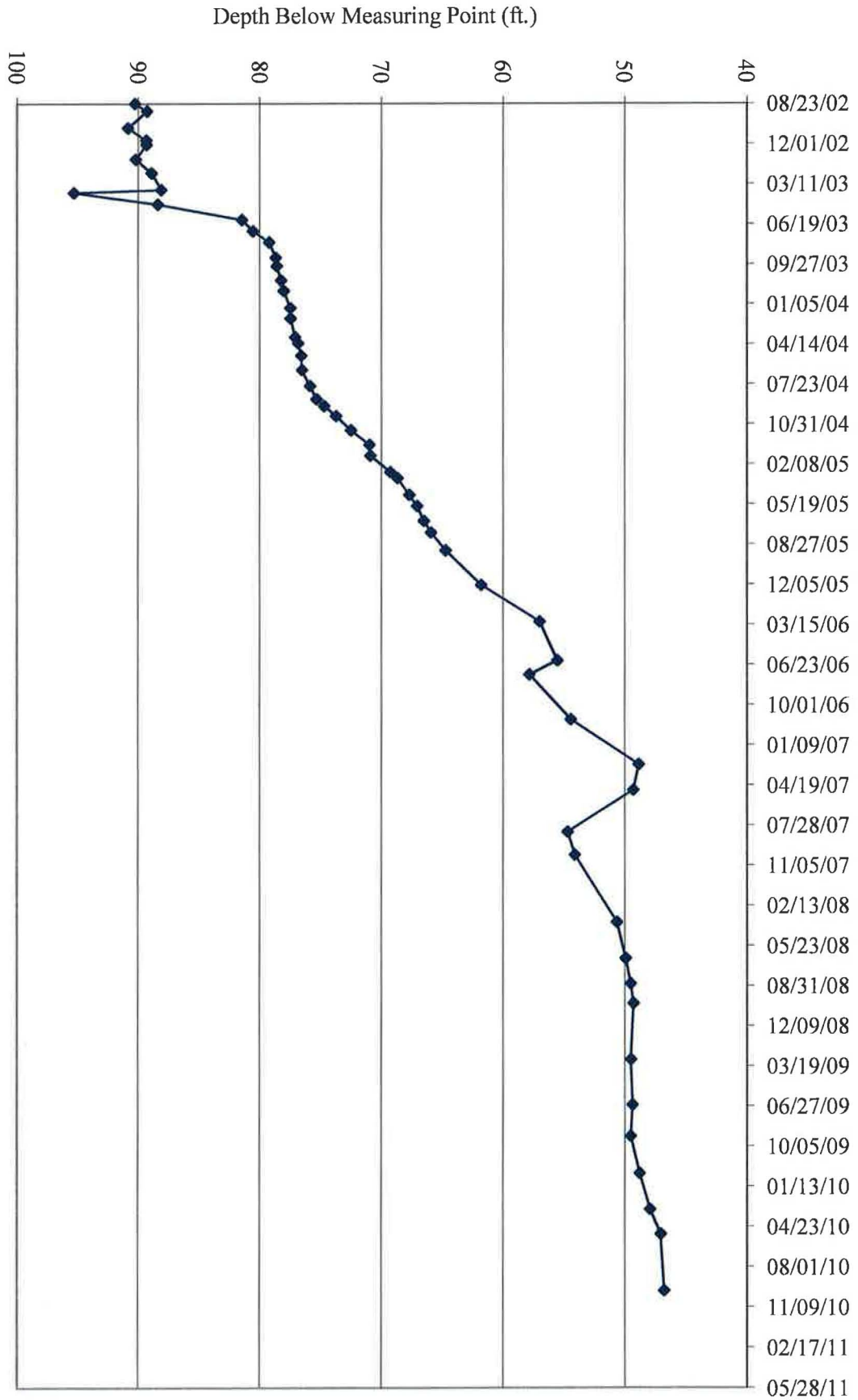
**TW4-11 Water Depth Over Time (ft. blimp)**



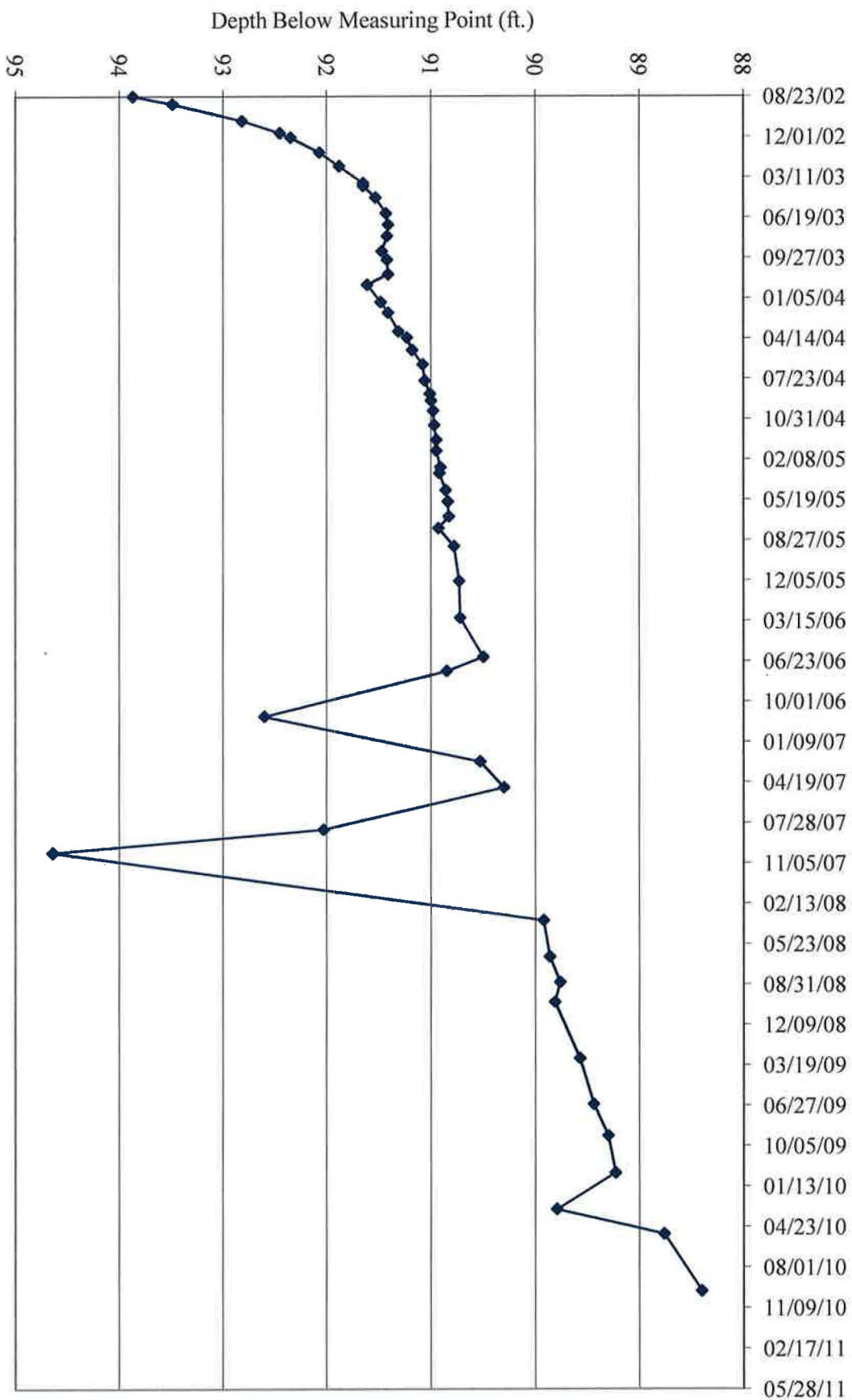
### TW4-12 Water Depth Over Time (ft. blmp)





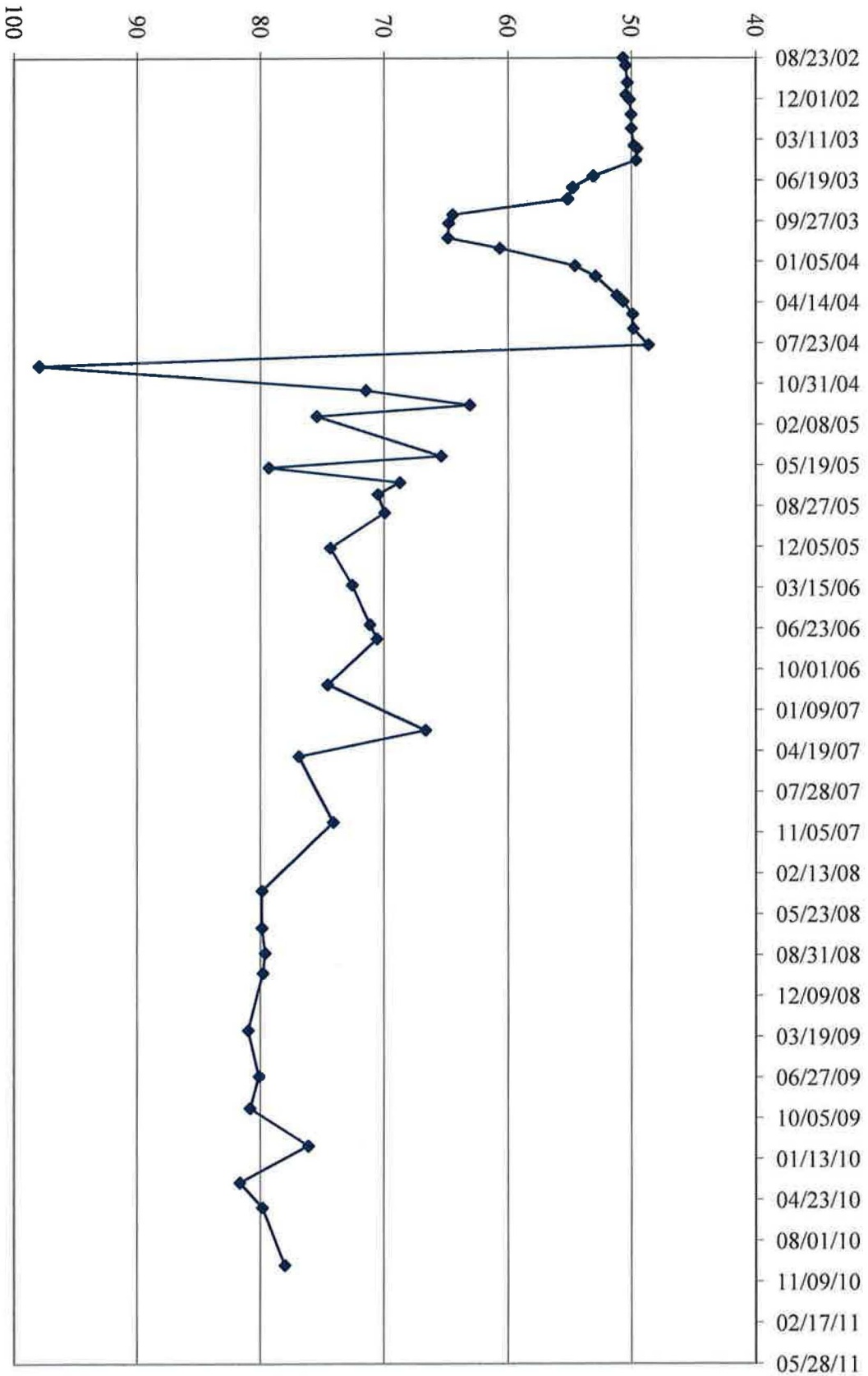


### TW4-14 Water Depth Over Time (ft. blmp)



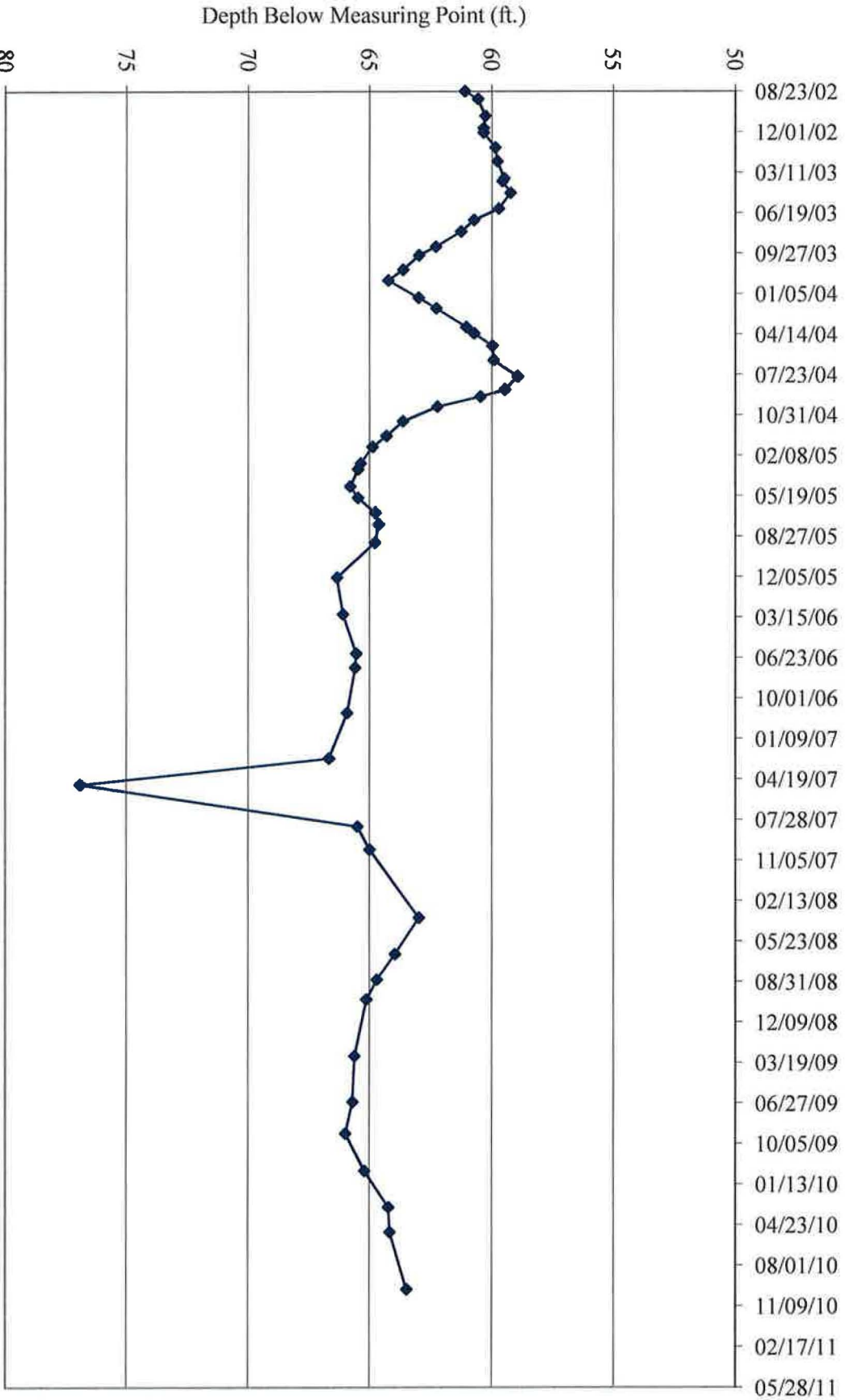


Depth Below Measuring Point (ft.)

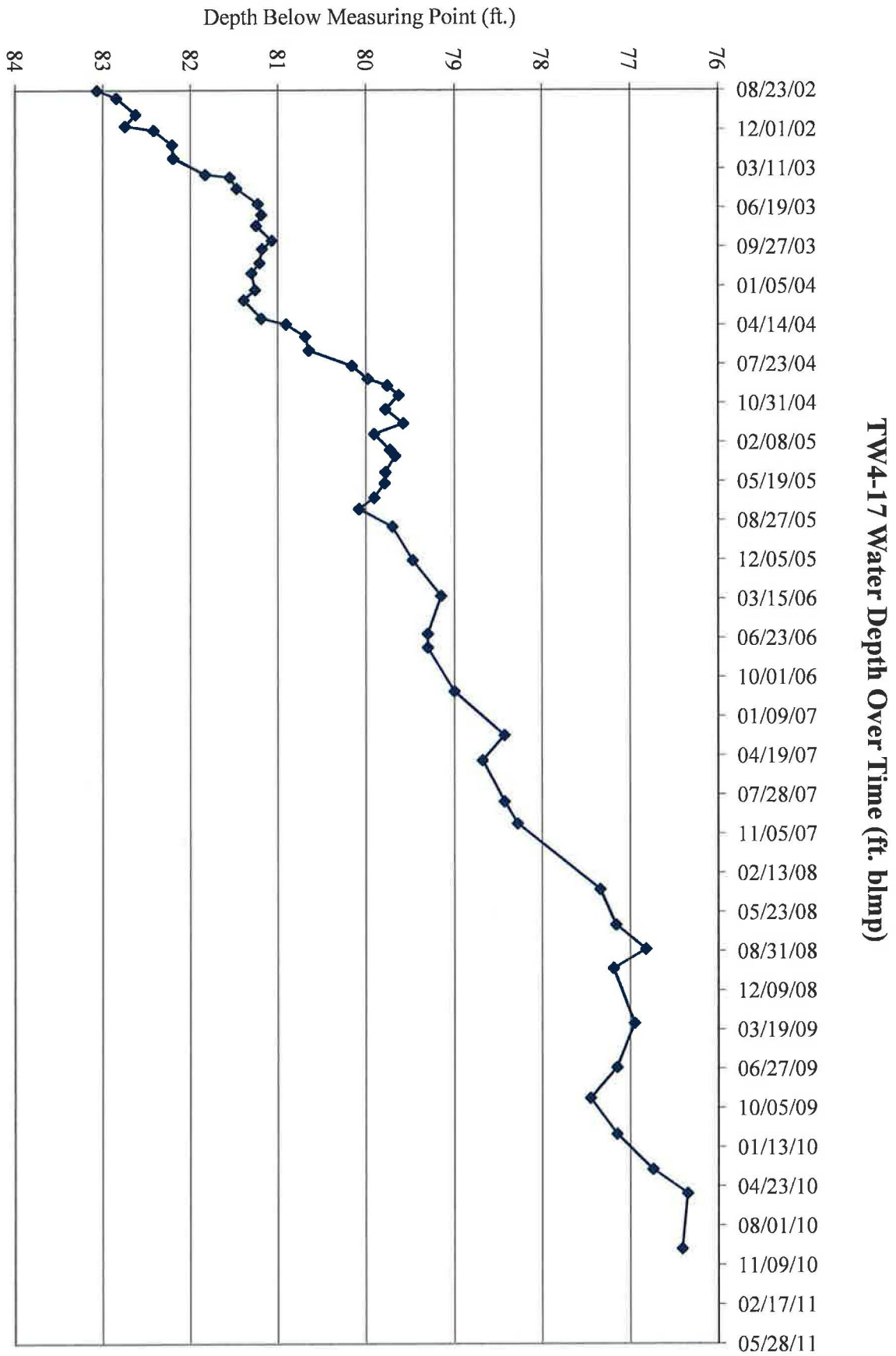


TW4-15 Water Depth Over Time (ft. blmp)

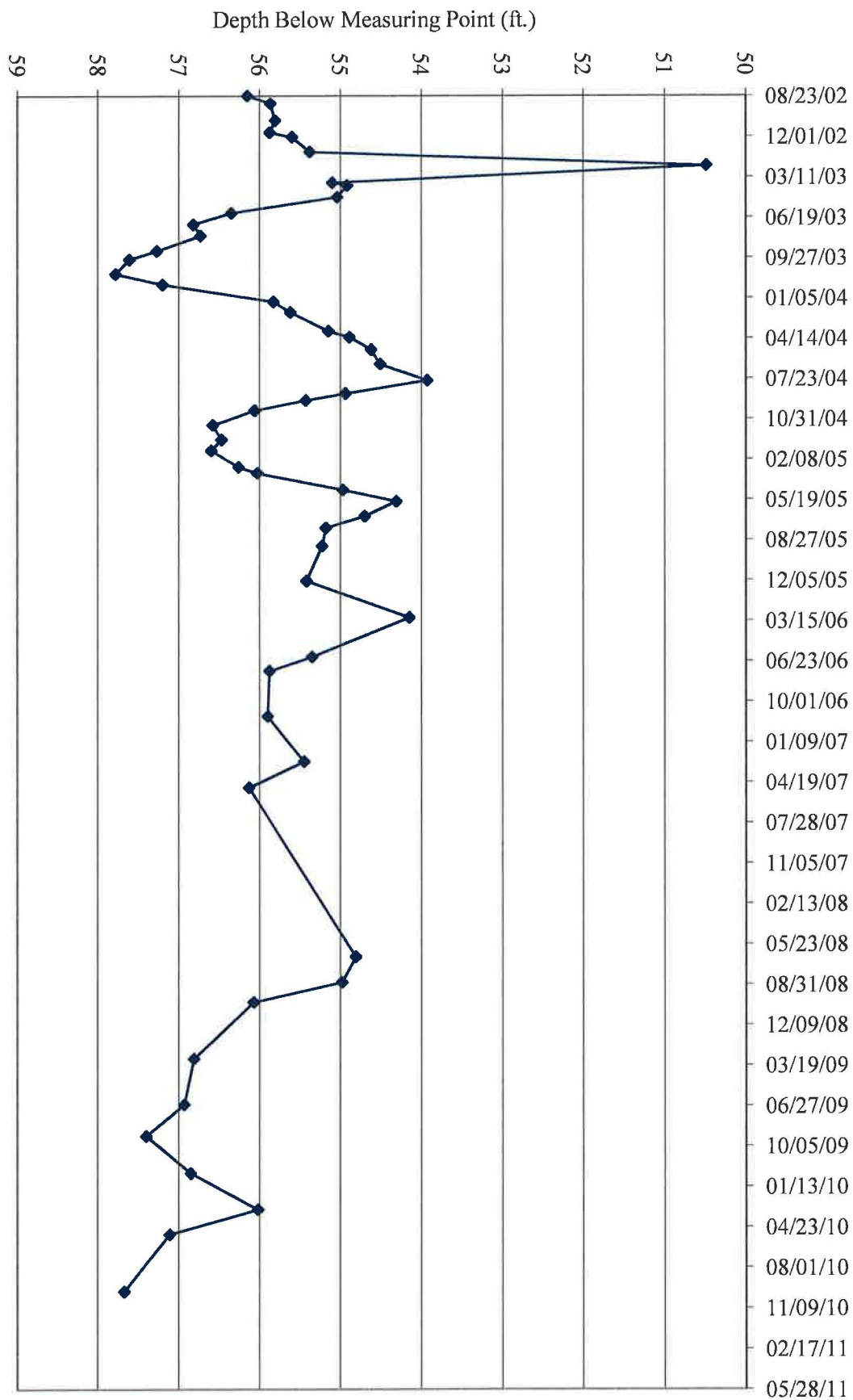
**TW4-16 Water Depth Over Time (ft. blmp)**



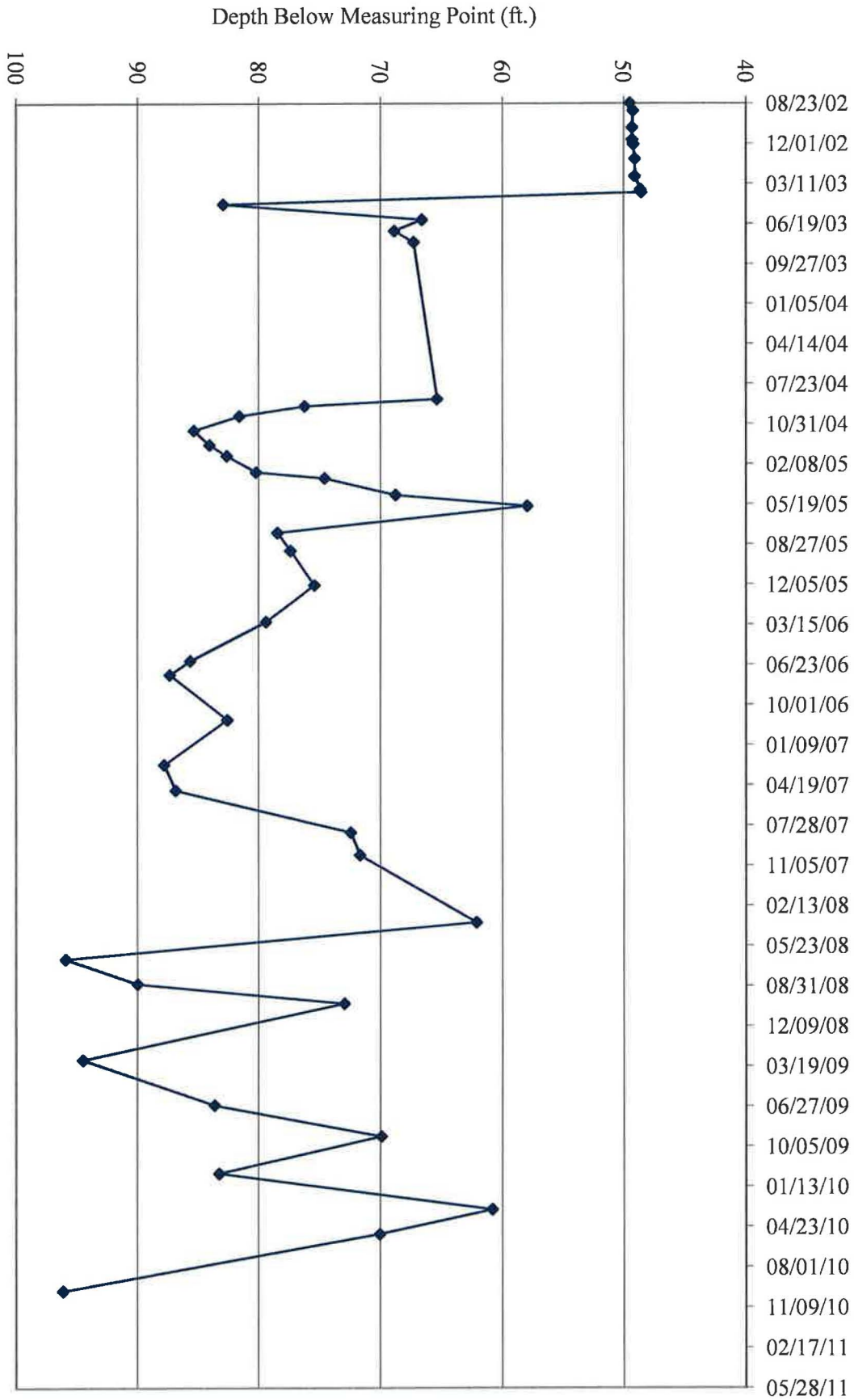


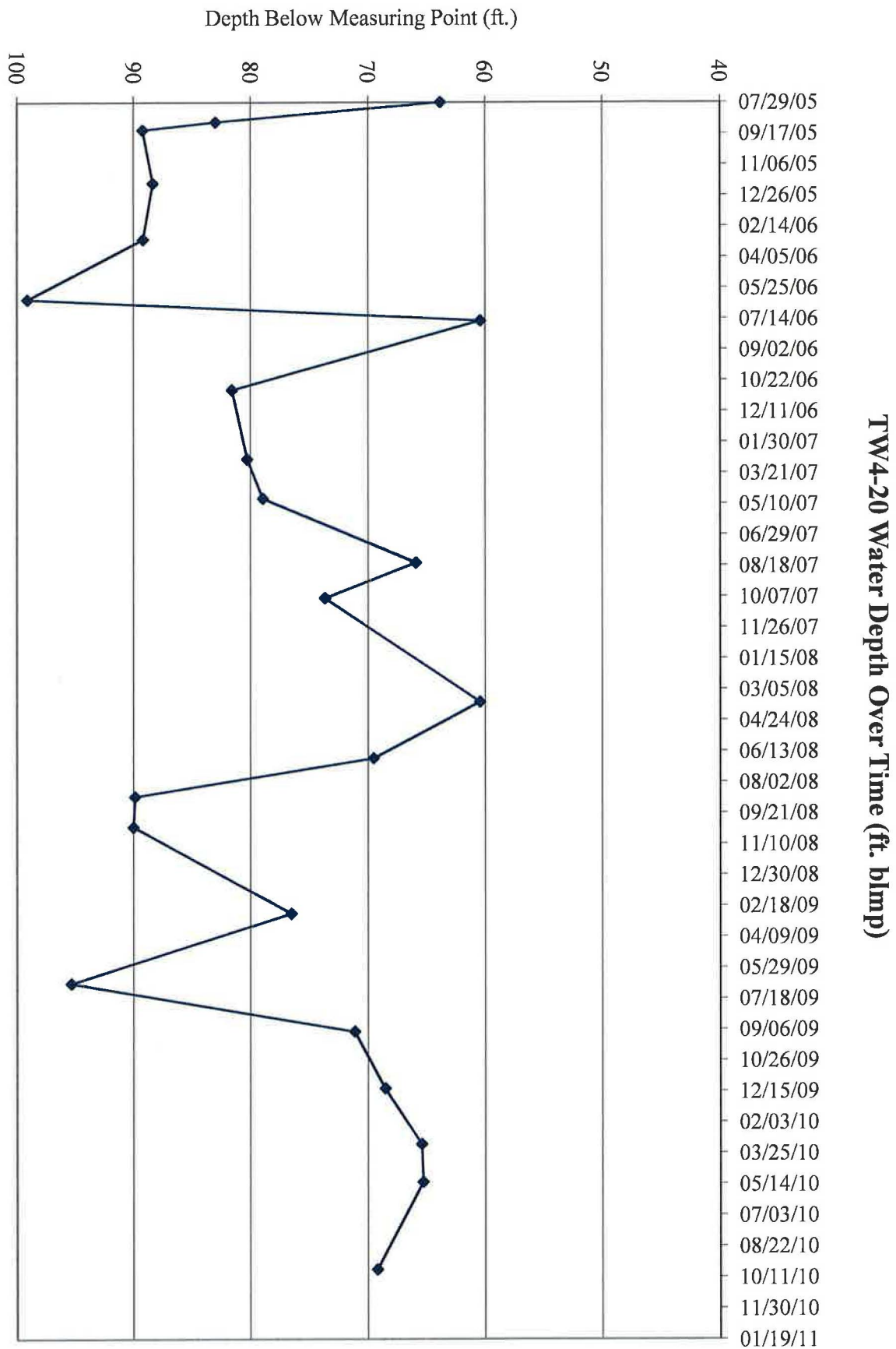


### TW4-18 Water Depth Over Time (ft. blmp)



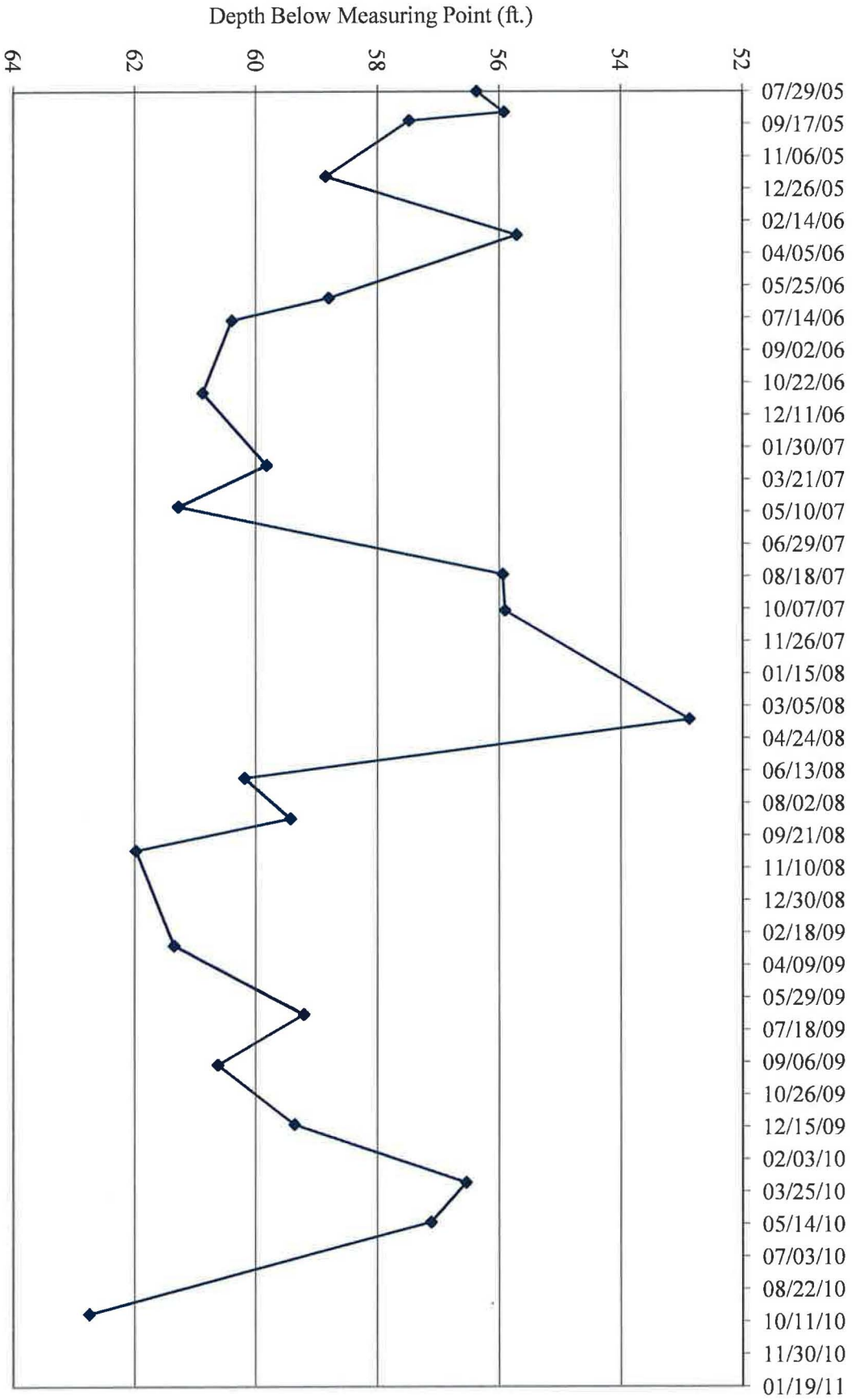




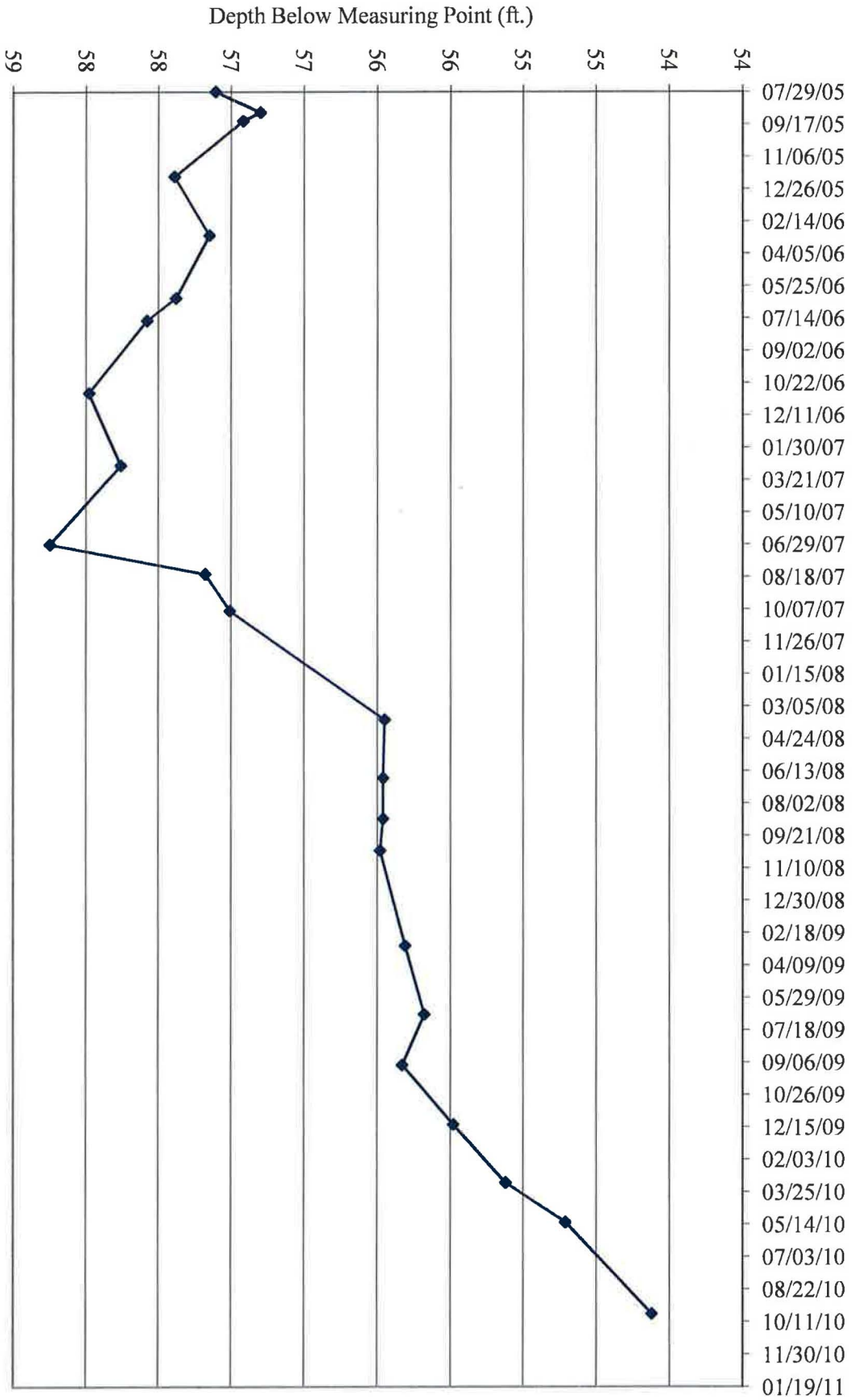




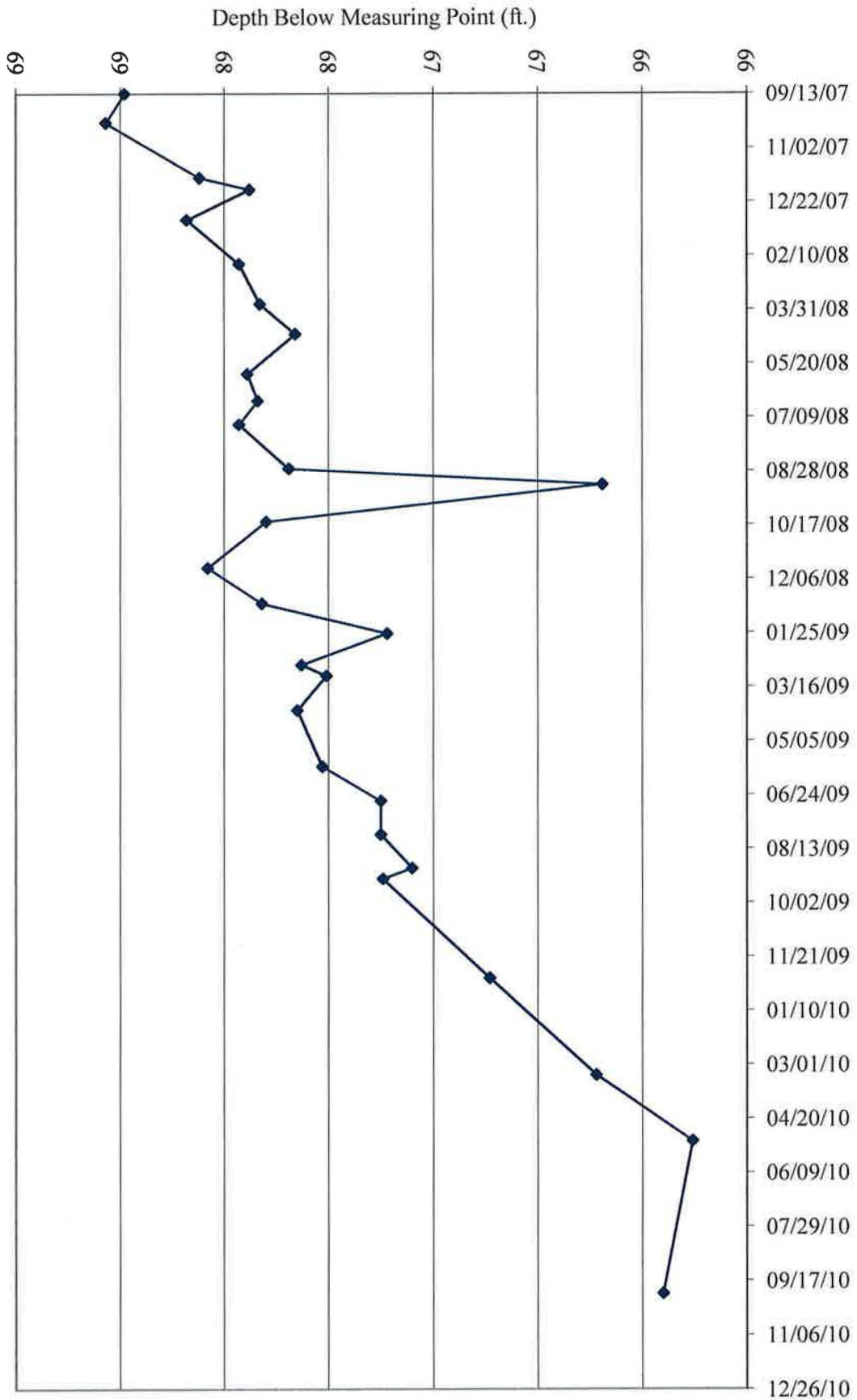
TW4-21 Water Depth Over Time (ft. blmp)

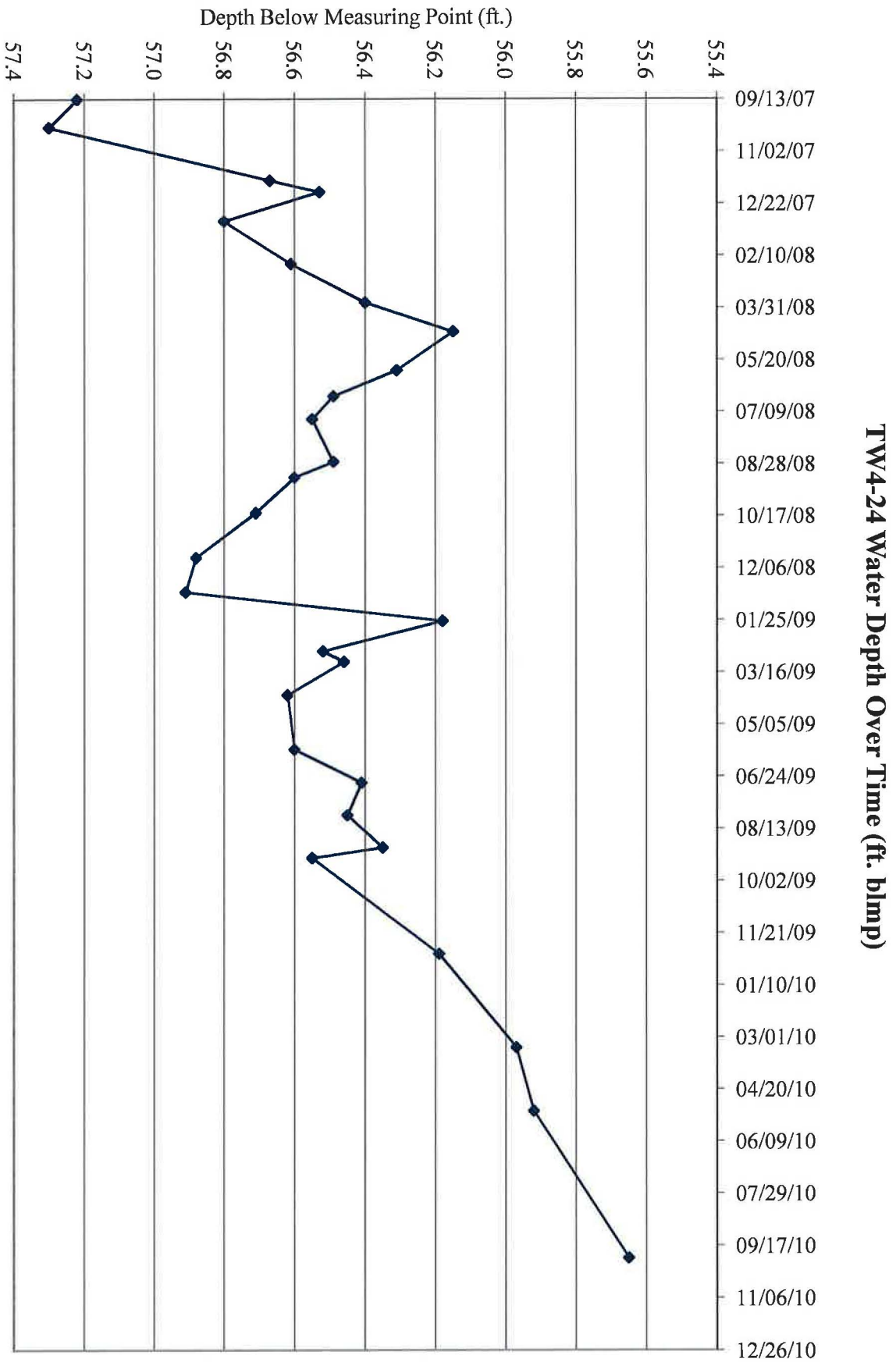


TW4-22 Water Depth Over Time (ft. blmp)



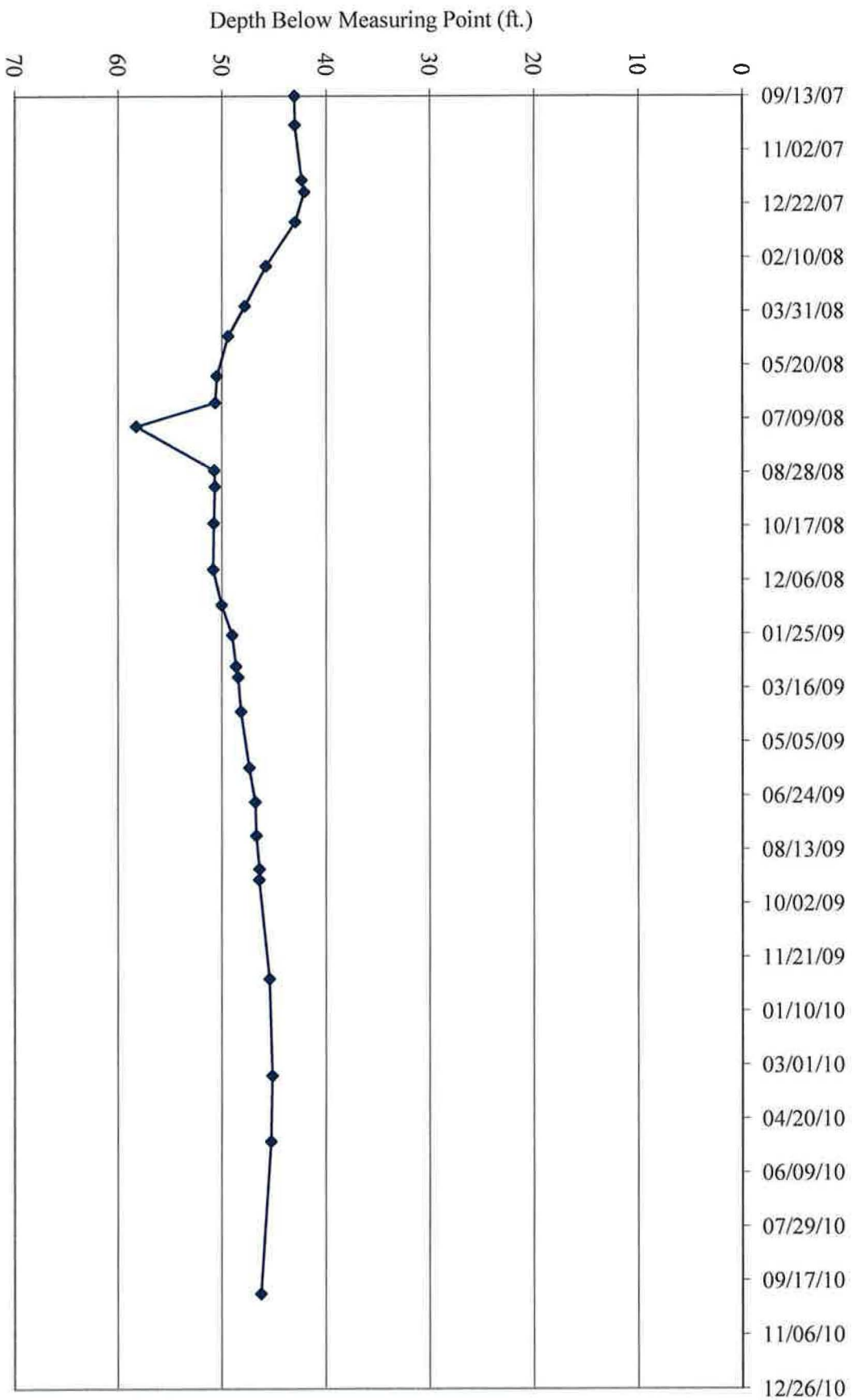




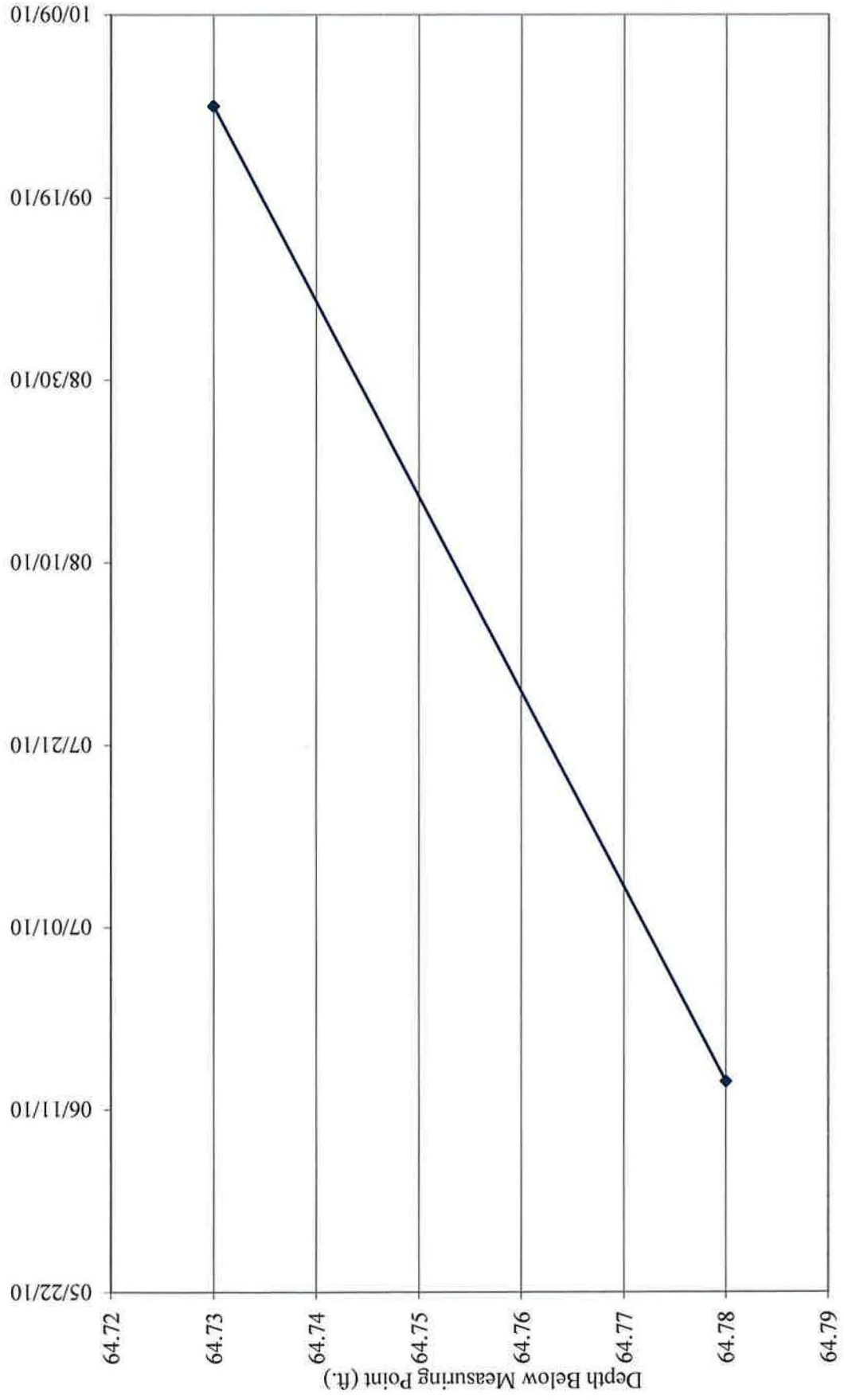




### TW4-25 Water Depth Over Time (ft. blmp)



**TW4-26 Water Depth Over Time (ft. blmp)**





Tab G

Depths to Groundwater and Elevations Over Time for Chloroform Monitoring Wells

**Water Levels and Data over Time  
White Mesa Mill - Well MW4**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,620.77	5,622.33	1.56				123.6
5,527.63				09/25/79	94.70	93.14	
5,527.63				10/10/79	94.70	93.14	
5,528.43				01/10/80	93.90	92.34	
5,529.93				03/20/80	92.40	90.84	
5,528.03				06/17/80	94.30	92.74	
5,528.03				09/15/80	94.30	92.74	
5,527.93				10/08/80	94.40	92.84	
5,527.93				02/12/81	94.40	92.84	
5,525.93				09/01/84	96.40	94.84	
5,528.33				12/01/84	94.00	92.44	
5,528.13				02/01/85	94.20	92.64	
5,528.33				06/01/85	94.00	92.44	
5,528.93				09/01/85	93.40	91.84	
5,528.93				10/01/85	93.40	91.84	
5,528.93				11/01/85	93.40	91.84	
5,528.83				12/01/85	93.50	91.94	
5,512.33				03/01/86	110.00	108.44	
5,528.91				06/19/86	93.42	91.86	
5,528.83				09/01/86	93.50	91.94	
5,529.16				12/01/86	93.17	91.61	
5,526.66				02/20/87	95.67	94.11	
5,529.16				04/28/87	93.17	91.61	
5,529.08				08/14/87	93.25	91.69	
5,529.00				11/20/87	93.33	91.77	
5,528.75				01/26/88	93.58	92.02	
5,528.91				06/01/88	93.42	91.86	
5,528.25				08/23/88	94.08	92.52	
5,529.00				11/02/88	93.33	91.77	
5,528.33				03/09/89	94.00	92.44	
5,529.10				06/21/89	93.23	91.67	
5,529.06				09/01/89	93.27	91.71	
5,529.21				11/15/89	93.12	91.56	
5,529.22				02/16/90	93.11	91.55	
5,529.43				05/08/90	92.90	91.34	
5,529.40				08/07/90	92.93	91.37	
5,529.53				11/13/90	92.80	91.24	
5,529.86				02/27/91	92.47	90.91	
5,529.91				05/21/91	92.42	90.86	
5,529.77				08/27/91	92.56	91.00	
5,529.79				12/03/91	92.54	90.98	
5,530.13				03/17/92	92.20	90.64	
5,529.85				06/11/92	92.48	90.92	
5,529.90				09/13/92	92.43	90.87	



**Water Levels and Data over Time  
White Mesa Mill - Well MW4**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,620.77	5,622.33	1.56				123.6
5,529.92				12/09/92	92.41	90.85	
5,530.25				03/24/93	92.08	90.52	
5,530.20				06/08/93	92.13	90.57	
5,530.19				09/22/93	92.14	90.58	
5,529.75				12/14/93	92.58	91.02	
5,530.98				03/24/94	91.35	89.79	
5,531.35				06/15/94	90.98	89.42	
5,531.62				08/18/94	90.71	89.15	
5,532.58				12/13/94	89.75	88.19	
5,533.42				03/16/95	88.91	87.35	
5,534.70				06/27/95	87.63	86.07	
5,535.44				09/20/95	86.89	85.33	
5,537.16				12/11/95	85.17	83.61	
5,538.37				03/28/96	83.96	82.40	
5,539.10				06/07/96	83.23	81.67	
5,539.13				09/16/96	83.20	81.64	
5,542.29				03/20/97	80.04	78.48	
5,551.58				04/07/99	70.75	69.19	
5,552.08				05/11/99	70.25	68.69	
5,552.83				07/06/99	69.50	67.94	
5,553.47				09/28/99	68.86	67.30	
5,554.63				01/03/00	67.70	66.14	
5,555.13				04/04/00	67.20	65.64	
5,555.73				05/02/00	66.60	65.04	
5,556.03				05/11/00	66.30	64.74	
5,555.73				05/15/00	66.60	65.04	
5,555.98				05/25/00	66.35	64.79	
5,556.05				06/09/00	66.28	64.72	
5,556.18				06/16/00	66.15	64.59	
5,556.05				06/26/00	66.28	64.72	
5,556.15				07/06/00	66.18	64.62	
5,556.18				07/13/00	66.15	64.59	
5,556.17				07/18/00	66.16	64.60	
5,556.26				07/25/00	66.07	64.51	
5,556.35				08/02/00	65.98	64.42	
5,556.38				08/09/00	65.95	64.39	
5,556.39				08/15/00	65.94	64.38	
5,556.57				08/31/00	65.76	64.20	
5,556.68				09/08/00	65.65	64.09	
5,556.73				09/13/00	65.60	64.04	
5,556.82				09/20/00	65.51	63.95	
5,556.84				09/29/00	65.49	63.93	
5,556.81				10/05/00	65.52	63.96	

**Water Levels and Data over Time  
White Mesa Mill - Well MW4**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,620.77	5,622.33	1.56				123.6
5,556.89				10/12/00	65.44	63.88	
5,556.98				10/19/00	65.35	63.79	
5,557.01				10/23/00	65.32	63.76	
5,557.14				11/09/00	65.19	63.63	
5,557.17				11/14/00	65.16	63.60	
5,556.95				11/21/00	65.38	63.82	
5,557.08				11/30/00	65.25	63.69	
5,557.55				12/07/00	64.78	63.22	
5,557.66				01/14/01	64.67	63.11	
5,557.78				02/09/01	64.55	62.99	
5,558.28				03/29/01	64.05	62.49	
5,558.23				04/30/01	64.10	62.54	
5,558.31				05/31/01	64.02	62.46	
5,558.49				06/22/01	63.84	62.28	
5,558.66				07/10/01	63.67	62.11	
5,559.01				08/20/01	63.32	61.76	
5,559.24				09/19/01	63.09	61.53	
5,559.26				10/02/01	63.07	61.51	
5,559.27				11/08/01	63.06	61.50	
5,559.77				12/03/01	62.56	61.00	
5,559.78				01/03/02	62.55	60.99	
5,559.96				02/06/02	62.37	60.81	
5,560.16				03/26/02	62.17	60.61	
5,560.28				04/09/02	62.05	60.49	
5,560.76				05/23/02	61.57	60.01	
5,560.58				06/05/02	61.75	60.19	
5,560.43				07/08/02	61.90	60.34	
5,560.44				08/23/02	61.89	60.33	
5,560.71				09/11/02	61.62	60.06	
5,560.89				10/23/02	61.44	59.88	
5,557.86				11/22/02	64.47	62.91	
5,561.10				12/03/02	61.23	59.67	
5,561.39				01/09/03	60.94	59.38	
5,561.41				02/12/03	60.92	59.36	
5,561.93				03/26/03	60.40	58.84	
5,561.85				04/02/03	60.48	58.92	
5,536.62				05/01/03	85.71	84.15	
5,528.56				06/09/03	93.77	92.21	
5,535.28				07/07/03	87.05	85.49	
5,534.44				08/04/03	87.89	86.33	
5,537.10				09/11/03	85.23	83.67	
5,539.96				10/02/03	82.37	80.81	
5,535.91				11/07/03	86.42	84.86	



**Water Levels and Data over Time  
White Mesa Mill - Well MW4**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,620.77	5,622.33	1.56				123.6
5,550.70				12/03/03	71.63	70.07	
5,557.58				01/15/04	64.75	63.19	
5,558.80				02/10/04	63.53	61.97	
5,560.08				03/28/04	62.25	60.69	
5,560.55				04/12/04	61.78	60.22	
5,561.06				05/13/04	61.27	59.71	
5,561.48				06/18/04	60.85	59.29	
5,561.86				07/28/04	60.47	58.91	
5,529.17				08/30/04	93.16	91.60	
5,536.55				09/16/04	85.78	84.22	
5,529.00				10/11/04	93.33	91.77	
5,541.55				11/16/04	80.78	79.22	
5,541.12				12/22/04	81.21	79.65	
5,540.59				01/18/05	81.74	80.18	
5,542.85				02/28/05	79.48	77.92	
5,537.91				03/15/05	84.42	82.86	
5,548.67				04/26/05	73.66	72.10	
5,549.53				05/24/05	72.80	71.24	
5,544.36				06/30/05	77.97	76.41	
5,545.16				07/29/05	77.17	75.61	
5,544.67				09/12/05	77.66	76.10	
5,541.28				09/27/05	81.05	79.49	
5,536.96				12/07/05	85.37	83.81	
5,546.49				03/08/06	75.84	74.28	
5,546.15				06/13/06	76.18	74.62	
5,545.15				07/18/06	77.18	75.62	
5,545.91				11/17/06	76.42	74.86	
5,545.90				02/27/07	76.43	74.87	
5,548.16				05/02/07	74.17	72.61	
5,547.20				08/13/07	75.13	73.57	
5,547.20				10/10/07	75.13	73.57	
5,547.79				03/26/08	74.54	72.98	
5,545.09				06/25/08	77.24	75.68	
5,550.36				08/26/08	71.97	70.41	
5,550.39				10/14/08	71.94	70.38	
5,542.25				03/03/09	80.08	78.52	
5,542.25				06/24/09	80.08	78.52	
5,550.19				09/10/09	72.14	70.58	
5,550.94				12/11/09	71.39	69.83	
5,546.08				03/11/10	76.25	74.69	
5,550.98				05/11/10	71.35	69.79	
5,548.33				09/29/10	74.00	72.44	

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

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,620.51	5,622.31	1.80				121.33
5,560.53				8/23/02	61.78	59.98	
5,560.76				9/11/02	61.55	59.75	
5,560.96				10/23/02	61.35	59.55	
5,561.00				11/22/02	61.31	59.51	
5,561.19				12/3/02	61.12	59.32	
5,561.46				1/9/03	60.85	59.05	
5,561.48				2/12/03	60.83	59.03	
5,561.96				3/26/03	60.35	58.55	
5,561.94				4/2/03	60.37	58.57	
5,536.88				5/1/03	85.43	83.63	
5,529.35				6/9/03	92.96	91.16	
5,535.54				7/7/03	86.77	84.97	
5,534.74				8/4/03	87.57	85.77	
5,536.74				9/11/03	85.57	83.77	
5,540.24				10/2/03	82.07	80.27	
5,536.13				11/7/03	86.18	84.38	
5,550.77				12/3/03	71.54	69.74	
5,557.67				1/15/04	64.64	62.84	
5,558.87				2/10/04	63.44	61.64	
5,560.16				3/28/04	62.15	60.35	
5,560.63				4/12/04	61.68	59.88	
5,561.14				5/13/04	61.17	59.37	
5,561.56				6/18/04	60.75	58.95	
5,561.95				7/28/04	60.36	58.56	
5,529.25				8/30/04	93.06	91.26	
5,536.63				9/16/04	85.68	83.88	
5,529.08				10/11/04	93.23	91.43	
5,541.63				11/16/04	80.68	78.88	
5,541.20				12/22/04	81.11	79.31	
5,540.67				1/18/05	81.64	79.84	
5,543.45				2/28/05	78.86	77.06	
5,537.99				3/15/05	84.32	82.52	
5,549.27				4/26/05	73.04	71.24	
5,545.08				5/24/05	77.23	75.43	
5,544.94				6/30/05	77.37	75.57	
5,544.71				7/29/05	77.60	75.80	
5,545.23				9/12/05	77.08	75.28	
5,545.00				9/27/05	77.31	75.51	
5,537.45				12/7/05	84.86	83.06	
5,546.86				3/8/06	75.45	73.65	
5,546.66				6/13/06	75.65	73.85	
5,545.63				7/18/06	76.68	74.88	
5,546.18				11/7/06	76.13	74.33	



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

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
5,545.30	5,620.51	5,622.31	1.80	2/27/07	77.01	75.21	121.33

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-1**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
z	5,620.77	5,622.33	1.02				111.04
5,540.98				11/08/99	81.35	80.33	
5,541.13				11/09/99	81.20	80.18	
5,541.23				01/02/00	81.10	80.08	
5,541.23				01/10/00	81.10	80.08	
5,540.98				01/17/00	81.35	80.33	
5,541.03				01/24/00	81.30	80.28	
5,541.03				02/01/00	81.30	80.28	
5,540.93				02/07/00	81.40	80.38	
5,541.23				02/14/00	81.10	80.08	
5,541.23				02/23/00	81.10	80.08	
5,541.33				03/01/00	81.00	79.98	
5,541.43				03/08/00	80.90	79.88	
5,541.73				03/15/00	80.60	79.58	
5,541.43				03/20/00	80.90	79.88	
5,541.43				03/29/00	80.90	79.88	
5,541.18				04/04/00	81.15	80.13	
5,540.93				04/13/00	81.40	80.38	
5,541.23				04/21/00	81.10	80.08	
5,541.43				04/28/00	80.90	79.88	
5,541.33				05/01/00	81.00	79.98	
5,541.63				05/11/00	80.70	79.68	
5,541.33				05/15/00	81.00	79.98	
5,541.63				05/25/00	80.70	79.68	
5,541.63				06/09/00	80.70	79.68	
5,541.65				06/16/00	80.68	79.66	
5,541.63				06/26/00	80.70	79.68	
5,541.85				07/06/00	80.48	79.46	
5,541.79				07/13/00	80.54	79.52	
5,541.91				07/18/00	80.42	79.40	
5,542.17				07/27/00	80.16	79.14	
5,542.31				08/02/00	80.02	79.00	
5,542.43				08/09/00	79.90	78.88	
5,542.41				08/15/00	79.92	78.90	
5,542.08				08/31/00	80.25	79.23	
5,542.93				09/01/00	79.40	78.38	
5,542.87				09/08/00	79.46	78.44	
5,543.09				09/13/00	79.24	78.22	
5,543.25				09/20/00	79.08	78.06	
5,543.44				10/05/00	78.89	77.87	
5,544.08				11/09/00	78.25	77.23	
5,544.49				12/06/00	77.84	76.82	
5,546.14				01/14/01	76.19	75.17	
5,547.44				02/02/01	74.89	73.87	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-1**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
z	5,620.77	5,622.33	1.02				111.04
5,548.71				03/29/01	73.62	72.60	
5,549.20				04/30/01	73.13	72.11	
5,549.64				05/31/01	72.69	71.67	
5,549.94				06/22/01	72.39	71.37	
5,550.25				07/10/01	72.08	71.06	
5,550.93				08/10/01	71.40	70.38	
5,551.34				09/19/01	70.99	69.97	
5,551.59				10/02/01	70.74	69.72	
5,549.64				05/31/01	72.69	71.67	
5,549.94				06/21/01	72.39	71.37	
5,550.25				07/10/01	72.08	71.06	
5,550.93				08/20/01	71.40	70.38	
5,551.34				09/19/01	70.99	69.97	
5,551.59				10/02/01	70.74	69.72	
5,551.87				11/08/01	70.46	69.44	
5,552.40				12/03/01	69.93	68.91	
5,552.62				01/03/02	69.71	68.69	
5,553.12				02/06/02	69.21	68.19	
5,553.75				03/26/02	68.58	67.56	
5,553.97				04/09/02	68.36	67.34	
5,554.56				05/23/02	67.77	66.75	
5,554.54				06/05/02	67.79	66.77	
5,554.83				07/08/02	67.50	66.48	
5,555.29				08/23/02	67.04	66.02	
5,555.54				09/11/02	66.79	65.77	
5,555.94				10/23/02	66.39	65.37	
5,556.02				11/22/02	66.31	65.29	
5,556.23				12/03/02	66.10	65.08	
5,556.49				01/09/03	65.84	64.82	
5,556.67				02/12/03	65.66	64.64	
5,557.15				03/26/03	65.18	64.16	
5,557.23				04/02/03	65.10	64.08	
5,556.07				05/01/03	66.26	65.24	
5,554.28				06/09/03	68.05	67.03	
5,553.84				07/07/03	68.49	67.47	
5,553.39				08/04/03	68.94	67.92	
5,553.06				09/11/03	69.27	68.25	
5,553.33				10/02/03	69.00	67.98	
5,553.25				11/07/03	69.08	68.06	
5,553.82				12/03/03	68.51	67.49	
5,555.61				01/15/04	66.72	65.70	
5,556.32				02/10/04	66.01	64.99	
5,557.38				03/28/04	64.95	63.93	

**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-1**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
<b>z</b>	5,620.77	5,622.33	1.02				111.04
5,557.79				04/12/04	64.54	63.52	
5,558.35				05/13/04	63.98	62.96	
5,560.03				06/18/04	62.30	61.28	
5,560.36				07/28/04	61.97	60.95	
5,557.96				08/30/04	64.37	63.35	
5,557.24				09/16/04	65.09	64.07	
5,556.28				10/11/04	66.05	65.03	
5,556.17				11/16/04	66.16	65.14	
5,556.21				12/22/04	66.12	65.10	
5,555.82				01/18/05	66.51	65.49	
5,555.96				02/28/05	66.37	65.35	
5,556.01				03/15/05	66.32	65.30	
5,556.05				04/26/05	66.28	65.26	
5,556.00				05/24/05	66.33	65.31	
5,555.97				06/30/05	66.36	65.34	
5,555.90				07/29/05	66.43	65.41	
5,556.22				09/12/05	66.11	65.09	
5,556.25				12/07/05	66.08	65.06	
5,556.71				03/08/06	65.62	64.60	
5,556.98				06/14/06	65.35	64.33	
5,560.95				07/18/06	61.38	60.36	
5,557.07				11/07/06	65.26	64.24	
5,558.10				02/27/07	64.23	63.21	
5,557.82				05/02/07	64.51	63.49	
5,557.82				08/14/07	64.51	63.49	
5,557.63				10/10/07	64.70	63.68	
5,559.48				03/26/08	62.85	61.83	
5,560.35				06/24/08	61.98	60.96	
5,560.58				08/26/08	61.75	60.73	
5,560.62				10/14/08	61.71	60.69	
5,560.65				03/10/09	61.68	60.66	
5,560.66				06/24/09	61.67	60.65	
5,560.36				09/10/09	61.97	60.95	
5,560.53				12/11/09	61.8	60.78	
5,560.50				03/11/10	61.83	60.81	
5,559.94				05/11/10	62.39	61.37	
5,559.01				09/29/10	63.32	62.30	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-2**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,623.10	5,625.00	1.90				121.125
5,548.85				11/08/99	76.15	74.25	
5,548.85				11/09/99	76.15	74.25	
5,548.60				01/02/00	76.40	74.50	
5,548.80				01/10/00	76.20	74.30	
5,548.60				01/17/00	76.40	74.50	
5,549.00				01/24/00	76.00	74.10	
5,548.90				02/01/00	76.10	74.20	
5,548.90				02/07/00	76.10	74.20	
5,549.30				02/14/00	75.70	73.80	
5,549.40				02/23/00	75.60	73.70	
5,549.50				03/01/00	75.50	73.60	
5,549.60				03/08/00	75.40	73.50	
5,549.50				03/15/00	75.50	73.60	
5,550.20				03/20/00	74.80	72.90	
5,550.00				03/29/00	75.00	73.10	
5,549.70				04/04/00	75.30	73.40	
5,549.80				04/13/00	75.20	73.30	
5,550.00				04/21/00	75.00	73.10	
5,550.10				04/28/00	74.90	73.00	
5,550.10				05/01/00	74.90	73.00	
5,550.40				05/11/00	74.60	72.70	
5,550.10				05/15/00	74.90	73.00	
5,550.40				05/25/00	74.60	72.70	
5,550.40				06/09/00	74.60	72.70	
5,550.50				06/16/00	74.50	72.60	
5,550.35				06/26/00	74.65	72.75	
5,550.45				07/06/00	74.55	72.65	
5,550.45				07/13/00	74.55	72.65	
5,550.46				07/18/00	74.54	72.64	
5,550.61				07/27/00	74.39	72.49	
5,550.66				08/02/00	74.34	72.44	
5,550.68				08/09/00	74.32	72.42	
5,550.70				08/15/00	74.30	72.40	
5,550.82				08/31/00	74.18	72.28	
5,551.15				09/08/00	73.85	71.95	
5,551.25				09/13/00	73.75	71.85	
5,551.32				09/20/00	73.68	71.78	
5,546.11				10/05/00	78.89	76.99	
5,546.75				11/09/00	78.25	76.35	
5,547.16				12/06/00	77.84	75.94	
5,552.46				01/26/01	72.54	70.64	
5,552.48				02/02/01	72.52	70.62	
5,551.38				03/29/01	73.62	71.72	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-2**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,623.10	5,625.00	1.90				121.125
5,551.87				04/30/01	73.13	71.23	
5,552.31				05/31/01	72.69	70.79	
5,552.61				06/21/01	72.39	70.49	
5,552.92				07/10/01	72.08	70.18	
5,553.60				08/20/01	71.40	69.50	
5,554.01				09/19/01	70.99	69.09	
5,554.26				10/02/01	70.74	68.84	
5,554.42				11/08/01	70.58	68.68	
5,555.07				12/03/01	69.93	68.03	
5,555.02				01/03/02	69.98	68.08	
5,555.19				02/06/02	69.81	67.91	
5,555.43				03/26/02	69.57	67.67	
5,555.67				04/09/02	69.33	67.43	
5,556.01				05/23/02	68.99	67.09	
5,556.07				06/05/02	68.93	67.03	
5,556.19				07/08/02	68.81	66.91	
5,556.32				08/23/02	68.68	66.78	
5,556.53				09/11/02	68.47	66.57	
5,557.00				10/23/02	68.00	66.10	
5,556.70				11/22/02	68.30	66.40	
5,557.29				12/03/02	67.71	65.81	
5,557.48				01/09/03	67.52	65.62	
5,557.63				02/12/03	67.37	65.47	
5,558.11				03/26/03	66.89	64.99	
5,558.15				04/02/03	66.85	64.95	
5,553.99				05/01/03	71.01	69.11	
5,549.26				06/09/03	75.74	73.84	
5,548.42				07/07/03	76.58	74.68	
5,548.03				08/04/03	76.97	75.07	
5,547.50				09/11/03	77.50	75.60	
5,547.96				10/02/03	77.04	75.14	
5,547.80				11/07/03	77.20	75.30	
5,548.57				12/03/03	76.43	74.53	
5,554.28				01/15/04	70.72	68.82	
5,555.74				02/10/04	69.26	67.36	
5,557.18				03/28/04	67.82	65.92	
5,557.77				04/12/04	67.23	65.33	
5,558.35				05/13/04	66.65	64.75	
5,558.47				06/18/04	66.53	64.63	
5,559.28				07/28/04	65.72	63.82	
5,554.54				08/30/04	70.46	68.56	
5,552.25				09/16/04	72.75	70.85	
5,549.93				10/11/04	75.07	73.17	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-2**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,623.10	5,625.00	1.90				121.125
5,550.17				11/16/04	74.83	72.93	
5,550.65				12/22/04	74.35	72.45	
5,550.23				01/18/05	74.77	72.87	
5,550.37				02/28/05	74.63	72.73	
5,550.41				03/15/05	74.59	72.69	
5,550.46				04/26/05	74.54	72.64	
5,550.60				05/24/05	74.40	72.50	
5,550.49				06/30/05	74.51	72.61	
5,550.39				07/29/05	74.61	72.71	
5,550.61				09/12/05	74.39	72.49	
5,550.57				12/07/05	74.43	72.53	
5,551.58				03/08/06	73.42	71.52	
5,551.70				06/14/06	73.3	71.40	
5,550.80				07/18/06	74.20	72.30	
5550.80				11/07/06	74.20	72.30	
5553.17				02/27/07	71.83	69.93	
5,552.34				05/02/07	72.66	70.76	
5,552.30				08/14/07	72.7	70.80	
5,552.48				10/10/07	72.52	70.62	
5,554.86				03/26/08	70.14	68.24	
5,555.51				06/24/08	69.49	67.59	
5,555.57				08/26/08	69.43	67.53	
5,555.71				10/14/08	69.29	67.39	
5,556.01				03/10/09	68.99	67.09	
5,556.53				06/24/09	68.47	66.57	
5,556.22				09/10/09	68.78	66.88	
5,556.81				12/11/09	68.19	66.29	
5,558.15				03/11/10	66.85	64.95	
5,557.91				05/11/10	67.09	65.19	
5,557.52				09/29/10	67.48	65.58	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-3**

Water Elevation (z)	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
	5,631.21	5,632.23	1.02				141
5,565.78				11/29/99	66.45	65.43	
5,566.93				01/02/00	65.30	64.28	
5,567.03				01/10/00	65.20	64.18	
5,566.83				01/17/00	65.40	64.38	
5,567.13				01/24/00	65.10	64.08	
5,567.33				02/01/00	64.90	63.88	
5,567.13				02/07/00	65.10	64.08	
5,567.43				02/14/00	64.80	63.78	
5,567.63				02/23/00	64.60	63.58	
5,567.73				03/01/00	64.50	63.48	
5,567.83				03/08/00	64.40	63.38	
5,567.70				03/15/00	64.53	63.51	
5,568.03				03/20/00	64.20	63.18	
5,567.93				03/29/00	64.30	63.28	
5,567.63				04/04/00	64.60	63.58	
5,567.83				04/13/00	64.40	63.38	
5,568.03				04/21/00	64.20	63.18	
5,568.23				04/28/00	64.00	62.98	
5,568.13				05/01/00	64.10	63.08	
5,568.53				05/11/00	63.70	62.68	
5,568.23				05/15/00	64.00	62.98	
5,568.53				05/25/00	63.70	62.68	
5,568.61				06/09/00	63.62	62.60	
5,568.69				06/16/00	63.54	62.52	
5,568.45				06/26/00	63.78	62.76	
5,568.61				07/06/00	63.62	62.60	
5,568.61				07/06/00	63.62	62.60	
5,568.49				07/13/00	63.74	62.72	
5,568.55				07/18/00	63.68	62.66	
5,568.65				07/27/00	63.58	62.56	
5,568.73				08/02/00	63.50	62.48	
5,568.77				08/09/00	63.46	62.44	
5,568.76				08/16/00	63.47	62.45	
5,568.95				08/31/00	63.28	62.26	
5,568.49				09/08/00	63.74	62.72	
5,568.67				09/13/00	63.56	62.54	
5,568.96				09/20/00	63.27	62.25	
5,568.93				10/05/00	63.3	62.28	
5,569.34				11/09/00	62.89	61.87	
5,568.79				12/06/00	63.44	62.42	
5,569.11				01/03/01	63.12	62.10	
5,569.75				02/09/01	62.48	61.46	
5,570.34				03/28/01	61.89	60.87	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-3**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,631.21	5,632.23	1.02				141
5,570.61				04/30/01	61.62	60.60	
5,570.70				05/31/01	61.53	60.51	
5,570.88				06/21/01	61.35	60.33	
5,571.02				07/10/01	61.21	60.19	
5,571.70				08/20/01	60.53	59.51	
5,572.12				09/19/01	60.11	59.09	
5,572.08				10/02/01	60.15	59.13	
5,570.70				05/31/01	61.53	60.51	
5,570.88				06/21/01	61.35	60.33	
5,571.02				07/10/01	61.21	60.19	
5,571.70				08/20/01	60.53	59.51	
5,572.12				09/19/01	60.11	59.09	
5,572.08				10/02/01	60.15	59.13	
5,572.78				11/08/01	59.45	58.43	
5,573.27				12/03/01	58.96	57.94	
5,573.47				01/03/02	58.76	57.74	
5,573.93				02/06/02	58.30	57.28	
5,574.75				03/26/02	57.48	56.46	
5,574.26				04/09/02	57.97	56.95	
5,575.39				05/23/02	56.84	55.82	
5,574.84				06/05/02	57.39	56.37	
5,575.33				07/08/02	56.90	55.88	
5,575.79				08/23/02	56.44	55.42	
5,576.08				09/11/02	56.15	55.13	
5,576.30				10/23/02	55.93	54.91	
5,576.35				11/22/02	55.88	54.86	
5,576.54				12/03/02	55.69	54.67	
5,576.96				01/09/03	55.27	54.25	
5,577.11				02/12/03	55.12	54.10	
5,577.61				03/26/03	54.62	53.60	
5,572.80				04/02/03	59.43	58.41	
5,577.89				05/01/03	54.34	53.32	
5,577.91				06/09/03	54.32	53.30	
5,577.53				07/07/03	54.70	53.68	
5,577.50				08/04/03	54.73	53.71	
5,577.71				09/11/03	54.52	53.50	
5,577.31				10/02/03	54.92	53.90	
5,577.33				11/07/03	54.90	53.88	
5,577.34				12/03/03	54.89	53.87	
5,578.24				01/15/04	53.99	52.97	
5,578.38				02/10/04	53.85	52.83	
5,578.69				03/28/04	53.54	52.52	
5,579.15				04/12/04	53.08	52.06	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-3**

Water Elevation (z)	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
	5,631.21	5,632.23	1.02				141
5,579.47				05/13/04	52.76	51.74	
5,579.53				06/18/04	52.70	51.68	
5,580.17				07/28/04	52.06	51.04	
5,580.20				08/30/04	52.03	51.01	
5,580.26				09/16/04	51.97	50.95	
5,580.12				10/11/04	52.11	51.09	
5,579.93				11/16/04	52.30	51.28	
5,580.07				12/22/04	52.16	51.14	
5,579.80				01/18/05	52.43	51.41	
5,580.35				02/28/05	51.88	50.86	
5,580.57				03/15/05	51.66	50.64	
5,580.86				04/26/05	51.37	50.35	
5,581.20				05/24/05	51.03	50.01	
5,581.51				06/30/05	50.72	49.70	
5,581.55				07/29/05	50.68	49.66	
5,581.68				09/12/05	50.55	49.53	
5,581.83				12/07/05	50.4	49.38	
5,564.92				03/08/06	67.31	66.29	
5,582.73				06/13/06	49.50	48.48	
5,582.33				07/18/06	49.90	48.88	
5,582.75				11/07/06	49.48	48.46	
5583.35				02/27/07	48.88	47.86	
5,559.57				05/02/07	72.66	71.64	
5,583.29				08/14/07	48.94	47.92	
5,583.49				10/10/07	48.74	47.72	
5,584.95				03/26/08	47.28	46.26	
5,584.59				06/24/08	47.64	46.62	
5,584.55				08/26/08	47.68	46.66	
5,584.03				10/14/08	48.2	47.18	
5,583.64				03/03/09	48.59	47.57	
5,587.34				06/24/09	44.89	43.87	
5,582.90				09/10/09	49.33	48.31	
5,583.27				12/11/09	48.96	47.94	
5,583.63				03/11/10	48.6	47.58	
5,583.82				05/11/10	48.41	47.39	
5,583.51				09/29/10	48.72	47.70	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-4**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,612.301	5,613.485	1.184				114.5
5,512.145				05/25/00	101.34	100.16	
5,518.985				06/09/00	94.50	93.32	
5,512.145				06/16/00	101.34	100.16	
5,517.465				06/26/00	96.02	94.84	
5,520.145				07/06/00	93.34	92.16	
5,521.435				07/13/00	92.05	90.87	
5,522.005				07/18/00	91.48	90.30	
5,522.945				07/27/00	90.54	89.36	
5,523.485				08/02/00	90.00	88.82	
5,523.845				08/09/00	89.64	88.46	
5,523.885				08/15/00	89.60	88.42	
5,524.555				09/01/00	88.93	87.75	
5,513.235				09/08/00	100.25	99.07	
5,516.665				09/13/00	96.82	95.64	
5,519.085				09/20/00	94.40	93.22	
5,522.165				10/05/00	91.32	90.14	
5,524.665				11/09/00	88.82	87.64	
5,518.545				12/06/00	94.94	93.76	
5,527.695				01/03/01	85.79	84.61	
5,529.085				02/09/01	84.40	83.22	
5,529.535				03/27/01	83.95	82.77	
5,530.235				04/30/01	83.25	82.07	
5,530.265				05/31/01	83.22	82.04	
5,534.405				06/22/01	79.08	77.90	
5,533.145				07/10/01	80.34	79.16	
5,534.035				08/20/01	79.45	78.27	
5,534.465				09/19/01	79.02	77.84	
5,533.285				10/02/01	80.20	79.02	
5,530.265				05/31/01	83.22	82.04	
5,534.405				06/21/01	79.08	77.90	
5,533.145				07/10/01	80.34	79.16	
5,534.035				08/20/01	79.45	78.27	
5,534.465				09/19/01	79.02	77.84	
5,533.285				10/02/01	80.20	79.02	
5,533.865				11/08/01	79.62	78.44	
5,534.275				12/03/01	79.21	78.03	
5,534.715				01/03/02	78.77	77.59	
5,535.435				02/06/02	78.05	76.87	
5,536.445				03/26/02	77.04	75.86	
5,536.405				04/09/02	77.08	75.90	
5,537.335				05/23/02	76.15	74.97	
5,537.325				06/05/02	76.16	74.98	
5,537.975				07/08/02	75.51	74.33	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-4**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,612.301	5,613.485	1.184				114.5
5,538.825				08/23/02	74.66	73.48	
5,539.275				09/11/02	74.21	73.03	
5,539.765				10/23/02	73.72	72.54	
5,540.205				11/22/02	73.28	72.10	
5,540.295				12/03/02	73.19	72.01	
5,540.795				01/09/03	72.69	71.51	
5,540.985				02/12/03	72.50	71.32	
5,541.675				03/26/03	71.81	70.63	
5,541.765				04/02/03	71.72	70.54	
5,541.885				05/01/03	71.60	70.42	
5,542.025				06/09/03	71.46	70.28	
5,541.925				07/07/03	71.56	70.38	
5,541.885				08/04/03	71.60	70.42	
5,541.825				09/11/03	71.66	70.48	
5,541.885				10/02/03	71.60	70.42	
5,541.995				11/07/03	71.49	70.31	
5,542.005				12/03/03	71.48	70.30	
5,542.555				01/15/04	70.93	69.75	
5,542.705				02/10/04	70.78	69.60	
5,543.225				03/28/04	70.26	69.08	
5,543.555				04/12/04	69.93	68.75	
5,543.865				05/13/04	69.62	68.44	
5,543.915				06/18/04	69.57	68.39	
5,544.655				07/28/04	68.83	67.65	
5,544.795				08/30/04	68.69	67.51	
5,544.845				09/16/04	68.64	67.46	
5,544.705				10/11/04	68.78	67.60	
5,544.525				11/16/04	68.96	67.78	
5,544.625				12/22/04	68.86	67.68	
5,544.305				01/18/05	69.18	68.00	
5,544.585				02/28/05	68.90	67.72	
5,544.685				03/15/05	68.80	67.62	
5,544.675				04/26/05	68.81	67.63	
5,544.785				05/24/05	68.70	67.52	
5,544.795				06/30/05	68.69	67.51	
5,544.775				07/29/05	68.71	67.53	
5,545.005				09/12/05	68.48	67.30	
5,545.225				12/07/05	68.26	67.08	
5,545.735				03/08/06	67.75	66.57	
5,545.785				06/14/06	67.70	66.52	
5,545.855				07/18/06	67.63	66.45	
5,545.805				11/07/06	67.68	66.50	
5546.675				02/27/07	66.81	65.63	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-4**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,612.301	5,613.485	1.184				114.5
5,546.535				05/02/07	66.95	65.77	
5,547.155				08/15/07	66.33	65.15	
5,547.215				10/10/07	66.27	65.09	
5,548.305				03/26/08	65.18	64.00	
5,548.865				06/24/08	64.62	63.44	
5,549.235				08/26/08	64.25	63.07	
5,549.305				10/14/08	64.18	63.00	
5,549.725				03/03/09	63.76	62.58	
5,549.905				06/24/09	63.58	62.40	
5,549.695				09/10/09	63.79	62.61	
5,549.865				12/11/09	63.62	62.44	
5,545.60				03/11/10	67.89	66.71	
5,530.88				05/11/10	82.61	81.43	
5,545.24				09/29/10	68.25	67.07	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-5**

Water Elevation (z)	Land Surface (LSD)	Measuring Point		Date Of Monitoring	Total or Measured	Total	Total Depth Of Well
		Elevation (MP)	Length Of Riser (L)		Depth to Water (blw.MP)	Depth to Water (blw.LSD)	
	5,638.75	5,640.70	1.95				121.75
5,579.30				01/02/00	61.40	59.45	
5,579.60				01/10/00	61.10	59.15	
5,579.35				01/17/00	61.35	59.40	
5,579.60				01/24/00	61.10	59.15	
5,579.50				02/01/00	61.20	59.25	
5,579.50				02/07/00	61.20	59.25	
5,579.90				02/14/00	60.80	58.85	
5,579.90				02/23/00	60.80	58.85	
5,580.20				03/01/00	60.50	58.55	
5,580.00				03/08/00	60.70	58.75	
5,580.04				03/15/00	60.66	58.71	
5,580.70				03/20/00	60.00	58.05	
5,580.30				03/29/00	60.40	58.45	
5,580.00				04/04/00	60.70	58.75	
5,580.20				04/13/00	60.50	58.55	
5,580.40				04/21/00	60.30	58.35	
5,580.50				04/28/00	60.20	58.25	
5,580.50				05/01/00	60.20	58.25	
5,580.90				05/11/00	59.80	57.85	
5,580.50				05/15/00	60.20	58.25	
5,580.75				05/25/00	59.95	58.00	
5,580.80				06/09/00	59.90	57.95	
5,580.92				06/16/00	59.78	57.83	
5,580.80				06/26/00	59.90	57.95	
5,580.90				07/06/00	59.80	57.85	
5,581.05				07/13/00	59.65	57.70	
5,580.90				07/18/00	59.80	57.85	
5,581.05				07/27/00	59.65	57.70	
5,581.06				08/02/00	59.64	57.69	
5,581.08				08/09/00	59.62	57.67	
5,581.07				08/16/00	59.63	57.68	
5,581.25				08/31/00	59.45	57.50	
5,581.32				09/08/00	59.38	57.43	
5,581.34				09/13/00	59.36	57.41	
5,581.41				09/20/00	59.29	57.34	
5,581.37				10/05/00	59.33	57.38	
5,581.66				11/09/00	59.04	57.09	
5,581.63				12/06/00	59.07	57.12	
5,581.92				01/03/01	58.78	56.83	
5,582.20				02/09/01	58.50	56.55	
5,582.54				03/28/01	58.16	56.21	
5,582.72				04/30/01	57.98	56.03	
5,582.72				05/31/01	57.98	56.03	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-5**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,638.75	5,640.70	1.95				121.75
5,582.81				06/22/01	57.89	55.94	
5,582.92				07/10/01	57.78	55.83	
5,583.17				08/20/01	57.53	55.58	
5,583.28				09/19/01	57.42	55.47	
5,583.36				10/02/01	57.34	55.39	
5,582.72				05/31/01	57.98	56.03	
5,582.81				06/21/01	57.89	55.94	
5,582.92				07/10/01	57.78	55.83	
5,583.17				08/20/01	57.53	55.58	
5,583.28				09/19/01	57.42	55.47	
5,583.36				10/02/01	57.34	55.39	
5,583.49				11/08/01	57.21	55.26	
5,583.84				12/03/01	56.86	54.91	
5,583.79				01/03/02	56.91	54.96	
5,583.96				02/06/02	56.74	54.79	
5,584.39				03/26/02	56.31	54.36	
5,584.12				04/09/02	56.58	54.63	
5,584.55				05/23/02	56.15	54.20	
5,584.42				06/05/02	56.28	54.33	
5,583.65				07/08/02	57.05	55.10	
5,584.90				08/23/02	55.80	53.85	
5,585.02				09/11/02	55.68	53.73	
5,585.20				10/23/02	55.50	53.55	
5,585.15				11/22/02	55.55	53.60	
5,585.42				12/03/02	55.28	53.33	
5,585.65				01/09/03	55.05	53.10	
5,585.65				02/12/03	55.05	53.10	
5,585.92				03/26/03	54.78	52.83	
5,586.22				04/02/03	54.48	52.53	
5,586.01				05/01/03	54.69	52.74	
5,584.81				06/09/03	55.89	53.94	
5,584.34				07/07/03	56.36	54.41	
5,584.40				08/04/03	56.30	54.35	
5,583.88				09/11/03	56.82	54.87	
5,583.57				10/02/03	57.13	55.18	
5,583.39				11/07/03	57.31	55.36	
5,583.97				12/03/03	56.73	54.78	
5,585.28				01/15/04	55.42	53.47	
5,585.50				02/10/04	55.20	53.25	
5,585.87				03/28/04	54.83	52.88	
5,586.20				04/12/04	54.50	52.55	
5,586.45				05/13/04	54.25	52.30	
5,586.50				06/18/04	54.20	52.25	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-5**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,638.75	5,640.70	1.95				121.75
5,587.13				07/28/04	53.57	51.62	
5,586.22				08/30/04	54.48	52.53	
5,585.69				09/16/04	55.01	53.06	
5,585.17				10/11/04	55.53	53.58	
5,584.64				11/16/04	56.06	54.11	
5,584.77				12/22/04	55.93	53.98	
5,584.65				01/18/05	56.05	54.10	
5,584.98				02/28/05	55.72	53.77	
5,585.15				03/15/05	55.55	53.60	
5,586.25				04/26/05	54.45	52.50	
5,586.79				05/24/05	53.91	51.96	
5,586.52				06/30/05	54.18	52.23	
5,586.03				07/29/05	54.67	52.72	
5,586.05				09/12/05	54.65	52.70	
5,585.80				12/07/05	54.90	52.95	
5,587.06				03/08/06	53.64	51.69	
5,585.90				06/13/06	54.80	52.85	
5,585.32				07/18/06	55.38	53.43	
5,585.35				11/07/06	55.35	53.40	
5,585.81				02/27/07	54.89	52.94	
5,585.20				05/02/07	55.50	53.55	
5,586.66				08/14/07	54.04	52.09	
5,586.80				10/10/07	53.90	51.95	
5,588.48				03/26/08	52.22	50.27	
5,586.51				06/24/08	54.19	52.24	
5,586.45				08/26/08	54.25	52.30	
5,585.40				10/14/08	55.3	53.35	
5,584.80				03/03/09	55.9	53.95	
5,584.73				06/24/09	55.97	54.02	
5,584.36				09/10/09	56.34	54.39	
5,585.02				12/11/09	55.68	53.73	
5,585.66				03/11/10	55.04	53.09	
5,584.86				05/11/10	55.84	53.89	
5,584.55				09/29/10	56.15	54.20	



**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-6**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,607.33	5,608.78	1.450				98.55
5,522.28				05/25/00	86.50	85.05	
5,521.51				06/09/00	87.27	85.82	
5,522.35				06/16/00	86.43	84.98	
5,522.14				06/26/00	86.64	85.19	
5,522.25				07/06/00	86.53	85.08	
5,522.13				07/13/00	86.65	85.20	
5,522.17				07/18/00	86.61	85.16	
5,522.26				07/25/00	86.52	85.07	
5,522.31				08/02/00	86.47	85.02	
5,522.33				08/09/00	86.45	85.00	
5,522.35				08/15/00	86.43	84.98	
5,522.40				08/31/00	86.38	84.93	
5,522.40				09/08/00	86.38	84.93	
5,522.45				09/13/00	86.33	84.88	
5,522.53				09/20/00	86.25	84.80	
5,522.39				10/05/00	86.39	84.94	
5,522.42				11/09/00	86.36	84.91	
5,522.29				12/06/00	86.49	85.04	
5,522.63				01/03/01	86.15	84.70	
5,522.72				02/09/01	86.06	84.61	
5,522.90				03/26/01	85.88	84.43	
5,522.70				04/30/01	86.08	84.63	
5,522.89				05/31/01	85.89	84.44	
5,522.88				06/20/01	85.90	84.45	
5,522.96				07/10/01	85.82	84.37	
5,523.10				08/20/01	85.68	84.23	
5,523.23				09/19/01	85.55	84.10	
5,523.21				10/02/01	85.57	84.12	
5,522.89				05/31/01	85.89	84.44	
5,522.88				06/21/01	85.90	84.45	
5,522.96				07/10/01	85.82	84.37	
5,523.10				08/20/01	85.68	84.23	
5,523.23				09/19/01	85.55	84.10	
5,523.21				10/02/01	85.57	84.12	
5,523.25				11/08/01	85.53	84.08	
5,523.46				12/03/01	85.32	83.87	
5,523.36				01/03/02	85.42	83.97	
5,523.50				02/06/02	85.28	83.83	
5,523.94				03/26/02	84.84	83.39	
5,523.75				04/09/02	85.03	83.58	
5,524.23				05/23/02	84.55	83.10	
5,523.98				06/05/02	84.80	83.35	
5,524.31				07/08/02	84.47	83.02	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-6**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,607.33	5,608.78	1.450				98.55
5,524.36				08/23/02	84.42	82.97	
5,524.49				09/11/02	84.29	82.84	
5,524.71				10/23/02	84.07	82.62	
5,524.60				11/22/02	84.18	82.73	
5,524.94				12/03/02	83.84	82.39	
5,525.10				01/09/03	83.68	82.23	
5,525.15				02/12/03	83.63	82.18	
5,525.35				03/26/03	83.43	81.98	
5,525.68				04/02/03	83.10	81.65	
5,525.74				05/01/03	83.04	81.59	
5,525.98				06/09/03	82.80	81.35	
5,526.04				07/07/03	82.74	81.29	
5,526.07				08/04/03	82.71	81.26	
5,526.42				09/11/03	82.36	80.91	
5,526.30				10/02/03	82.48	81.03	
5,526.41				11/07/03	82.37	80.92	
5,526.46				12/03/03	82.32	80.87	
5,526.83				01/15/04	81.95	80.50	
5,526.81				02/10/04	81.97	80.52	
5,527.14				03/28/04	81.64	80.19	
5,527.39				04/12/04	81.39	79.94	
5,527.64				05/13/04	81.14	79.69	
5,527.70				06/18/04	81.08	79.63	
5,528.16				07/28/04	80.62	79.17	
5,528.30				08/30/04	80.48	79.03	
5,528.52				09/16/04	80.26	78.81	
5,528.71				10/11/04	80.07	78.62	
5,528.74				11/16/04	80.04	78.59	
5,529.20				12/22/04	79.58	78.13	
5,528.92				01/18/05	79.86	78.41	
5,529.51				02/28/05	79.27	77.82	
5,529.74				03/15/05	79.04	77.59	
5,529.96				04/26/05	78.82	77.37	
5,530.15				05/24/05	78.63	77.18	
5,530.35				06/30/05	78.43	76.98	
5,530.47				07/29/05	78.31	76.86	
5,530.95				09/12/05	77.83	76.38	
5,531.50				12/07/05	77.28	75.83	
5,532.43				03/08/06	76.35	74.90	
5,533.49				06/13/06	75.29	73.84	
5,532.58				07/18/06	76.20	74.75	
5,532.88				11/07/06	75.90	74.45	
5534.09				02/27/07	74.69	73.24	



**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-6**

<b>Water Elevation (z)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,607.33	5,608.78	1.450				98.55
5,534.04				05/02/07	74.74	73.29	
5,534.43				08/14/07	74.35	72.90	
5,554.54				10/10/07	54.24	52.79	
5,535.40				03/26/08	73.38	71.93	
5,535.55				06/24/08	73.23	71.78	
5,535.90				08/26/08	72.88	71.43	
5,535.87				10/14/08	72.91	71.46	
5,536.42				03/10/09	72.36	70.91	
5,536.71				06/24/09	72.07	70.62	
5,536.83				09/10/09	71.95	70.50	
5,537.35				12/11/09	71.43	69.98	
5,537.93				03/11/10	70.85	69.40	
5,538.14				05/11/10	70.64	69.19	
5,538.03				09/29/10	70.75	69.30	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-7**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,619.87	5,621.07	1.20				119.8
5,552.37				11/29/99	68.70	67.50	
5,553.57				01/02/00	67.50	66.30	
5,553.87				01/10/00	67.20	66.00	
5,553.72				01/17/00	67.35	66.15	
5,553.97				01/24/00	67.10	65.90	
5,553.87				02/01/00	67.20	66.00	
5,553.87				02/07/00	67.20	66.00	
5,554.17				02/14/00	66.90	65.70	
5,554.27				02/23/00	66.80	65.60	
5,554.37				03/01/00	66.70	65.50	
5,554.37				03/08/00	66.70	65.50	
5,554.27				03/15/00	66.80	65.60	
5,554.77				03/20/00	66.30	65.10	
5,554.57				03/29/00	66.50	65.30	
5,554.27				04/04/00	66.80	65.60	
5,554.57				04/13/00	66.50	65.30	
5,554.77				04/21/00	66.30	65.10	
5,554.87				04/28/00	66.20	65.00	
5,554.87				05/01/00	66.20	65.00	
5,555.27				05/11/00	65.80	64.60	
5,554.97				05/15/00	66.10	64.90	
5,555.27				05/25/00	65.80	64.60	
5,555.33				06/09/00	65.74	64.54	
5,555.45				06/16/00	65.62	64.42	
5,555.22				06/26/00	65.85	64.65	
5,555.45				07/06/00	65.62	64.42	
5,555.40				07/13/00	65.67	64.47	
5,555.45				07/18/00	65.62	64.42	
5,555.59				07/27/00	65.48	64.28	
5,555.65				08/02/00	65.42	64.22	
5,555.70				08/09/00	65.37	64.17	
5,555.74				08/16/00	65.33	64.13	
5,555.96				08/31/00	65.11	63.91	
5,555.87				09/08/00	65.20	64.00	
5,555.95				09/13/00	65.12	63.92	
5,556.05				09/20/00	65.02	63.82	
5,556.06				10/05/00	65.01	63.81	
5,556.17				10/12/00	64.90	63.70	
5,556.20				10/19/00	64.87	63.67	
5,556.22				10/23/00	64.85	63.65	
5,556.36				11/09/00	64.71	63.51	
5,556.42				11/14/00	64.65	63.45	
5,556.45				11/30/00	64.62	63.42	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-7**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,619.87	5,621.07	1.20				119.8
5,556.15				12/06/00	64.92	63.72	
5,556.89				01/14/01	64.18	62.98	
5,557.07				02/09/01	64.00	62.80	
5,557.62				03/29/01	63.45	62.25	
5,557.51				04/30/01	63.56	62.36	
5,557.77				05/31/01	63.30	62.10	
5,557.84				06/21/01	63.23	62.03	
5,557.98				07/10/01	63.09	61.89	
5,558.33				08/20/01	62.74	61.54	
5,558.57				09/19/01	62.50	61.30	
5,558.53				10/02/01	62.54	61.34	
5,558.62				11/08/01	62.45	61.25	
5,559.03				12/03/01	62.04	60.84	
5,559.08				01/03/02	61.99	60.79	
5,559.32				02/06/02	61.75	60.55	
5,559.63				03/26/02	61.44	60.24	
5,559.55				04/09/02	61.52	60.32	
5,560.06				05/23/02	61.01	59.81	
5,559.91				06/05/02	61.16	59.96	
5,560.09				07/08/02	60.98	59.78	
5,560.01				08/23/02	61.06	59.86	
5,560.23				09/11/02	60.84	59.64	
5,560.43				10/23/02	60.64	59.44	
5,560.39				11/22/02	60.68	59.48	
5,560.61				12/03/02	60.46	59.26	
5,560.89				01/09/03	60.18	58.98	
5,560.94				02/12/03	60.13	58.93	
5,561.28				03/26/03	59.79	58.59	
5,561.35				04/02/03	59.72	58.52	
5,546.20				05/01/03	74.87	73.67	
5,539.47				06/09/03	81.60	80.40	
5,541.87				07/07/03	79.20	78.00	
5,542.12				08/04/03	78.95	77.75	
5,541.91				09/11/03	79.16	77.96	
5,544.62				10/02/03	76.45	75.25	
5,542.67				11/07/03	78.40	77.20	
5,549.96				12/03/03	71.11	69.91	
5,557.17				01/15/04	63.90	62.70	
5,558.65				02/10/04	62.42	61.22	
5,559.90				03/28/04	61.17	59.97	
5,560.36				04/12/04	60.71	59.51	
5,560.87				05/13/04	60.20	59.00	
5,560.95				06/18/04	60.12	58.92	

**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-7**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well (blw.LSD)</b>
	5,619.87	5,621.07	1.20				119.8
5,561.64				07/28/04	59.43	58.23	
5,543.00				08/30/04	78.07	76.87	
5,541.91				09/16/04	79.16	77.96	
5,540.08				10/11/04	80.99	79.79	
5,546.92				11/16/04	74.15	72.95	
5,546.97				12/22/04	74.10	72.90	
5,546.51				01/18/05	74.56	73.36	
5,546.66				02/28/05	74.41	73.21	
5,546.81				03/15/05	74.26	73.06	
5,548.19				04/26/05	72.88	71.68	
5,547.11				05/24/05	73.96	72.76	
5,546.98				06/30/05	74.09	72.89	
5,546.92				07/29/05	74.15	72.95	
5,547.26				09/12/05	73.81	72.61	
5,547.26				12/07/05	73.81	72.61	
5,548.86				03/08/06	72.21	71.01	
5,548.62				06/13/06	72.45	71.25	
5,550.04				07/18/06	71.03	69.83	
5,548.32				11/07/06	72.75	71.55	
5,550.44				02/27/07	70.63	69.43	
5,549.69				05/02/07	71.38	70.18	
5,549.97				08/14/07	71.10	69.90	
5,550.30				10/10/07	70.77	69.57	
5,551.92				03/26/08	69.15	67.95	
5,552.94				06/24/08	68.13	66.93	
5,552.34				08/26/08	68.73	67.53	
5,552.61				10/14/08	68.46	67.26	
5,552.81				03/10/09	68.26	67.06	
5,553.11				06/24/09	67.96	66.76	
5,552.55				09/10/09	68.52	67.32	
5,553.06				12/11/09	68.01	66.81	
5,554.64				03/11/10	66.43	65.23	
5,554.20				05/11/10	66.87	65.67	
5,553.45				09/29/10	67.62	66.42	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-8**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,616.80	5,618.21	1.41				126.00
5,543.21				11/29/99	75.00	73.59	
5,543.01				01/02/00	75.20	73.79	
5,543.31				01/10/00	74.90	73.49	
5,543.11				01/17/00	75.10	73.69	
5,543.41				01/24/00	74.80	73.39	
5,543.31				02/01/00	74.90	73.49	
5,543.31				02/07/00	74.90	73.49	
5,543.71				02/14/00	74.50	73.09	
5,543.76				02/23/00	74.45	73.04	
5,543.86				03/01/00	74.35	72.94	
5,543.86				03/08/00	74.35	72.94	
5,543.91				03/15/00	74.30	72.89	
5,544.31				03/20/00	73.90	72.49	
5,544.21				03/29/00	74.00	72.59	
5,544.01				04/04/00	74.20	72.79	
5,544.21				04/13/00	74.00	72.59	
5,544.41				04/21/00	73.80	72.39	
5,544.51				04/28/00	73.70	72.29	
5,544.51				05/01/00	73.70	72.29	
5,544.81				05/11/00	73.40	71.99	
5,544.51				05/15/00	73.70	72.29	
5,544.71				05/25/00	73.50	72.09	
5,544.71				06/09/00	73.50	72.09	
5,544.81				06/16/00	73.40	71.99	
5,544.68				06/26/00	73.53	72.12	
5,544.76				07/06/00	73.45	72.04	
5,544.77				07/13/00	73.44	72.03	
5,544.76				07/18/00	73.45	72.04	
5,544.92				07/27/00	73.29	71.88	
5,544.96				08/02/00	73.25	71.84	
5,544.98				08/09/00	73.23	71.82	
5,544.97				08/15/00	73.24	71.83	
5,545.21				08/31/00	73.00	71.59	
5,545.31				09/08/00	72.90	71.49	
5,545.43				09/13/00	72.78	71.37	
5,545.56				09/20/00	72.65	71.24	
5,545.57				10/05/00	72.64	71.23	
5,545.81				11/09/00	72.40	70.99	
5,545.66				12/06/00	72.55	71.14	
5,546.28				01/03/01	71.93	70.52	
5,546.70				02/09/01	71.51	70.10	
5,547.18				03/27/01	71.03	69.62	
5,547.31				04/30/01	70.90	69.49	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-8**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,616.80	5,618.21	1.41				126.00
5,547.49				05/31/01	70.72	69.31	
5,547.49				06/20/01	70.72	69.31	
5,547.83				07/10/01	70.38	68.97	
5,548.13				08/20/01	70.08	68.67	
5,548.30				09/19/01	69.91	68.50	
5,548.45				10/02/01	69.76	68.35	
5,547.49				05/31/01	70.72	69.31	
5,547.54				06/21/01	70.67	69.26	
5,547.83				07/10/01	70.38	68.97	
5,548.13				08/20/01	70.08	68.67	
5,548.30				09/19/01	69.91	68.50	
5,548.45				10/02/01	69.76	68.35	
5,548.62				11/08/01	69.59	68.18	
5,549.03				12/03/01	69.18	67.77	
5,548.97				01/03/02	69.24	67.83	
5,549.19				02/06/02	69.02	67.61	
5,549.66				03/26/02	68.55	67.14	
5,549.64				04/09/02	68.57	67.16	
5,550.01				05/23/02	68.20	66.79	
5,549.97				06/05/02	68.24	66.83	
5,550.13				07/08/02	68.08	66.67	
5,550.30				08/23/02	67.91	66.50	
5,550.50				09/11/02	67.71	66.30	
5,550.90				10/23/02	67.31	65.90	
5,550.83				11/22/02	67.38	65.97	
5,551.04				12/03/02	67.17	65.76	
5,551.24				01/09/03	66.97	65.56	
5,551.23				02/12/03	66.98	65.57	
5,551.52				03/26/03	66.69	65.28	
5,551.64				04/02/03	66.57	65.16	
5,549.02				05/01/03	69.19	67.78	
5,544.74				06/09/03	73.47	72.06	
5,543.78				07/07/03	74.43	73.02	
5,543.39				08/04/03	74.82	73.41	
5,543.05				09/11/03	75.16	73.75	
5,543.19				10/02/03	75.02	73.61	
5,543.21				11/07/03	75.00	73.59	
5,543.40				12/03/03	74.81	73.40	
5,548.10				01/15/04	70.11	68.70	
5,549.50				02/10/04	68.71	67.30	
5,550.87				03/28/04	67.34	65.93	
5,551.33				04/12/04	66.88	65.47	
5,551.87				05/13/04	66.34	64.93	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-8**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,616.80	5,618.21	1.41				126.00
5,551.92				06/18/04	66.29	64.88	
5,552.69				07/28/04	65.52	64.11	
5,549.78				08/30/04	68.43	67.02	
5,547.46				09/16/04	70.75	69.34	
5,545.21				10/11/04	73.00	71.59	
5,545.09				11/16/04	73.12	71.71	
5,545.61				12/22/04	72.60	71.19	
5,545.24				01/18/05	72.97	71.56	
5,545.42				02/28/05	72.79	71.38	
5,545.45				03/15/05	72.76	71.35	
5,545.46				04/26/05	72.75	71.34	
5,545.66				05/24/05	72.55	71.14	
5,545.54				06/30/05	72.67	71.26	
5,545.43				07/29/05	72.78	71.37	
5,545.61				09/12/05	72.60	71.19	
5,545.52				12/07/05	72.69	71.28	
5,546.53				03/08/06	71.68	70.27	
5,546.51				06/13/06	71.70	70.29	
5,546.51				07/18/06	71.70	70.29	
5,546.46				11/07/06	71.75	70.34	
5,547.92				02/27/07	70.29	68.88	
5,547.01				05/02/07	71.20	69.79	
5,547.40				08/14/07	70.81	69.40	
5,547.57				10/10/07	70.64	69.23	
5,548.76				03/26/08	69.45	68.04	
5,549.17				06/24/08	69.04	67.63	
5,549.31				08/26/08	68.9	67.49	
5,549.37				10/14/08	68.84	67.43	
5,549.72				03/03/09	68.49	67.08	
5,550.08				06/24/09	68.13	66.72	
5,549.93				09/10/09	68.28	66.87	
5,550.44				12/11/09	67.77	66.36	
5,551.46				03/11/10	66.75	65.34	
5,551.38				05/11/10	66.83	65.42	
5,551.15				09/29/10	67.06	65.65	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-9**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,636.11	5,637.59	1.48				121.33
5,577.09				12/20/99	60.5	59.02	
5,577.09				01/02/00	60.5	59.02	
5,577.29				01/10/00	60.3	58.82	
5,577.09				01/17/00	60.5	59.02	
5,577.39				01/24/00	60.2	58.72	
5,577.29				02/01/00	60.3	58.82	
5,577.19				02/07/00	60.4	58.92	
5,577.69				02/14/00	59.9	58.42	
5,577.69				02/23/00	59.9	58.42	
5,577.79				03/01/00	59.8	58.32	
5,577.79				03/08/00	59.8	58.32	
5,577.89				03/15/00	59.7	58.22	
5,568.49				03/20/00	69.1	67.62	
5,578.14				03/29/00	59.45	57.97	
5,577.84				04/04/00	59.75	58.27	
5,578.04				04/13/00	59.55	58.07	
5,578.24				04/21/00	59.35	57.87	
5,578.39				04/28/00	59.2	57.72	
5,578.39				05/01/00	59.2	57.72	
5,578.79				05/11/00	58.8	57.32	
5,578.39				05/15/00	59.2	57.72	
5,578.79				05/25/00	58.8	57.32	
5,578.81				06/09/00	58.78	57.30	
5,578.89				06/16/00	58.7	57.22	
5,578.74				06/26/00	58.85	57.37	
5,578.86				07/06/00	58.73	57.25	
5,578.87				07/13/00	58.72	57.24	
5,578.84				07/18/00	58.75	57.27	
5,579.03				07/27/00	58.56	57.08	
5,579.03				08/02/00	58.56	57.08	
5,579.05				08/09/00	58.54	57.06	
5,579.04				08/15/00	58.55	57.07	
5,579.25				08/31/00	58.34	56.86	
5,579.35				09/08/00	58.24	56.76	
5,579.40				09/13/00	58.19	56.71	
5,579.46				09/20/00	58.13	56.65	
5,579.44				10/05/00	58.15	56.67	
5,579.79				11/09/00	57.8	56.32	
5,579.73				12/06/00	57.86	56.38	
5,580.01				01/03/01	57.58	56.10	
5,580.30				02/09/01	57.29	55.81	
5,580.66				03/27/01	56.93	55.45	
5,580.75				04/30/01	56.84	55.36	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-9**

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
	5,636.11	5,637.59	1.48				121.33
5,581.04				05/31/01	56.55	55.07	
5,581.12				06/21/01	56.47	54.99	
5,581.15				07/10/01	56.44	54.96	
5,581.51				08/20/01	56.08	54.60	
5,581.70				09/19/01	55.89	54.41	
5,581.61				10/02/01	55.98	54.50	
5,581.04				05/31/01	56.55	55.07	
5,581.12				06/21/01	56.47	54.99	
5,581.15				07/10/01	56.44	54.96	
5,581.51				08/20/01	56.08	54.60	
5,581.70				09/19/01	55.89	54.41	
5,581.61				10/02/01	55.98	54.50	
5,581.83				11/08/01	55.76	54.28	
5,582.17				12/03/01	55.42	53.94	
5,582.21				01/03/02	55.38	53.90	
5,582.57				02/06/02	55.02	53.54	
5,583.12				03/26/02	54.47	52.99	
5,582.77				04/09/02	54.82	53.34	
5,583.21				05/23/02	54.38	52.90	
5,582.94				06/05/02	54.65	53.17	
5,582.71				07/08/02	54.88	53.40	
5,583.67				08/23/02	53.92	52.44	
5,583.82				09/11/02	53.77	52.29	
5,584.01				10/23/02	53.58	52.10	
5,583.88				11/22/02	53.71	52.23	
5,583.81				12/03/02	53.78	52.30	
5,584.28				01/09/03	53.31	51.83	
5,584.41				02/12/03	53.18	51.70	
5,584.68				03/26/03	52.91	51.43	
5,584.49				04/02/03	53.10	51.62	
5,584.51				05/01/03	53.08	51.60	
5,583.59				06/09/03	54.00	52.52	
5,582.96				07/07/03	54.63	53.15	
5,582.98				08/04/03	54.61	53.13	
5,582.57				09/11/03	55.02	53.54	
5,582.25				10/02/03	55.34	53.86	
5,582.09				11/07/03	55.50	54.02	
5,582.48				12/03/03	55.11	53.63	
5,583.69				01/15/04	53.90	52.42	
5,583.89				02/10/04	53.70	52.22	
5,584.30				03/28/04	53.29	51.81	
5,584.59				04/12/04	53.00	51.52	
5,584.87				05/13/04	52.72	51.24	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-9**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,636.11	5,637.59	1.48				121.33
5,584.96				06/18/04	52.63	51.15	
5,585.50				07/28/04	52.09	50.61	
5,584.81				08/30/04	52.78	51.30	
5,584.40				09/16/04	53.19	51.71	
5,583.91				10/11/04	53.68	52.20	
5,583.39				11/16/04	54.20	52.72	
5,583.54				12/22/04	54.05	52.57	
5,583.34				01/18/05	54.25	52.77	
5,583.66				02/28/05	53.93	52.45	
5,583.87				03/15/05	53.72	52.24	
5,584.74				04/26/05	52.85	51.37	
5,585.26				05/24/05	52.33	50.85	
5,585.06				06/30/05	52.53	51.05	
5,584.67				07/29/05	52.92	51.44	
5,584.75				09/12/05	52.84	51.36	
5,584.51				12/07/05	53.08	51.60	
5,585.74				03/08/06	51.85	50.37	
5,584.74				06/13/06	52.85	51.37	
5,584.26				07/18/06	53.33	51.85	
5,584.21				11/07/06	53.38	51.90	
5,584.67				02/27/07	52.92	51.44	
5,584.06				05/02/07	53.53	52.05	
5,585.33				08/14/07	52.26	50.78	
5,585.42				10/10/07	52.17	50.69	
5,587.01				03/26/08	50.58	49.10	
5,585.44				06/24/08	52.15	50.67	
5,585.23				08/26/08	52.36	50.88	
5,584.42				10/14/08	53.17	51.69	
5,583.59				03/03/09	54	52.52	
5,583.35				06/24/09	54.24	52.76	
5,582.91				09/10/09	54.68	53.20	
5,583.43				12/11/09	54.16	52.68	
5,584.00				03/11/10	53.59	52.11	
5,583.27				05/11/10	54.32	52.84	
5,582.92				09/29/10	54.67	53.19	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-10**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,631.99	5,634.24	2.25				121.33
5,576.75				01/03/02	57.49	55.24	
5,576.92				02/06/02	57.32	55.07	
5,577.43				03/26/02	56.81	54.56	
5,577.22				04/09/02	57.02	54.77	
5,577.80				05/23/02	56.44	54.19	
5,577.47				06/05/02	56.77	54.52	
5,577.55				07/08/02	56.69	54.44	
5,578.10				08/23/02	56.14	53.89	
5,578.24				09/11/02	56.00	53.75	
5,578.49				10/23/02	55.75	53.50	
5,578.43				11/22/02	55.81	53.56	
5,578.43				12/03/02	55.81	53.56	
5,578.66				01/09/03	55.58	53.33	
5,578.66				02/12/03	55.58	53.33	
5,578.78				03/26/03	55.46	53.21	
5,578.90				04/02/03	55.34	53.09	
5,578.83				05/01/03	55.41	53.16	
5,578.05				06/09/03	56.19	53.94	
5,577.38				07/07/03	56.86	54.61	
5,577.15				08/04/03	57.09	54.84	
5,576.76				09/11/03	57.48	55.23	
5,576.36				10/02/03	57.88	55.63	
5,576.05				11/07/03	58.19	55.94	
5,576.20				12/03/03	58.04	55.79	
5,577.43				01/15/04	56.81	54.56	
5,577.81				02/10/04	56.43	54.18	
5,578.47				03/28/04	55.77	53.52	
5,578.69				04/12/04	55.55	53.30	
5,578.93				05/13/04	55.31	53.06	
5,578.99				06/18/04	55.25	53.00	
5,579.18				07/28/04	55.06	52.81	
5,579.06				08/30/04	55.18	52.93	
5,578.78				09/16/04	55.46	53.21	
5,577.80				10/11/04	56.44	54.19	
5,577.13				11/16/04	57.11	54.86	
5,576.96				12/22/04	57.28	55.03	
5,576.63				01/18/05	57.61	55.36	
5,576.82				02/28/05	57.42	55.17	
5,576.86				03/15/05	57.38	55.13	
5,577.52				04/26/05	56.72	54.47	
5,578.01				05/24/05	56.23	53.98	
5,578.15				06/30/05	56.09	53.84	
5,577.90				07/29/05	56.34	54.09	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-10**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,631.99	5,634.24	2.25				121.33
5,578.02				09/12/05	56.22	53.97	
5,577.56				12/07/05	56.68	54.43	
5,579.69				03/08/06	54.55	52.30	
5,578.34				06/13/06	55.90	53.65	
5,577.94				07/18/06	56.30	54.05	
5,578.01				11/07/06	56.23	53.98	
5,578.43				02/27/07	55.81	53.56	
5,577.84				05/02/07	56.40	54.15	
5,578.74				08/14/07	55.50	53.25	
5,579.04				10/10/07	55.20	52.95	
5,580.69				03/26/08	53.55	51.30	
5,579.87				06/24/08	54.37	52.12	
5,579.47				08/26/08	54.77	52.52	
5,578.87				10/14/08	55.37	53.12	
5,578.01				03/10/09	56.23	53.98	
5,577.85				06/24/09	56.39	54.14	
5,577.49				09/10/09	56.75	54.50	
5,577.98				12/11/09	56.26	54.01	
5,578.38				03/11/10	55.86	53.61	
5,578.16				05/11/10	56.08	53.83	
5,577.85				09/29/10	56.39	54.14	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-11**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,621.92	5,623.62	1.70				121.33
5,548.32				01/03/02	75.30	73.60	
5,548.73				02/06/02	74.89	73.19	
5,549.03				03/26/02	74.59	72.89	
5,548.84				04/09/02	74.78	73.08	
5,549.30				05/23/02	74.32	72.62	
5,549.01				06/05/02	74.61	72.91	
5,549.22				07/08/02	74.40	72.70	
5,549.44				08/23/02	74.18	72.48	
5,549.57				09/11/02	74.05	72.35	
5,549.64				10/23/02	73.98	72.28	
5,549.58				11/22/02	74.04	72.34	
5,549.62				12/03/02	74.00	72.30	
5,549.85				01/09/03	73.77	72.07	
5,549.91				02/12/03	73.71	72.01	
5,550.15				03/26/03	73.47	71.77	
5,550.01				04/02/03	73.61	71.91	
5,550.31				05/01/03	73.31	71.61	
5,550.44				06/09/03	73.18	71.48	
5,550.33				07/07/03	73.29	71.59	
5,550.35				08/04/03	73.27	71.57	
5,550.44				09/11/03	73.18	71.48	
5,550.47				10/02/03	73.15	71.45	
5,550.60				11/07/03	73.02	71.32	
5,550.60				12/03/03	73.02	71.32	
5,550.94				01/15/04	72.68	70.98	
5,551.00				02/10/04	72.62	70.92	
5,550.34				03/28/04	73.28	71.58	
5,551.54				04/12/04	72.08	70.38	
5,551.89				05/13/04	71.73	70.03	
5,551.94				06/18/04	71.68	69.98	
5,552.49				07/28/04	71.13	69.43	
5,552.74				08/30/04	70.88	69.18	
5,553.01				09/16/04	70.61	68.91	
5,553.11				10/11/04	70.51	68.81	
5,553.19				11/16/04	70.43	68.73	
5,553.53				12/22/04	70.09	68.39	
5,553.31				01/18/05	70.31	68.61	
5,553.84				02/28/05	69.78	68.08	
5,554.04				03/15/05	69.58	67.88	
5,554.23				04/26/05	69.39	67.69	
5,553.87				05/24/05	69.75	68.05	
5,554.46				06/30/05	69.16	67.46	
5,554.57				07/29/05	69.05	67.35	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-11**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,621.92	5,623.62	1.70				121.33
5,553.86				09/12/05	69.76	68.06	
5,555.30				12/07/05	68.32	66.62	
5,556.20				03/08/06	67.42	65.72	
5,556.48				06/14/06	67.14	65.44	
5,556.37				07/18/06	67.25	65.55	
5,556.94				11/07/06	66.68	64.98	
5557.92				02/27/07	65.7	64	
5,557.84				05/02/07	65.78	64.08	
5,558.02				08/15/07	65.60	63.90	
5,557.13				10/10/07	66.49	64.79	
5,569.74				03/26/08	53.88	52.18	
5,561.01				06/24/08	62.61	60.91	
5,562.07				08/26/08	61.55	59.85	
5,562.47				10/14/08	61.15	59.45	
5,563.80				03/10/09	59.82	58.12	
5,564.27				06/24/09	59.35	57.65	
5,564.32				09/10/09	59.3	57.60	
5,564.70				12/11/09	58.92	57.22	
5,565.14				03/11/10	58.48	56.78	
5,565.61				05/11/10	58.01	56.31	
5,565.67				09/29/10	57.95	56.25	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-12**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,622.38	5,624.03	1.65				121.33
5,580.71				08/23/02	43.32	41.67	
5,581.34				09/11/02	42.69	41.04	
5,581.13				10/23/02	42.90	41.25	
5,581.27				11/22/02	42.76	41.11	
5,581.35				12/03/02	42.68	41.03	
5,582.38				01/09/03	41.65	40.00	
5,582.27				02/12/03	41.76	40.11	
5,582.51				03/26/03	41.52	39.87	
5,581.91				04/02/03	42.12	40.47	
5,582.72				05/01/03	41.31	39.66	
5,582.93				06/09/03	41.10	39.45	
5,583.01				07/07/03	41.02	39.37	
5,583.11				08/04/03	40.92	39.27	
5,583.35				09/11/03	40.68	39.03	
5,583.52				10/02/03	40.51	38.86	
5,583.57				11/07/03	40.46	38.81	
5,583.81				12/03/03	40.22	38.57	
5,584.17				01/15/04	39.86	38.21	
5,584.19				02/10/04	39.84	38.19	
5,584.31				03/28/04	39.72	38.07	
5,584.70				04/12/04	39.33	37.68	
5,584.68				05/13/04	39.35	37.70	
5,584.73				06/18/04	39.30	37.65	
5,585.16				07/28/04	38.87	37.22	
5,585.18				08/30/04	38.85	37.20	
5,585.29				09/16/04	38.74	37.09	
5,585.65				10/11/04	38.38	36.73	
5,585.71				11/16/04	38.32	36.67	
5,586.15				12/22/04	37.88	36.23	
5,585.94				01/18/05	38.09	36.44	
5,586.36				02/28/05	37.67	36.02	
5,586.75				03/15/05	37.28	35.63	
5,587.00				04/26/05	37.03	35.38	
5,587.15				05/24/05	36.88	35.23	
5,587.38				06/30/05	36.65	35.00	
5,587.38				07/29/05	36.65	35.00	
5,587.74				09/12/05	36.29	34.64	
5,588.23				12/07/05	35.80	34.15	
5,588.72				03/08/06	35.31	33.66	
5,588.14				06/13/06	35.89	34.24	
5,588.13				07/18/06	35.90	34.25	
5,584.50				11/07/06	39.53	37.88	
5588.65				02/27/07	35.38	33.73	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-12**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,622.38	5,624.03	1.65				121.33
5,588.33				05/02/07	35.70	34.05	
5,586.29				08/14/07	37.74	36.09	
5,586.48				10/10/07	37.55	35.90	
5,587.56				03/26/08	36.47	34.82	
5,587.39				06/24/08	36.64	34.99	
5,587.15				08/26/08	36.88	35.23	
5,586.64				10/14/08	37.39	35.74	
5,585.97				03/03/09	38.06	36.41	
5,585.54				06/24/09	38.49	36.84	
5,585.34				09/10/09	38.69	37.04	
5,585.57				12/11/09	38.46	36.81	
5,585.68				03/11/10	38.35	36.70	
5,586.15				05/11/10	37.88	36.23	
5,585.48				09/29/10	38.55	36.90	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-13**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,618.09	5,619.94	1.85				121.33
5,529.66				08/23/02	90.28	88.43	
5,530.66				09/11/02	89.28	87.43	
5,529.10				10/23/02	90.84	88.99	
5,530.58				11/22/02	89.36	87.51	
5,530.61				12/03/02	89.33	87.48	
5,529.74				01/09/03	90.20	88.35	
5,531.03				02/12/03	88.91	87.06	
5,531.82				03/26/03	88.12	86.27	
5,524.63				04/02/03	95.31	93.46	
5,531.54				05/01/03	88.40	86.55	
5,538.46				06/09/03	81.48	79.63	
5,539.38				07/07/03	80.56	78.71	
5,540.72				08/04/03	79.22	77.37	
5,541.25				09/11/03	78.69	76.84	
5,541.34				10/02/03	78.60	76.75	
5,541.69				11/07/03	78.25	76.40	
5,541.91				12/03/03	78.03	76.18	
5,542.44				01/15/04	77.50	75.65	
5,542.47				02/10/04	77.47	75.62	
5,542.84				03/28/04	77.10	75.25	
5,543.08				04/12/04	76.86	75.01	
5,543.34				05/13/04	76.60	74.75	
5,543.40				06/18/04	76.54	74.69	
5,544.06				07/28/04	75.88	74.03	
5,544.61				08/30/04	75.33	73.48	
5,545.23				09/16/04	74.71	72.86	
5,546.20				10/11/04	73.74	71.89	
5,547.43				11/16/04	72.51	70.66	
5,548.96				12/22/04	70.98	69.13	
5,549.02				01/18/05	70.92	69.07	
5,550.66				02/28/05	69.28	67.43	
5,551.26				03/15/05	68.68	66.83	
5,552.23				04/26/05	67.71	65.86	
5,552.87				05/24/05	67.07	65.22	
5,553.42				06/30/05	66.52	64.67	
5,554.00				07/29/05	65.94	64.09	
5,555.21				09/12/05	64.73	62.88	
5,558.13				12/07/05	61.81	59.96	
5,562.93				03/08/06	57.01	55.16	
5,564.39				06/13/06	55.55	53.70	
5,562.09				07/18/06	57.85	56.00	
5,565.49				11/07/06	54.45	52.60	
5571.08				02/27/07	48.86	47.01	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-13**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,618.09	5,619.94	1.85				121.33
5,570.63				05/02/07	49.31	47.46	
5,565.24				08/14/07	54.7	52.85	
5,565.83				10/10/07	54.11	52.26	
5,569.29				03/26/08	50.65	48.80	
5,570.00				06/24/08	49.94	48.09	
5,570.41				08/26/08	49.53	47.68	
5,570.64				10/14/08	49.3	47.45	
5,570.43				03/03/09	49.51	47.66	
5,570.56				06/24/09	49.38	47.53	
5,570.42				09/10/09	49.52	47.67	
5,571.15				12/11/09	48.79	46.94	
5,572.01				03/11/10	47.93	46.08	
5,572.88				05/11/10	47.06	45.21	
5,573.17				09/29/10	46.77	44.92	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-14**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,610.92	5,612.77	1.85				121.33
5,518.90				08/23/02	93.87	92.02	
5,519.28				09/11/02	93.49	91.64	
5,519.95				10/23/02	92.82	90.97	
5,520.32				11/22/02	92.45	90.60	
5,520.42				12/03/02	92.35	90.50	
5,520.70				01/09/03	92.07	90.22	
5,520.89				02/12/03	91.88	90.03	
5,521.12				03/26/03	91.65	89.80	
5,521.12				04/02/03	91.65	89.80	
5,521.24				05/01/03	91.53	89.68	
5,521.34				06/09/03	91.43	89.58	
5,521.36				07/07/03	91.41	89.56	
5,521.35				08/04/03	91.42	89.57	
5,521.30				09/11/03	91.47	89.62	
5,521.35				10/02/03	91.42	89.57	
5,521.36				11/07/03	91.41	89.56	
5,521.16				12/03/03	91.61	89.76	
5,521.29				01/15/04	91.48	89.63	
5,521.36				02/10/04	91.41	89.56	
5,521.46				03/28/04	91.31	89.46	
5,521.54				04/12/04	91.23	89.38	
5,521.59				05/13/04	91.18	89.33	
5,521.69				06/18/04	91.08	89.23	
5,521.71				07/28/04	91.06	89.21	
5,521.76				08/30/04	91.01	89.16	
5,521.77				09/16/04	91.00	89.15	
5,521.79				10/11/04	90.98	89.13	
5,521.80				11/16/04	90.97	89.12	
5,521.82				12/22/04	90.95	89.10	
5,521.82				01/18/05	90.95	89.10	
5,521.86				02/28/05	90.91	89.06	
5,521.85				03/15/05	90.92	89.07	
5,521.91				04/26/05	90.86	89.01	
5,521.93				05/24/05	90.84	88.99	
5,521.94				06/30/05	90.83	88.98	
5,521.84				07/29/05	90.93	89.08	
5,521.99				09/12/05	90.78	88.93	
5,522.04				12/07/05	90.73	88.88	
5,522.05				03/08/06	90.72	88.87	
5,522.27				06/13/06	90.50	88.65	
5,521.92				07/18/06	90.85	89.00	
5,520.17				11/07/06	92.60	90.75	
5522.24				02/27/07	90.53	88.68	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-14**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,610.92	5,612.77	1.85				121.33
5,522.47				05/02/07	90.30	88.45	
5,520.74				08/14/07	92.03	90.18	
5,518.13				10/10/07	94.64	92.79	
5,522.85				03/26/08	89.92	88.07	
5,522.91				06/24/08	89.86	88.01	
5,523.01				08/26/08	89.76	87.91	
5,522.96				10/14/08	89.81	87.96	
5,523.20				03/03/09	89.57	87.72	
5,523.33				06/24/09	89.44	87.59	
5,523.47				09/10/09	89.3	87.45	
5,523.54				12/11/09	89.23	87.38	
5,522.98				03/11/10	89.79	87.94	
5,524.01				05/11/10	88.76	86.91	
5,524.37				09/29/10	88.40	86.55	



**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-15 (MW-26)**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point Elevation (MP)	Length Of Riser (L)	Date Of Monitoring	Total or	Total	Total Depth Of Well
					Measured Depth to Water (blw.MP)	Depth to Water (blw.LSD)	
	5,624.15	5,625.45	1.30				121.33
5,574.75				08/23/02	50.70	49.40	
5,574.97				09/11/02	50.48	49.18	
5,575.10				10/23/02	50.35	49.05	
5,574.99				11/22/02	50.46	49.16	
5,575.28				12/03/02	50.17	48.87	
5,575.41				01/09/03	50.04	48.74	
5,575.43				02/12/03	50.02	48.72	
5,575.63				03/26/03	49.82	48.52	
5,575.91				04/02/03	49.54	48.24	
5,575.81				05/01/03	49.64	48.34	
5,572.36				06/09/03	53.09	51.79	
5,570.70				07/07/03	54.75	53.45	
5,570.29				08/04/03	55.16	53.86	
5,560.94				09/11/03	64.51	63.21	
5,560.63				10/02/03	64.82	63.52	
5,560.56				11/07/03	64.89	63.59	
5,564.77				12/03/03	60.68	59.38	
5,570.89				01/15/04	54.56	53.26	
5,572.55				02/10/04	52.90	51.60	
5,574.25				03/28/04	51.20	49.90	
5,574.77				04/12/04	50.68	49.38	
5,575.53				05/13/04	49.92	48.62	
5,575.59				06/18/04	49.86	48.56	
5,576.82				07/28/04	48.63	47.33	
5,527.47				09/16/04	97.98	96.68	
5,553.97				11/16/04	71.48	70.18	
5,562.33				12/22/04	63.12	61.82	
5,550.00				01/18/05	75.45	74.15	
5,560.02				04/26/05	65.43	64.13	
5,546.11				05/24/05	79.34	78.04	
5,556.71				06/30/05	68.74	67.44	
5,554.95				07/29/05	70.50	69.20	
5,555.48				09/12/05	69.97	68.67	
5,551.09				12/07/05	74.36	73.06	
5,552.85				03/08/06	72.60	71.30	
5,554.30				06/13/06	71.15	69.85	
5,554.87				07/18/06	70.58	69.28	
5,550.88				11/07/06	74.57	73.27	
5558.77				02/27/07	66.68	65.38	
5,548.54				05/02/07	76.91	75.61	
5,551.33				10/10/07	74.12	72.82	
5,545.56				03/26/08	79.89	78.59	
5,545.56				06/25/08	79.89	78.59	

**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-15 (MW-26)**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,624.15	5,625.45	1.30				121.33
5,545.82				08/26/08	79.63	78.33	
5,545.64				10/14/08	79.81	78.51	
5,544.45				03/03/09	81.00	79.70	
5,545.32				06/24/09	80.13	78.83	
5,544.61				09/10/09	80.84	79.54	
5,549.33				12/11/09	76.12	74.82	
5,543.78				03/11/10	81.67	80.37	
5,545.61				05/11/10	79.84	78.54	
5,547.43				09/29/10	78.02	76.72	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-16**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,622.19	5,624.02	1.83				121.33
5,562.91				08/23/02	61.11	59.28	
5,563.45				09/11/02	60.57	58.74	
5,563.75				10/23/02	60.27	58.44	
5,563.68				11/22/02	60.34	58.51	
5,563.68				12/03/02	60.34	58.51	
5,564.16				01/09/03	59.86	58.03	
5,564.25				02/12/03	59.77	57.94	
5,564.53				03/26/03	59.49	57.66	
5,564.46				04/02/03	59.56	57.73	
5,564.79				05/01/03	59.23	57.40	
5,564.31				06/09/03	59.71	57.88	
5,563.29				07/07/03	60.73	58.90	
5,562.76				08/04/03	61.26	59.43	
5,561.73				09/11/03	62.29	60.46	
5,561.04				10/02/03	62.98	61.15	
5,560.39				11/07/03	63.63	61.80	
5,559.79				12/03/03	64.23	62.40	
5,561.02				01/15/04	63	61.17	
5,561.75				02/10/04	62.27	60.44	
5,562.98				03/28/04	61.04	59.21	
5,563.29				04/12/04	60.73	58.90	
5,564.03				05/13/04	59.99	58.16	
5,564.09				06/18/04	59.93	58.10	
5,565.08				07/28/04	58.94	57.11	
5,564.56				08/30/04	59.46	57.63	
5,563.55				09/16/04	60.47	58.64	
5,561.79				10/11/04	62.23	60.40	
5,560.38				11/16/04	63.64	61.81	
5,559.71				12/22/04	64.31	62.48	
5,559.14				01/18/05	64.88	63.05	
5,558.65				02/28/05	65.37	63.54	
5,558.54				03/15/05	65.48	63.65	
5,558.22				04/26/05	65.8	63.97	
5,558.54				05/24/05	65.48	63.65	
5,559.24				06/30/05	64.78	62.95	
5,559.38				07/29/05	64.64	62.81	
5,559.23				09/12/05	64.79	62.96	
5,557.67				12/07/05	66.35	64.52	
5,557.92				03/08/06	66.10	64.27	
5,558.47				06/13/06	65.55	63.72	
5,558.42				07/18/06	65.60	63.77	
5,558.09				11/07/06	65.93	64.10	
5557.34				02/27/07	66.68	64.85	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-16**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,622.19	5,624.02	1.83				121.33
5,547.11				05/02/07	76.91	75.08	
5,558.52				08/14/07	65.5	63.67	
5,559.02				10/10/07	65.00	63.17	
5,561.04				03/26/08	62.98	61.15	
5,560.06				06/24/08	63.96	62.13	
5,559.32				08/26/08	64.7	62.87	
5,558.89				10/14/08	65.13	63.30	
5,558.40				03/03/09	65.62	63.79	
5,558.32				06/24/09	65.7	63.87	
5,558.03				09/10/09	65.99	64.16	
5,558.81				12/11/09	65.21	63.38	
5,559.80				03/11/10	64.22	62.39	
5,559.85				05/11/10	64.17	62.34	
5,560.54				09/29/10	63.48	61.65	



**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-17 (MW-32)**

Water Elevation (WL)	Land Surface (LSD)	Measuring Point		Date Of Monitoring	Total or Measured	Total	Total Depth Of Well
		Elevation (MP)	Length Of Riser (L)		Depth to Water (blw.MP)	Depth to Water (blw.LSD)	
	5,623.41	5,625.24	1.83				121.33
5,542.17				08/23/02	83.07	81.24	
5,542.39				09/11/02	82.85	81.02	
5,542.61				10/23/02	82.63	80.80	
5,542.49				11/22/02	82.75	80.92	
5,542.82				12/03/02	82.42	80.59	
5,543.03				01/09/03	82.21	80.38	
5,543.04				02/12/03	82.20	80.37	
5,543.41				03/26/03	81.83	80.00	
5,543.69				04/02/03	81.55	79.72	
5,543.77				05/01/03	81.47	79.64	
5,544.01				06/09/03	81.23	79.40	
5,544.05				07/07/03	81.19	79.36	
5,543.99				08/04/03	81.25	79.42	
5,544.17				09/11/03	81.07	79.24	
5,544.06				10/02/03	81.18	79.35	
5,544.03				11/07/03	81.21	79.38	
5,543.94				12/03/03	81.30	79.47	
5,543.98				01/15/04	81.26	79.43	
5,543.85				02/10/04	81.39	79.56	
5,544.05				03/28/04	81.19	79.36	
5,544.33				04/12/04	80.91	79.08	
5,544.55				05/13/04	80.69	78.86	
5,544.59				06/18/04	80.65	78.82	
5,545.08				07/28/04	80.16	78.33	
5,545.26				08/30/04	79.98	78.15	
5,545.48				09/16/04	79.76	77.93	
5,545.61				10/11/04	79.63	77.80	
5,545.46				11/16/04	79.78	77.95	
5,545.66				12/22/04	79.58	77.75	
5,545.33				01/18/05	79.91	78.08	
5,545.51				02/28/05	79.73	77.90	
5,545.57				03/15/05	79.67	77.84	
5,545.46				04/26/05	79.78	77.95	
5,545.45				05/24/05	79.79	77.96	
5,545.33				06/30/05	79.91	78.08	
5,545.16				07/29/05	80.08	78.25	
5,545.54				09/12/05	79.70	77.87	
5,545.77				12/07/05	79.47	77.64	
5,546.09				03/08/06	79.15	77.32	
5,545.94				06/13/06	79.30	77.47	
5,545.94				07/18/06	79.30	77.47	
5,546.24				11/07/06	79.00	77.17	
5546.81				02/27/07	78.43	76.6	

**Water Levels and Data over Time**  
**White Mesa Mill - Well TW4-17 (MW-32)**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,623.41	5,625.24	1.83				121.33
5546.56				05/02/07	78.68	76.85	
5546.81				08/15/07	78.43	76.6	
5546.96				10/10/07	78.28	76.45	
5547.9				03/26/08	77.34	75.51	
5548.08				06/25/08	77.16	75.33	
5548.42				08/26/08	76.82	74.99	
5548.05				10/14/08	77.19	75.36	
5548.29				03/03/09	76.95	75.12	
5548.09				06/24/09	77.15	75.32	
5547.79				09/10/09	77.45	75.62	
5548.09				12/11/09	77.15	75.32	
5,548.50				03/11/10	76.74	74.91	
5,548.89				05/11/10	76.35	74.52	
5,548.83				09/29/10	76.41	74.58	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-18**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,639.13	5,641.28	2.15				121.33
5,585.13				08/23/02	56.15	54.00	
5,585.41				09/11/02	55.87	53.72	
5,585.47				10/23/02	55.81	53.66	
5,585.40				11/22/02	55.88	53.73	
5,585.68				12/03/02	55.60	53.45	
5,585.90				01/09/03	55.38	53.23	
5,590.79				02/12/03	50.49	48.34	
5,586.18				03/26/03	55.10	52.95	
5,586.36				04/02/03	54.92	52.77	
5,586.24				05/01/03	55.04	52.89	
5,584.93				06/09/03	56.35	54.20	
5,584.46				07/07/03	56.82	54.67	
5,584.55				08/04/03	56.73	54.58	
5,584.01				09/11/03	57.27	55.12	
5,583.67				10/02/03	57.61	55.46	
5,583.50				11/07/03	57.78	55.63	
5,584.08				12/03/03	57.20	55.05	
5,585.45				01/15/04	55.83	53.68	
5,585.66				02/10/04	55.62	53.47	
5,586.13				03/28/04	55.15	53.00	
5,586.39				04/12/04	54.89	52.74	
5,586.66				05/13/04	54.62	52.47	
5,586.77				06/18/04	54.51	52.36	
5,587.35				07/28/04	53.93	51.78	
5,586.34				08/30/04	54.94	52.79	
5,585.85				09/16/04	55.43	53.28	
5,585.22				10/11/04	56.06	53.91	
5,584.70				11/16/04	56.58	54.43	
5,584.81				12/22/04	56.47	54.32	
5,584.68				01/18/05	56.60	54.45	
5,585.02				02/28/05	56.26	54.11	
5,585.25				03/15/05	56.03	53.88	
5,586.31				04/26/05	54.97	52.82	
5,586.97				05/24/05	54.31	52.16	
5,586.58				06/30/05	54.70	52.55	
5,586.10				07/29/05	55.18	53.03	
5,586.05				09/12/05	55.23	53.08	
5,585.86				12/07/05	55.42	53.27	
5,587.13				03/08/06	54.15	52.00	
5,585.93				06/13/06	55.35	53.20	
5,585.40				07/18/06	55.88	53.73	
5,585.38				11/07/06	55.90	53.75	
5585.83				02/27/07	55.45	53.30	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-18**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,639.13	5,641.28	2.15				121.33
5585.15				05/02/07	56.13	53.98	
5586.47				06/24/08	54.81	52.66	
5586.3				08/26/08	54.98	52.83	
5585.21				10/14/08	56.07	53.92	
5584.47				03/03/09	56.81	54.66	
5584.35				06/24/09	56.93	54.78	
5583.88				09/10/09	57.4	55.25	
5584.43				12/11/09	56.85	54.70	
5,585.26				03/11/10	56.02	53.87	
5,584.17				05/11/10	57.11	54.96	
5,583.61				09/29/10	57.67	55.52	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-19**

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
	5,629.53	5,631.39	1.86				121.33
5,581.88				08/23/02	49.51	47.65	
5,582.14				09/11/02	49.25	47.39	
5,582.06				10/23/02	49.33	47.47	
5,582.07				11/22/02	49.32	47.46	
5,582.16				12/03/02	49.23	47.37	
5,582.28				01/09/03	49.11	47.25	
5,582.29				02/21/03	49.10	47.24	
5,582.74				03/26/03	48.65	46.79	
5,582.82				04/02/03	48.57	46.71	
5,548.47				05/01/03	82.92	81.06	
5,564.76				06/09/03	66.63	64.77	
5,562.53				07/07/03	68.86	67.00	
5,564.10				08/04/03	67.29	65.43	
5,566.01				08/30/04	65.38	63.52	
5,555.16				09/16/04	76.23	74.37	
5,549.80				10/11/04	81.59	79.73	
5,546.04				11/16/04	85.35	83.49	
5,547.34				12/22/04	84.05	82.19	
5,548.77				01/18/05	82.62	80.76	
5,551.18				02/28/05	80.21	78.35	
5,556.81				03/15/05	74.58	72.72	
5,562.63				04/26/05	68.76	66.90	
5,573.42				05/24/05	57.97	56.11	
5,552.94				07/29/05	78.45	76.59	
5,554.00				09/12/05	77.39	75.53	
5,555.98				12/07/05	75.41	73.55	
5,552.00				03/08/06	79.39	77.53	
5,545.74				06/13/06	85.65	83.79	
5,544.06				07/18/06	87.33	85.47	
5,548.81				11/07/06	82.58	80.72	
5543.59				02/27/07	87.8	85.94	
5544.55				05/02/07	86.84	84.98	
5558.97				08/15/07	72.42	70.56	
5559.73				10/10/07	71.66	69.8	
5569.26				03/26/08	62.13	60.27	
5535.47				06/25/08	95.92	94.06	
5541.41				08/26/08	89.98	88.12	
5558.45				10/14/08	72.94	71.08	
5536.9				03/03/09	94.49	92.63	
5547.76				06/24/09	83.63	81.77	
5561.48				09/10/09	69.91	68.05	
5548.14				12/11/09	83.25	81.39	
5,570.58				03/11/10	60.81	58.95	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-19**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,629.53	5,631.39	1.86				121.33
5,561.35				05/11/10	70.04	68.18	
5,535.26				09/29/10	96.13	94.27	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-20**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,628.52	5,629.53	1.01				106.0
5,565.70				07/29/05	63.83	62.82	
5,546.53				08/30/05	83.00	81.99	
5,540.29				09/12/05	89.24	88.23	
5,541.17				12/07/05	88.36	87.35	
5,540.33				03/08/06	89.20	88.19	
5,530.43				06/13/06	99.10	98.09	
5,569.13				07/18/06	60.40	59.39	
5,547.95				11/07/06	81.58	80.57	
5,549.25				02/27/07	80.28	79.27	
5,550.58				05/02/07	78.95	77.94	
5,563.60				08/14/07	65.93	64.92	
5,555.85				10/10/07	73.68	72.67	
5,569.10				03/26/08	60.43	59.42	
5,560.00				06/25/08	69.53	68.52	
5,539.64				08/26/08	89.89	88.88	
5,539.51				10/14/08	90.02	89.01	
5,553.00				03/03/09	76.53	75.52	
5,534.18				06/24/09	95.35	94.34	
5,558.39				09/10/09	71.14	70.13	
5,560.99				12/11/09	68.54	67.53	
5,564.09				03/11/10	65.44	64.43	
5,564.22				05/11/10	65.31	64.30	
5,560.33				09/29/10	69.20	68.19	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-21**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,638.20	5,639.35	1.15				120.92
5,582.98				07/29/05	56.37	55.22	
5,583.43				08/30/05	55.92	54.77	
5,581.87				09/12/05	57.48	56.33	
5,580.50				12/07/05	58.85	57.70	
5,583.64				03/08/06	55.71	54.56	
5,580.55				06/13/06	58.80	57.65	
5,578.95				07/18/06	60.40	59.25	
5,578.47				11/07/06	60.88	59.73	
5,579.53				02/27/07	59.82	58.67	
5,578.07				05/02/07	61.28	60.13	
5,583.41				08/15/07	55.94	54.79	
5,583.45				10/10/07	55.9	54.75	
5,586.47				03/26/08	52.88	51.73	
5,579.16				06/24/08	60.19	59.04	
5,579.92				08/26/08	59.43	58.28	
5,577.37				10/14/08	61.98	60.83	
5,578.00				03/10/09	61.35	60.20	
5,580.14				06/24/09	59.21	58.06	
5,578.72				09/10/09	60.63	59.48	
5,579.99				12/11/09	59.36	58.21	
5,582.81				03/11/10	56.54	55.39	
5,582.23				05/11/10	57.12	55.97	
5,576.60				09/29/10	62.75	61.60	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-22**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,627.83	5,629.00	1.17				113.5
5,571.89				07/29/05	57.11	55.94	
5,572.20				08/30/05	56.80	55.63	
5,572.08				09/12/05	56.92	55.75	
5,571.61				12/07/05	57.39	56.22	
5,571.85				03/08/06	57.15	55.98	
5,571.62				06/13/06	57.38	56.21	
5,571.42				07/18/06	57.58	56.41	
5,571.02				11/07/06	57.98	56.81	
5,571.24				02/27/07	57.76	56.59	
5,570.75				06/29/07	58.25	57.08	
5,571.82				08/14/07	57.18	56.01	
5,571.99				10/10/07	57.01	55.84	
5,573.05				03/26/08	55.95	54.78	
5,573.04				06/24/08	55.96	54.79	
5,573.04				08/26/08	55.96	54.79	
5,573.02				10/14/08	55.98	54.81	
5,573.19				03/10/09	55.81	54.64	
5,573.32				06/24/09	55.68	54.51	
5,573.17				09/10/09	55.83	54.66	
5,573.52				12/11/09	55.48	54.31	
5,573.88				03/11/10	55.12	53.95	
5,574.29				05/11/10	54.71	53.54	
5,574.88				09/29/10	54.12	52.95	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-23**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,627.83	5,629.00	1.17				113.5
5,560.52				09/13/07	68.48	67.31	
5,560.43				10/10/07	68.57	67.40	
5,560.88				11/30/07	68.12	66.95	
5,561.12				12/11/07	67.88	66.71	
5,560.82				01/08/08	68.18	67.01	
5,561.07				02/18/08	67.93	66.76	
5,561.17				03/26/08	67.83	66.66	
5,561.34				04/23/08	67.66	66.49	
5561.11				05/30/08	67.89	66.72	
5,561.16				06/24/08	67.84	66.67	
5,561.07				07/16/08	67.93	66.76	
5,561.31				08/26/08	67.69	66.52	
5,562.81				09/10/08	66.19	65.02	
5,561.20				10/14/08	67.8	66.63	
5,560.92				11/26/08	68.08	66.91	
5,561.18				12/29/08	67.82	66.65	
5,561.78				01/26/09	67.22	66.05	
5,561.37				02/24/09	67.63	66.46	
5,561.49				03/06/09	67.51	66.34	
5,561.35				04/07/09	67.65	66.48	
5,561.47				05/29/09	67.53	66.36	
5,561.75				06/30/09	67.25	66.08	
5,561.75				07/31/09	67.25	66.08	
5,561.90				08/31/09	67.1	65.93	
5,561.76				09/10/09	67.24	66.07	
5,562.27				12/11/09	66.73	65.56	
5,562.78				03/11/10	66.22	65.05	
5,563.24				05/11/10	65.76	64.59	
5,563.10				09/29/10	65.90	64.73	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-24**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,627.83	5,625.70	-2.13				113.5
5,568.48				09/13/07	57.22	59.35	
5,568.40				10/10/07	57.30	59.43	
5,569.03				11/30/07	56.67	58.80	
5,569.17				12/11/07	56.53	58.66	
5,568.90				01/08/08	56.80	58.93	
5,569.09				02/18/08	56.61	58.74	
5,569.30				03/26/08	56.40	58.53	
5,569.55				04/23/08	56.15	58.28	
5,569.39				05/30/08	56.31	58.44	
5,569.21				06/24/08	56.49	58.62	
5,569.15				07/16/08	56.55	58.68	
5,569.21				08/26/08	56.49	58.62	
5,569.10				09/10/08	56.60	58.73	
5,568.99				10/14/08	56.71	58.84	
5,568.82				11/26/08	56.88	59.01	
5,568.79				12/29/08	56.91	59.04	
5,569.52				01/26/09	56.18	58.31	
5,569.18				02/24/09	56.52	58.65	
5,569.24				03/06/09	56.46	58.59	
5,569.08				04/07/09	56.62	58.75	
5,569.10				05/29/09	56.60	58.73	
5,569.29				06/30/09	56.41	58.54	
5,569.25				07/31/09	56.45	58.58	
5,569.35				08/31/09	56.35	58.48	
5,569.15				09/10/09	56.55	58.68	
5,569.51				12/11/09	56.19	58.32	
5,569.73				03/11/10	55.97	58.10	
5,569.78				05/11/10	55.92	58.05	

**Water Levels and Data over Time  
White Mesa Mill - Well TW4-25**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,627.83	5,644.91	17.08				113.5
5,601.86				09/13/07	43.05	25.97	
5,601.89				10/10/07	43.02	25.94	
5,602.57				11/30/07	42.34	25.26	
5,602.82				12/11/07	42.09	25.01	
5,601.94				01/08/08	42.97	25.89	
5,599.13				02/18/08	45.78	28.70	
5,597.11				03/26/08	47.80	30.72	
5,595.51				04/23/08	49.40	32.32	
5,594.42				05/30/08	50.49	33.41	
5,594.26				06/24/08	50.65	33.57	
5,586.67				07/16/08	58.24	41.16	
5,594.17				08/26/08	50.74	33.66	
5,594.23				09/10/08	50.68	33.60	
5,594.12				10/14/08	50.79	33.71	
5,594.06				11/26/08	50.85	33.77	
5,594.87				12/29/08	50.04	32.96	
5,595.89				01/26/09	49.02	31.94	
5,596.27				02/24/09	48.64	31.56	
5,596.47				03/06/09	48.44	31.36	
5,596.74				04/07/09	48.17	31.09	
5,597.55				05/29/09	47.36	30.28	
5,598.11				06/30/09	46.8	29.72	
5,598.22				07/31/09	46.69	29.61	
5,598.52				08/31/09	46.39	29.31	
5,598.49				09/10/09	46.42	29.34	
5,599.48				12/11/09	45.43	28.35	
5,599.75				03/11/10	45.16	28.08	
5,599.63				05/11/10	45.28	28.20	
5,598.68				09/29/10	46.23	29.15	



**Water Levels and Data over Time  
White Mesa Mill - Well TW4-26**

<b>Water Elevation (WL)</b>	<b>Land Surface (LSD)</b>	<b>Measuring Point Elevation (MP)</b>	<b>Length Of Riser (L)</b>	<b>Date Of Monitoring</b>	<b>Total or Measured Depth to Water (blw.MP)</b>	<b>Total Depth to Water (blw.LSD)</b>	<b>Total Depth Of Well</b>
	5,599.98	5,601.68	1.70				86
5,536.90				06/14/10	64.78	63.08	
5,536.95				09/29/10	64.73	63.03	

Tab H

Laboratory Analytical Reports





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-007  
**Client Sample ID:** MW-4

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 10:33  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	38	mg/L		1		A4500-Cl B	08/31/10 14:14 / ljl
Nitrogen, Nitrate+Nitrite as N	4.8	mg/L	D	0.5		E353.2	09/02/10 14:15 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	1.5	ug/L		1.0		SW8260B	08/30/10 18:40 / jlr
Chloroform	1900	ug/L	D	100		SW8260B	08/27/10 19:52 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 18:40 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 18:40 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/30/10 18:40 / jlr
Surr: Dibromofluoromethane	107	%REC		70-130		SW8260B	08/30/10 18:40 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	08/30/10 18:40 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/30/10 18:40 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-005  
**Client Sample ID:** TW4-1

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/18/10 08:37  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	35	mg/L		1		A4500-Cl B	08/31/10 14:10 / ljl
Nitrogen, Nitrate+Nitrite as N	6.7	mg/L	D	0.5		E353.2	09/02/10 14:10 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	1.0	ug/L		1.0		SW8260B	08/30/10 21:02 / jlr
Chloroform	1600	ug/L	D	100		SW8260B	08/27/10 18:42 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 21:02 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 21:02 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/30/10 21:02 / jlr
Surr: Dibromofluoromethane	109	%REC		70-130		SW8260B	08/30/10 21:02 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	08/30/10 21:02 / jlr
Surr: Toluene-d8	86.0	%REC		80-120		SW8260B	08/30/10 21:02 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-014  
**Client Sample ID:** TW4-1R

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/17/10 09:20  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/31/10 14:40 / ljl
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 14:38 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/30/10 22:50 / jlr
Chloroform	1.6	ug/L		1.0		SW8260B	08/30/10 22:50 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 22:50 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 22:50 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/30/10 22:50 / jlr
Surr: Dibromofluoromethane	104	%REC		70-130		SW8260B	08/30/10 22:50 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	08/30/10 22:50 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/30/10 22:50 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-008  
**Client Sample ID:** TW4-2

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/18/10 08:17  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	43	mg/L		1		A4500-Cl B	08/31/10 14:16 / ljl
Nitrogen, Nitrate+Nitrite as N	6.6	mg/L	D	0.5		E353.2	09/02/10 14:18 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	2.5	ug/L		1.0		SW8260B	08/30/10 19:16 / jlr
Chloroform	3300	ug/L	D	1000		SW8260B	08/27/10 20:28 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 19:16 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 19:16 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/30/10 19:16 / jlr
Surr: Dibromofluoromethane	103	%REC		70-130		SW8260B	08/30/10 19:16 / jlr
Surr: p-Bromofluorobenzene	113	%REC		80-120		SW8260B	08/30/10 19:16 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/30/10 19:16 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-015  
**Client Sample ID:** TW4-2R

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/17/10 10:03  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/31/10 14:42 / jlj
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 14:40 / jlj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/31/10 00:03 / jlr
Chloroform	1.7	ug/L		1.0		SW8260B	08/31/10 00:03 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/31/10 00:03 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/31/10 00:03 / jlr
Surr: 1,2-Dichlorobenzene-d4	103	%REC		80-120		SW8260B	08/31/10 00:03 / jlr
Surr: Dibromofluoromethane	106	%REC		70-130		SW8260B	08/31/10 00:03 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	08/31/10 00:03 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/31/10 00:03 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-001  
**Client Sample ID:** TW4-3

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 06:27  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	22	mg/L		1		A4500-CI B	08/24/10 10:49 / lr
Nitrogen, Nitrate+Nitrite as N	3.1	mg/L	D	0.2		E353.2	08/26/10 12:49 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 13:35 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 13:35 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 13:35 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 13:35 / jlr
Surr: 1,2-Dichlorobenzene-d4	106	%REC		80-120		SW8260B	08/18/10 13:35 / jlr
Surr: Dibromofluoromethane	108	%REC		70-130		SW8260B	08/18/10 13:35 / jlr
Surr: p-Bromofluorobenzene	107	%REC		80-120		SW8260B	08/18/10 13:35 / jlr
Surr: Toluene-d8	86.0	%REC		80-120		SW8260B	08/18/10 13:35 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-011  
**Client Sample ID:** TW4-3R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 08:41  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:25 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:26 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 23:37 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 23:37 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 23:37 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 23:37 / jlr
Surr: 1,2-Dichlorobenzene-d4	103	%REC		80-120		SW8260B	08/18/10 23:37 / jlr
Surr: Dibromofluoromethane	103	%REC		70-130		SW8260B	08/18/10 23:37 / jlr
Surr: p-Bromofluorobenzene	106	%REC		80-120		SW8260B	08/18/10 23:37 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/18/10 23:37 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-006  
**Client Sample ID:** TW4-4

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 10:52  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	36	mg/L		1		A4500-Cl B	08/31/10 14:12 / jlj
Nitrogen, Nitrate+Nitrite as N	7.3	mg/L	D	0.5		E353.2	09/02/10 14:13 / jlj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	1.3	ug/L		1.0		SW8260B	08/30/10 18:04 / jlr
Chloroform	2100	ug/L	D	100		SW8260B	08/27/10 19:17 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 18:04 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 18:04 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/30/10 18:04 / jlr
Surr: Dibromofluoromethane	107	%REC		70-130		SW8260B	08/30/10 18:04 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	08/30/10 18:04 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/30/10 18:04 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-021  
**Client Sample ID:** TW4-5

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 06:17  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	38	mg/L		1		A4500-Cl B	08/24/10 11:52 / lr
Nitrogen, Nitrate+Nitrite as N	7	mg/L	D	1		E353.2	08/26/10 14:09 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 17:30 / jlr
Chloroform	12	ug/L		1.0		SW8260B	08/20/10 17:30 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 17:30 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 17:30 / jlr
Surr: 1,2-Dichlorobenzene-d4	111	%REC		80-120		SW8260B	08/20/10 17:30 / jlr
Surr: Dibromofluoromethane	100	%REC		70-130		SW8260B	08/20/10 17:30 / jlr
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		SW8260B	08/20/10 17:30 / jlr
Surr: Toluene-d8	95.0	%REC		80-120		SW8260B	08/20/10 17:30 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 S - Spike recovery outside of advisory limits.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-030  
**Client Sample ID:** TW4-5R

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 12:50  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:13 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 14:44 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 16:20 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/20/10 16:20 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 16:20 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 16:20 / jlr
Surr: 1,2-Dichlorobenzene-d4	111	%REC		80-120		SW8260B	08/20/10 16:20 / jlr
Surr: Dibromofluoromethane	92.0	%REC		70-130		SW8260B	08/20/10 16:20 / jlr
Surr: p-Bromofluorobenzene	119	%REC		80-120		SW8260B	08/20/10 16:20 / jlr
Surr: Toluene-d8	94.0	%REC		80-120		SW8260B	08/20/10 16:20 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-027  
**Client Sample ID:** TW4-6

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 08:07  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	31	mg/L		1		A4500-Cl B	08/24/10 12:07 / lr
Nitrogen, Nitrate+Nitrite as N	3.9	mg/L	D	0.2		E353.2	08/26/10 14:36 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/26/10 18:56 / jlr
Chloroform	630	ug/L	D	100		SW8260B	08/21/10 04:07 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/26/10 18:56 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/26/10 18:56 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/26/10 18:56 / jlr
Surr: Dibromofluoromethane	112	%REC		70-130		SW8260B	08/26/10 18:56 / jlr
Surr: p-Bromofluorobenzene	111	%REC		80-120		SW8260B	08/26/10 18:56 / jlr
Surr: Toluene-d8	98.0	%REC		80-120		SW8260B	08/26/10 18:56 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-036  
**Client Sample ID:** TW4-6R

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 10:56  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-CI B	08/24/10 12:37 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 15:06 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 23:58 / jlr
Chloroform	6.2	ug/L		1.0		SW8260B	08/20/10 23:58 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 23:58 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 23:58 / jlr
Surr: 1,2-Dichlorobenzene-d4	114	%REC		80-120		SW8260B	08/20/10 23:58 / jlr
Surr: Dibromofluoromethane	119	%REC		70-130		SW8260B	08/20/10 23:58 / jlr
Surr: p-Bromofluorobenzene	113	%REC		80-120		SW8260B	08/20/10 23:58 / jlr
Surr: Toluene-d8	97.0	%REC		80-120		SW8260B	08/20/10 23:58 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-004  
**Client Sample ID:** TW4-7

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/18/10 08:27  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	36	mg/L		1		A4500-Cl B	08/31/10 14:08 / ljl
Nitrogen, Nitrate+Nitrite as N	3.9	mg/L	D	0.5		E353.2	09/02/10 14:00 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	1.1	ug/L		1.0		SW8260B	08/30/10 20:27 / jlr
Chloroform	1500	ug/L	D	100		SW8260B	08/27/10 18:07 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 20:27 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 20:27 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/30/10 20:27 / jlr
Surr: Dibromofluoromethane	111	%REC		70-130		SW8260B	08/30/10 20:27 / jlr
Surr: p-Bromofluorobenzene	111	%REC		80-120		SW8260B	08/30/10 20:27 / jlr
Surr: Toluene-d8	86.0	%REC		80-120		SW8260B	08/30/10 20:27 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-013  
**Client Sample ID:** TW4-7R

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/17/10 08:36  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/31/10 14:37 / ljl
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 14:35 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/30/10 22:14 / jlr
Chloroform	1.1	ug/L		1.0		SW8260B	08/30/10 22:14 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 22:14 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 22:14 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/30/10 22:14 / jlr
Surr: Dibromofluoromethane	106	%REC		70-130		SW8260B	08/30/10 22:14 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/30/10 22:14 / jlr
Surr: Toluene-d8	86.0	%REC		80-120		SW8260B	08/30/10 22:14 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-007  
**Client Sample ID:** TW4-8

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 06:48  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	45	mg/L		1		A4500-Cl B	08/24/10 11:06 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:16 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 17:07 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 17:07 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 17:07 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 17:07 / jlr
Surr: 1,2-Dichlorobenzene-d4	106	%REC		80-120		SW8260B	08/18/10 17:07 / jlr
Surr: Dibromofluoromethane	109	%REC		70-130		SW8260B	08/18/10 17:07 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/18/10 17:07 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/18/10 17:07 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-017  
**Client Sample ID:** TW4-8R

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 08:40  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:36 / lr
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E353.2	08/26/10 13:56 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 03:10 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 03:10 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 03:10 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 03:10 / jlr
Surr: 1,2-Dichlorobenzene-d4	101	%REC		80-120		SW8260B	08/19/10 03:10 / jlr
Surr: Dibromofluoromethane	111	%REC		70-130		SW8260B	08/19/10 03:10 / jlr
Surr: p-Bromofluorobenzene	105	%REC		80-120		SW8260B	08/19/10 03:10 / jlr
Surr: Toluene-d8	89.0	%REC		80-120		SW8260B	08/19/10 03:10 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-008  
**Client Sample ID:** TW4-9

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 06:32  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	40	mg/L		1		A4500-Cl B	08/24/10 11:08 / lr
Nitrogen, Nitrate+Nitrite as N	1.2	mg/L	D	0.2		E353.2	08/26/10 13:19 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 21:50 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 21:50 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 21:50 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 21:50 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/18/10 21:50 / jlr
Surr: Dibromofluoromethane	105	%REC		70-130		SW8260B	08/18/10 21:50 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/18/10 21:50 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/18/10 21:50 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-018  
**Client Sample ID:** TW4-9R

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 09:27  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:38 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 14:01 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 03:46 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 03:46 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 03:46 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 03:46 / jlr
Surr: 1,2-Dichlorobenzene-d4	101	%REC		80-120		SW8260B	08/19/10 03:46 / jlr
Surr: Dibromofluoromethane	108	%REC		70-130		SW8260B	08/19/10 03:46 / jlr
Surr: p-Bromofluorobenzene	105	%REC		80-120		SW8260B	08/19/10 03:46 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/19/10 03:46 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-025  
**Client Sample ID:** TW4-10

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 07:57  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	38	mg/L		1		A4500-Cl B	08/24/10 12:02 / lr
Nitrogen, Nitrate+Nitrite as N	0.8	mg/L		0.1		E353.2	08/26/10 14:26 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/26/10 17:46 / jlr
Chloroform	100	ug/L	D	20		SW8260B	08/21/10 02:56 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/26/10 17:46 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/26/10 17:46 / jlr
Surr: 1,2-Dichlorobenzene-d4	100	%REC		80-120		SW8260B	08/26/10 17:46 / jlr
Surr: Dibromofluoromethane	102	%REC		70-130		SW8260B	08/26/10 17:46 / jlr
Surr: p-Bromofluorobenzene	105	%REC		80-120		SW8260B	08/26/10 17:46 / jlr
Surr: Toluene-d8	99.0	%REC		80-120		SW8260B	08/26/10 17:46 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-034  
**Client Sample ID:** TW4-10R

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 09:30  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:34 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 15:01 / lji
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 19:50 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/20/10 19:50 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 19:50 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 19:50 / jlr
Surr: 1,2-Dichlorobenzene-d4	120	%REC		80-120		SW8260B	08/20/10 19:50 / jlr
Surr: Dibromofluoromethane	128	%REC		70-130		SW8260B	08/20/10 19:50 / jlr
Surr: p-Bromofluorobenzene	118	%REC		80-120		SW8260B	08/20/10 19:50 / jlr
Surr: Toluene-d8	94.0	%REC		80-120		SW8260B	08/20/10 19:50 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-028  
**Client Sample ID:** TW4-11

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 08:18  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	43	mg/L		1		A4500-Cl B	08/24/10 12:09 / lr
Nitrogen, Nitrate+Nitrite as N	6.7	mg/L	D	0.5		E353.2	08/26/10 14:39 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/26/10 19:31 / jlr
Chloroform	800	ug/L	D	100		SW8260B	08/26/10 16:01 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/26/10 19:31 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/26/10 19:31 / jlr
Surr: 1,2-Dichlorobenzene-d4	99.0	%REC		80-120		SW8260B	08/26/10 19:31 / jlr
Surr: Dibromofluoromethane	105	%REC		70-130		SW8260B	08/26/10 19:31 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/26/10 19:31 / jlr
Surr: Toluene-d8	97.0	%REC		80-120		SW8260B	08/26/10 19:31 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-037  
**Client Sample ID:** TW4-11R

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 12:51  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:39 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 15:16 / lj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/21/10 00:34 / jlr
Chloroform	2.1	ug/L		1.0		SW8260B	08/21/10 00:34 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/21/10 00:34 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/21/10 00:34 / jlr
Surr: 1,2-Dichlorobenzene-d4	114	%REC		80-120		SW8260B	08/21/10 00:34 / jlr
Surr: Dibromofluoromethane	113	%REC		70-130		SW8260B	08/21/10 00:34 / jlr
Surr: p-Bromofluorobenzene	116	%REC		80-120		SW8260B	08/21/10 00:34 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/21/10 00:34 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-002  
**Client Sample ID:** TW4-12

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 07:46  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	35	mg/L		1		A4500-Cl B	08/24/10 10:51 / lr
Nitrogen, Nitrate+Nitrite as N	9	mg/L	D	1		E353.2	08/26/10 12:59 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 14:10 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 14:10 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 14:10 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 14:10 / jlr
Surr: 1,2-Dichlorobenzene-d4	106	%REC		80-120		SW8260B	08/18/10 14:10 / jlr
Surr: Dibromofluoromethane	108	%REC		70-130		SW8260B	08/18/10 14:10 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/18/10 14:10 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/18/10 14:10 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-012  
**Client Sample ID:** TW4-12R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 09:28  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:26 / lr
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E353.2	08/26/10 13:36 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 00:12 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 00:12 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 00:12 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 00:12 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/19/10 00:12 / jlr
Surr: Dibromofluoromethane	104	%REC		70-130		SW8260B	08/19/10 00:12 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/19/10 00:12 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/19/10 00:12 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-003  
**Client Sample ID:** TW4-13

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 07:56  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	55	mg/L		1		A4500-Cl B	08/24/10 10:56 / lr
Nitrogen, Nitrate+Nitrite as N	5.6	mg/L	D	0.5		E353.2	08/26/10 13:01 / lji
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 14:46 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 14:46 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 14:46 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 14:46 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/18/10 14:46 / jlr
Surr: Dibromofluoromethane	109	%REC		70-130		SW8260B	08/18/10 14:46 / jlr
Surr: p-Bromofluorobenzene	106	%REC		80-120		SW8260B	08/18/10 14:46 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/18/10 14:46 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-013  
**Client Sample ID:** TW4-13R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 10:26  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:27 / lr
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E353.2	08/26/10 13:39 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 00:48 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 00:48 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 00:48 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 00:48 / jlr
Surr: 1,2-Dichlorobenzene-d4	103	%REC		80-120		SW8260B	08/19/10 00:48 / jlr
Surr: Dibromofluoromethane	108	%REC		70-130		SW8260B	08/19/10 00:48 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/19/10 00:48 / jlr
Surr: Toluene-d8	89.0	%REC		80-120		SW8260B	08/19/10 00:48 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-004  
**Client Sample ID:** TW4-14

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 08:06  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	35	mg/L		1		A4500-Cl B	08/24/10 10:57 / lr
Nitrogen, Nitrate+Nitrite as N	2.8	mg/L	D	0.2		E353.2	08/26/10 13:04 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 15:21 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 15:21 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 15:21 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 15:21 / jlr
Surr: 1,2-Dichlorobenzene-d4	106	%REC		80-120		SW8260B	08/18/10 15:21 / jlr
Surr: Dibromofluoromethane	109	%REC		70-130		SW8260B	08/18/10 15:21 / jlr
Surr: p-Bromofluorobenzene	107	%REC		80-120		SW8260B	08/18/10 15:21 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/18/10 15:21 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-014  
**Client Sample ID:** TW4-14R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 12:26  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:31 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:41 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 01:24 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 01:24 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 01:24 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 01:24 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/19/10 01:24 / jlr
Surr: Dibromofluoromethane	102	%REC		70-130		SW8260B	08/19/10 01:24 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/19/10 01:24 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/19/10 01:24 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-003  
**Client Sample ID:** TW4-15

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 14:15  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	49	mg/L		1		A4500-Cl B	08/31/10 14:05 / ljl
Nitrogen, Nitrate+Nitrite as N	0.6	mg/L		0.1		E353.2	09/02/10 13:58 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/30/10 17:29 / jlr
Chloroform	2200	ug/L	D	100		SW8260B	08/27/10 17:32 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 17:29 / jlr
Methylene chloride	21	ug/L		1.0		SW8260B	08/30/10 17:29 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/30/10 17:29 / jlr
Surr: Dibromofluoromethane	109	%REC		70-130		SW8260B	08/30/10 17:29 / jlr
Surr: p-Bromofluorobenzene	111	%REC		80-120		SW8260B	08/30/10 17:29 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/30/10 17:29 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-002  
**Client Sample ID:** TW4-16

**Report Date:** 09/17/10  
**Collection Date:** 08/24/10 12:32  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	72	mg/L		1		A4500-Cl B	09/07/10 15:41 / lr
Nitrogen, Nitrate+Nitrite as N	4.6	mg/L	D	0.2		E353.2	09/06/10 16:11 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 01:06 / jlr
Chloroform	4.3	ug/L		1.0		SW8260B	09/02/10 01:06 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 01:06 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 01:06 / jlr
Surr: 1,2-Dichlorobenzene-d4	111	%REC		80-120		SW8260B	09/02/10 01:06 / jlr
Surr: Dibromofluoromethane	119	%REC		70-130		SW8260B	09/02/10 01:06 / jlr
Surr: p-Bromofluorobenzene	114	%REC		80-120		SW8260B	09/02/10 01:06 / jlr
Surr: Toluene-d8	92.0	%REC		80-120		SW8260B	09/02/10 01:06 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-006  
**Client Sample ID:** TW4-16R

**Report Date:** 09/17/10  
**Collection Date:** 08/23/10 09:57  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	09/07/10 15:50 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/06/10 16:29 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 02:56 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	09/02/10 02:56 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 02:56 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 02:56 / jlr
Surr: 1,2-Dichlorobenzene-d4	108	%REC		80-120		SW8260B	09/02/10 02:56 / jlr
Surr: Dibromofluoromethane	113	%REC		70-130		SW8260B	09/02/10 02:56 / jlr
Surr: p-Bromofluorobenzene	113	%REC		80-120		SW8260B	09/02/10 02:56 / jlr
Surr: Toluene-d8	94.0	%REC		80-120		SW8260B	09/02/10 02:56 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-001  
**Client Sample ID:** TW4-17

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 13:40  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	28	mg/L		1		A4500-Cl B	08/31/10 14:00 / ljl
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 13:53 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/27/10 23:59 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/27/10 23:59 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/27/10 23:59 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/27/10 23:59 / jlr
Surr: 1,2-Dichlorobenzene-d4	101	%REC		80-120		SW8260B	08/27/10 23:59 / jlr
Surr: Dibromofluoromethane	124	%REC		70-130		SW8260B	08/27/10 23:59 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/27/10 23:59 / jlr
Surr: Toluene-d8	94.0	%REC		80-120		SW8260B	08/27/10 23:59 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-023  
**Client Sample ID:** TW4-18

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 07:20  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	37	mg/L		1		A4500-Cl B	08/24/10 11:56 / lr
Nitrogen, Nitrate+Nitrite as N	9	mg/L	D	1		E353.2	08/26/10 14:21 / lji
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/21/10 01:44 / jlr
Chloroform	29	ug/L		1.0		SW8260B	08/21/10 01:44 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/21/10 01:44 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/21/10 01:44 / jlr
Surr: 1,2-Dichlorobenzene-d4	117	%REC		80-120		SW8260B	08/21/10 01:44 / jlr
Surr: Dibromofluoromethane	111	%REC		70-130		SW8260B	08/21/10 01:44 / jlr
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		SW8260B	08/21/10 01:44 / jlr
Surr: Toluene-d8	91.0	%REC		80-120		SW8260B	08/21/10 01:44 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 S - Spike recovery outside of advisory limits.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-032  
**Client Sample ID:** TW4-18R

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 07:53  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:30 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 14:56 / lj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 18:40 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/20/10 18:40 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 18:40 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 18:40 / jlr
Surr: 1,2-Dichlorobenzene-d4	114	%REC		80-120		SW8260B	08/20/10 18:40 / jlr
Surr: Dibromofluoromethane	98.0	%REC		70-130		SW8260B	08/20/10 18:40 / jlr
Surr: p-Bromofluorobenzene	113	%REC		80-120		SW8260B	08/20/10 18:40 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/20/10 18:40 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-002  
**Client Sample ID:** TW4-19

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 09:58  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	142	mg/L		1		A4500-Cl B	08/31/10 14:03 / ljl
Nitrogen, Nitrate+Nitrite as N	5.9	mg/L	D	0.5		E353.2	09/02/10 13:55 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	4.9	ug/L		1.0		SW8260B	08/30/10 16:52 / jlr
Chloroform	2000	ug/L	D	100		SW8260B	08/27/10 16:57 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 16:52 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/30/10 16:52 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/30/10 16:52 / jlr
Surr: Dibromofluoromethane	103	%REC		70-130		SW8260B	08/30/10 16:52 / jlr
Surr: p-Bromofluorobenzene	110	%REC		80-120		SW8260B	08/30/10 16:52 / jlr
Surr: Toluene-d8	86.0	%REC		80-120		SW8260B	08/30/10 16:52 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-009  
**Client Sample ID:** TW4-20

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 12:22  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	196	mg/L		1		A4500-Cl B	08/31/10 14:28 / jlj
Nitrogen, Nitrate+Nitrite as N	5.3	mg/L	D	0.5		E353.2	09/02/10 14:20 / jlj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	12	ug/L		1.0		SW8260B	08/30/10 19:51 / jlr
Chloroform	15000	ug/L	D	1000		SW8260B	08/27/10 21:03 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/30/10 19:51 / jlr
Methylene chloride	2.2	ug/L		1.0		SW8260B	08/30/10 19:51 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/30/10 19:51 / jlr
Surr: Dibromofluoromethane	67.0	%REC	S	70-130		SW8260B	08/30/10 19:51 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/30/10 19:51 / jlr
Surr: Toluene-d8	89.0	%REC		80-120		SW8260B	08/30/10 19:51 / jlr

**Report Definitions:**  
RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
S - Spike recovery outside of advisory limits.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-024  
**Client Sample ID:** TW4-21

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 07:30  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	278	mg/L		1		A4500-Cl B	08/24/10 11:59 / lr
Nitrogen, Nitrate+Nitrite as N	14	mg/L	D	1		E353.2	08/26/10 14:24 / lji
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	9.2	ug/L		1.0		SW8260B	08/26/10 17:11 / jlr
Chloroform	390	ug/L	D	100		SW8260B	08/26/10 15:26 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/26/10 17:11 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/26/10 17:11 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/26/10 17:11 / jlr
Surr: Dibromofluoromethane	104	%REC		70-130		SW8260B	08/26/10 17:11 / jlr
Surr: p-Bromofluorobenzene	109	%REC		80-120		SW8260B	08/26/10 17:11 / jlr
Surr: Toluene-d8	97.0	%REC		80-120		SW8260B	08/26/10 17:11 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-033  
**Client Sample ID:** TW4-21R

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 08:43  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:33 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 14:59 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 19:15 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/20/10 19:15 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 19:15 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 19:15 / jlr
Surr: 1,2-Dichlorobenzene-d4	117	%REC		80-120		SW8260B	08/20/10 19:15 / jlr
Surr: Dibromofluoromethane	116	%REC		70-130		SW8260B	08/20/10 19:15 / jlr
Surr: p-Bromofluorobenzene	119	%REC		80-120		SW8260B	08/20/10 19:15 / jlr
Surr: Toluene-d8	97.0	%REC		80-120		SW8260B	08/20/10 19:15 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-003  
**Client Sample ID:** TW4-22

**Report Date:** 09/17/10  
**Collection Date:** 08/24/10 12:21  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	130	mg/L		1		A4500-Cl B	09/07/10 15:43 / lr
Nitrogen, Nitrate+Nitrite as N	15	mg/L	D	1		E353.2	09/06/10 16:14 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/01/10 20:54 / jlr
Chloroform	340	ug/L	D	100		SW8260B	09/01/10 19:44 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/01/10 20:54 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/01/10 20:54 / jlr
Surr: 1,2-Dichlorobenzene-d4	112	%REC		80-120		SW8260B	09/01/10 20:54 / jlr
Surr: Dibromofluoromethane	132	%REC	S	70-130		SW8260B	09/01/10 20:54 / jlr
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		SW8260B	09/01/10 20:54 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	09/01/10 20:54 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 S - Spike recovery outside of advisory limits.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-007  
**Client Sample ID:** TW4-22R

**Report Date:** 09/17/10  
**Collection Date:** 08/23/10 12:34  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	09/07/10 15:52 / lr
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E353.2	09/06/10 16:31 / jlj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 03:32 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	09/02/10 03:32 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 03:32 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 03:32 / jlr
Surr: 1,2-Dichlorobenzene-d4	110	%REC		80-120		SW8260B	09/02/10 03:32 / jlr
Surr: Dibromofluoromethane	112	%REC		70-130		SW8260B	09/02/10 03:32 / jlr
Surr: p-Bromofluorobenzene	123	%REC	S	80-120		SW8260B	09/02/10 03:32 / jlr
Surr: Toluene-d8	92.0	%REC		80-120		SW8260B	09/02/10 03:32 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 S - Spike recovery outside of advisory limits.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-005  
**Client Sample ID:** TW4-23

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 06:40  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	40	mg/L		1		A4500-Cl B	08/24/10 10:59 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:06 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 15:56 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 15:56 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 15:56 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 15:56 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/18/10 15:56 / jlr
Surr: Dibromofluoromethane	111	%REC		70-130		SW8260B	08/18/10 15:56 / jlr
Surr: p-Bromofluorobenzene	105	%REC		80-120		SW8260B	08/18/10 15:56 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/18/10 15:56 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-015  
**Client Sample ID:** TW4-23R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 13:06  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:33 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:44 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 01:59 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 01:59 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 01:59 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 01:59 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/19/10 01:59 / jlr
Surr: Dibromofluoromethane	107	%REC		70-130		SW8260B	08/19/10 01:59 / jlr
Surr: p-Bromofluorobenzene	105	%REC		80-120		SW8260B	08/19/10 01:59 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/19/10 01:59 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-004  
**Client Sample ID:** TW4-24

**Report Date:** 09/17/10  
**Collection Date:** 08/24/10 12:10  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	587	mg/L		1		A4500-Cl B	09/07/10 15:47 / lr
Nitrogen, Nitrate+Nitrite as N	31	mg/L	D	1		E353.2	09/06/10 16:24 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 01:43 / jlr
Chloroform	1.8	ug/L		1.0		SW8260B	09/02/10 01:43 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 01:43 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 01:43 / jlr
Surr: 1,2-Dichlorobenzene-d4	111	%REC		80-120		SW8260B	09/02/10 01:43 / jlr
Surr: Dibromofluoromethane	131	%REC	S	70-130		SW8260B	09/02/10 01:43 / jlr
Surr: p-Bromofluorobenzene	112	%REC		80-120		SW8260B	09/02/10 01:43 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	09/02/10 01:43 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 S - Spike recovery outside of advisory limits.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-008  
**Client Sample ID:** TW4-24R

**Report Date:** 09/17/10  
**Collection Date:** 08/23/10 08:55  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	09/07/10 15:52 / lr
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E353.2	09/06/10 16:34 / ljt
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 04:08 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	09/02/10 04:08 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 04:08 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 04:08 / jlr
Surr: 1,2-Dichlorobenzene-d4	111	%REC		80-120		SW8260B	09/02/10 04:08 / jlr
Surr: Dibromofluoromethane	119	%REC		70-130		SW8260B	09/02/10 04:08 / jlr
Surr: p-Bromofluorobenzene	119	%REC		80-120		SW8260B	09/02/10 04:08 / jlr
Surr: Toluene-d8	104	%REC		80-120		SW8260B	09/02/10 04:08 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-006  
**Client Sample ID:** TW4-25

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 06:07  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	250	mg/L		1		A4500-Cl B	08/24/10 11:04 / lr
Nitrogen, Nitrate+Nitrite as N	14	mg/L	D	1		E353.2	08/26/10 13:09 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/18/10 16:32 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/18/10 16:32 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/18/10 16:32 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/18/10 16:32 / jlr
Surr: 1,2-Dichlorobenzene-d4	105	%REC		80-120		SW8260B	08/18/10 16:32 / jlr
Surr: Dibromofluoromethane	112	%REC		70-130		SW8260B	08/18/10 16:32 / jlr
Surr: p-Bromofluorobenzene	106	%REC		80-120		SW8260B	08/18/10 16:32 / jlr
Surr: Toluene-d8	87.0	%REC		80-120		SW8260B	08/18/10 16:32 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-016  
**Client Sample ID:** TW4-25R

**Report Date:** 09/03/10  
**Collection Date:** 08/09/10 14:11  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 11:34 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 13:46 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/19/10 02:35 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/19/10 02:35 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/19/10 02:35 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/19/10 02:35 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/19/10 02:35 / jlr
Surr: Dibromofluoromethane	103	%REC		70-130		SW8260B	08/19/10 02:35 / jlr
Surr: p-Bromofluorobenzene	107	%REC		80-120		SW8260B	08/19/10 02:35 / jlr
Surr: Toluene-d8	88.0	%REC		80-120		SW8260B	08/19/10 02:35 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-022  
**Client Sample ID:** TW4-26

**Report Date:** 09/03/10  
**Collection Date:** 08/11/10 07:04  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	17	mg/L		1		A4500-Cl B	08/24/10 11:54 / lr
Nitrogen, Nitrate+Nitrite as N	9	mg/L	D	1		E353.2	08/26/10 14:19 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 18:05 / jlr
Chloroform	5.2	ug/L		1.0		SW8260B	08/20/10 18:05 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 18:05 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 18:05 / jlr
Surr: 1,2-Dichlorobenzene-d4	113	%REC		80-120		SW8260B	08/20/10 18:05 / jlr
Surr: Dibromofluoromethane	101	%REC		70-130		SW8260B	08/20/10 18:05 / jlr
Surr: p-Bromofluorobenzene	118	%REC		80-120		SW8260B	08/20/10 18:05 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/20/10 18:05 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-031  
**Client Sample ID:** TW4-26R

**Report Date:** 09/03/10  
**Collection Date:** 08/10/10 14:14  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/24/10 12:28 / lr
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	08/26/10 14:46 / ljj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/20/10 16:55 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/20/10 16:55 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/20/10 16:55 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/20/10 16:55 / jlr
Surr: 1,2-Dichlorobenzene-d4	112	%REC		80-120		SW8260B	08/20/10 16:55 / jlr
Surr: Dibromofluoromethane	96.0	%REC		70-130		SW8260B	08/20/10 16:55 / jlr
Surr: p-Bromofluorobenzene	122	%REC	S	80-120		SW8260B	08/20/10 16:55 / jlr
Surr: Toluene-d8	94.0	%REC		80-120		SW8260B	08/20/10 16:55 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 S - Spike recovery outside of advisory limits.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-010  
**Client Sample ID:** TW4-60

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/17/10 14:30  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	ND	mg/L		1		A4500-Cl B	08/31/10 14:32 / jlj
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 14:30 / jlj
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/27/10 22:14 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/27/10 22:14 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/27/10 22:14 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/27/10 22:14 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/27/10 22:14 / jlr
Surr: Dibromofluoromethane	118	%REC		70-130		SW8260B	08/27/10 22:14 / jlr
Surr: p-Bromofluorobenzene	110	%REC		80-120		SW8260B	08/27/10 22:14 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/27/10 22:14 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-029  
**Client Sample ID:** TW4-65

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10 07:30  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	269	mg/L		1		A4500-Cl B	08/31/10 12:21 / ljl
Nitrogen, Nitrate+Nitrite as N	15	mg/L	D	1		E353.2	08/26/10 14:41 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	12	ug/L		1.0		SW8260B	08/26/10 20:06 / jlr
Chloroform	650	ug/L	D	100		SW8260B	08/26/10 16:36 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/26/10 20:06 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/26/10 20:06 / jlr
Surr: 1,2-Dichlorobenzene-d4	103	%REC		80-120		SW8260B	08/26/10 20:06 / jlr
Surr: Dibromofluoromethane	104	%REC		70-130		SW8260B	08/26/10 20:06 / jlr
Surr: p-Bromofluorobenzene	110	%REC		80-120		SW8260B	08/26/10 20:06 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/26/10 20:06 / jlr

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-011  
**Client Sample ID:** TW4-70

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/16/10 13:40  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	26	mg/L		1		A4500-Cl B	08/31/10 14:33 / ljl
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	09/02/10 14:33 / ljl
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/27/10 22:49 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/27/10 22:49 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/27/10 22:49 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/27/10 22:49 / jlr
Surr: 1,2-Dichlorobenzene-d4	104	%REC		80-120		SW8260B	08/27/10 22:49 / jlr
Surr: Dibromofluoromethane	115	%REC		70-130		SW8260B	08/27/10 22:49 / jlr
Surr: p-Bromofluorobenzene	107	%REC		80-120		SW8260B	08/27/10 22:49 / jlr
Surr: Toluene-d8	96.0	%REC		80-120		SW8260B	08/27/10 22:49 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-039  
**Client Sample ID:** Temp Blank

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
Temperature	2.0	°C				E170.1	08/13/10 08:40 / kbh

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-016  
**Client Sample ID:** Temp Blank

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/18/10  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
Temperature	2.0	°C				E170.1	08/20/10 09:00 / kbh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-010  
**Client Sample ID:** Temp Blank

**Report Date:** 09/17/10  
**Collection Date:** 08/24/10 12:32  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
Temperature	4.0	°C				E170.1	08/27/10 09:00 / kbh

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Lab ID:** C10080518-038  
**Client Sample ID:** Trip Blank

**Report Date:** 09/03/10  
**Collection Date:** 08/12/10  
**Date Received:** 08/13/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/21/10 01:08 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/21/10 01:08 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/21/10 01:08 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/21/10 01:08 / jlr
Surr: 1,2-Dichlorobenzene-d4	112	%REC		80-120		SW8260B	08/21/10 01:08 / jlr
Surr: Dibromofluoromethane	115	%REC		70-130		SW8260B	08/21/10 01:08 / jlr
Surr: p-Bromofluorobenzene	118	%REC		80-120		SW8260B	08/21/10 01:08 / jlr
Surr: Toluene-d8	99.0	%REC		80-120		SW8260B	08/21/10 01:08 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10080785-012  
**Client Sample ID:** Trip Blank

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Collection Date:** 08/18/10 08:37  
**Date Received:** 08/20/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	08/27/10 23:24 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	08/27/10 23:24 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	08/27/10 23:24 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	08/27/10 23:24 / jlr
Surr: 1,2-Dichlorobenzene-d4	102	%REC		80-120		SW8260B	08/27/10 23:24 / jlr
Surr: Dibromofluoromethane	116	%REC		70-130		SW8260B	08/27/10 23:24 / jlr
Surr: p-Bromofluorobenzene	108	%REC		80-120		SW8260B	08/27/10 23:24 / jlr
Surr: Toluene-d8	95.0	%REC		80-120		SW8260B	08/27/10 23:24 / jlr

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Lab ID:** C10081012-009  
**Client Sample ID:** Trip Blank

**Report Date:** 09/17/10  
**Collection Date:** 08/24/10  
**Date Received:** 08/27/10  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	09/02/10 04:44 / jlr
Chloroform	ND	ug/L		1.0		SW8260B	09/02/10 04:44 / jlr
Chloromethane	ND	ug/L		1.0		SW8260B	09/02/10 04:44 / jlr
Methylene chloride	ND	ug/L		1.0		SW8260B	09/02/10 04:44 / jlr
Surr: 1,2-Dichlorobenzene-d4	108	%REC		80-120		SW8260B	09/02/10 04:44 / jlr
Surr: Dibromofluoromethane	119	%REC		70-130		SW8260B	09/02/10 04:44 / jlr
Surr: p-Bromofluorobenzene	116	%REC		80-120		SW8260B	09/02/10 04:44 / jlr
Surr: Toluene-d8	106	%REC		80-120		SW8260B	09/02/10 04:44 / jlr

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



# ANALYTICAL SUMMARY REPORT

September 03, 2010

Denison Mines USA Corp  
6425 S Hwy 191  
Blanding, UT 84511

Workorder No.: C10080518      Quote ID: C2975 - Chloroform Sampling  
Project Name: 3rd Quarter Chloroform 2010

Energy Laboratories, Inc. received the following 39 samples for Denison Mines USA Corp on 8/13/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C10080518-001	TW4-3	08/10/10 06:27	08/13/10	Aqueous	Chloride Nitrogen, Nitrate + Nitrite SW8260B VOCs, Standard List
C10080518-002	TW4-12	08/10/10 07:46	08/13/10	Aqueous	Same As Above
C10080518-003	TW4-13	08/10/10 07:56	08/13/10	Aqueous	Same As Above
C10080518-004	TW4-14	08/10/10 08:06	08/13/10	Aqueous	Same As Above
C10080518-005	TW4-23	08/10/10 06:40	08/13/10	Aqueous	Same As Above
C10080518-006	TW4-25	08/10/10 06:07	08/13/10	Aqueous	Same As Above
C10080518-007	TW4-8	08/11/10 06:48	08/13/10	Aqueous	Same As Above
C10080518-008	TW4-9	08/11/10 06:32	08/13/10	Aqueous	Same As Above
C10080518-009	TW4-24	08/11/10 06:04	08/13/10	Aqueous	Same As Above
C10080518-010	TW4-16	08/11/10 07:21	08/13/10	Aqueous	Same As Above
C10080518-011	TW4-3R	08/09/10 08:41	08/13/10	Aqueous	Same As Above
C10080518-012	TW4-12R	08/09/10 09:28	08/13/10	Aqueous	Same As Above
C10080518-013	TW4-13R	08/09/10 10:26	08/13/10	Aqueous	Same As Above
C10080518-014	TW4-14R	08/09/10 12:26	08/13/10	Aqueous	Same As Above
C10080518-015	TW4-23R	08/09/10 13:06	08/13/10	Aqueous	Same As Above
C10080518-016	TW4-25R	08/09/10 14:11	08/13/10	Aqueous	Same As Above
C10080518-017	TW4-8R	08/10/10 08:40	08/13/10	Aqueous	Same As Above
C10080518-018	TW4-9R	08/10/10 09:27	08/13/10	Aqueous	Same As Above
C10080518-019	TW4-24R	08/10/10 10:18	08/13/10	Aqueous	Same As Above
C10080518-020	TW4-16R	08/10/10 11:00	08/13/10	Aqueous	Same As Above
C10080518-021	TW4-5	08/11/10 06:17	08/13/10	Aqueous	Same As Above
C10080518-022	TW4-26	08/11/10 07:04	08/13/10	Aqueous	Same As Above
C10080518-023	TW4-18	08/12/10 07:20	08/13/10	Aqueous	Same As Above
C10080518-024	TW4-21	08/12/10 07:30	08/13/10	Aqueous	Same As Above
C10080518-025	TW4-10	08/12/10 07:57	08/13/10	Aqueous	Same As Above
C10080518-026	TW4-22	08/12/10 07:48	08/13/10	Aqueous	Same As Above
C10080518-027	TW4-6	08/12/10 08:07	08/13/10	Aqueous	Same As Above



## ANALYTICAL SUMMARY REPORT

C10080518-028	TW4-11	08/12/10 08:18 08/13/10	Aqueous	Same As Above
C10080518-029	TW4-65	08/12/10 07:30 08/13/10	Aqueous	Same As Above
C10080518-030	TW4-5R	08/10/10 12:50 08/13/10	Aqueous	Same As Above
C10080518-031	TW4-26R	08/10/10 14:14 08/13/10	Aqueous	Same As Above
C10080518-032	TW4-18R	08/11/10 07:53 08/13/10	Aqueous	Same As Above
C10080518-033	TW4-21R	08/11/10 08:43 08/13/10	Aqueous	Same As Above
C10080518-034	TW4-10R	08/11/10 09:30 08/13/10	Aqueous	Same As Above
C10080518-035	TW4-22R	08/11/10 10:14 08/13/10	Aqueous	Same As Above
C10080518-036	TW4-6R	08/11/10 10:56 08/13/10	Aqueous	Same As Above
C10080518-037	TW4-11R	08/11/10 12:51 08/13/10	Aqueous	Same As Above
C10080518-038	Trip Blank	08/12/10 00:00 08/13/10	Aqueous	SW8260B VOCs, Standard List
C10080518-039	Temp Blank	08/12/10 00:00 08/13/10	Aqueous	Temperature

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

*Stephanie D Waldrop*  
Reporting Supervisor

Digitally signed by  
Stephanie Waldrop  
Date: 2010.09.03 12:34:42 -06:00



**CLIENT:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010  
**Sample Delivery Group:** C10080518

**Report Date:** 09/03/10

## CASE NARRATIVE

### ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package.

### SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

### GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

### RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

### SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

### ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

### SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT  
eli-g - Energy Laboratories, Inc. - Gillette, WY  
eli-h - Energy Laboratories, Inc. - Helena, MT  
eli-r - Energy Laboratories, Inc. - Rapid City, SD  
eli-t - Energy Laboratories, Inc. - College Station, TX

### CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

### ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting [www.energylab.com](http://www.energylab.com)

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page [www.energylab.com](http://www.energylab.com).

## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010

**Report Date:** 09/03/10  
**Work Order:** C10080518

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-Cl B</b>								Batch: 100824C-CL-TTR-W		
<b>Sample ID: MBLK9-100824C</b>	Method Blank						Run: TITRATION_100824A	08/24/10 09:25		
Chloride		ND	mg/L	0.5						
<b>Sample ID: C10080518-008AMS</b>	Sample Matrix Spike						Run: TITRATION_100824A	08/24/10 11:14		
Chloride		125	mg/L	1.0	96	90	110			
<b>Sample ID: C10080518-008AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100824A	08/24/10 11:16		
Chloride		127	mg/L	1.0	98	90	110	1.4	10	
<b>Sample ID: LCS35-100824C</b>	Laboratory Control Sample						Run: TITRATION_100824A	08/24/10 11:21		
Chloride		3540	mg/L	1.0	100	90	110			
<b>Sample ID: C10080518-020AMS</b>	Sample Matrix Spike						Run: TITRATION_100824A	08/24/10 11:45		
Chloride		35.8	mg/L	1.0	101	90	110			
<b>Sample ID: C10080518-020AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100824A	08/24/10 11:47		
Chloride		36.1	mg/L	1.0	102	90	110	0.9	10	
<b>Sample ID: C10080518-028AMS</b>	Sample Matrix Spike						Run: TITRATION_100824A	08/24/10 12:16		
Chloride		222	mg/L	1.0	101	90	110			
<b>Sample ID: C10080518-028AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100824A	08/24/10 12:18		
Chloride		224	mg/L	1.0	102	90	110	0.8	10	
<b>Sample ID: C10080518-037AMS</b>	Sample Matrix Spike						Run: TITRATION_100824A	08/24/10 12:41		
Chloride		35.8	mg/L	1.0	101	90	110			
<b>Sample ID: C10080518-037AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100824A	08/24/10 12:43		
Chloride		36.1	mg/L	1.0	102	90	110	0.9	10	
<b>Method: A4500-Cl B</b>								Batch: 100831A-CL-TTR-W		
<b>Sample ID: MBLK9-100831A</b>	Method Blank						Run: TITRATION_100831A	08/31/10 10:57		
Chloride		ND	mg/L	0.5						
<b>Sample ID: C10080518-029AMS</b>	Sample Matrix Spike						Run: TITRATION_100831A	08/31/10 13:49		
Chloride		632	mg/L	1.0	102	90	110			
<b>Sample ID: C10080518-029AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100831A	08/31/10 13:51		
Chloride		632	mg/L	1.0	102	90	110	0	10	
<b>Sample ID: LCS35-100831A</b>	Laboratory Control Sample						Run: TITRATION_100831A	08/31/10 14:22		
Chloride		3610	mg/L	1.0	102	90	110			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010

**Report Date:** 09/03/10  
**Work Order:** C10080518

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E353.2</b>										Batch: R136521
<b>Sample ID: MBLK-1</b>		Method Blank					Run: TECHNICON_100826B			08/26/10 12:34
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.04						
<b>Sample ID: LCS-2</b>		Laboratory Control Sample					Run: TECHNICON_100826B			08/26/10 12:36
Nitrogen, Nitrate+Nitrite as N		2.39	mg/L	0.10	96	90	110			
<b>Sample ID: C10080518-011BMS</b>		Sample Matrix Spike					Run: TECHNICON_100826B			08/26/10 13:29
Nitrogen, Nitrate+Nitrite as N		2.06	mg/L	0.10	103	90	110			
<b>Sample ID: C10080518-011BMSD</b>		Sample Matrix Spike Duplicate					Run: TECHNICON_100826B			08/26/10 13:31
Nitrogen, Nitrate+Nitrite as N		2.13	mg/L	0.10	106	90	110	3.3	10	
<b>Sample ID: C10080518-020BMS</b>		Sample Matrix Spike					Run: TECHNICON_100826B			08/26/10 14:11
Nitrogen, Nitrate+Nitrite as N		2.06	mg/L	0.10	101	90	110			
<b>Sample ID: C10080518-020BMSD</b>		Sample Matrix Spike Duplicate					Run: TECHNICON_100826B			08/26/10 14:14
Nitrogen, Nitrate+Nitrite as N		2.09	mg/L	0.10	102	90	110	1.4	10	
<b>Sample ID: C10080518-031BMS</b>		Sample Matrix Spike					Run: TECHNICON_100826B			08/26/10 14:49
Nitrogen, Nitrate+Nitrite as N		2.08	mg/L	0.10	104	90	110			
<b>Sample ID: C10080518-031BMSD</b>		Sample Matrix Spike Duplicate					Run: TECHNICON_100826B			08/26/10 14:51
Nitrogen, Nitrate+Nitrite as N		2.11	mg/L	0.10	105	90	110	1.4	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010

**Report Date:** 09/03/10  
**Work Order:** C10080518

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW8260B</b>										
Batch: R136231										
<b>Sample ID: 18-Aug-10_LCS_5</b>	8	Laboratory Control Sample					Run: 5975VOC1_100818A			08/18/10 11:49
Carbon tetrachloride		11	ug/L	1.0	108	70	130			
Chloroform		11	ug/L	1.0	107	70	130			
Chloromethane		10	ug/L	1.0	100	70	130			
Methylene chloride		10	ug/L	1.0	101	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	90	80	120			
Surr: Dibromofluoromethane				1.0	87	70	130			
Surr: p-Bromofluorobenzene				1.0	101	80	130			
Surr: Toluene-d8				1.0	93	80	120			
<b>Sample ID: 18-Aug-10_MBLK_7</b>	8	Method Blank					Run: 5975VOC1_100818A			08/18/10 12:59
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	102	80	120			
Surr: Dibromofluoromethane				1.0	92	70	130			
Surr: p-Bromofluorobenzene				1.0	105	80	120			
Surr: Toluene-d8				1.0	86	80	120			
<b>Sample ID: C10080518-019CMS</b>	8	Sample Matrix Spike					Run: 5975VOC1_100818A			08/18/10 18:53
Carbon tetrachloride		120	ug/L	10	124	70	130			
Chloroform		120	ug/L	10	121	70	130			
Chloromethane		110	ug/L	10	113	70	130			
Methylene chloride		120	ug/L	10	117	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	87	80	120			
Surr: Dibromofluoromethane				1.0	98	70	130			
Surr: p-Bromofluorobenzene				1.0	101	80	120			
Surr: Toluene-d8				1.0	95	80	120			
<b>Sample ID: C10080518-019CMSD</b>	8	Sample Matrix Spike Duplicate					Run: 5975VOC1_100818A			08/18/10 19:29
Carbon tetrachloride		120	ug/L	10	123	70	130	1	20	
Chloroform		120	ug/L	10	120	70	130	1	20	
Chloromethane		120	ug/L	10	116	70	130	2.5	20	
Methylene chloride		110	ug/L	10	115	70	130	2.1	20	
Surr: 1,2-Dichlorobenzene-d4				1.0	87	80	120	0	10	
Surr: Dibromofluoromethane				1.0	96	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	101	80	120	0	10	
Surr: Toluene-d8				1.0	94	80	120	0	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010

**Report Date:** 09/03/10  
**Work Order:** C10080518

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW8260B</b>										
Batch: R136412										
<b>Sample ID: 20-Aug-10_MBLK_6</b>	8	Method Blank				Run: 5975VOC1_100820C			08/20/10 13:16	
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	110	80	120			
Surr: Dibromofluoromethane				1.0	92	70	130			
Surr: p-Bromofluorobenzene				1.0	120	80	120			
Surr: Toluene-d8				1.0	95	80	120			
<b>Sample ID: 20-AUG-10_LCS_9</b>	8	Laboratory Control Sample				Run: 5975VOC1_100820C			08/20/10 15:10	
Carbon tetrachloride		11	ug/L	1.0	108	70	130			
Chloroform		11	ug/L	1.0	106	70	130			
Chloromethane		11	ug/L	1.0	108	70	130			
Methylene chloride		10	ug/L	1.0	101	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	105	80	120			
Surr: Dibromofluoromethane				1.0	96	70	130			
Surr: p-Bromofluorobenzene				1.0	106	80	130			
Surr: Toluene-d8				1.0	97	80	120			
<b>Sample ID: C10080518-029CMS</b>	8	Sample Matrix Spike				Run: 5975VOC1_100820C			08/20/10 21:01	
Carbon tetrachloride		12000	ug/L	1000	125	70	130			
Chloroform		13000	ug/L	1000	125	70	130			
Chloromethane		13000	ug/L	1000	128	70	130			
Methylene chloride		15000	ug/L	1000	147	70	130			S
Surr: 1,2-Dichlorobenzene-d4				1.0	109	80	120			
Surr: Dibromofluoromethane				1.0	113	70	130			
Surr: p-Bromofluorobenzene				1.0	94	80	120			
Surr: Toluene-d8				1.0	97	80	120			
- Spike recovery is high for one analyte. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										
<b>Sample ID: C10080518-029CMSD</b>	8	Sample Matrix Spike Duplicate				Run: 5975VOC1_100820C			08/20/10 21:36	
Carbon tetrachloride		12000	ug/L	1000	119	70	130	4.9	20	
Chloroform		13000	ug/L	1000	126	70	130	0.3	20	
Chloromethane		12000	ug/L	1000	120	70	130	5.8	20	
Methylene chloride		14000	ug/L	1000	140	70	130	4.5	20	S
Surr: 1,2-Dichlorobenzene-d4				1.0	106	80	120	0	10	
Surr: Dibromofluoromethane				1.0	108	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	100	80	120	0	10	
Surr: Toluene-d8				1.0	96	80	120	0	10	
- Spike recovery is high for one analyte. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										
<b>Sample ID: 26-Aug-10_LCS_3</b>	8	Laboratory Control Sample				Run: 5975VOC1_100820C			08/26/10 12:43	
Carbon tetrachloride		9.8	ug/L	1.0	98	70	130			
Chloroform		10	ug/L	1.0	100	70	130			
Chloromethane		10	ug/L	1.0	102	70	130			
Methylene chloride		9.8	ug/L	1.0	98	70	130			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform 2010

**Report Date:** 09/03/10  
**Work Order:** C10080518

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> SW8260B										Batch: R136412
<b>Sample ID:</b> 26-Aug-10_LCS_3	8	Laboratory Control Sample			Run: 5975VOC1_100820C				08/26/10 12:43	
Surr: 1,2-Dichlorobenzene-d4				1.0	97	80	120			
Surr: Dibromofluoromethane				1.0	90	70	130			
Surr: p-Bromofluorobenzene				1.0	86	80	130			
Surr: Toluene-d8				1.0	83	80	120			
<b>Sample ID:</b> 26-Aug-10_MBLK_6	8	Method Blank			Run: 5975VOC1_100820C				08/26/10 14:29	
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	102	80	120			
Surr: Dibromofluoromethane				1.0	91	70	130			
Surr: p-Bromofluorobenzene				1.0	103	80	120			
Surr: Toluene-d8				1.0	83	80	120			
<b>Sample ID:</b> C10080785-009CMS	8	Sample Matrix Spike			Run: 5975VOC1_100820C				08/26/10 20:42	
Carbon tetrachloride		14000	ug/L	1000	140	70	130			S
Chloroform		29000	ug/L	1000	141	70	130			S
Chloromethane		16000	ug/L	1000	156	70	130			S
Methylene chloride		13000	ug/L	1000	125	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	101	80	120			
Surr: Dibromofluoromethane				1.0	108	70	130			
Surr: p-Bromofluorobenzene				1.0	93	80	120			
Surr: Toluene-d8				1.0	94	80	120			
- Spike recovery is high for several analytes. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										
<b>Sample ID:</b> C10080785-009CMSD	8	Sample Matrix Spike Duplicate			Run: 5975VOC1_100820C				08/26/10 21:16	
Carbon tetrachloride		14000	ug/L	1000	138	70	130	2	20	S
Chloroform		29000	ug/L	1000	136	70	130	1.9	20	S
Chloromethane		14000	ug/L	1000	142	70	130	9.4	20	S
Methylene chloride		13000	ug/L	1000	127	70	130	1.3	20	
Surr: 1,2-Dichlorobenzene-d4				1.0	101	80	120	0	10	
Surr: Dibromofluoromethane				1.0	112	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	93	80	120	0	10	
Surr: Toluene-d8				1.0	97	80	120	0	10	
- Spike recovery is high for several analytes. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



# Workorder Receipt Checklist



C10080518

Login completed by: Tabitha Edwards

Date Received: 8/13/2010

Reviewed by: BL2000\kschroeder

Received by: ha

Reviewed Date: 8/17/2010

Carrier name: FedEx

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Container/Temp Blank temperature:                       | 2°C On Ice                              |                             |   |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |

Contact and Corrective Action Comments:

None



# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3rd Quarter Chloroform 2010</b>	Sample Origin State: <b>UT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>PO BOX 809 Blanding UT 84511</b>	Contact Name: <b>Ryan Palmer</b>	Phone/Fax: <b>435 678 2221</b>	Email: <b>Tanner Holliday</b>
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:			ANALYSIS REQUESTED SEE ATTACHED Standard Turnaround (TAT)	R U S H	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments:	Shipped by: <b>7clock</b>
<input type="checkbox"/> DW <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> POTWW/WTP <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC						Cooler ID(s): <b>Chiat</b>
Number of Containers: _____ Sample Type: <input type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> V <input type="checkbox"/> B <input type="checkbox"/> O <input type="checkbox"/> DW <input type="checkbox"/> Air Water <input type="checkbox"/> Soils/Solids <input type="checkbox"/> Vegetation <input type="checkbox"/> Bioassay <input type="checkbox"/> Other <input type="checkbox"/> DW - Drinking Water			Quote # <b>C2975</b>	Receipt Temp: <b>2</b> °C	On Ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Custody Seal On Bottle: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N On Cooler: <input type="checkbox"/> Y <input type="checkbox"/> N
Intact Signature Match: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					Intact Signature Match: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)    Collection Date    Collection Time    MATRIX			LABORATORY USE ONLY			
1 TW4-3			8-10-2010	0627	5-W	X
2 TW4-12			8-10-2010	0746	5-W	X
3 TW4-13			8-10-2010	0756	5-W	X
4 TW4-14			8-10-2010	0806	5-W	X
5 TW4-23			8-10-2010	0640	5-W	X
6 TW4-25			8-10-2010	0607	5-W	X
7 TW4-8			8-11-2010	0648	5-W	X
8 TW4-9			8-11-2010	0632	5-W	X
9 TW4-24			8-11-2010	0604	5-W	X
10 <del>16</del> 16			8-11-2010	0721	5-W	X

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Tanner Holliday</b>	Date/Time: <b>8-12-2010 1130</b>	Signature: <i>Tanner Holliday</i>	Received by (print):	Date/Time:	Signature:
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	Sample Disposal: Return to Client:	Lab Disposal:	Received by Laboratory: <b>DACCENEN</b>	Date/Time: <b>8/13/10 8:41</b>	Signature:	

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# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3rd Quarter chlorform 2010</b>	Sample Origin State: <b>VT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <del>XXXXXXXXXX</del> <b>PO BOX 809 Blanding, UT 84511</b>	Contact Name: <b>Ryan Palmer</b>	Phone/Fax: <b>435 678 2221</b>	Email: <b>Tanner Holliday</b>
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:  <input type="checkbox"/> DW <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/MWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC	ANALYSIS REQUESTED  Number of Containers: _____ Sample Type: A W S V B O DW Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water  Quote # <b>C2975</b>	SEE ATTACHED  Standard Turnaround (TAT)  <b>R U S H</b>	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by: <b>Foley</b>
			Comments:	Cooler ID(s): <b>Chunt</b>

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX																
1 TW4-3R	8-9-2010	0841	5-W	X															
2 TW4-12R	8-9-2010	0928	5-W	X															
3 TW4-13R	8-9-2010	1026	5-W	X															
4 TW4-14R	8-9-2010	1226	5-W	X															
5 TW4-23R	8-9-2010	1306	5-W	X															
6 TW4-25R	8-9-2010	1411	5-W	X															
7 TW4-8R	8-10-2010	0840	5-W	X															
8 TW4-9R	8-10-2010	0927	5-W	X															
9 TW4-24R	8-10-2010	1018	5-W	X															
10 TW4-16R	8-10-2010	1100	5-W	X															

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Tanner Holliday</b>	Date/Time: <b>8-12-2010 1130</b>	Signature: <i>Tanner Holliday</i>	Received by (print):	Date/Time:	Signature:
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	Sample Disposal: Return to Client: _____	Lab Disposal: _____	Received by Laboratory: <b>Lacereaux</b>	Date/Time: <b>8/13/10 8:46</b>	Signature:	

LABORATORY USE ONLY  
C10080518

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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3<sup>rd</sup> Quarter Chloroform 2010</b>	Sample Origin State: <b>UT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>PO BOX 809 Blanding UT 84511</b>	Contact Name: <b>Ryan Palmer</b>	Phone/Fax: <b>435 678 2221</b>	Email: <b>Tanner Holliday</b>
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:  <input type="checkbox"/> DW <input type="checkbox"/> POTWWWTP <input type="checkbox"/> State: _____ <input type="checkbox"/> Other: _____	<input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC	ANALYSIS REQUESTED  SEE ATTACHED  Standard Turnaround (TAT)  <b>R U S H</b>	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by: <b>J.P.P.</b>
			Comments:	Cooler ID(s): <b>Chill</b>

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Quote #	LABORATORY USE ONLY														
1 TW4-5	8-11-2010	0617	5-W	X	C2975														
2 TW4-26	8-11-2010	0704	5-W	X															
3 TW4-18	8-12-2010	0720	5-W	X															
4 TW4-21	8-12-2010	0730	5-W	X															
5 TW4-10	8-12-2010	0757	5-W	X															
6 TW4-22	8-12-2010	0748	5-W	X															
7 TW4-6	8-12-2010	0807	5-W	X															
8 TW4-11	8-12-2010	0818	5-W	X															
9 TW4-65	8-12-2010	0730	5-W	X															
10																			

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Tanner Holliday</b>	Date/Time: <b>8-12-2010 1130</b>	Signature: <i>Tanner Holliday</i>	Received by (print):	Date/Time:	Signature:
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	Sample Disposal: Return to Client:	Lab Disposal:	Received by Laboratory: <i>Ilse Cermer</i>	Date/Time: <b>8/13/10 8:44</b>	Signature:	

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# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3rd Quarter Chloroform 2010</b>	Sample Origin State: <b>UT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>PO BOX 809 Blanding, UT</b>	Contact Name: <b>Ryan Palmer</b>	Phone/Fax: <b>435-678-2221</b>	Email: <b>Tanner Holliday</b>
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:  <input type="checkbox"/> DW <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC	Number of Containers Sample Type: AWS/VB/DW Air Water Solids/Solids Vegetation Bioassay Other DW - Drinking Water	<b>ANALYSIS REQUESTED</b>										Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page  Comments:	Shipped by: <b>F. DeV</b>
		SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Quote # <b>C2975</b>	SEE ATTACHED	Standard Turnaround (TAT)	R U S H	On Ice: <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b>	Receipt Temp <b>2</b> °C		Custody Seal On Bottle <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b> On Cooler <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b> Intact <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b> Signature Match <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b>

1	2	3	4	5	6	7	8	9	10
TW4-5R	8-10-2010	1250	S-W	X					
TW4-26R	8-10-2010	1414	S-W	X					
TW4-18R	8-11-2010	0753	S-W	X					
TW4-21R	8-11-2010	0843	S-W	X					
TW4-10R	8-11-2010	0930	S-W	X					
TW4-22R	8-11-2010	1014	S-W	X					
TW4-6R	8-11-2010	1056	S-W	X					
TW4-11R	8-11-2010	1251	S-W	X					
<del>XXXXXXXXXX</del>			<del>XXXX</del>						
<b>TRIP BLANK / TEMP BLANK</b>									

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Tanner Holliday</b> Date/Time: <b>8-12-2010 1130</b> Signature: <i>Tanner Holliday</i>	Received by (print): _____      Date/Time: _____      Signature: _____
	Relinquished by (print): _____      Date/Time: _____      Signature: _____	Received by (print): _____      Date/Time: _____      Signature: _____
	Sample Disposal:      Return to Client:      Lab Disposal:	Received by Laboratory: <b>H. Axeman</b> Date/Time: <b>5/13/11 8:46</b> Signature: _____

LABORATORY USE ONLY C10080518

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# ANALYTICAL SUMMARY REPORT

October 22, 2010

Denison Mines USA Corp  
6425 S Hwy 191  
Blanding, UT 84511

Workorder No.: C10080785      Quote ID: C2975 - Chloroform Sampling

Project Name: 3rd Quarter Chloroform

Energy Laboratories, Inc. received the following 16 samples for Denison Mines USA Corp on 8/20/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C10080785-001	TW4-17	08/16/10 13:40	08/20/10	Aqueous	Chloride Nitrogen, Nitrate + Nitrite SW8260B VOCs, Standard List
C10080785-002	TW4-19	08/16/10 09:58	08/20/10	Aqueous	Same As Above
C10080785-003	TW4-15	08/16/10 14:15	08/20/10	Aqueous	Same As Above
C10080785-004	TW4-7	08/18/10 08:27	08/20/10	Aqueous	Same As Above
C10080785-005	TW4-1	08/18/10 08:37	08/20/10	Aqueous	Same As Above
C10080785-006	TW4-4	08/16/10 10:52	08/20/10	Aqueous	Same As Above
C10080785-007	MW-4	08/16/10 10:33	08/20/10	Aqueous	Same As Above
C10080785-008	TW4-2	08/18/10 08:17	08/20/10	Aqueous	Same As Above
C10080785-009	TW4-20	08/16/10 12:22	08/20/10	Aqueous	Same As Above
C10080785-010	TW4-60	08/17/10 14:30	08/20/10	Aqueous	Same As Above
C10080785-011	TW4-70	08/16/10 13:40	08/20/10	Aqueous	Same As Above
C10080785-012	Trip Blank	08/18/10 08:37	08/20/10	Aqueous	SW8260B VOCs, Standard List
C10080785-013	TW4-7R	08/17/10 08:36	08/20/10	Aqueous	Chloride Nitrogen, Nitrate + Nitrite SW8260B VOCs, Standard List
C10080785-014	TW4-1R	08/17/10 09:20	08/20/10	Aqueous	Same As Above
C10080785-015	TW4-2R	08/17/10 10:03	08/20/10	Aqueous	Same As Above
C10080785-016	Temp Blank	08/18/10 00:00	08/20/10	Aqueous	Temperature

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

*Stephanie D Waldrop*  
Reporting Supervisor

Digitally signed by  
Stephanie Waldrop  
Date: 2010.10.22 11:35:06 -06:00





**CLIENT:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Sample Delivery Group:** C10080785

**Revised Date:** 10/22/10

**Report Date:** 09/08/10

## CASE NARRATIVE

### REVISED/SUPPLEMENTAL REPORT

The attached analytical report has been revised from a previously submitted report due to the request by Kathy Weinel on October 14, 2010 to change the collection date on sample TW4-2 from 8/16/10 to 8/18/10.

### ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package.

### SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

### GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

### RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

### SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

### ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

### SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT  
eli-g - Energy Laboratories, Inc. - Gillette, WY  
eli-h - Energy Laboratories, Inc. - Helena, MT  
eli-r - Energy Laboratories, Inc. - Rapid City, SD  
eli-t - Energy Laboratories, Inc. - College Station, TX

### CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

### ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting [www.energylab.com](http://www.energylab.com)

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page [www.energylab.com](http://www.energylab.com).



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Work Order:** C10080785

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A4500-Cl B</b>								Batch: 100831A-CL-TTR-W		
<b>Sample ID: MBLK9-100831A</b>	Method Blank						Run: TITRATION_100831A		08/31/10 10:57	
Chloride		ND	mg/L	0.5						
<b>Sample ID: C10080785-008AMS</b>	Sample Matrix Spike						Run: TITRATION_100831A		08/31/10 14:19	
Chloride		228	mg/L	1.0	104	90	110			
<b>Sample ID: C10080785-008AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100831A		08/31/10 14:20	
Chloride		226	mg/L	1.0	103	90	110	0.8	10	
<b>Sample ID: LCS35-100831A</b>	Laboratory Control Sample						Run: TITRATION_100831A		08/31/10 14:22	
Chloride		3610	mg/L	1.0	102	90	110			
<b>Sample ID: C10080785-011AMS</b>	Sample Matrix Spike						Run: TITRATION_100831A		08/31/10 14:45	
Chloride		212	mg/L	1.0	105	90	110			
<b>Sample ID: C10080785-011AMSD</b>	Sample Matrix Spike Duplicate						Run: TITRATION_100831A		08/31/10 14:47	
Chloride		207	mg/L	1.0	102	90	110	2.5	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform

**Revised Date:** 10/22/10  
**Report Date:** 09/08/10  
**Work Order:** C10080785

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E353.2</b>										Batch: R136823
<b>Sample ID: MBLK-1</b>		Method Blank								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.04						09/02/10 13:07
<b>Sample ID: LCS-2</b>		Laboratory Control Sample								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		2.42	mg/L	0.10	97	90	110			09/02/10 13:10
<b>Sample ID: C10080785-003BMS</b>		Sample Matrix Spike								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		2.57	mg/L	0.10	99	90	110			09/02/10 14:03
<b>Sample ID: C10080785-003BMSD</b>		Sample Matrix Spike Duplicate								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		2.58	mg/L	0.10	99	90	110	0.4	10	09/02/10 14:05
<b>Sample ID: C10080785-015BMS</b>		Sample Matrix Spike								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		2.07	mg/L	0.10	103	90	110			09/02/10 14:43
<b>Sample ID: C10080785-015BMSD</b>		Sample Matrix Spike Duplicate								Run: TECHNICON_100902A
Nitrogen, Nitrate+Nitrite as N		2.04	mg/L	0.10	102	90	110	1.5	10	09/02/10 14:45

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

Revised Date: 10/22/10

Client: Denison Mines USA Corp

Report Date: 09/08/10

Project: 3rd Quarter Chloroform

Work Order: C10080785

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW8260B</b>										
Batch: R136612										
<b>Sample ID: 27-Aug-10_MBLK_6</b>	8	Method Blank								
Run: GCMS2_100827A										
08/27/10 12:32										
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	101	80	120			
Surr: Dibromofluoromethane				1.0	100	70	130			
Surr: p-Bromofluorobenzene				1.0	109	80	120			
Surr: Toluene-d8				1.0	90	80	120			
<b>Sample ID: 27-Aug-10_LCS_7</b>	8	Laboratory Control Sample								
Run: GCMS2_100827A										
08/27/10 13:07										
Carbon tetrachloride		12	ug/L	1.0	117	70	130			
Chloroform		12	ug/L	1.0	122	70	130			
Chloromethane		11	ug/L	1.0	108	70	130			
Methylene chloride		10	ug/L	1.0	104	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	98	80	120			
Surr: Dibromofluoromethane				1.0	108	70	130			
Surr: p-Bromofluorobenzene				1.0	93	80	130			
Surr: Toluene-d8				1.0	99	80	120			
<b>Sample ID: C10080785-002CMS</b>	8	Sample Matrix Spike								
Run: GCMS2_100827A										
08/27/10 15:12										
Carbon tetrachloride		1100	ug/L	100	110	70	130			
Chloroform		2800	ug/L	100	80	70	130			
Chloromethane		990	ug/L	100	99	70	130			
Methylene chloride		1300	ug/L	100	132	70	130			S
Surr: 1,2-Dichlorobenzene-d4				1.0	99	80	120			
Surr: Dibromofluoromethane				1.0	102	70	130			
Surr: p-Bromofluorobenzene				1.0	96	80	120			
Surr: Toluene-d8				1.0	82	80	120			
<b>Sample ID: C10080785-002CMSD</b>	8	Sample Matrix Spike Duplicate								
Run: GCMS2_100827A										
08/27/10 15:47										
Carbon tetrachloride		1200	ug/L	100	121	70	130	9.7	20	
Chloroform		3300	ug/L	100	131	70	130	17	20	S
Chloromethane		960	ug/L	100	96	70	130	3.3	20	
Methylene chloride		1200	ug/L	100	120	70	130	9.8	20	
Surr: 1,2-Dichlorobenzene-d4				1.0	99	80	120	0	10	
Surr: Dibromofluoromethane				1.0	98	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	108	80	120	0	10	
Surr: Toluene-d8				1.0	86	80	120	0	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Revised Date: 10/22/10

Client: Denison Mines USA Corp

Report Date: 09/08/10

Project: 3rd Quarter Chloroform

Work Order: C10080785

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW8260B</b>										
Batch: R136662										
<b>Sample ID: 30-Aug-10_LCS_8</b>	8	Laboratory Control Sample					Run: 5975VOC1_100830A			08/30/10 14:30
Carbon tetrachloride		13	ug/L	1.0	127	70	130			
Chloroform		13	ug/L	1.0	127	70	130			
Chloromethane		14	ug/L	1.0	136	70	130			S
Methylene chloride		13	ug/L	1.0	126	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	90	80	120			
Surr: Dibromofluoromethane				1.0	98	70	130			
Surr: p-Bromofluorobenzene				1.0	103	80	130			
Surr: Toluene-d8				1.0	95	80	120			
<b>Sample ID: 30-Aug-10_MBLK_11</b>	8	Method Blank					Run: 5975VOC1_100830A			08/30/10 16:16
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	104	80	120			
Surr: Dibromofluoromethane				1.0	96	70	130			
Surr: p-Bromofluorobenzene				1.0	108	80	120			
Surr: Toluene-d8				1.0	87	80	120			
<b>Sample ID: C10080785-015CMS</b>	8	Sample Matrix Spike					Run: 5975VOC1_100830A			08/31/10 00:40
Carbon tetrachloride		130	ug/L	10	134	70	130			S
Chloroform		130	ug/L	10	129	70	130			
Chloromethane		140	ug/L	10	135	70	130			S
Methylene chloride		130	ug/L	10	130	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	89	80	120			
Surr: Dibromofluoromethane				1.0	105	70	130			
Surr: p-Bromofluorobenzene				1.0	104	80	120			
Surr: Toluene-d8				1.0	94	80	120			
- Spike recovery is high for several analytes. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										
<b>Sample ID: C10080785-015CMSD</b>	8	Sample Matrix Spike Duplicate					Run: 5975VOC1_100830A			08/31/10 01:16
Carbon tetrachloride		140	ug/L	10	143	70	130	6.4	20	S
Chloroform		140	ug/L	10	137	70	130	6.1	20	S
Chloromethane		140	ug/L	10	144	70	130	6.3	20	S
Methylene chloride		140	ug/L	10	137	70	130	4.8	20	S
Surr: 1,2-Dichlorobenzene-d4				1.0	89	80	120	0	10	
Surr: Dibromofluoromethane				1.0	105	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	104	80	120	0	10	
Surr: Toluene-d8				1.0	93	80	120	0	10	
- Spike recovery is high for several analytes. This is a matrix related bias since the MS MSD pair both exhibit this same behavior yet have an acceptable RPD.										

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

# Workorder Receipt Checklist



C10080785

Login completed by: Halley Ackerman

Date Received: 8/20/2010

Reviewed by: BL2000\kschroeder

Received by: ckw

Reviewed Date: 8/24/2010

Carrier name: FedEx

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Container/Temp Blank temperature:                       | 2°C On Ice                              |                             |   |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |

-----  
Contact and Corrective Action Comments:





# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3<sup>rd</sup> Quarter Chloroform</b>	Sample Origin State: <b>UT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>P.O. Box 809 Blanding UT 84511</b>	Contact Name: <b>Ryan Palmer</b>	Phone/Fax: <b>678 2221</b>	Email:
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Sampler: (Please Print) <b>Tanner, Gavin</b>
Special Report/Formats:		Purchase Order:	Quote/Bottle Order:

- DW
- POTW/WWTP
- State: \_\_\_\_\_
- Other: \_\_\_\_\_
- EDD/EDT (Electronic Data) Format: \_\_\_\_\_
- LEVEL IV
- NELAC

ANALYSIS REQUESTED									
SEE ATTACHED									

<b>R U S H</b> Standard Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by: <b>Express</b>
	Comments:	Cooler ID(s): <b>Client</b>
		Receipt Temp <b>2 °C</b>
		On Ice: <input checked="" type="radio"/> Y <input type="radio"/> N
		Custody Seal On Bottle <input type="radio"/> Y <input type="radio"/> N On Cooler <input checked="" type="radio"/> Y <input type="radio"/> N
		Intact <input checked="" type="radio"/> Y <input type="radio"/> N Signature Match <input checked="" type="radio"/> Y <input type="radio"/> N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	
1 TW4-17	8-16-10	1340	5-W	X
2 TW4-19	8-16-10	0958	5-W	X
3 TW4-15	8-16-10	1415	5-W	X
4 TW4-7	8-18-10	0827	5-W	X
5 TW4-1	8-18-10	0837	5-W	X
6 TW4-4	8-16-10	1052	5-W	X
7 MW-4	8-16-10	1033	5-W	X
8 TW4-2	8-16-10	0817	5-W	X
9 TW4-20	8-16-10	1222	5-W	X
10 TW4-60	8-17-10	1430	5-W	X

Check # 2975

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Ryan Palmer</b>	Date/Time: <b>8.19.10 1400</b>	Signature: <i>[Signature]</i>	Received by (print):	Date/Time:	Signature:
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	Sample Disposal: Return to Client:	Lab Disposal:	Received by Laboratory: <b>[Signature]</b>	Date/Time: <b>8/20/10 09:00</b>	Signature:	

LABORATORY USE ONLY

C10080765

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <i>Denison Mines</i>	Project Name, PWS, Permit, Etc. <i>3rd Quezon chloroform</i>	Sample Origin State:	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <i>P.O. Box 809 Blanding UT 84511</i>	Contact Name: <i>Ryan Palmer</i>	Phone/Fax: <i>678 2221</i>	Email:
Invoice Address: <i>Same</i>	Invoice Contact & Phone: <i>Same</i>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:  <input type="checkbox"/> DW <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC	ANALYSIS REQUESTED  Number of Containers: _____ Sample Type: <input type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> V <input type="checkbox"/> B <input type="checkbox"/> O <input type="checkbox"/> DW <input type="checkbox"/> Air Water <input type="checkbox"/> Solids <input type="checkbox"/> Vegetation <input type="checkbox"/> Bioassay <input type="checkbox"/> Other <input type="checkbox"/> DW - Drinking Water	SEE ATTACHED  Standard Turnaround (TAT)  <b>R U S H</b>	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by: <i>Express</i> Cooler ID(s): <i>Client</i>
			Comments:	Receipt Temp: <i>2 °C</i> On Ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Custody Seal: On Bottle: <input type="checkbox"/> Y <input type="checkbox"/> N On Cooler: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Signature Match: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX															
<i>1 TW4-70</i>	<i>8-16-10</i>	<i>1340</i>	<i>5-W</i>	<i>X</i>														
<i>2 Trip Blank</i>																		
<i>3</i>																		
<i>4 TW4-7R</i>	<i>8-17-10</i>	<i>0836</i>	<i>5-W</i>	<i>X</i>														
<i>5 TW4-1R</i>	<i>8-17-10</i>	<i>0920</i>	<i>5-W</i>	<i>X</i>														
<i>6 TW4-2R</i>	<i>8-17-10</i>	<i>1003</i>	<i>5-W</i>	<i>X</i>														
<i>7 Vmp Blank</i>																		
<i>8</i>																		
<i>9</i>																		
<i>10</i>																		

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <i>Ryan Palmer</i> Date/Time: <i>8-17-10 1400</i> Signature: <i>[Signature]</i>	Received by (print): _____      Date/Time: _____      Signature: _____
	Relinquished by (print): _____      Date/Time: _____      Signature: _____	Received by (print): _____      Date/Time: _____      Signature: _____
	Sample Disposal: Return to Client: _____      Lab Disposal: _____	Received by Laboratory: <i>[Signature]</i> Date/Time: <i>7/20/10 900</i> Signature: _____

LABORATORY USE ONLY

*C10080785*

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.





# ANALYTICAL SUMMARY REPORT

September 17, 2010

Denison Mines USA Corp  
6425 S Hwy 191  
Blanding, UT 84511

Workorder No.: C10081012      Quote ID: C2975 - Chloroform Sampling

Project Name: 3rd Quarter Chloroform

Energy Laboratories, Inc. received the following 10 samples for Denison Mines USA Corp on 8/27/2010 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C10081012-001	TW4-1	08/24/10 12:45	08/27/10	Aqueous	Chloride Nitrogen, Nitrate + Nitrite SW8260B VOCs, Standard List
C10081012-002	TW4-16	08/24/10 12:32	08/27/10	Aqueous	Same As Above
C10081012-003	TW4-22	08/24/10 12:21	08/27/10	Aqueous	Same As Above
C10081012-004	TW4-24	08/24/10 12:10	08/27/10	Aqueous	Same As Above
C10081012-005	TW4-1R	08/23/10 13:35	08/27/10	Aqueous	Same As Above
C10081012-006	TW4-16R	08/23/10 09:57	08/27/10	Aqueous	Same As Above
C10081012-007	TW4-22R	08/23/10 12:34	08/27/10	Aqueous	Same As Above
C10081012-008	TW4-24R	08/23/10 08:55	08/27/10	Aqueous	Same As Above
C10081012-009	Trip Blank	08/24/10 00:00	08/27/10	Aqueous	SW8260B VOCs, Standard List
C10081012-010	Temp Blank	08/24/10 12:32	08/27/10	Aqueous	Temperature

This report was prepared by Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

*Stephanie D Waldrop*  
Reporting Supervisor

Digitally signed by  
Stephanie Waldrop  
Date: 2010.09.17 17:48:27 -06:00



**CLIENT:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform  
**Sample Delivery Group:** C10081012

**Report Date:** 09/17/10

## CASE NARRATIVE

### ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package.

### SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

### GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

### RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

### SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

### ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

### SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

### BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT  
eli-g - Energy Laboratories, Inc. - Gillette, WY  
eli-h - Energy Laboratories, Inc. - Helena, MT  
eli-r - Energy Laboratories, Inc. - Rapid City, SD  
eli-t - Energy Laboratories, Inc. - College Station, TX

### CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

### ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting [www.energylab.com](http://www.energylab.com)

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page [www.energylab.com](http://www.energylab.com).



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform

**Report Date:** 09/17/10  
**Work Order:** C10081012

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> A4500-Cl B										Batch: 100907-CL-TTR-W
<b>Sample ID:</b> MBLK9-100907 Chloride		Method Blank ND	mg/L	0.5			Run: TITRATION_100907A			09/07/10 15:25
<b>Sample ID:</b> C10081012-008A Chloride		Sample Matrix Spike 38.2	mg/L	1.0	108	90	110			09/07/10 15:53
<b>Sample ID:</b> C10081012-008A Chloride		Sample Matrix Spike Duplicate 37.5	mg/L	1.0	106	90	110	1.8		09/07/10 15:55
<b>Sample ID:</b> LCS35-100907 Chloride		Laboratory Control Sample 3580	mg/L	1.0	101	90	110			09/07/10 15:58

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform

**Report Date:** 09/17/10  
**Work Order:** C10081012

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E353.2</b>										Batch: R136887
<b>Sample ID: MBLK-1</b>		Method Blank								Run: TECHNICON_100906A 09/06/10 14:41
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.04						
<b>Sample ID: LCS-2</b>		Laboratory Control Sample								Run: TECHNICON_100906A 09/06/10 14:44
Nitrogen, Nitrate+Nitrite as N		2.48	mg/L	0.10	99	90	110			
<b>Sample ID: C10081004-003EMS</b>		Sample Matrix Spike								Run: TECHNICON_100906A 09/06/10 16:16
Nitrogen, Nitrate+Nitrite as N		2.07	mg/L	0.10	103	90	110			
<b>Sample ID: C10081004-003EMSD</b>		Sample Matrix Spike Duplicate								Run: TECHNICON_100906A 09/06/10 16:19
Nitrogen, Nitrate+Nitrite as N		2.02	mg/L	0.10	101	90	110	2.4	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.





## QA/QC Summary Report

**Client:** Denison Mines USA Corp  
**Project:** 3rd Quarter Chloroform

**Report Date:** 09/17/10  
**Work Order:** C10081012

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: SW8260B</b>										
Batch: R136774										
<b>Sample ID: 01-Sep-10_LCS_3</b>	8	Laboratory Control Sample			Run: GCMS2_100901A			09/01/10 11:59		
Carbon tetrachloride		12	ug/L	1.0	121	70	130			
Chloroform		11	ug/L	1.0	112	70	130			
Chloromethane		13	ug/L	1.0	128	70	130			
Methylene chloride		12	ug/L	1.0	119	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	105	80	120			
Surr: Dibromofluoromethane				1.0	107	70	130			
Surr: p-Bromofluorobenzene				1.0	110	80	130			
Surr: Toluene-d8				1.0	97	80	120			
<b>Sample ID: 01-Sep-10_MBLK_6</b>	8	Method Blank			Run: GCMS2_100901A			09/01/10 13:43		
Carbon tetrachloride		ND	ug/L	1.0						
Chloroform		ND	ug/L	1.0						
Chloromethane		ND	ug/L	1.0						
Methylene chloride		ND	ug/L	1.0						
Surr: 1,2-Dichlorobenzene-d4				1.0	106	80	120			
Surr: Dibromofluoromethane				1.0	94	70	130			
Surr: p-Bromofluorobenzene				1.0	131	80	120			S
Surr: Toluene-d8				1.0	91	80	120			
<b>Sample ID: C10081012-003CMS</b>	8	Sample Matrix Spike			Run: GCMS2_100901A			09/01/10 21:30		
Carbon tetrachloride		1300	ug/L	100	127	70	130			
Chloroform		1600	ug/L	100	123	70	130			
Chloromethane		1200	ug/L	100	124	70	130			
Methylene chloride		1200	ug/L	100	120	70	130			
Surr: 1,2-Dichlorobenzene-d4				1.0	104	80	120			
Surr: Dibromofluoromethane				1.0	109	70	130			
Surr: p-Bromofluorobenzene				1.0	97	80	120			
Surr: Toluene-d8				1.0	111	80	120			
<b>Sample ID: C10081012-003CMSD</b>	8	Sample Matrix Spike Duplicate			Run: GCMS2_100901A			09/01/10 22:05		
Carbon tetrachloride		1200	ug/L	100	122	70	130	4.2	20	
Chloroform		1500	ug/L	100	114	70	130	6.3	20	
Chloromethane		1200	ug/L	100	121	70	130	2	20	
Methylene chloride		1100	ug/L	100	107	70	130	12	20	
Surr: 1,2-Dichlorobenzene-d4				1.0	104	80	120	0	10	
Surr: Dibromofluoromethane				1.0	100	70	130	0	10	
Surr: p-Bromofluorobenzene				1.0	99	80	120	0	10	
Surr: Toluene-d8				1.0	95	80	120	0	10	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

# Workorder Receipt Checklist



C10081012

Login completed by: Corinne Wagner

Date Received: 8/27/2010

Reviewed by: BL2000\kschroeder

Received by: ckw

Reviewed Date: 8/30/2010

Carrier name: FedEx

- |   |   |                             |   |
|---|---|-----------------------------|---|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Container/Temp Blank temperature:                       | 4°C On Ice                              |                             |   |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |

Contact and Corrective Action Comments:

None



# Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: <b>Denison Mines</b>	Project Name, PWS, Permit, Etc. <b>3rd Quarter Chloroform</b>	Sample Origin State: <b>UT</b>	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: <b>PO Box 509 Blanding UT 84511</b>	Contact Name: <b>Ryan Palmer</b> Phone/Fax: <b>435 678 2221</b>	Email:	Sampler: (Please Print) <b>Tanner Holliday</b>
Invoice Address: <b>Same</b>	Invoice Contact & Phone: <b>Same</b>	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

DW  
 POTW/WWTP  
 State: \_\_\_\_\_  
 Other: \_\_\_\_\_

EDD/EDT (Electronic Data) Format: \_\_\_\_\_  
 LEVEL IV  
 NELAC

Number of Containers Sample Type: A W S V B O DW Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water	ANALYSIS REQUESTED									
	SEE ATTACHED									

Standard Turnaround (TAT) **R U S H**

Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page

Comments:

Shipped by: **Fed Ex**

Cooler ID(s): **Client**

Receipt Temp: **4 °C**

On Ice:  N

Custody Seal  
 On Bottle:  N  
 On Cooler:  N  
 Intact:  N  
 Signature Match:  N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Quote #																
<sup>1</sup> TW4-1	8-24-10	1245	5-W	X																
<sup>2</sup> TW4-16	8-24-10	1232	5-W	X																
<sup>3</sup> TW4-22	8-24-10	1221	5-W	X																
<sup>4</sup> TW4-24	8-24-10	1210	5-W	X																
<sup>5</sup> TW4-1R	8-23-10	1335	5-W	X																
<sup>6</sup> TW4-16R	8-23-10	0957	5-W	X																
<sup>7</sup> TW4-22R	8-23-10	1234	5-W	X																
<sup>8</sup> TW4-24R	8-23-10	0855	5-W	X																
<sup>9</sup> Trip Blank																				
<sup>10</sup> <b>None Blank</b>																				

LABORATORY USE ONLY

**C10081012**

<b>Custody Record MUST be Signed</b>	Relinquished by (print): <b>Tanner Holliday</b> Date/Time: <b>8-26-10 1130</b> Signature: <i>Tanner Holliday</i>	Received by (print): _____ Date/Time: _____ Signature: _____
	Relinquished by (print): _____ Date/Time: _____ Signature: _____	Received by (print): _____ Date/Time: _____ Signature: _____
	Sample Disposal: _____ Return to Client: _____ Lab Disposal: _____	Received by Laboratory: _____ Date/Time: <b>8/27/10 900</b> Signature: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.

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Tab I

Quality Assurance and Data Validation Tables

I-1: Field QA/QC Evaluation

Location	2x Casing Volume	Volume Pumped	2x Casing Volume	Volume Pumped	Volume Check	Conductivity		RPD	pH		RPD	Temp		RPD	Redox Potential		RPD	Turbidity		RPD
MW-4	NA	Continuously pumped well	--			1958	1920	1.96	6.69	6.69	0.00	15.23	15.21	0.13	336	338	0.59	0.0	0.0	0.00
TW4-1	61.16	131.00	61	131	OK	2153	2157	0.19	6.16	6.18	0.32	14.88	14.84	0.27	396	397	0.25	10.8	10	7.69
TW4-2	68.66	62.00	69	62	Insufficient	2756	2817	2.19	6.58	6.58	0.00	14.93	14.92	0.07	448	448	0.00	55.2	62.1	11.76
TW4-3	63.26	70.00	63	70	OK	1743	1732	0.63	6.53	6.55	0.31	14.5	14.51	0.07	427	428	0.23	8.5	8.3	2.38
TW4-4	NA	Continuously pumped well	--			2423	2423	0.00	6.4	6.39	0.16	14.96	14.94	0.13	266	268	0.75	8	8.2	2.47
TW4-5	85.14	90.00	85	90	OK	1739	1732	0.40	6.55	6.56	0.15	15.41	15.4	0.06	379	383	1.05	65.5	68.8	4.91
TW4-6	34.75	44.00	35	44	OK	3566	3500	1.87	6.62	6.7	1.20	15.78	15.52	1.66	432	428	0.93	138	99.6	32.32
TW4-7	68.72	64.00	69	64	Insufficient	1625	1691	3.98	6.8	6.8	0.00	14.76	14.75	0.07	292	295	1.02	43.7	42.5	2.78
TW4-8	75.82	100.00	76	100	OK	3259	3261	0.06	6.79	6.78	0.15	14.86	14.82	0.27	161	165	2.45	53.2	52.3	1.71
TW4-9	86.94	90.00	87	90	OK	2432	2466	1.39	6.41	6.41	0.00	14.89	14.84	0.34	370	371	0.27	51.2	56.5	9.84
TW4-10	79.91	61.00	80	61	Insufficient	2553	2774	8.30	6.42	6.42	0.00	14.92	25.51	52.39	344	342	0.58	44.1	77.5	54.93
TW4-11	54.59	61.00	55	61	OK	1687	1674	0.77	6.65	6.64	0.15	14.57	14.56	0.07	386	389	0.77	9.3	10.1	8.25
TW4-12	82.19	90.00	82	90	OK	969.4	969.9	0.05	6.82	6.83	0.15	14.65	14.66	0.07	424	424	0.00	8.8	8.9	1.13
TW4-13	72.33	78.00	72	78	OK	1512	1528	1.05	6.85	6.86	0.15	14.9	14.89	0.07	425	427	0.47	37.8	46.4	20.43
TW4-14	5.84	3.50	6	4	Insufficient	4449		--	6.67		--	30.25		--	365		--	235		--
TW4-15	NA	Continuously pumped well	--			3519	3535	0.45	6.38	6.39	0.16	15.19	15.19	0.00	196	205	4.49	1.3	1.3	0.00
TW4-16	102.08	140.00	102	140	OK	3451	3546	2.72	6.46	6.47	0.15	14.86	14.85	0.07	399	400	0.25	199.5	204.8	2.62
TW4-17	69.74	70.52	70	71	OK	3976	3974	0.05	6.25	6.25	0.00	14.81	14.81	0.00	149	148	0.67	13.8	13.2	4.44
TW4-18	106.49	110.00	106	110	OK	1579	1563	1.02	6.3	6.29	0.16	15.19	15.18	0.07	479	479	0.00	224	220.3	1.67
TW4-19	NA	Continuously pumped well	--			2931	2926	0.17	6.46	6.5	0.62	17.88	17.89	0.06	381	376	1.32	25.7	22.5	13.28
TW4-20	NA	Continuously pumped well	--			3476	3534	1.65	5.97	6.02	0.83	18.9	18.79	0.58	190	210	10.00	33.9	31.4	7.66
TW4-21	88.33	100.00	88	100	OK	3061	3064	0.10	6.7	6.71	0.15	16.01	16.01	0.00	449	449	0.00	7.5	7.2	4.08
TW4-22	77.16	170.00	77	170	OK	3142	3142	0.00	6.54	6.54	0.00	15.94	15.95	0.06	448	447	0.22	968	914	5.74
TW4-23	62.62	240.00	63	240	OK	3675	3682	0.19	6.26	6.26	0.00	14.42	14.44	0.14	106	106	0.00	9.1	8.3	9.20
TW4-24	73.98	110.00	74	110	OK	9014	9053	0.43	6.39	6.42	0.47	15.02	15.02	0.00	471	470	0.21	3.7	3.8	2.67
TW4-25	116.44	120.00	116	120	OK	2953	2949	0.14	6.8	6.81	0.15	15.15	15.13	0.13	410	411	0.24	46.9	47.5	1.27
TW4-26	27.83	25	28	25	Insufficient	5135	5112	0.45	4.26	4.31	1.17	15.7	15.45	1.61	445	447	0.45	55.8	242	125.05

MW-4, TW4-4, TW4-15, TW4-19, and TW4-20 are continually pumped wells.

TW4-1, TW4-2, TW4-6, TW4-7, TW4-10, TW4-13, TW4-14, and TW4-26 were pumped dry and sampled after recovery.



I-2: Holding Time Evaluation

Location	Constituent	Holding Time	Allowed Holding Time	Holding Time Check
MW-4	Chloroform	11.00 days	14 days	OK
MW-4	Chloromethane	14.00 days	14 days	OK
MW-4	Methylene chloride	14.00 days	14 days	OK
MW-4	Carbon Tetrachloride	14.00 days	14 days	OK
MW-4	Nitrogen	17.00 days	28 days	OK
MW-4	Chloride	15.00 days	28 days	OK
TW4-1	Chloroform	8.00 days	14 days	OK
TW4-1	Chloromethane	8.00 days	14 days	OK
TW4-1	Methylene chloride	8.00 days	14 days	OK
TW4-1	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-1	Nitrogen	13.00 days	28 days	OK
TW4-1	Chloride	14.00 days	28 days	OK
TW4-2	Chloroform	9.00 days	14 days	OK
TW4-2	Chloromethane	12.00 days	14 days	OK
TW4-2	Methylene chloride	12.00 days	14 days	OK
TW4-2	Carbon Tetrachloride	12.00 days	14 days	OK
TW4-2	Nitrogen	15.00 days	28 days	OK
TW4-2	Chloride	13.00 days	28 days	OK
TW4-3	Chloroform	8.00 days	14 days	OK
TW4-3	Chloromethane	8.00 days	14 days	OK
TW4-3	Methylene chloride	8.00 days	14 days	OK
TW4-3	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-3	Nitrogen	16.00 days	28 days	OK
TW4-3	Chloride	14.00 days	28 days	OK
TW4-4	Chloroform	11.00 days	14 days	OK
TW4-4	Chloromethane	14.00 days	14 days	OK
TW4-4	Methylene chloride	14.00 days	14 days	OK
TW4-4	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-4	Nitrogen	17.00 days	28 days	OK
TW4-4	Chloride	15.00 days	28 days	OK
TW4-5	Chloroform	9.00 days	14 days	OK
TW4-5	Chloromethane	9.00 days	14 days	OK
TW4-5	Methylene chloride	9.00 days	14 days	OK
TW4-5	Carbon Tetrachloride	9.00 days	14 days	OK
TW4-5	Nitrogen	15.00 days	28 days	OK
TW4-5	Chloride	13.00 days	28 days	OK
TW4-6	Chloroform	9.00 days	14 days	OK
TW4-6	Chloromethane	14.00 days	14 days	OK
TW4-6	Methylene chloride	14.00 days	14 days	OK
TW4-6	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-6	Nitrogen	14.00 days	28 days	OK
TW4-6	Chloride	12.00 days	28 days	OK
TW4-7	Chloroform	9.00 days	14 days	OK
TW4-7	Chloromethane	12.00 days	14 days	OK
TW4-7	Methylene chloride	12.00 days	14 days	OK
TW4-7	Carbon Tetrachloride	12.00 days	14 days	OK
TW4-7	Nitrogen	15.00 days	28 days	OK



## I-2: Holding Time Evaluation

Location	Constituent	Holding Time	Allowed Holding Time	Holding Time Check
TW4-7	Chloride	13.00 days	28 days	OK
TW4-8	Chloroform	7.00 days	14 days	OK
TW4-8	Chloromethane	7.00 days	14 days	OK
TW4-8	Methylene chloride	7.00 days	14 days	OK
TW4-8	Carbon Tetrachloride	7.00 days	14 days	OK
TW4-8	Nitrogen	15.00 days	28 days	OK
TW4-8	Chloride	13.00 days	28 days	OK
TW4-9	Chloroform	7.00 days	14 days	OK
TW4-9	Chloromethane	7.00 days	14 days	OK
TW4-9	Methylene chloride	7.00 days	14 days	OK
TW4-9	Carbon Tetrachloride	7.00 days	14 days	OK
TW4-9	Nitrogen	15.00 days	28 days	OK
TW4-9	Chloride	13.00 days	28 days	OK
TW4-10	Chloroform	9.00 days	14 days	OK
TW4-10	Chloromethane	14.00 days	14 days	OK
TW4-10	Methylene chloride	14.00 days	14 days	OK
TW4-10	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-10	Nitrogen	14.00 days	28 days	OK
TW4-10	Chloride	12.00 days	28 days	OK
TW4-11	Chloroform	14.00 days	14 days	OK
TW4-11	Chloromethane	14.00 days	14 days	OK
TW4-11	Methylene chloride	14.00 days	14 days	OK
TW4-11	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-11	Nitrogen	14.00 days	28 days	OK
TW4-11	Chloride	12.00 days	28 days	OK
TW4-12	Chloroform	8.00 days	14 days	OK
TW4-12	Chloromethane	8.00 days	14 days	OK
TW4-12	Methylene chloride	8.00 days	14 days	OK
TW4-12	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-12	Nitrogen	16.00 days	28 days	OK
TW4-12	Chloride	14.00 days	28 days	OK
TW4-13	Chloroform	8.00 days	14 days	OK
TW4-13	Chloromethane	8.00 days	14 days	OK
TW4-13	Methylene chloride	8.00 days	14 days	OK
TW4-13	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-13	Nitrogen	16.00 days	28 days	OK
TW4-13	Chloride	14.00 days	28 days	OK
TW4-14	Chloroform	8.00 days	14 days	OK
TW4-14	Chloromethane	8.00 days	14 days	OK
TW4-14	Methylene chloride	8.00 days	14 days	OK
TW4-14	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-14	Nitrogen	16.00 days	28 days	OK
TW4-14	Chloride	14.00 days	28 days	OK
TW4-15	Chloroform	11.00 days	14 days	OK
TW4-15	Chloromethane	14.00 days	14 days	OK
TW4-15	Methylene chloride	14.00 days	14 days	OK
TW4-15	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-15	Nitrogen	17.00 days	28 days	OK

## I-2: Holding Time Evaluation

Location	Constituent	Holding Time	Allowed Holding Time	Holding Time Check
TW4-15	Chloride	15.00 days	28 days	OK
TW4-16	Chloroform	9.00 days	14 days	OK
TW4-16	Chloromethane	9.00 days	14 days	OK
TW4-16	Methylene chloride	9.00 days	14 days	OK
TW4-16	Carbon Tetrachloride	9.00 days	14 days	OK
TW4-16	Nitrogen	13.00 days	28 days	OK
TW4-16	Chloride	14.00 days	28 days	OK
TW4-17	Chloroform	11.00 days	14 days	OK
TW4-17	Chloromethane	11.00 days	14 days	OK
TW4-17	Methylene chloride	11.00 days	14 days	OK
TW4-17	Carbon Tetrachloride	11.00 days	14 days	OK
TW4-17	Nitrogen	17.00 days	28 days	OK
TW4-17	Chloride	15.00 days	28 days	OK
TW4-18	Chloroform	9.00 days	14 days	OK
TW4-18	Chloromethane	9.00 days	14 days	OK
TW4-18	Methylene chloride	9.00 days	14 days	OK
TW4-18	Carbon Tetrachloride	9.00 days	14 days	OK
TW4-18	Nitrogen	14.00 days	28 days	OK
TW4-18	Chloride	12.00 days	28 days	OK
TW4-19	Chloroform	11.00 days	14 days	OK
TW4-19	Chloromethane	14.00 days	14 days	OK
TW4-19	Methylene chloride	14.00 days	14 days	OK
TW4-19	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-19	Nitrogen	17.00 days	28 days	OK
TW4-19	Chloride	15.00 days	28 days	OK
TW4-20	Chloroform	11.00 days	14 days	OK
TW4-20	Chloromethane	14.00 days	14 days	OK
TW4-20	Methylene chloride	14.00 days	14 days	OK
TW4-20	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-20	Nitrogen	17.00 days	28 days	OK
TW4-20	Chloride	15.00 days	28 days	OK
TW4-21	Chloroform	14.00 days	14 days	OK
TW4-21	Chloromethane	14.00 days	14 days	OK
TW4-21	Methylene chloride	14.00 days	14 days	OK
TW4-21	Carbon Tetrachloride	14.00 days	14 days	OK
TW4-21	Nitrogen	14.00 days	28 days	OK
TW4-21	Chloride	12.00 days	28 days	OK
TW4-22	Chloroform	8.00 days	14 days	OK
TW4-22	Chloromethane	8.00 days	14 days	OK
TW4-22	Methylene chloride	8.00 days	14 days	OK
TW4-22	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-22	Nitrogen	13.00 days	28 days	OK
TW4-22	Chloride	14.00 days	28 days	OK
TW4-23	Chloroform	8.00 days	14 days	OK
TW4-23	Chloromethane	8.00 days	14 days	OK
TW4-23	Methylene chloride	8.00 days	14 days	OK
TW4-23	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-23	Nitrogen	16.00 days	28 days	OK



## I-2: Holding Time Evaluation

Location	Constituent	Holding Time	Allowed Holding Time	Holding Time Check
TW4-23	Chloride	14.00 days	28 days	OK
TW4-24	Chloroform	9.00 days	14 days	OK
TW4-24	Chloromethane	9.00 days	14 days	OK
TW4-24	Methylene chloride	9.00 days	14 days	OK
TW4-24	Carbon Tetrachloride	9.00 days	14 days	OK
TW4-24	Nitrogen	13.00 days	28 days	OK
TW4-24	Chloride	14.00 days	28 days	OK
TW4-25	Chloroform	8.00 days	14 days	OK
TW4-25	Chloromethane	8.00 days	14 days	OK
TW4-25	Methylene chloride	8.00 days	14 days	OK
TW4-25	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-25	Nitrogen	16.00 days	28 days	OK
TW4-25	Chloride	14.00 days	28 days	OK
TW4-26	Chloroform	9.00 days	14 days	OK
TW4-26	Chloromethane	9.00 days	14 days	OK
TW4-26	Methylene chloride	9.00 days	14 days	OK
TW4-26	Carbon Tetrachloride	9.00 days	14 days	OK
TW4-26	Nitrogen	15.00 days	28 days	OK
TW4-26	Chloride	13.00 days	28 days	OK
TW4-60	Chloroform	10.00 days	14 days	OK
TW4-60	Chloromethane	10.00 days	14 days	OK
TW4-60	Methylene chloride	10.00 days	14 days	OK
TW4-60	Carbon Tetrachloride	10.00 days	14 days	OK
TW4-60	Nitrogen	16.00 days	28 days	OK
TW4-60	Chloride	14.00 days	28 days	OK
TW4-65	Chloroform	8.00 days	14 days	OK
TW4-65	Chloromethane	8.00 days	14 days	OK
TW4-65	Methylene chloride	8.00 days	14 days	OK
TW4-65	Carbon Tetrachloride	8.00 days	14 days	OK
TW4-65	Nitrogen	14.00 days	28 days	OK
TW4-65	Chloride	19.00 days	28 days	OK
TW4-70	Chloroform	11.00 days	14 days	OK
TW4-70	Chloromethane	11.00 days	14 days	OK
TW4-70	Methylene chloride	11.00 days	14 days	OK
TW4-70	Carbon Tetrachloride	11.00 days	14 days	OK
TW4-70	Nitrogen	17.00 days	28 days	OK
TW4-70	Chloride	15.00 days	28 days	OK



Table I-3 Receipt Temperature Check

Sample Batch	Wells in Batch	Temperature
C10080518	TW4-3, TW4-3R, TW4-5, TW4-5R, TW4-6, TW4-6R, TW4-8, TW4-8R, TW4-9, TW4-9R, TW4-10, TW4-10R, TW4-11, TW4-11R, TW4-12, TW4-12R, TW4-13, TW4-13R, TW4-14, TW4-14R, TW4-18, TW4-18R, TW4-19, TW4-19R, TW4-21, TW4-21R, TW4-23, TW4-23R, TW4-25, TW4-25R, TW4-26, TW4-26R	2 °C
C10080785	MW-4, TW4-2, TW4-2R, TW4-4, TW4-7, TW4-7R, TW4-15, TW4-17, TW4-19, TW4-20, TW4-60, TW4-70, Trip Blank	2 °C
C10081012	TW4-1, TW4-1R, TW4-16, TW4-16R, TW4-22, TW4-22R, TW4-24, TW4-24R	4 °C

I-4 Analytical Method Check

<b>Parameter</b>	<b>Method</b>	<b>Method Used by Lab</b>
Carbon Tetrachloride	SW8260B	SW8260B
Chloride	A4500-Cl B	A4500-Cl B
Chloroform	SW8260B	SW8260B
Chloromethane	SW8260B	SW8260B
Methylene chloride	SW8260B	SW8260B
Nitrogen	E353.2	E353.2

All parameters were analyzed using the reporting method specified in the QAP

I-5 Reporting Limit Evaluation

Location	Constituent	Lab Reporting Limit	Rqd' Reporting Limit	Qualifier	Qualifier Check
MW-4	Chloroform	100 ug/L	1.0 ug/L	D	OK
MW-4	Chloromethane	1 ug/L	1.0 ug/L	U	OK
MW-4	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
MW-4	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
MW-4	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
MW-4	Chloride	1 mg/L	1 mg/L		OK
TW4-1	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-1	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-1	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-1	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-1	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-1	Chloride	1 mg/L	1 mg/L		OK
TW4-2	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-2	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-2	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-2	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-2	Chloride	1 mg/L	1 mg/L		OK
TW4-3	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-3	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-3	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-3	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-3	Nitrogen	0.2 mg/L	0.1 mg/L	D	OK
TW4-3	Chloride	1 mg/L	1 mg/L		OK
TW4-4	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-4	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-4	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-4	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-4	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-4	Chloride	1 mg/L	1 mg/L		OK
TW4-5	Chloroform	1 ug/L	1.0 ug/L		OK
TW4-5	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-5	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-5	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-5	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-5	Chloride	1 mg/L	1 mg/L		OK
TW4-6	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-6	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-6	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-6	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-6	Nitrogen	0.2 mg/L	0.1 mg/L	D	OK
TW4-6	Chloride	1 mg/L	1 mg/L		OK
TW4-7	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-7	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-7	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-7	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-7	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-7	Chloride	1 mg/L	1 mg/L		OK



I-5 Reporting Limit Evaluation

Location	Constituent	Lab Reporting Limit	Rqd' Reporting Limit	Qualifier	Qualifier Check
TW4-8	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-8	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-8	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-8	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-8	Nitrogen	0.1 mg/L	0.1 mg/L	U	OK
TW4-8	Chloride	1 mg/L	1 mg/L		OK
TW4-9	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-9	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-9	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-9	Nitrogen	0.2 mg/L	0.1 mg/L	D	OK
TW4-9	Chloride	1 mg/L	1 mg/L		OK
TW4-10	Chloroform	20 ug/L	1.0 ug/L	D	OK
TW4-10	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-10	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-10	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-10	Nitrogen	0.1 mg/L	0.1 mg/L		OK
TW4-10	Chloride	1 mg/L	1 mg/L		OK
TW4-11	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-11	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-11	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-11	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-11	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-11	Chloride	1 mg/L	1 mg/L		OK
TW4-12	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-12	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-12	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-12	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-12	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-12	Chloride	1 mg/L	1 mg/L		OK
TW4-13	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-13	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-13	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-13	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-13	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-13	Chloride	1 mg/L	1 mg/L		OK
TW4-14	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-14	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-14	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-14	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-14	Nitrogen	0.2 mg/L	0.1 mg/L	D	OK
TW4-14	Chloride	1 mg/L	1 mg/L		OK
TW4-15	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-15	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-15	Methylene chloride	1 ug/L	1.0 ug/L		OK
TW4-15	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-15	Nitrogen	0.1 mg/L	0.1 mg/L		OK
TW4-15	Chloride	1 mg/L	1 mg/L		OK
TW4-16	Chloroform	1 ug/L	1.0 ug/L		OK

I-5 Reporting Limit Evaluation

Location	Constituent	Lab Reporting Limit	Rqd' Reporting Limit	Qualifier	Qualifier Check
TW4-16	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-16	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-16	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-16	Nitrogen	0.2 mg/L	0.1 mg/L	D	OK
TW4-16	Chloride	1 mg/L	1 mg/L		OK
TW4-17	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-17	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-17	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-17	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-17	Nitrogen	0.1 mg/L	0.1 mg/L	U	OK
TW4-17	Chloride	1 mg/L	1 mg/L		OK
TW4-18	Chloroform	1 ug/L	1.0 ug/L		OK
TW4-18	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-18	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-18	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-18	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-18	Chloride	1 mg/L	1 mg/L		OK
TW4-19	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-19	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-19	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-19	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-19	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-19	Chloride	1 mg/L	1 mg/L		OK
TW4-20	Chloroform	1000 ug/L	1.0 ug/L	D	OK
TW4-20	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-20	Methylene chloride	1 ug/L	1.0 ug/L		OK
TW4-20	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-20	Nitrogen	0.5 mg/L	0.1 mg/L	D	OK
TW4-20	Chloride	1 mg/L	1 mg/L		OK
TW4-21	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-21	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-21	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-21	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-21	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-21	Chloride	1 mg/L	1 mg/L		OK
TW4-22	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-22	Chloromethane	1 ug/L	1.0 ug/L		OK
TW4-22	Methylene chloride	1 ug/L	1.0 ug/L		OK
TW4-22	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-22	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-22	Chloride	1 mg/L	1 mg/L		OK
TW4-23	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-23	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-23	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-23	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-23	Nitrogen	0.1 mg/L	0.1 mg/L	U	OK
TW4-23	Chloride	1 mg/L	1 mg/L		OK
TW4-24	Chloroform	1 ug/L	1.0 ug/L		OK



I-5 Reporting Limit Evaluation

Location	Constituent	Lab Reporting Limit	Rqd' Reporting Limit	Qualifier	Qualifier Check
TW4-24	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-24	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-24	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-24	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-24	Chloride	1 mg/L	1 mg/L		OK
TW4-25	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-25	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-25	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-25	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-25	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-25	Chloride	1 mg/L	1 mg/L		OK
TW4-26	Chloroform	1 ug/L	1.0 ug/L		OK
TW4-26	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-26	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-26	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-26	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-26	Chloride	1 mg/L	1 mg/L		OK
TW4-60	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-60	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-60	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-60	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-60	Nitrogen	0.1 mg/L	0.1 mg/L	U	OK
TW4-60	Chloride	1 mg/L	1 mg/L	U	OK
TW4-65	Chloroform	100 ug/L	1.0 ug/L	D	OK
TW4-65	Chloromethane	1 ug/L	1.0 ug/L		OK
TW4-65	Methylene chloride	1 ug/L	1.0 ug/L		OK
TW4-65	Carbon Tetrachloride	1 ug/L	1.0 ug/L		OK
TW4-65	Nitrogen	1 mg/L	0.1 mg/L	D	OK
TW4-65	Chloride	1 mg/L	1 mg/L		OK
TW4-70	Chloroform	1 ug/L	1.0 ug/L	U	OK
TW4-70	Chloromethane	1 ug/L	1.0 ug/L	U	OK
TW4-70	Methylene chloride	1 ug/L	1.0 ug/L	U	OK
TW4-70	Carbon Tetrachloride	1 ug/L	1.0 ug/L	U	OK
TW4-70	Nitrogen	0.1 mg/L	0.1 mg/L	U	OK
TW4-70	Chloride	1 mg/L	1 mg/L		OK



## I-6 Trip Blank Evaluation

<b>Lab Report</b>	<b>Constituent</b>	<b>Result</b>
C10080518	Carbon tetrachloride	ND ug/L
	Chloroform	ND ug/L
	Chloromethane	ND ug/L
	Methylene chloride	ND ug/L
C10080785	Carbon tetrachloride	ND ug/L
	Chloroform	ND ug/L
	Chloromethane	ND ug/L
	Methylene chloride	ND ug/L
C10081012	Carbon tetrachloride	ND ug/L
	Chloroform	ND ug/L
	Chloromethane	ND ug/L
	Methylene chloride	ND ug/L

I-7 QA/QC Evaluation for Sample Duplicates

Constituent	TW4-21	TW4-65	%RPD
Carbon Tetrachloride	9.2	12	26
Chloride	278	269	3
Chloroform	390	650	50
Chloromethane	0	0	0
Methylene Chloride	0	0	0
Nitrate	14	15	7

Constituent	TW4-17	TW4-70	%RPD
Carbon Tetrachloride	0	0	0
Chloride	28	26	7
Chloroform	0	0	0
Chloromethane	0	0	0
Methylene Chloride	0	0	0
Nitrate	0	0	0

I-8 QC Control Limits for Analysis and Blanks

**Matrix Spike % Recovery Comparison**

Lab Report	Lab Sample ID	Well	Analyte	MS %REC	MSD %REC	REC Range	RPD
C10080518	C10080518-029	TW4-21	Methylene Chloride	147	140	70 - 130	4.5
C10080518	C10080785-009	TW4-20	Carbon Tetrachloride	140	138	70 - 130	2
C10080518	C10080785-009	TW4-20	Chloroform	141	136	70 - 130	1.9
C10080518	C10080785-009	TW4-20	Chloromethane	156	142	70 - 130	9.4
C10080785	C10080785-002	TW4-19	Methylene Chloride	132	120	70 - 130	9.8
C10080785	C10080785-002	TW4-19	Chloroform	80	131	70 - 130	17
C10080785	C10080785-015	TW4-2R	Carbon Tetrachloride	134	143	70 - 130	6.4
C10080785	C10080785-015	TW4-2R	Chloromethane	135	144	70 - 130	6.3
C10080785	C10080785-015	TW4-2R	Chloroform	129	135	70 - 130	6.1
C10080785	C10080785-015	TW4-2R	Methylene Chloride	130	137	70 - 130	4.8

NA = MS samples were not Denison samples.

**Surrogate % Recovery**

Lab Report	Well/Sample	Analyte	Surrogate %REC	Lab Specified REC Range	QAP Required Range
C10080518	TW4-5	p-Bromofluorobenzene	122	80 - 120	None
C10080518	TW4-18	p-Bromofluorobenzene	122	80 - 120	None
C10080518	TW4-26R	p-Bromofluorobenzene	122	80 - 120	None
C10080785	TW4-20	Dibromofluoromethane	67	70 - 130	None
C10081012	TW4-22	p-Bromofluorobenzene	132	80 - 120	None
C10081012	TW4-22	Dibromofluoromethane	122	70 - 130	None
C10081012	TW4-24	p-Bromofluorobenzene	131	70 - 130	None
C10081012	TW4-22	p-Bromofluorobenzene	123	80 - 120	None
C10081012	Method Blank	p-Bromofluorobenzene	131	80 - 120	None

**LCS % Recovery**

Lab Report	Analyte	Surrogate %REC	Lab Specified REC Range	QAP Required Range
C10080785	Chloromethane	136	70 - 130	None



I-9 Rinsate Evaluation

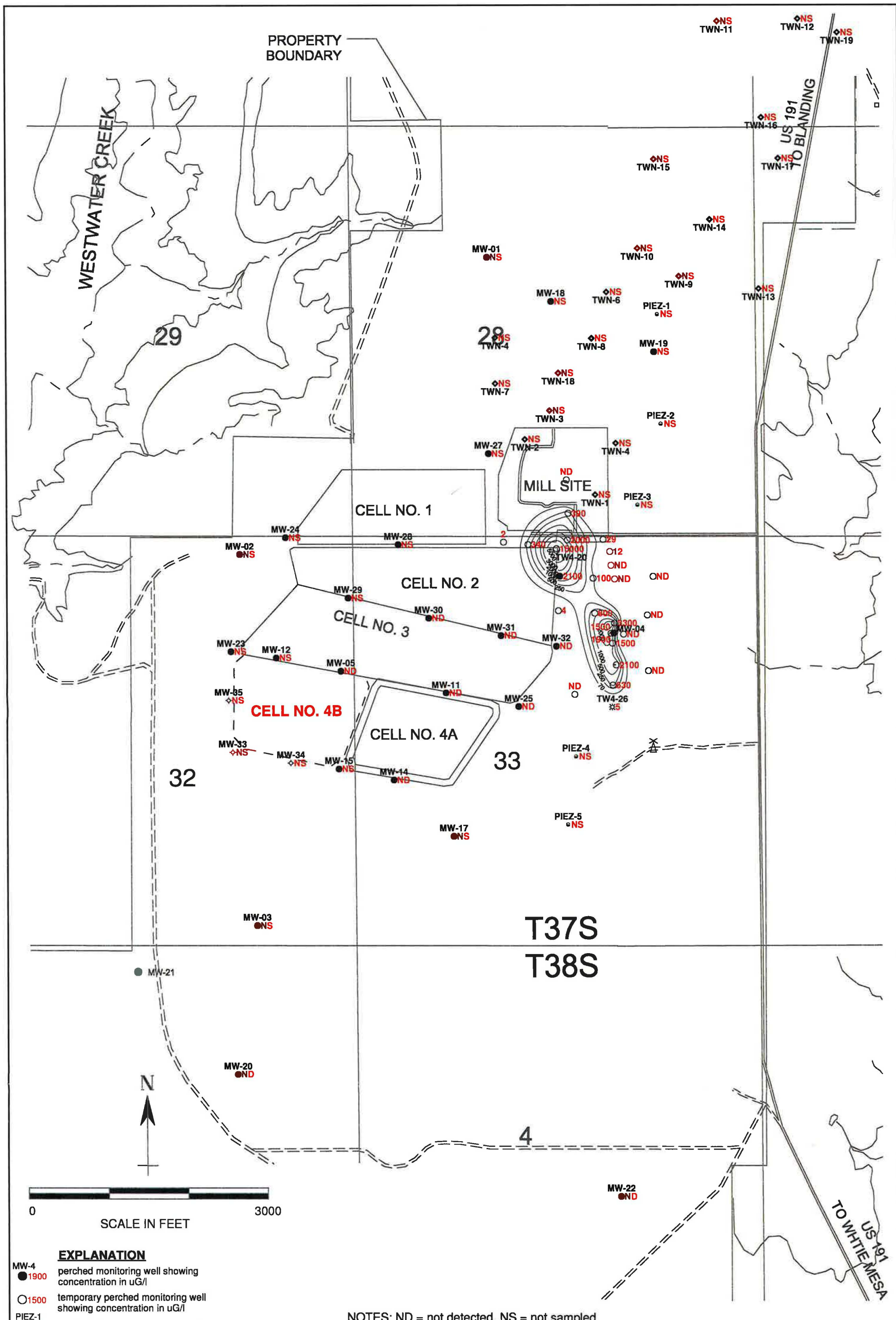
Rinsate Sample	Parameter	Rinsate Result		Sample Date	Previous Well Sampled	Result for Previous Well Sampled		Qualifier	Rinsate Reporting Limit
		0.1	mg/L			3.1	mg/L		
TW4-12R	Nitrogen	0.1	mg/L		TW4-3	3.1	mg/L	D	0.1 mg/L
TW4-13R	Nitrogen	0.1	mg/L		TW4-12	9	mg/L	D	0.1 mg/L
TW4-8R	Nitrogen	0.1	mg/L		TW4-25	14	mg/L	D	0.1 mg/L
TW4-6R	Chloroform	6.2	ug/L		TW4-10	100	mg/L	D	1.0 ug/L
TW4-11R	Chloroform	2.1	ug/L		TW4-6	630	ug/L	D	1.0 ug/L
TW4-7R	Chloroform	1.1	ug/L		TW4-11	800	ug/L	D	1.0 ug/L
TW4-2R	Chloroform	1.7	ug/L		TW4-7	1500	ug/L	D	1.0 ug/L
TW4-24R	Nitrogen	0.1	mg/L		NA	NA	mg/L		0.1 mg/L
TW4-22R	Nitrogen	0.1	mg/L		TW4-16	4.6	mg/L	D	0.1 mg/L
TW4-1R	Nitrogen	0.1	mg/L		TW4-22	15	mg/L	D	0.1 mg/L
TW4-1R	Chloroform	8.2	ug/L		TW4-22	340	ug/L	D	1.0 ug/L

Previous well sampled is the well that the pump was used to purge prior to the rinsate sample.

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


Tab J

Kriged Current Quarter Chloroform Isoconcentration Map



- EXPLANATION**
- MW-4 ● 1900 perched monitoring well showing concentration in uG/l
  - 1500 temporary perched monitoring well showing concentration in uG/l
  - PIEZ-1 ● NS perched piezometer (not sampled)
  - TWN-1 ◇ NS temporary perched nitrate monitoring well (not sampled)
  - TW4-26 ✖ 5 temporary perched monitoring well installed May, 2010 showing concentration in uG/l
  - MW-34 ◇ NS perched monitoring well installed August/September, 2010 (not sampled)

NOTES: ND = not detected, NS = not sampled



**HYDRO  
GEO  
CHEM, INC.**

<b>KRIGED 3rd QUARTER, 2010 CHLOROFORM (uG/L) WHITE MESA SITE</b>			
APPROVED SJS	DATE	REFERENCE H:/718000/nov10/chl0810.srf	FIGURE



Tab K

Analyte Concentrations Over Time

MW-4	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
28-Sep-99	6200					
28-Sep-99	5820					
28-Sep-99	6020					
15-Mar-00	5520					
15-Mar-00	5430					
2-Sep-00	5420				9.63	
30-Nov-00	6470				9.37	
29-Mar-01	4360				8.77	
22-Jun-01	6300				9.02	
20-Sep-01	5300				9.45	
8-Nov-01	5200				8	
26-Mar-02	4700				8.19	
22-May-02	4300				8.21	
12-Sep-02	6000				8.45	
24-Nov-02	2500				8.1	
28-Mar-03	2000				8.3	
30-Apr-03	3300				NA	
30-May-03	3400				8.2	
23-Jun-03	4300				8.2	
30-Jul-03	3600				8.1	
29-Aug-03	4100				8.4	
12-Sep-03	3500				8.5	
15-Oct-03	3800				8.1	
8-Nov-03	3800				8	
29-Mar-04	NA				NA	
22-Jun-04	NA				NA	
17-Sep-04	3300				6.71	
17-Nov-04	4300				7.5	
16-Mar-05	2900				6.3	
25-May-05	3170	NA	NA	NA	7.1	NA
31-Aug-05	3500	<10	<10	<10	7.0	NA
1-Dec-05	3000	<50	<50	<50	7.0	NA
9-Mar-06	3100	<50	<50	50	6	49
14-Jun-06	3000	<50	<50	50	6	49
20-Jul-06	2820	<50	<50	<50	1.2	48
9-Nov-06	2830	2.1	1.4	<1	6.4	50
28-Feb-07	2300	1.6	<1	<1	6.3	47
27-Jun-07	2000	1.8	<1	<1	7	45
15-Aug-07	2600	1.9	<1	<1	6.2	47
10-Oct-07	2300	1.7	<1	<1	6.2	45
26-Mar-08	2400	1.7	<1	<1	5.8	42
25-Jun-08	2500	1.6	<1	<1	6.09	42
10-Sep-08	1800	1.8	<1	<1	6.36	35
15-Oct-08	2100	1.7	<1	<1	5.86	45
4-Mar-09	2200	1.5	<1	<1	5.7	37

MW-4	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
23-Jun-09	1800	1.3	<1	<1	5.2	34
14-Sep-09	2000	1.4	<1	<1	5.3	43
14-Dec-09	1800	1.6	ND	ND	5.8	44
17-Feb-10	1600	1.2	ND	ND	4	45
14-Jun-10	2100	1.2	ND	ND	5.1	41
16-Aug-10	1900	1.5	ND	ND	4.8	38



TW4-1	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
28-Jun-99	1700				7.2	
10-Nov-99	5.8					
15-Mar-00	1100					
10-Apr-00	1490					
6-Jun-00	1530					
2-Sep-00	2320				5.58	
30-Nov-00	3440				7.79	
29-Mar-01	2340				7.15	
22-Jun-01	6000				8.81	
20-Sep-01					12.8	
8-Nov-01	3200				12.4	
26-Mar-02	3200				13.1	
22-May-02	2800				12.7	
12-Sep-02	3300				12.8	
24-Nov-02	3500				13.6	
28-Mar-03	3000				12.4	
23-Jun-03	3600				12.5	
12-Sep-03	2700				12.5	
8-Nov-03	3400				11.8	
29-Mar-04	3200				11	
22-Jun-04	3100				8.78	
17-Sep-04	2800				10.8	
17-Nov-04	3000				11.1	
16-Mar-05	2700				9.1	
25-May-05	3080	NA	NA	NA	10.6	NA
31-Aug-05	2900	<10	<10	<10	9.8	NA
1-Dec-05	2400	<50	<50	<50	9.7	NA
9-Mar-06	2700	<50	<50	<50	9.4	49
14-Jun-06	2200	<50	<50	<50	9.8	48
20-Jul-06	2840	<50	<50	<50	9.7	51
8-Nov-06	2260	1.4	<1	<1	9.4	47
28-Feb-07	1900	1.2	<1	<1	8.9	47
27-Jun-07	1900	1.4	<1	<1	9	45
15-Aug-07	2300	1.3	<1	<1	8.4	43
10-Oct-07	2000	1.3	<1	<1	7.8	43
26-Mar-08	2000	1.3	<1	<1	7.6	39
25-Jun-08	1900	1.1	<1	<1	8.68	39
10-Sep-08	1700	1.3	<1	<1	8.15	35
15-Oct-08	1700	1.3	<1	<1	9.3	41

<b>TW4-1</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
11-Mar-09	1700	1.1	<1	<1	7.5	37
24-Jun-09	1500	1	<1	<1	6.9	37
15-Sep-09	1700	<1	<1	<1	7.3	36
29-Dec-09	1400	<1	<1	<1	6.8	41
3-Mar-10	1300	<1	<1	<1	7.1	35
15-Jun-10	1600	1.2	<1	<1	6.8	40
24-Aug-10	1500	<1	<1	<1	6.8	35

<b>TW4-2</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
10-Nov-99	2510					
2-Sep-00	5220					
28-Nov-00	4220				10.7	
29-Mar-01	3890				10.2	
22-Jun-01	5500				9.67	
20-Sep-01	4900				11.4	
8-Nov-01	5300				10.1	
26-Mar-02	5100				9.98	
23-May-02	4700				9.78	
12-Sep-02	6000				9.44	
24-Nov-02	5400				10.4	
28-Mar-03	4700				9.5	
23-Jun-03	5100				9.6	
12-Sep-03	3200				8.6	
8-Nov-03	4700				9.7	
29-Mar-04	4200				9.14	
22-Jun-04	4300				8.22	
17-Sep-04	4100				8.4	
17-Nov-04	4500				8.6	
16-Mar-05	3700				7.7	
25-May-05	3750				8.6	
31-Aug-05	3900	<10	<10	<10	8	NA
1-Dec-05	3500	<50	<50	<50	7.8	NA
9-Mar-06	3800	<50	<50	<50	7.5	56
14-Jun-06	3200	<50	<50	<50	7.1	56
20-Jul-06	4120	<50	<50	<50	7.4	54
8-Nov-06	3420	2.3	<1	<1	7.6	55
28-Feb-07	2900	1.8	<1	<1	7.3	54
27-Jun-07	3000	2.5	<1	<1	7.8	50
15-Aug-07	340	2.2	<1	<1	7.3	49
10-Oct-07	3200	2.1	<1	<1	6.9	51
26-Mar-08	3300	2.3	<1	<1	6.9	48
25-Jun-08	3100	2.2	<1	<1	7.44	46
10-Sep-08	2800	2.4	<1	<1	7.1	42
15-Oct-08	3200	2.4	<2	<2	7.99	47
11-Mar-09	3100	2.2	<1	<1	6.5	46
24-Jun-09	2800	2	<1	<1	6.4	44
15-Sep-09	3000	2	<1	<1	6.6	43
29-Dec-09	1600	2	<1	<1	6.4	46



TW4-2	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
3-Mar-10	2600	2	<1	<1	6.8	42
15-Jun-10	3300	2.6	<1	<1	6.7	43
16-Aug-10	3300	2.5	<1	<1	6.6	43

TW4-3	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
28-Jun-99	3500				7.6	
29-Nov-99	702					
15-Mar-00	834					
2-Sep-00	836				1.56	
29-Nov-00	836				1.97	
27-Mar-01	347				1.85	
21-Jun-01	390				2.61	
20-Sep-01	300				3.06	
7-Nov-01	170				3.6	
26-Mar-02	11				3.87	
21-May-02	204				4.34	
12-Sep-02	203				4.32	
24-Nov-02	102				4.9	
28-Mar-03	0				4.6	
23-Jun-03	0				4.8	
12-Sep-03	0				4.3	
8-Nov-03	0				4.8	
29-Mar-04	0				4.48	
22-Jun-04	0				3.68	
17-Sep-04	0				3.88	
17-Nov-04	0				4.1	
16-Mar-05	0				3.5	
25-May-05	<1	NA	NA	NA	3.7	NA
31-Aug-05	<1	<1	6.4	<1	3.5	NA
1-Dec-05	<1	<1	2.3	<1	3.3	NA
9-Mar-06	<1	<1	2.2	<1	3.3	26
14-Jun-06	<1	<1	<1	<1	3.2	26
20-Jul-06	<1	<1	1.6	<1	2.9	26
8-Nov-06	<1	<1	<1	<1	1.5	23
28-Feb-07	<1	<1	<1	<1	3.1	22
27-Jun-07	<1	<1	<1	<1	3.3	23
15-Aug-07	<1	<1	<1	<1	3.1	24
10-Oct-07	<1	<1	<1	<1	2.8	27
26-Mar-08	<1	<1	<1	<1	2.8	21
25-Jun-08	<1	<1	<1	<1	2.85	19
10-Sep-08	<1	<1	<1	<1	2.66	19
15-Oct-08	<1	<1	<1	<1	2.63	22
4-Mar-09	<1	<1	<1	<1	2.5	21
24-Jun-09	<1	<1	<1	<1	2.9	20

<b>TW4-3</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
15-Sep-09	<1	<1	<1	<1	2.8	21
16-Dec-09	<1	<1	<1	<1	2.5	22
23-Feb-10	<1	<1	<1	<1	2.8	23
8-Jun-10	<1	<1	<1	<1	3	24
10-Aug-10	<1	<1	<1	<1	3.1	22



TW4-4	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
6-Jun-00	0					
2-Sep-00	0					
28-Nov-00	3.9					
28-Mar-01	2260				1.02	
20-Jun-01	3100				14.5	
20-Sep-01	3200				14	
8-Nov-01	2900				14.8	
26-Mar-02	3400				15	
22-May-02	3200				13.2	
12-Sep-02	4000				13.4	
24-Nov-02	3800				12.6	
28-Mar-03	3300				13.4	
23-Jun-03	3600				12.8	
12-Sep-03	2900				12.3	
8-Nov-03	3500				12.3	
29-Mar-04	3200				12.2	
22-Jun-04	3500				12.1	
17-Sep-04	3100				11.1	
17-Nov-04	3600				10.8	
16-Mar-05	3100				11.6	
25-May-05	2400	NA	NA	NA	11.3	NA
31-Aug-05	3200	<10	<10	<10	9.9	NA
1-Dec-05	2800	<50	<50	<50	10.2	NA
9-Mar-06	2900	<50	<50	<50	9.5	51
14-Jun-06	2600	<50	<50	<50	8.6	48
20-Jul-06	2850	<50	<50	<50	9.7	50
8-Nov-06	2670	1.7	<1	<1	10.1	49
28-Feb-07	2200	1.5	<1	<1	9	49
27-Jun-07	2400	1.7	<1	<1	9.4	47
15-Aug-07	2700	1.5	<1	<1	9.5	45
10-Oct-07	2500	1.5	<1	<1	9.5	47
26-Mar-08	2800	1.6	<1	<1	9.2	43
25-Jun-08	2500	1.5	<1	<1	10.8	42
10-Sep-08	2200	1.4	<1	<1	8.83	39
15-Oct-08	2500	2	<2	<2	10.1	44
4-Mar-09	2200	1.2	<1	<1	10.2	37
24-Jun-09	1800	1.2	<1	<1	8.2	34
15-Sep-09	2000	1.1	<1	<1	8.4	39
29-Dec-09	950	1.1	<1	<1	7.6	41

TW4-4	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
17-Feb-10	1700	1	<1	<1	6.6	48
10-Jun-10	2000	1.2	<1	<1	7.6	35
16-Aug-10	2100	1.3	<1	<1	7.3	36

TW4-5	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
20-Dec-99	29.5					
15-Mar-00	49.0					
2-Sep-00	124					
29-Nov-00	255					
28-Mar-01	236					
20-Jun-01	240					
20-Sep-01	240					
7-Nov-01	260					
26-Mar-02	260					
22-May-02	300					
12-Sep-02	330					
24-Nov-02	260					
28-Mar-03	240					
23-Jun-03	290					
12-Sep-03	200					
8-Nov-03	240					
29-Mar-04	210					
22-Jun-04	200					
17-Sep-04	150					
17-Nov-04	180					
16-Mar-05	120					
25-May-05	113	NA	NA	NA	3.7	NA
31-Aug-05	82.0	<2.5	5.8	<2.5	6	NA
1-Dec-05	63.0	<2.5	2.5	<2.5	6	NA
9-Mar-06	66.0	<2.5	3.1	<2.5	6	52
14-Jun-06	51.0	<1	<2.5	<2.5	5.9	51
20-Jul-06	53.7	<1	<1	<1	6.7	54
8-Nov-06	47.1	<1	<1	<1	2.9	55
28-Feb-07	33.0	<1	<1	<1	7.8	57
27-Jun-07	26.0	<1	<1	<1	7	45
15-Aug-07	9.2	<1	<1	<1	7.7	38
10-Oct-07	9.4	<1	<1	<1	8.2	39
26-Mar-08	11.0	<1	<1	<1	7.4	36
25-Jun-08	9.3	<1	<1	<1	8.7	37
10-Sep-08	11.0	<1	<1	<1	7.91	34
15-Oct-08	10.0	<1	<1	<1	9.3	37
4-Mar-09	12.0	<1	<1	<1	7.9	34
24-Jun-09	13.0	<1	<1	<1	7.5	37
15-Sep-09	12.0	<1	<1	<1	8.3	48



<b>TW4-5</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
22-Dec-09	8.5	<1	<1	<1	7.5	41
25-Feb-10	13.0	<1	<1	<1	6.8	43
9-Jun-10	12.0	<1	<1	<1	7.1	28
11-Aug-10	12.0	<1	<1	<1	7	38

TW4-6	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
6-Jun-00	0					
2-Sep-00	0					
28-Nov-00	0				ND	
26-Mar-01	0				0.13	
20-Jun-01	0				ND	
20-Sep-01	4				ND	
7-Nov-01	1				ND	
26-Mar-02	0				ND	
21-May-02	0				ND	
12-Sep-02	0				ND	
24-Nov-02	0				ND	
28-Mar-03	0				0.1	
23-Jun-03	0				ND	
12-Sep-03	0				ND	
8-Nov-03	0				ND	
29-Mar-04	0				ND	
22-Jun-04	0				ND	
17-Sep-04	0				ND	
17-Nov-04	0				ND	
16-Mar-05	0				0.2	
25-May-05	2.5	NA	NA	NA	0.4	NA
31-Aug-05	10.0	<1	2.8	<1	0.8	NA
1-Dec-05	17.0	<1	1.3	<1	0.9	NA
9-Mar-06	31.0	<1	<1	<1	1.2	31
14-Jun-06	19.0	<1	<1	<1	1	30
20-Jul-06	11.0	<1	<1	<1	0.6	37
8-Nov-06	42.8	<1	<1	<1	1.4	65
28-Feb-07	46.0	<1	<1	<1	1.5	32
27-Jun-07	11.0	<1	<1	<1	0.6	38
15-Aug-07	18.0	<1	<1	<1	0.7	36
10-Oct-07	18.0	<1	<1	<1	0.8	38
26-Mar-08	52.0	<1	<1	<1	1.1	33
25-Jun-08	24.0	<1	<1	<1	0.9	35
10-Sep-08	39.0	<1	<1	<1	1.14	35
15-Oct-08	37.0	<1	<1	<1	1.01	33
11-Mar-09	81.0	<1	<1	<1	2.2	35
24-Jun-09	120	<1	<1	<1	2.7	37
15-Sep-09	280	<1	<1	<1	5.0	37
22-Dec-09	250	<1	<1	<1	6.1	41
25-Feb-10	1000	<1	<1	<1	1.6	45
10-Jun-10	590	<1	<1	<1	2.5	33
12-Aug-10	630	<1	<1	<1	3.9	31

TW4-6	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
6-Jun-00	0					
2-Sep-00	0					
28-Nov-00	0				ND	
26-Mar-01	0				0.13	
20-Jun-01	0				ND	
20-Sep-01	4				ND	
7-Nov-01	1				ND	
26-Mar-02	0				ND	
21-May-02	0				ND	
12-Sep-02	0				ND	
24-Nov-02	0				ND	
28-Mar-03	0				0.1	
23-Jun-03	0				ND	
12-Sep-03	0				ND	
8-Nov-03	0				ND	
29-Mar-04	0				ND	
22-Jun-04	0				ND	
17-Sep-04	0				ND	
17-Nov-04	0				ND	
16-Mar-05	0				0.2	
25-May-05	2.5	NA	NA	NA	0.4	NA
31-Aug-05	10.0	<1	2.8	<1	0.8	NA
1-Dec-05	17.0	<1	1.3	<1	0.9	NA
9-Mar-06	31.0	<1	<1	<1	1.2	31
14-Jun-06	19.0	<1	<1	<1	1	30
20-Jul-06	11.0	<1	<1	<1	0.6	37
8-Nov-06	42.8	<1	<1	<1	1.4	65
28-Feb-07	46.0	<1	<1	<1	1.5	32
27-Jun-07	11.0	<1	<1	<1	0.6	38
15-Aug-07	18.0	<1	<1	<1	0.7	36
10-Oct-07	18.0	<1	<1	<1	0.8	38
26-Mar-08	52.0	<1	<1	<1	1.1	33
25-Jun-08	24.0	<1	<1	<1	0.9	35
10-Sep-08	39.0	<1	<1	<1	1.14	35
15-Oct-08	37.0	<1	<1	<1	1.01	33
11-Mar-09	81.0	<1	<1	<1	2.2	35
24-Jun-09	120	<1	<1	<1	2.7	37
15-Sep-09	280	<1	<1	<1	5.0	37
22-Dec-09	250	<1	<1	<1	6.1	41
25-Feb-10	1000	<1	<1	<1	1.6	45
10-Jun-10	590	<1	<1	<1	2.5	33
12-Aug-10	630	<1	<1	<1	3.9	31



TW4-7	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
29-Nov-99	256					
15-Mar-00	616					
2-Sep-00	698					
29-Nov-00	684				1.99	
28-Mar-01	747				2.46	
20-Jun-01	1100				2.65	
20-Sep-01	1200				3.38	
8-Nov-01	1100				2.5	
26-Mar-02	1500				3.76	
23-May-02	1600				3.89	
12-Sep-02	1500				3.18	
24-Nov-02	2300				4.6	
28-Mar-03	1800				4.8	
23-Jun-03	5200				7.6	
12-Sep-03	3600				7.6	
8-Nov-03	4500				7.1	
29-Mar-04	2500				4.63	
22-Jun-04	2900				4.83	
17-Sep-04	3100				5.59	
17-Nov-04	3800				6	
16-Mar-05	3100				5.2	
25-May-05	2700	NA	NA	NA	5.4	NA
31-Aug-05	3100	<10	<10	<10	5.2	NA
1-Dec-05	2500	<50	<50	<50	5.3	NA
9-Mar-06	1900	<50	<50	<50	1	48
14-Jun-06	2200	<50	<50	<50	4.5	47
20-Jul-06	2140	<50	<50	<50	4.7	51
8-Nov-06	2160	1.5	<1	<1	4.6	49
28-Feb-07	1800	1.1	<1	<1	5	47
27-Jun-07	2600	1.5	<1	<1	5.1	45
14-Aug-07	2300	1.4	<1	<1	4.7	44
10-Oct-07	1900	1.2	<1	<1	4.7	45
26-Mar-08	2200	1.3	<1	<1	4.2	43
25-Jun-08	1800	1.3	<1	<1	4.8	43
10-Sep-08	1600	1.4	<1	<1	4.16	35
15-Oct-08	1900	<2	<2	<2	4.01	40
11-Mar-09	1800	1.2	<1	<1	3.7	35
24-Jun-09	1400	<1	<1	<1	3.8	37
15-Sep-09	1500	1.0	<1	<1	4.1	37

TW4-7	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
29-Dec-09	1300	<1	<1	<1	4.2	37
3-Mar-10	1200	<1	<1	<1	3.8	36
10-Jun-10	1100	<1	<1	<1	3.9	31
18-Aug-10	1500	1.1	<1	<1	3.9	36

TW4-8	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
29-Nov-99	0					
15-Mar-00	21.8					
2-Sep-00	102					
29-Nov-00	107				ND	
26-Mar-01	116				ND	
20-Jun-01	180				ND	
20-Sep-01	180				0.35	
7-Nov-01	180				ND	
26-Mar-02	190				0.62	
22-May-02	210				0.77	
12-Sep-02	300				ND	
24-Nov-02	450				ND	
28-Mar-03	320				0.8	
23-Jun-03	420				ND	
12-Sep-03	66.0				ND	
8-Nov-03	21.0				0.1	
29-Mar-04	24.0				0.65	
22-Jun-04	110				0.52	
17-Sep-04	120				ND	
17-Nov-04	120				ND	
16-Mar-05	10.0				ND	
25-May-05	<1	NA	NA	NA	0.2	NA
31-Aug-05	1.1	<1	1.7	<1	<0.1	NA
30-Nov-05	<1	<1	<1	<1	<0.1	NA
9-Mar-06	1.3	<1	2.1	<1	0.3	39
14-Jun-06	1.0	<1	1.8	<1	<0.1	37
20-Jul-06	<1	<1	<1	<1	0.1	39
8-Nov-06	<1	<1	<1	<1	<0.1	40
28-Feb-07	2.5	<1	<1	<1	0.7	39
27-Jun-07	2.5	<1	<1	<1	0.2	42
15-Aug-07	1.5	<1	<1	<1	<0.1	42
10-Oct-07	3.5	<1	<1	<1	0.5	43
26-Mar-08	<1	<1	<1	<1	0.1	46
25-Jun-08	<1	<1	<1	<1	<0.05	45
10-Sep-08	<1	<1	<1	<1	<0.05	39
15-Oct-08	<1	<1	<1	<1	<0.05	44
4-Mar-09	<1	<1	<1	<1	<0.1	42
24-Jun-09	<1	<1	<1	<1	<0.1	44
15-Sep-09	<1	<1	<1	<1	<1	44



<b>TW4-8</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
17-Dec-09	<1	<1	<1	<1	<0.1	51
24-Feb-10	<1	<1	<1	<1	<0.1	57
9-Jun-10	<1	<1	<1	<1	<0.1	42
11-Aug-10	<1	<1	<1	<1	<0.1	45

TW4-9	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
20-Dec-99	4.2					
15-Mar-00	1.9					
2-Sep-00	14.2					
29-Nov-00	39.4				ND	
27-Mar-01	43.6				ND	
20-Jun-01	59.0				0.15	
20-Sep-01	19.0				0.4	
7-Nov-01	49.0				0.1	
26-Mar-02	41.0				0.5	
22-May-02	38.0				0.65	
12-Sep-02	49.0				0.2	
24-Nov-02	51.0				0.6	
28-Mar-03	34.0				0.6	
23-Jun-03	33.0				0.8	
12-Sep-03	32.0				1.1	
8-Nov-03	46.0				1.1	
29-Mar-04	48.0				0.82	
22-Jun-04	48.0				0.75	
17-Sep-04	39.0				0.81	
17-Nov-04	26.0				1.2	
16-Mar-05	3.8				1.3	
25-May-05	1.2	NA	NA	NA	1.3	NA
31-Aug-05	<1	<1	2.9	<1	1.3	NA
1-Dec-05	<1	<1	<1	<1	1.3	NA
9-Mar-06	<1	<1	2.6	<1	1.5	38
14-Jun-06	<1	<1	2.7	<1	1.5	39
20-Jul-06	<1	<1	<1	<1	0.9	41
8-Nov-06	<1	<1	<1	<1	0.7	44
28-Feb-07	<1	<1	<1	<1	0.6	44
27-Jun-07	21	<1	<1	<1	1.3	42
15-Aug-07	9.5	<1	<1	<1	1.8	38
10-Oct-07	8.7	<1	<1	<1	2	40
26-Mar-08	1.3	<1	<1	<1	2.1	35
25-Jun-08	1.0	<1	<1	<1	2.3	35
10-Sep-08	<1	<1	<1	<1	2.79	28
15-Oct-08	<1	<1	<1	<1	1.99	58
4-Mar-09	<1	<1	<1	<1	2.5	30
24-Jun-09	<1	<1	<1	<1	2.3	30
15-Sep-09	<1	<1	<1	<1	2.5	30

<b>TW4-9</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
17-Dec-09	<1	<1	<1	<1	1.7	37
23-Feb-10	<1	<1	<1	<1	1.7	47
9-Jun-10	<1	<1	<1	<1	1.5	33
11-Aug-10	<1	<1	<1	<1	1.2	40



TW4-10	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
21-Jan-02	14					
26-Mar-02	16				0.14	
21-May-02	17				0.11	
12-Sep-02	6				ND	
24-Nov-02	14				ND	
28-Mar-03	29				0.2	
23-Jun-03	110				0.4	
12-Sep-03	74				0.4	
8-Nov-03	75				0.3	
29-Mar-04	22				0.1	
22-Jun-04	32				ND	
17-Sep-04	63				0.46	
17-Nov-04	120				0.4	
16-Mar-05	140				1.6	
25-May-05	62.4	NA	NA	NA	0.8	NA
31-Aug-05	110	<2.5	6.2	<2.5	1.1	NA
1-Dec-05	300	<2.5	<2.5	<2.5	3.3	NA
9-Mar-06	190	<5	<50	<50	2.4	50
14-Jun-06	300	<5	<50	<50	3.5	54
20-Jul-06	504	<5	<50	<50	6.8	61
8-Nov-06	452	<1	1.6	1	5.7	58
28-Feb-07	500	<1	<1	1	7.6	62
27-Jun-07	350	<1	<1	1	5.1	54
15-Aug-07	660	<1	<1	1	7.3	59
10-Oct-07	470	<1	<1	1	6.7	59
26-Mar-08	620	<1	<1	1	7.3	55
25-Jun-08	720	<1	<1	1	9.91	58
10-Sep-08	680	<1	<1	1	9.23	51
15-Oct-08	1200	<2	<2	2	10.5	61
11-Mar-09	1100	<1	<1	1	11.6	64
24-Jun-09	1200	<1	<1	1	9.8	62
15-Sep-09	910	<1	<1	1	8.1	51
22-Dec-09	300	<1	<1	<1	3.5	51
3-Mar-10	460	<1	<1	<1	5	49
10-Jun-10	220	<1	<1	<1	1.6	42
12-Aug-10	100	<1	<1	<1	0.8	38

TW4-11	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
21-Jan-02	4700					
26-Mar-02	4900				9.6	
22-May-02	5200				9.07	
12-Sep-02	6200				8.84	
24-Nov-02	5800				9.7	
28-Mar-03	5100				9.7	
23-Jun-03	5700				9.4	
12-Sep-03	4600				9.9	
8-Nov-03	5200				9.3	
29-Mar-04	5300				9.07	
22-Jun-04	5700				8.74	
17-Sep-04	4800				8.75	
17-Nov-04	5800				9.7	
16-Mar-05	4400				8.7	
25-May-05	3590	NA	NA	NA	10.3	NA
31-Aug-05	4400	<10	<10	<10	9.4	NA
1-Dec-05	4400	<100	<100	<100	9.4	NA
9-Mar-06	4400	<50	<50	<50	9.2	56
14-Jun-06	4300	<50	<50	<50	10	56
20-Jul-06	4080	<50	<50	<50	10	55
8-Nov-06	3660	1.7	2.7	1.3	10	55
28-Feb-07	3500	1.3	<1	1.6	10.1	54
27-Jun-07	3800	1.6	<1	1.1	10.6	53
15-Aug-07	4500	1.7	<1	1.1	10.2	53
10-Oct-07	4400	1.6	<1	1.2	9.8	53
26-Mar-08	340	<1	<1	<1	7.7	63
25-Jun-08	640	<1	<1	<1	7.28	46
10-Sep-08	900	<1	<1	<1	7.93	42
15-Oct-08	1000	<2	<2	<2	9.46	47
11-Mar-09	1100	<1	<1	<1	7.3	49
24-Jun-09	980	<1	<1	<1	6.8	44
15-Sep-09	1000	<1	<1	<1	7	49
29-Dec-09	860	<1	<1	<1	6.6	46
3-Mar-10	820	<1	<1	<1	6.8	42
10-Jun-10	820	<1	<1	<1	6.9	40
12-Aug-10	800	<1	<1	<1	6.7	43

<b>TW4-12</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
12-Sep-02	2				2.54	
24-Nov-02	0				2.2	
28-Mar-03	0				1.9	
23-Jun-03	0				1.8	
12-Sep-03	0				1.8	
9-Nov-03	0				1.6	
29-Mar-04	0				1.58	
22-Jun-04	0				1.4	
17-Sep-04	0				1.24	
17-Nov-04	0				1.5	
16-Mar-05	0				1.4	
25-May-05	<1	NA	NA	NA	1.6	NA
31-Aug-05	<1	<1	5.8	<1	1.5	NA
1-Dec-05	<1	<1	1.9	<2	1.4	NA
9-Mar-06	<1	<1	2.6	<1	1.3	19
14-Jun-06	<1	<1	1.4	<1	1.4	16
20-Jul-06	<1	<1	<1	<1	1.4	16
8-Nov-06	<1	<1	<1	<1	1.4	16
28-Feb-07	<1	<1	<1	<1	1.5	16
27-Jun-07	<1	<1	<1	<1	1.5	18
15-Aug-07	<1	<1	<1	<1	1.4	29
10-Oct-07	<1	<1	<1	<1	1.4	16
26-Mar-08	<1	<1	<1	<1	1.6	16
25-Jun-08	<1	<1	<1	<1	2.69	19
10-Sep-08	<1	<1	<1	<1	2.65	18
15-Oct-08	<1	<1	<1	<1	2.47	22
4-Mar-09	<1	<1	<1	<1	2.4	23
24-Jun-09	<1	<1	<1	<1	3.8	22
15-Sep-09	<1	<1	<1	<1	5.1	22
16-Dec-09	<1	<1	<1	<1	3.6	23
23-Feb-10	<1	<1	<1	<1	4	22
8-Jun-10	<1	<1	<1	<1	11	29
10-Aug-10	<1	<1	<1	<1	9	35



<b>TW4-13</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachlo ride (ug/l)</b>	<b>Chlorom ethane (ug/l)</b>	<b>Methylen e Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
12-Sep-02	ND				ND	
24-Nov-02	ND				ND	
28-Mar-03	ND				0.2	
23-Jun-03	ND				0.2	
12-Sep-03	ND				ND	
9-Nov-03	ND				0.9	
29-Mar-04	ND				0.12	
22-Jun-04	ND				0.17	
17-Sep-04	ND				4.43	
17-Nov-04	ND				4.7	
16-Mar-05	ND				4.2	
25-May-05	<1	NA	NA	NA	4.3	NA
31-Aug-05	<1	<1	3.1	<1	4.6	NA
1-Dec-05	<1	<1	<1	<1	4.3	NA
9-Mar-06	<1	<1	1.7	<1	4.2	67
14-Jun-06	<1	<1	1.4	<1	4.9	66
20-Jul-06	<1	<1	<1	<1	4.3	65
8-Nov-06	<1	<1	<1	<1	0.8	33
28-Feb-07	<1	<1	<1	<1	4	59
27-Jun-07	<1	<1	<1	<1	4.6	59
15-Aug-07	<1	<1	<1	<1	4.4	58
10-Oct-07	<1	<1	<1	<1	4.1	58
26-Mar-08	<1	<1	<1	<1	3.8	54
25-Jun-08	<1	<1	<1	<1	4.24	58
10-Sep-08	<1	<1	<1	<1	4.26	50
15-Oct-08	<1	<1	<1	<1	4.63	58
4-Mar-09	<1	<1	<1	<1	3.7	58
24-Jun-09	<1	<1	<1	<1	1.2	57
15-Sep-09	<1	<1	<1	<1	4.7	63
16-Dec-09	<1	<1	<1	<1	4.1	60
24-Feb-10	<1	<1	<1	<1	4.3	53
8-Jun-10	<1	<1	<1	<1	5.2	52
10-Aug-10	<1	<1	<1	<1	5.6	55

<b>TW4-14</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
8-Nov-06	<1	<1	<1	<1	2.4	37
28-Feb-07	<1	<1	<1	<1	2.3	38
27-Jun-07	<1	<1	<1	<1	1.4	38
15-Aug-07	<1	<1	<1	<1	1.1	36
10-Oct-07	<1	<1	<1	<1	0.8	36
26-Mar-08	<1	<1	<1	<1	0.04	57
25-Jun-08	<1	<1	<1	<1	1.56	35
10-Sep-08	<1	<1	<1	<1	1.34	34
15-Oct-08	<1	<1	<1	<1	0.76	40
4-Mar-09	<1	<1	<1	<1	1.6	35
24-Jun-09	<1	<1	<1	<1	1.4	36
15-Sep-09	<1	<1	<1	<1	1.5	38
16-Dec-09	<1	<1	<1	<1	1.4	34
3-Mar-10	<1	<1	<1	<1	2.5	33
8-Jun-10	<1	<1	<1	<1	2.9	49
10-Aug-10	<1	<1	<1	<1	2.8	35

TW4-15	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
12-Sep-02	3				ND	
24-Nov-02	0				ND	
28-Mar-03	0				0.1	
23-Jun-03	7800				14.5	
15-Aug-03	7400				16.8	
12-Sep-03	2500				2.7	
25-Sep-03	2600				2.5	
29-Oct-03	3100				3.1	
8-Nov-03	3000				2.8	
29-Mar-04	NA				NA	
22-Jun-04	NA				NA	
17-Sep-04	1400				0.53	
17-Nov-04	300				0.2	
16-Mar-05	310				0.3	
30-Mar-05	230				0.2	
25-May-05	442	NA	NA	NA	0.2	NA
31-Aug-05	960	<5	5.4	<5	0.2	NA
1-Dec-05	1000	<50	<50	<50	0.3	NA
9-Mar-06	1100	<50	<50	<50	0.2	52
14-Jun-06	830	<50	<50	<50	0.2	52
20-Jul-06	2170	<50	<50	<50	1.4	65
8-Nov-06	282	<1	<1	2.8	0.3	54
28-Feb-07	570	<1	<1	5.5	0.5	56
27-Jun-07	300	<1	<1	13	0.4	49
15-Aug-07	1400	<1	<1	36	1	57
10-Oct-07	2000	<1	<1	14	0.6	57
26-Mar-08	930	<1	<1	40	0.1	49
25-Jun-08	1300	<1	<1	53	0.56	57
10-Sep-08	630	<1	<1	24	0.24	44
15-Oct-08	1700	<1	<1	100	0.65	64
4-Mar-09	950	<1	<1	51	0.4	49
24-Jun-09	410	<1	<1	12	0.2	48
15-Sep-09	850	<1	<1	30	0.1	46
14-Dec-09	1100	<1	<1	40	2.3	60
17-Feb-10	780	<1	<1	19	0.2	57
9-Jun-10	1900	<1	<1	28	1.1	58
16-Aug-10	2200	<1	<1	21	0.6	49



<b>TW4-16</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
12-Sep-02	140				ND	
24-Nov-02	200				ND	
28-Mar-03	260				ND	
23-Jun-03	370				ND	
12-Sep-03	350				ND	
8-Nov-03	400				ND	
29-Mar-04	430				ND	
22-Jun-04	530				ND	
17-Sep-04	400				ND	
17-Nov-04	350				ND	
16-Mar-05	240				ND	
25-May-05	212	NA	NA	NA	<0.1	NA
31-Aug-05	85	<1	3.2	43	<0.1	NA
1-Dec-05	14	<2.5	2.6	5.9	1.4	NA
9-Mar-06	39.0	<1	1.1	21	3	60
14-Jun-06	13.0	<1	2.4	8.9	1.9	55
20-Jul-06	5.2	<1	<1	2.7	2.7	60
8-Nov-06	13.6	<1	<1	9.2	5.6	62
28-Feb-07	8.7	<1	<1	6.5	12.3	79
27-Jun-07	2.6	<1	<1	1.8	9.9	75
15-Aug-07	7.1	<1	<1	5.1	5.4	66
10-Oct-07	1.4	<1	<1	<1	4.4	69
26-Mar-08	11.0	<1	<1	26	ND	52
25-Jun-08	<1	<1	<1	<1	1.46	58
10-Sep-08	10	<1	<1	14	10.5	71
15-Oct-08	3.9	<1	<1	6.6	9.82	89
4-Mar-09	<1	<1	<1	<1	9.6	78
24-Jun-09	<1	<1	<1	<1	8.9	76
15-Sep-09	<1	<1	<1	<1	8.8	79
17-Dec-09	<1	<1	<1	<1	5.2	76
24-Feb-10	<1	<1	<1	<1	4.2	77
9-Jun-10	2.1	<1	<1	<1	4.7	64
24-Aug-10	4.3	<1	<1	<1	4.6	72

TW4-17	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
12-Sep-02	1.6				ND	
24-Nov-02	ND				ND	
28-Mar-03	ND				ND	
23-Jun-03	ND				ND	
12-Sep-03	ND				ND	
8-Nov-03	ND				ND	
29-Mar-04	ND				ND	
22-Jun-04	ND				ND	
17-Sep-04	ND				ND	
17-Nov-04	ND				ND	
16-Mar-05	ND				ND	
30-Mar-05	ND				ND	
25-May-05	<1	NA	NA	NA	<0.1	NA
31-Aug-05	<1	<1	3.2	<1	<0.1	NA
1-Dec-05	<1	<1	<1	<1	<0.1	NA
9-Mar-06	<1	<1	<1	<1	<0.1	32
14-Jun-06	<1	<1	3.5	<1	<0.1	30
20-Jul-06	<1	<1	1.8	<1	<0.1	32
8-Nov-06	<1	<1	1.5	<1	<0.1	31
28-Feb-07	<1	<1	<1	<1	<0.1	32
27-Jun-07	<1	<1	<1	<1	<0.1	32
15-Aug-07	<1	<1	<1	<1	<0.1	31
10-Oct-07	<1	<1	<1	<1	<0.1	32
26-Mar-08	<1	<1	<1	<1	<0.1	31
25-Jun-08	<1	<1	<1	<1	<0.05	29
10-Sep-08	<1	<1	<1	<1	<0.05	30
15-Oct-08	<1	<1	<1	<1	<0.05	26
4-Mar-09	<1	<1	<1	<1	<0.1	30
24-Jun-09	<1	<1	<1	<1	<0.1	31
15-Sep-09	<1	<1	<1	<1	<0.1	33
16-Dec-09	<1	<1	<1	<1	<0.1	34
17-Feb-10	<1	<1	<1	<1	<0.1	38
14-Jun-10	<1	<1	<1	<1	<0.1	32
16-Aug-10	<1	<1	<1	<1	<0.1	28

TW4-18	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
12-Sep-02	440				1.49	
24-Nov-02	240				13.3	
28-Mar-03	160				13.1	
23-Jun-03	110				19	
12-Sep-03	68.0				19.9	
9-Nov-03	84.0				20.7	
29-Mar-04	90.0				14	
22-Jun-04	82.0				12.2	
17-Sep-04	38.0				14.5	
17-Nov-04	51.0				17.3	
16-Mar-05	38.0				14.1	
25-May-05	29.8	NA	NA	NA	12.9	NA
31-Aug-05	39	<1	2.8	<1	13.3	NA
1-Dec-05	14	<1	1.1	<1	7.3	NA
9-Mar-06	12.0	<1	1.1	<1	5.9	5.9
14-Jun-06	12.0	<1	1.6	<1	4.7	35
20-Jul-06	10.8	<1	2.7	<1	6.1	35
8-Nov-06	139	<1	<1	<1	8.7	34
28-Feb-07	9.2	<1	<1	<1	5.1	30
27-Jun-07	8.0	<1	<1	<1	4.9	28
15-Aug-07	8.9	<1	<1	<1	5	32
10-Oct-07	7.4	<1	<1	<1	4.4	27
26-Mar-08	6.4	<1	<1	<1	0.7	23
25-Jun-08	5.7	<1	<1	<1	4.55	23
10-Sep-08	8.0	<1	<1	<1	4.68	26
15-Oct-08	9.4	<1	<1	<1	5,15	30
4-Mar-09	11.0	<1	<1	<1	5.2	29
24-Jun-09	16.0	<1	<1	<1	6.2	30
15-Sep-09	13.0	<1	<1	<1	5.9	26
22-Dec-09	8.2	<1	<1	<1	5.4	30
24-Feb-10	69.0	<1	<1	<1	5.1	41
9-Jun-10	29.0	<1	<1	<1	9	35
12-Aug-10	29.0	<1	<1	<1	9	37



TW4-19	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
12-Sep-02	7700				47.6	
24-Nov-02	5400				42	
28-Mar-03	4200				61.4	
15-May-03	4700				NA	
23-Jun-03	4500				11.4	
15-Jul-03	2400				6.8	
15-Aug-03	2600				4	
12-Sep-03	2500				5.7	
25-Sep-03	4600				9.2	
29-Oct-03	4600				7.7	
9-Nov-03	2600				4.8	
29-Mar-04	NA				NA	
22-Jun-04	NA				NA	
16-Aug-04	7100				9.91	
17-Sep-04	2600				4.5	
17-Nov-04	1800				3.6	
16-Mar-05	2200				5.3	
25-May-05	1200				5.7	
31-Aug-05	1400	<5	<5	<5	4.6	NA
1-Dec-05	2800	<50	<50	<50	<0.1	NA
9-Mar-06	1200	<50	<50	<50	4	86
14-Jun-06	1100	<50	<50	<50	5.2	116
20-Jul-06	1120	<50	<50	<50	4.3	123
8-Nov-06	1050	1.6	2.6	<1	4.6	134
28-Feb-07	1200	1.3	<1	<1	4	133
27-Jun-07	1800				2.3	
15-Aug-07	1100	1.9	<1	<1	4.1	129
10-Oct-07	1100	1.9	<1	<1	4	132
26-Mar-08	1800	2.9	<1	<1	2.2	131
25-Jun-08	1000	1	<1	<1	2.81	128
10-Sep-08	3600	8.6	<1	<1	36.2	113
15-Oct-08	4200	12	<1	<1	47.8	124
4-Mar-09	1100	1.2	<1	<1	3.2	127
24-Jun-09	990	1.2	<1	<1	2.4	132
15-Sep-09	6600	15	<1	<1	0.1	43
14-Dec-09	4700	16	<1	<1	26.7	124
17-Feb-10	940	1.3	<1	<1	2	144
9-Jun-10	1800	4.2	<1	<1	4.4	132

<b>TW4-20</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
25-May-05	39000	NA	NA	NA	10.1	NA
31-Aug-05	3800	<10	<10	<10	2.9	NA
1-Dec-05	19000	<250	<250	<250	1.8	NA
9-Mar-06	9200	<500	<500	<500	3.8	120
14-Jun-06	61000	<500	<500	<500	9.4	235
20-Jul-06	5300	<1000	<1000	<1000	2.9	134
8-Nov-06	11000	7.1	1.9	2.2	3.5	124
28-Feb-07	4400	3.1	<1	1.1	4.2	124
27-Jun-07	1800	2.2	<1	<1	2.3	112
15-Aug-07	5200	3.5	<1	1.8	2.1	117
10-Oct-07	9000	6.8	<1	1.9	5.6	170
26-Mar-08	13000	9	<1	1.5	0.9	132
25-Jun-08	30000	13	<1	1.2	7.96	191
10-Sep-08	21000	15	<1	3.7	4.44	156
15-Oct-08	NA	NA	NA	NA	5.51	166
4-Mar-09	8200	5.7	<1	5.2	5.1	164
24-Jun-09	6800	4.9	<2	4.2	2.9	164
15-Sep-09	13000	8.4	<2	4.4	3.3	153
14-Dec-09	15000	14	<1	3	5.3	187
17-Feb-10	3500	2.7	<1	3.2	2	179
14-Jun-10	18000	11	<1	3.7	5.6	200
16-Aug-10	15000	12	<1	2.2	5.3	196

<b>TW4-21</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
25-May-05	192	NA	NA	NA	14.6	NA
31-Aug-05	78	<5	<5	<5	10.1	NA
1-Dec-05	86	<1	1.0	<1	9.6	NA
9-Mar-06	120	<2.5	<2.5	<2.5	8.5	347
14-Jun-06	130	<2.5	<2.5	<2.5	10.2	318
20-Jul-06	106	<2.5	<2.5	<2.5	8.9	357
8-Nov-06	139	2	<1	<1	8.7	296
28-Feb-07	160	1.8	<1	<1	8.7	306
27-Jun-07	300	5.8	<1	<1	8.6	327
15-Aug-07	140	<1	<1	<1	8.6	300
10-Oct-07	120	<1	<1	<1	8.3	288
26-Mar-08	380	7	<1	<1	14.3	331
25-Jun-08	160	1.7	<1	<1	8.81	271
10-Sep-08	120	1.6	<1	<1	7.57	244
15-Oct-08	170	2	<1	<2	8.00	284
11-Mar-09	180	<1	<1	<1	8.3	279
24-Jun-09	200	<1	<1	<1	8.1	291
15-Sep-09	140	<1	<1	<1	9.2	281
22-Dec-09	160	<1	<1	<1	8.4	256
25-Feb-10	170	<1	<1	<1	8.4	228
10-Jun-10	210	1.2	<1	<1	12	266
12-Aug-10	390	9.2	<1	<1	14	278



<b>TW4-22</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
25-May-05	340	NA	NA	NA	18.2	NA
31-Aug-05	290	<5	<5	<5	15.7	NA
1-Dec-05	320	<5	<5	<5	15.1	NA
9-Mar-06	390	<10	<10	<10	15.3	236
14-Jun-06	280	<10	<10	<10	14.3	221
20-Jul-06	864	<10	<10	<10	14.5	221
8-Nov-06	350	<1	1.6	<1	15.9	236
28-Feb-07	440	<1	<1	<1	20.9	347
27-Jun-07	740	<1	<1	<1	19.3	273
15-Aug-07	530	<1	<1	<1	19.3	259
10-Oct-07	440	<1	<1	<1	18.8	238
26-Mar-08	1400	<1	<1	<1	39.1	519
25-Jun-08	1200	<1	<1	<1	41.9	271
10-Sep-08	6300	1.3	<1	<1	38.7	524
15-Oct-08	630	<2	<2	<2	36.3	539
11-Mar-09	390	<1	<1	<1	20.7	177
24-Jun-09	730	<1	<1	<1	20.6	177
15-Sep-09	2300	<1	<1	<1	40.3	391
29-Dec-09	380	<1	<1	<1	17.8	175
3-Mar-10	2200	<1	<1	<1	36.6	427
15-Jun-10	540	<1	<1	<1	19	134
24-Aug-10	340	<1	<1	<1	15	130

<b>TW4-23</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
27-Jun-07	<1	<1	<1	<1	<0.1	47
15-Aug-07	<1	<1	<1	<1	<0.1	46
10-Oct-07	<1	<1	<1	<1	<0.1	43
26-Mar-08	<1	<1	<1	<1	<0.1	41
25-Jun-08	<1	<1	<1	<1	<0.05	41
10-Sep-08	<1	<1	<1	<1	<0.05	35
15-Oct-08	<2	<2	<2	<2	<0.05	51
4-Mar-09	<1	<1	<1	<1	<0.1	41
24-Jun-09	<1	<1	<1	<1	<0.1	43
15-Sep-09	<1	<1	<1	<1	<0.1	43
16-Dec-09	<1	<1	<1	<1	<0.1	37
24-Feb-10	<1	<1	<1	<1	<0.1	45
8-Jun-10	<1	<1	<1	<1	<0.1	40
10-Aug-10	<1	<1	<1	<1	<0.1	40

<b>TW4-24</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
27-Jun-07	2.6	<1	<1	<1	26.1	770
15-Aug-07	2.2	<1	<1	<1	29	791
10-Oct-07	1.5	<1	<1	<1	24.7	692
26-Mar-08	1.5	<1	<1	<1	24.4	740
25-Jun-08	1.4	<1	<1	<1	45.3	834
10-Sep-08	2.9	<1	<1	<1	38.4	1180
15-Oct-08	<2	<2	<2	<2	44.6	1130
4-Mar-09	1.4	<1	<1	<1	30.5	1010
24-Jun-09	1.5	<1	<1	<1	30.4	759
15-Sep-09	1.4	<1	<1	<1	30.7	618
17-Dec-09	1.2	<1	<1	<1	28.3	1080
25-Feb-10	1.3	<1	<1	<1	33.1	896
9-Jun-10	1.7	<1	<1	<1	30	639
24-Aug-10	1.8	<1	<1	<1	31	587



<b>TW4-25</b>	<b>Chloroform (ug/l)</b>	<b>Carbon Tetrachloride (ug/l)</b>	<b>Chloromethane (ug/l)</b>	<b>Methylene Chloride (ug/l)</b>	<b>Nitrate (mg/l)</b>	<b>Chloride (mg/l)</b>
27-Jun-07	<1	<1	<1	<1	17.1	395
15-Aug-07	<1	<1	<1	<1	16.7	382
10-Oct-07	<1	<1	<1	<1	17	356
26-Mar-08	<1	<1	<1	<1	18.7	374
25-Jun-08	<1	<1	<1	<1	22.1	344
10-Sep-08	<1	<1	<1	<1	18.8	333
15-Oct-08	<2	<2	<2	<2	21.3	366
4-Mar-09	<1	<1	<1	<1	15.3	332
24-Jun-09	<1	<1	<1	<1	15.3	328
15-Sep-09	<1	<1	<1	<1	3.3	328
16-Dec-09	<1	<1	<1	<1	14.2	371
23-Feb-10	<1	<1	<1	<1	14.4	296
8-Jun-10	<1	<1	<1	<1	16	306
10-Aug-10	<1	<1	<1	<1	14	250

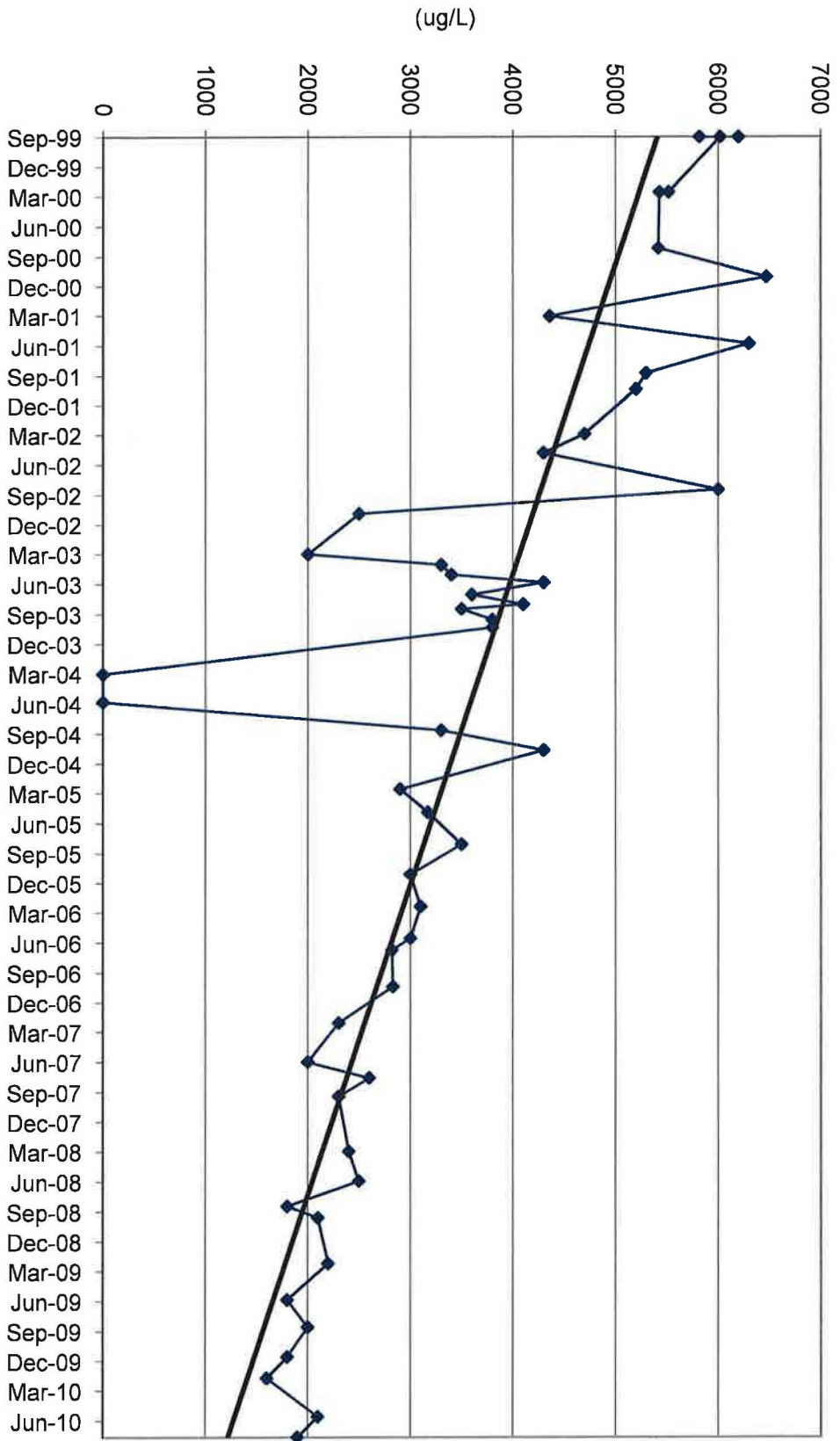
TW4-26	Chloroform (ug/l)	Carbon Tetrachloride (ug/l)	Chloromethane (ug/l)	Methylene Chloride (ug/l)	Nitrate (mg/l)	Chloride (mg/l)
15-Jun-10	13	<1	<1	<1	7.9	33
11-Aug-10	5	<1	<1	<1	9	17

Tab L

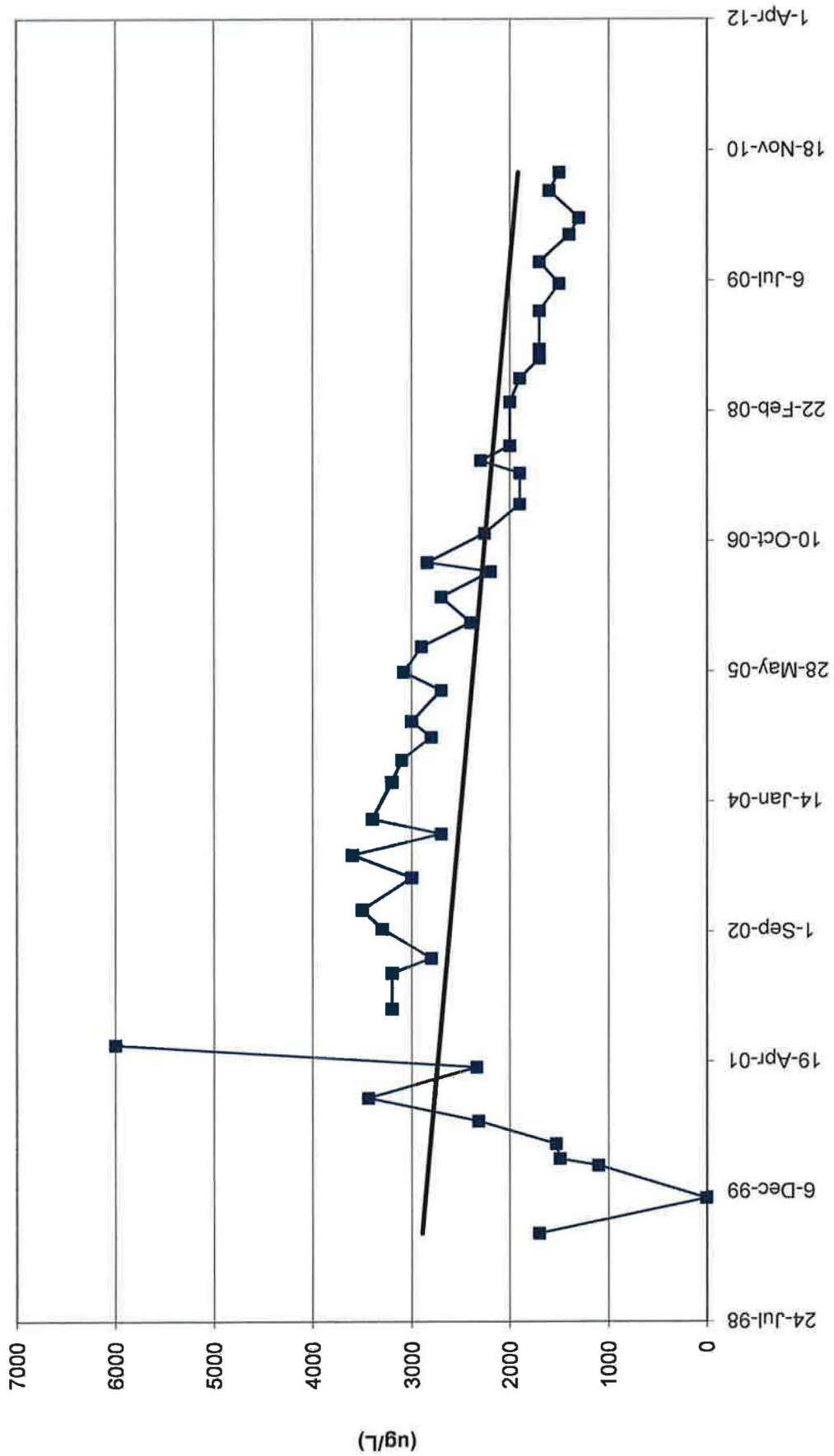
Chloroform Concentration Trend Graphs



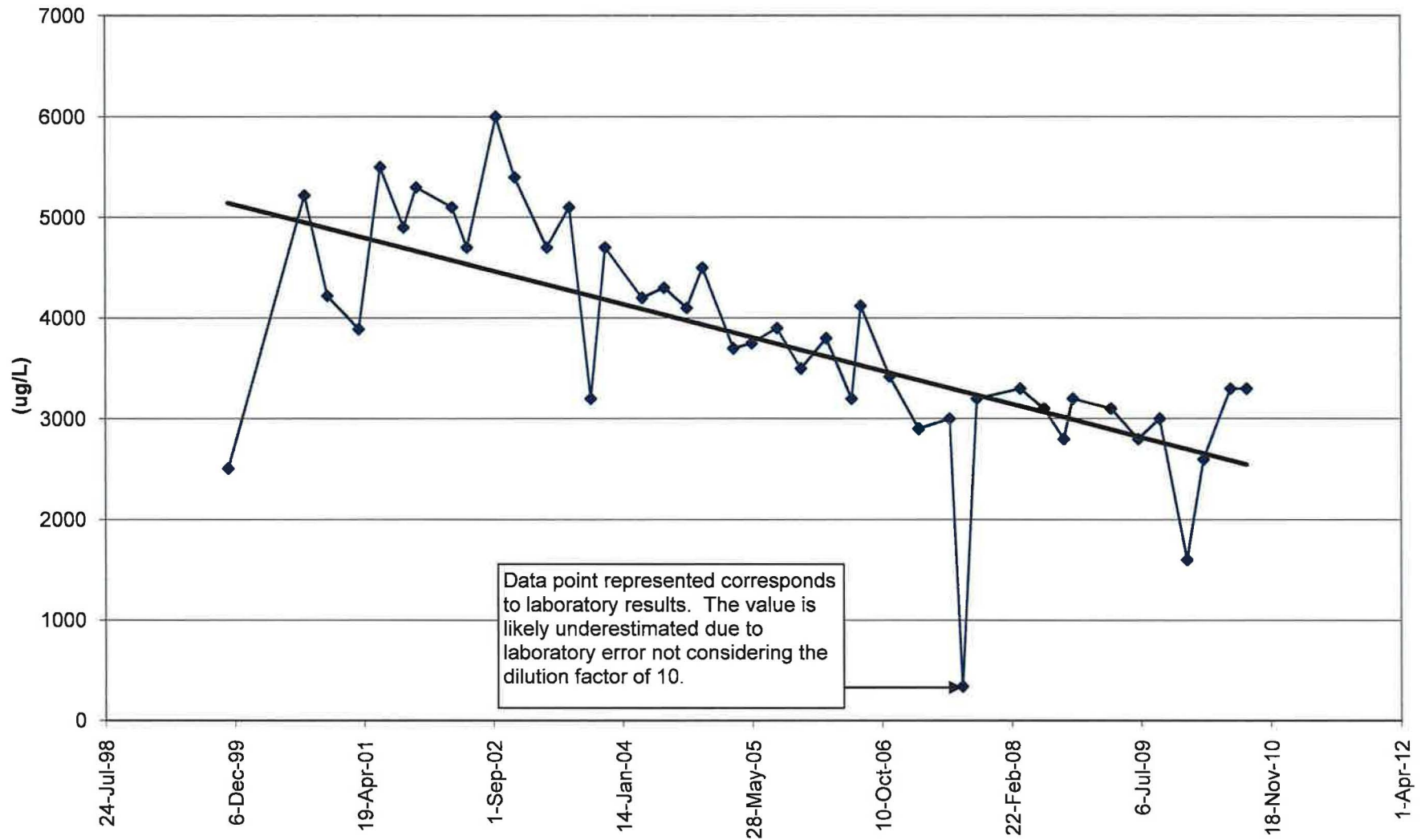
MW4-Chloroform Values



# TW4-1 Chloroform Values

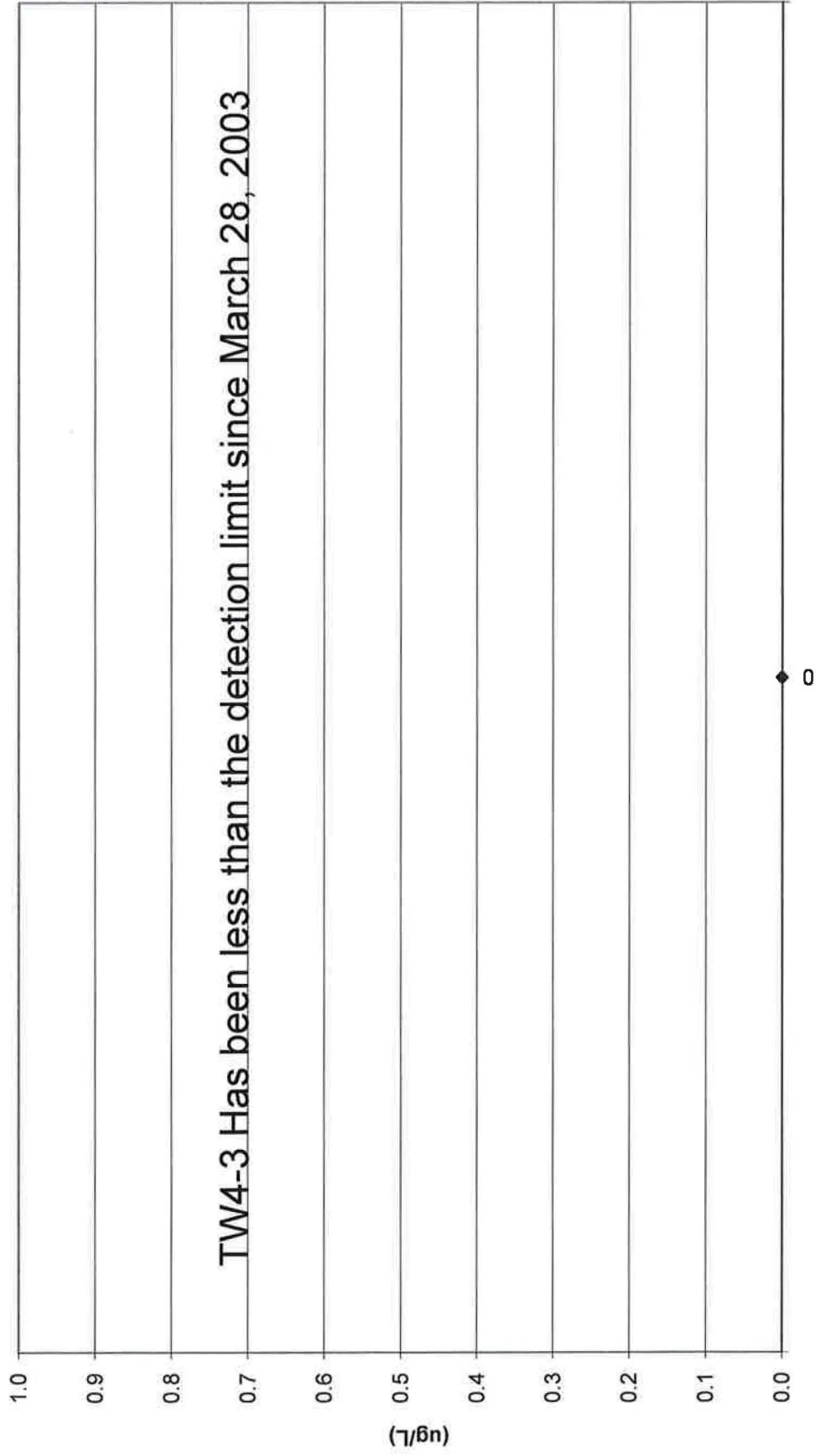


### TW4-2 Chloroform Values

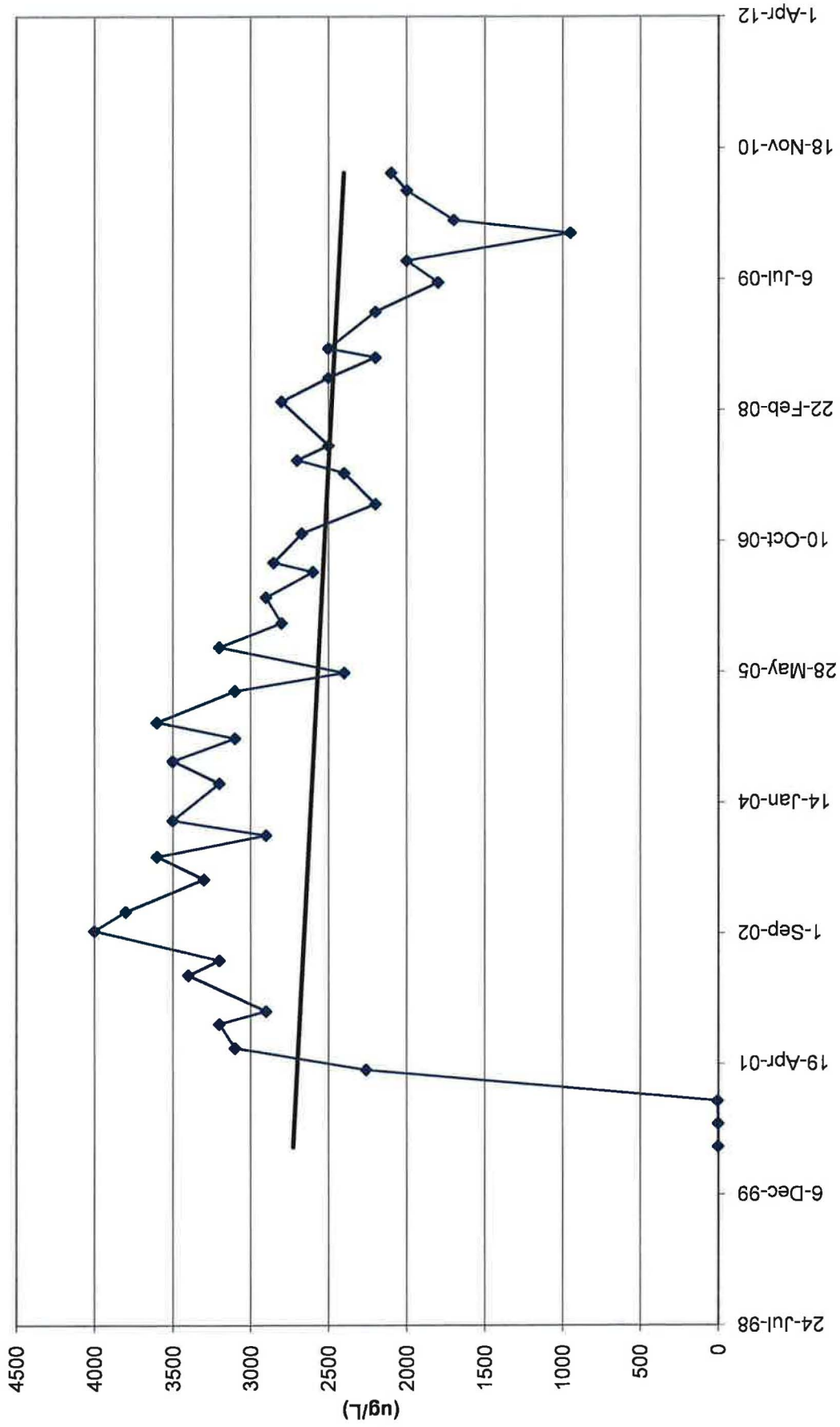




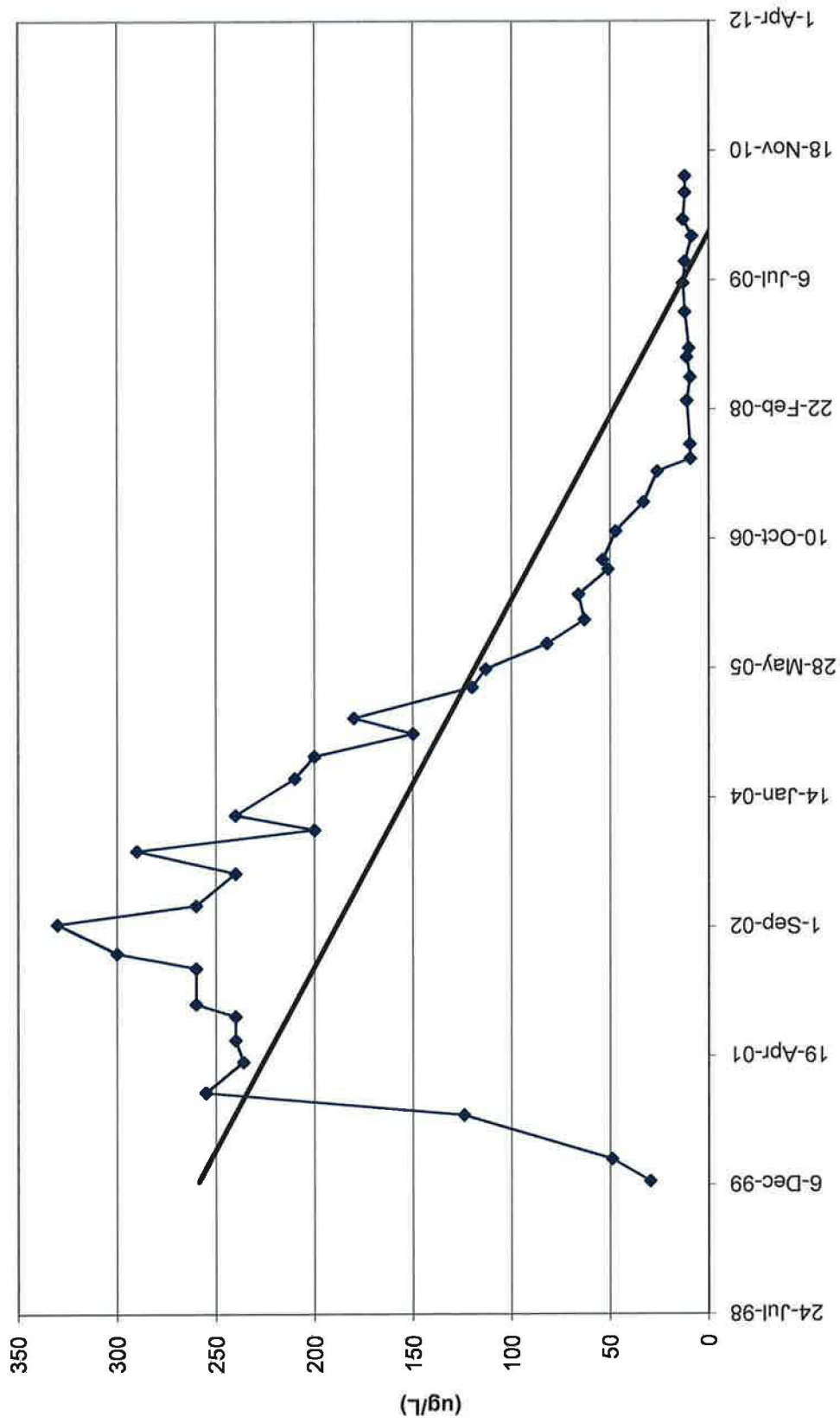
### TW-4-3 Chloroform Values



### TW4-4 Chloroform Values

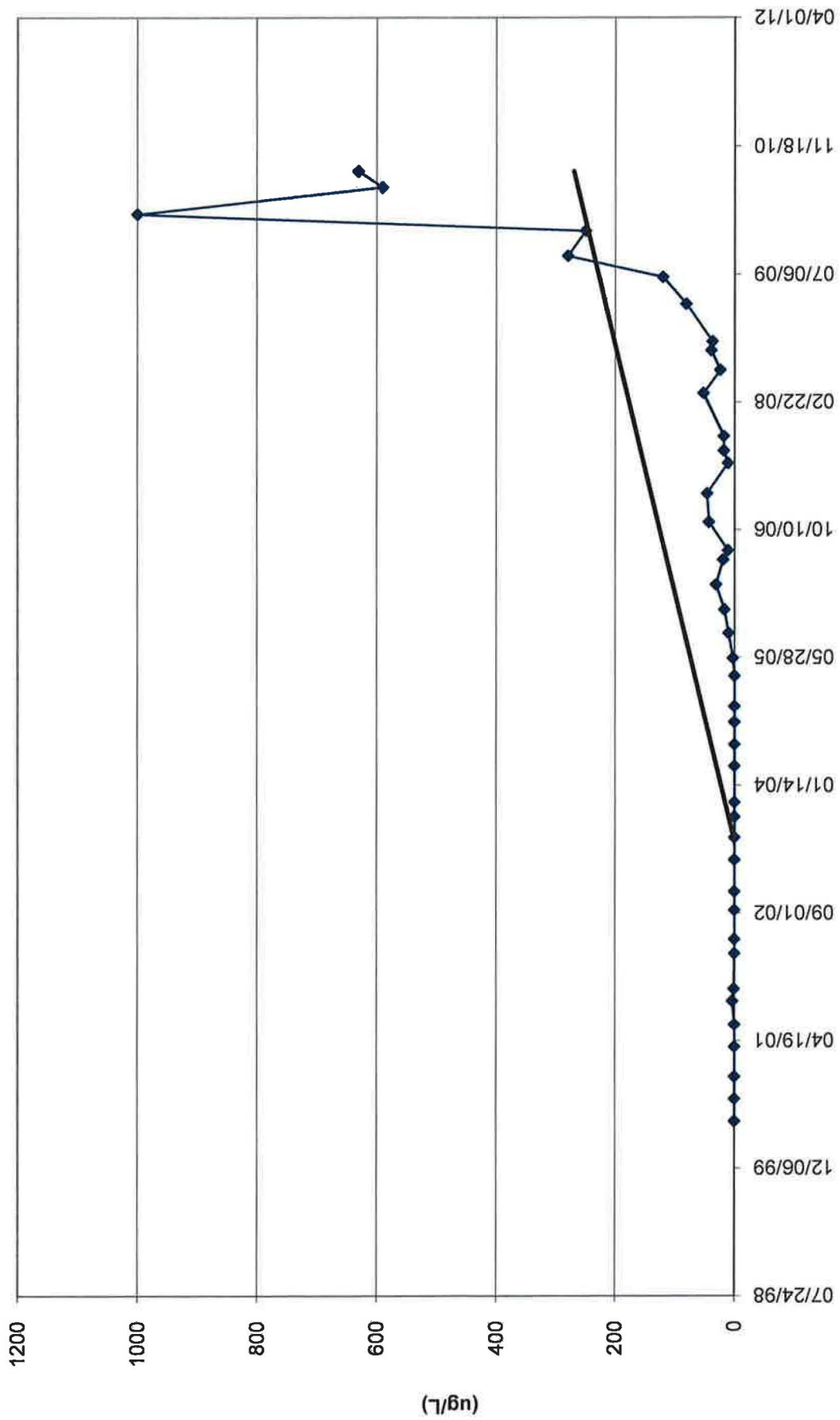


# TW4-5 Chloroform Values

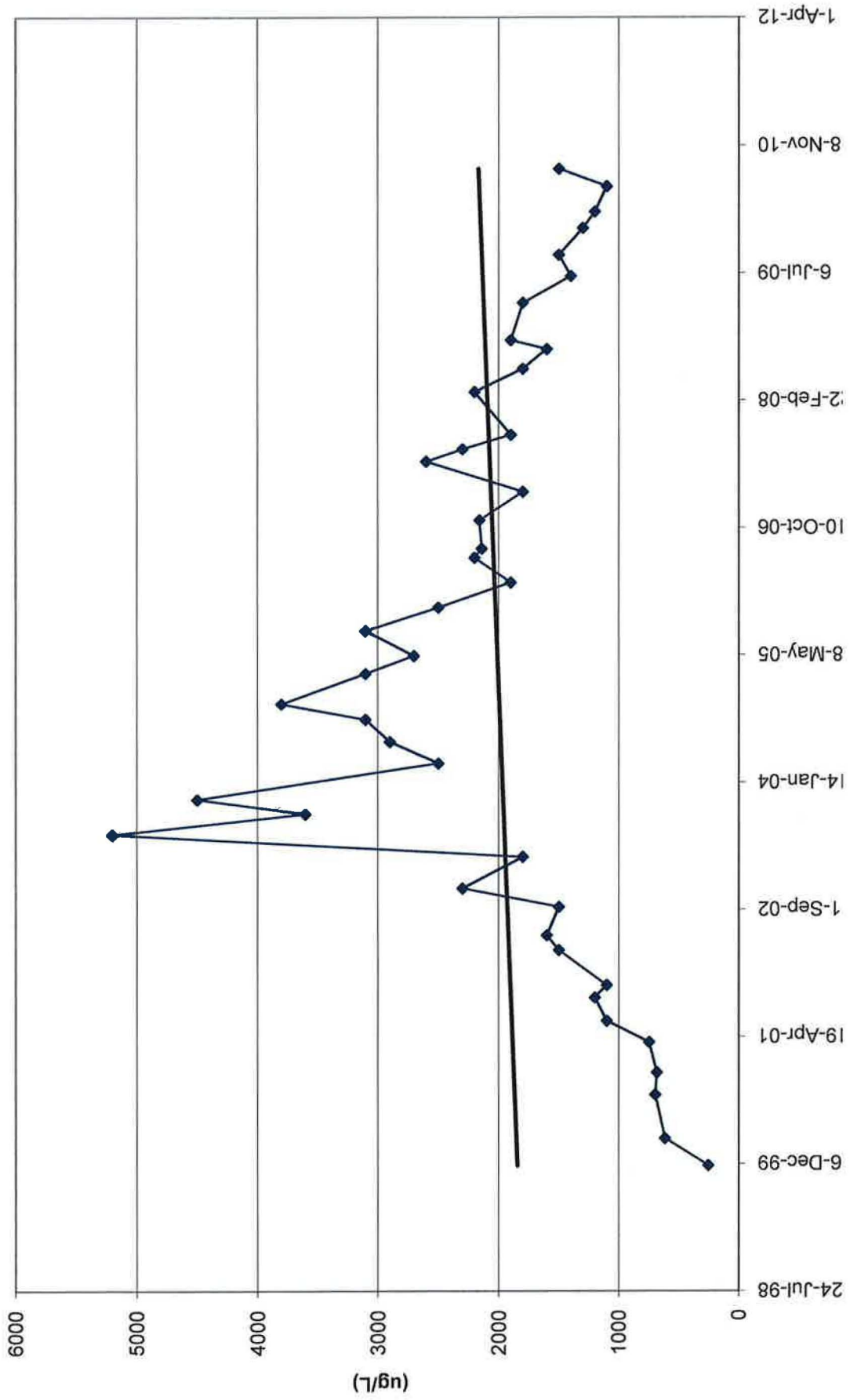




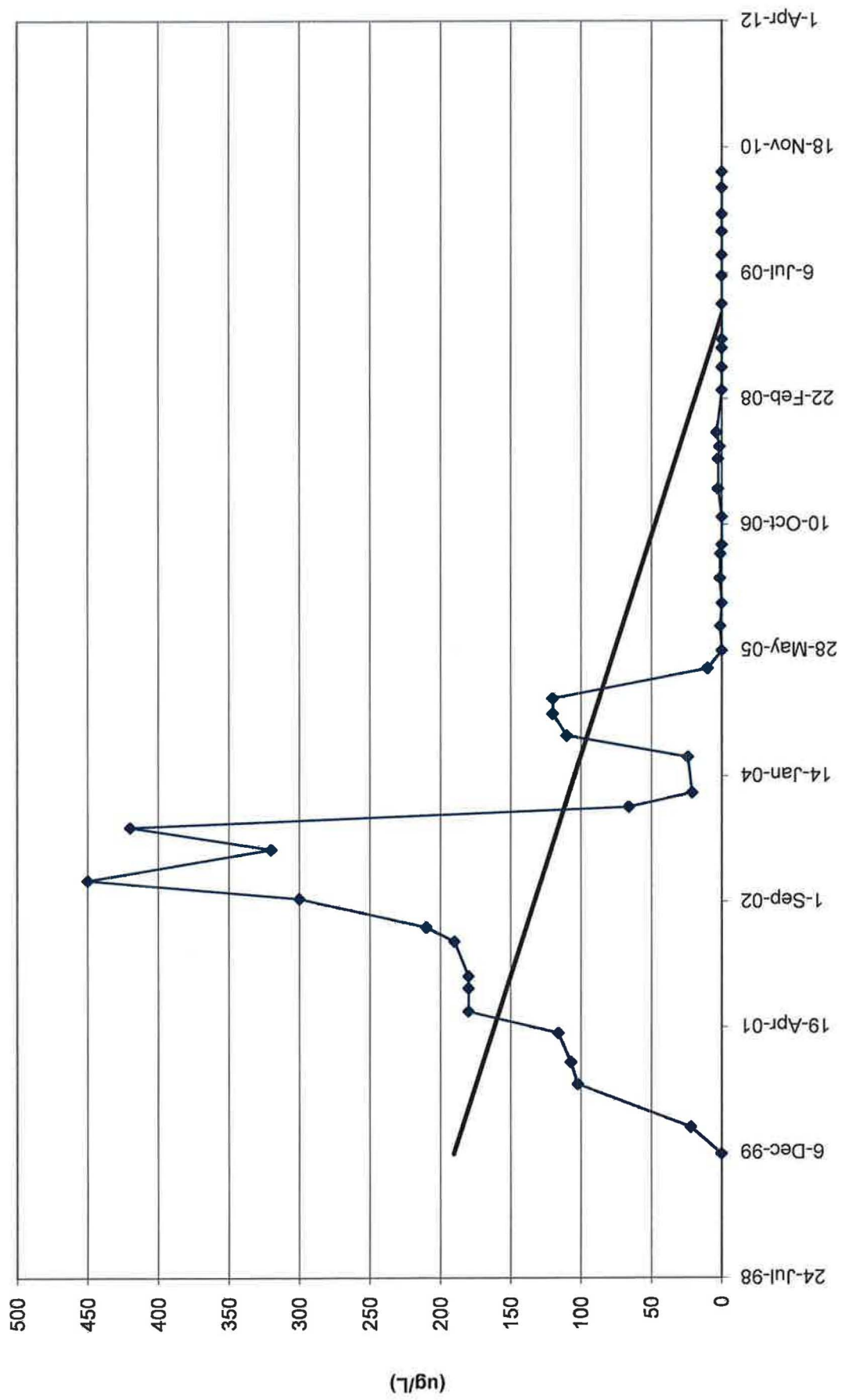
# TW4-6 Chloroform Values



# TW4-7 Chloroform Values

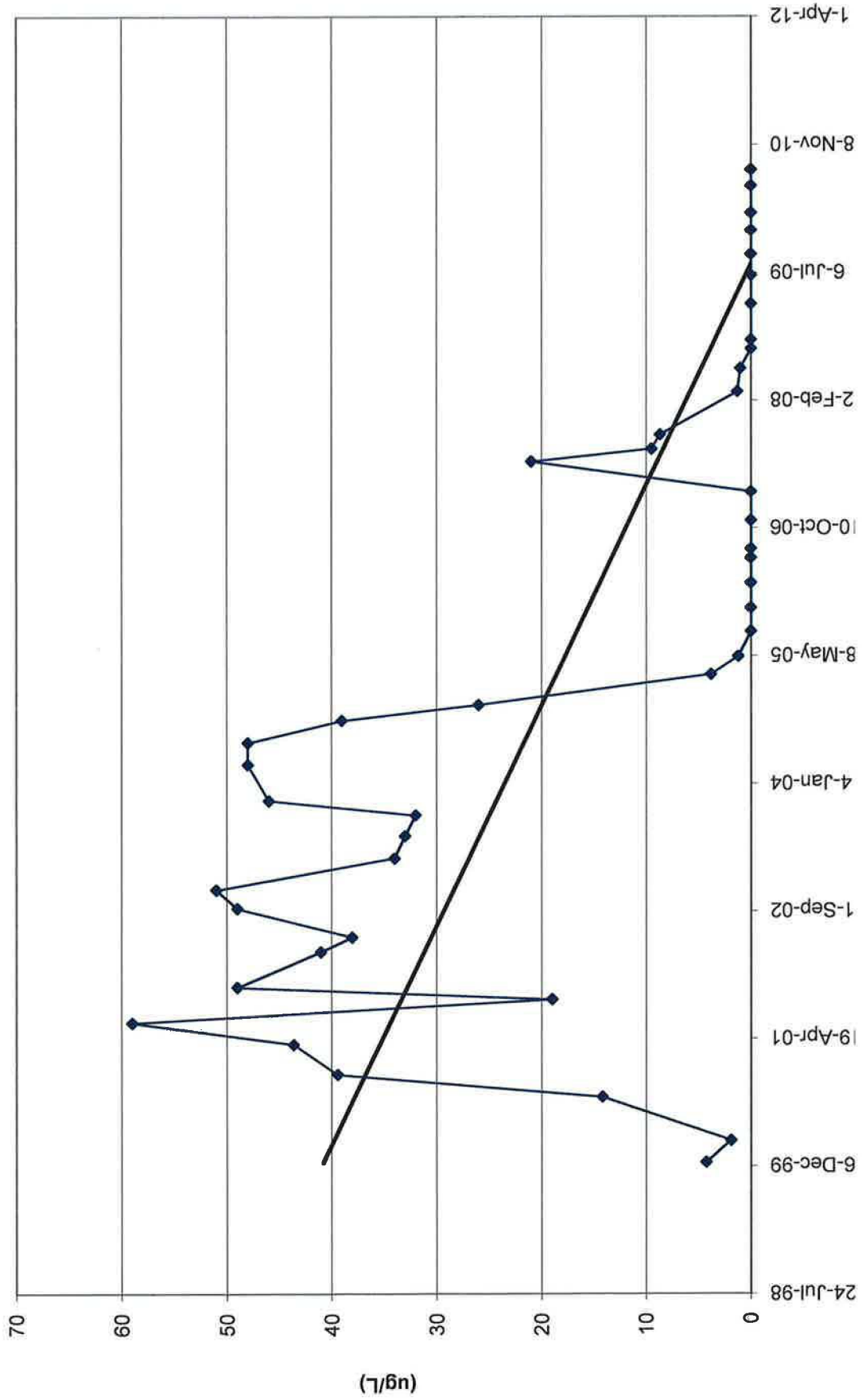


# TW4-8 Chloroform Values

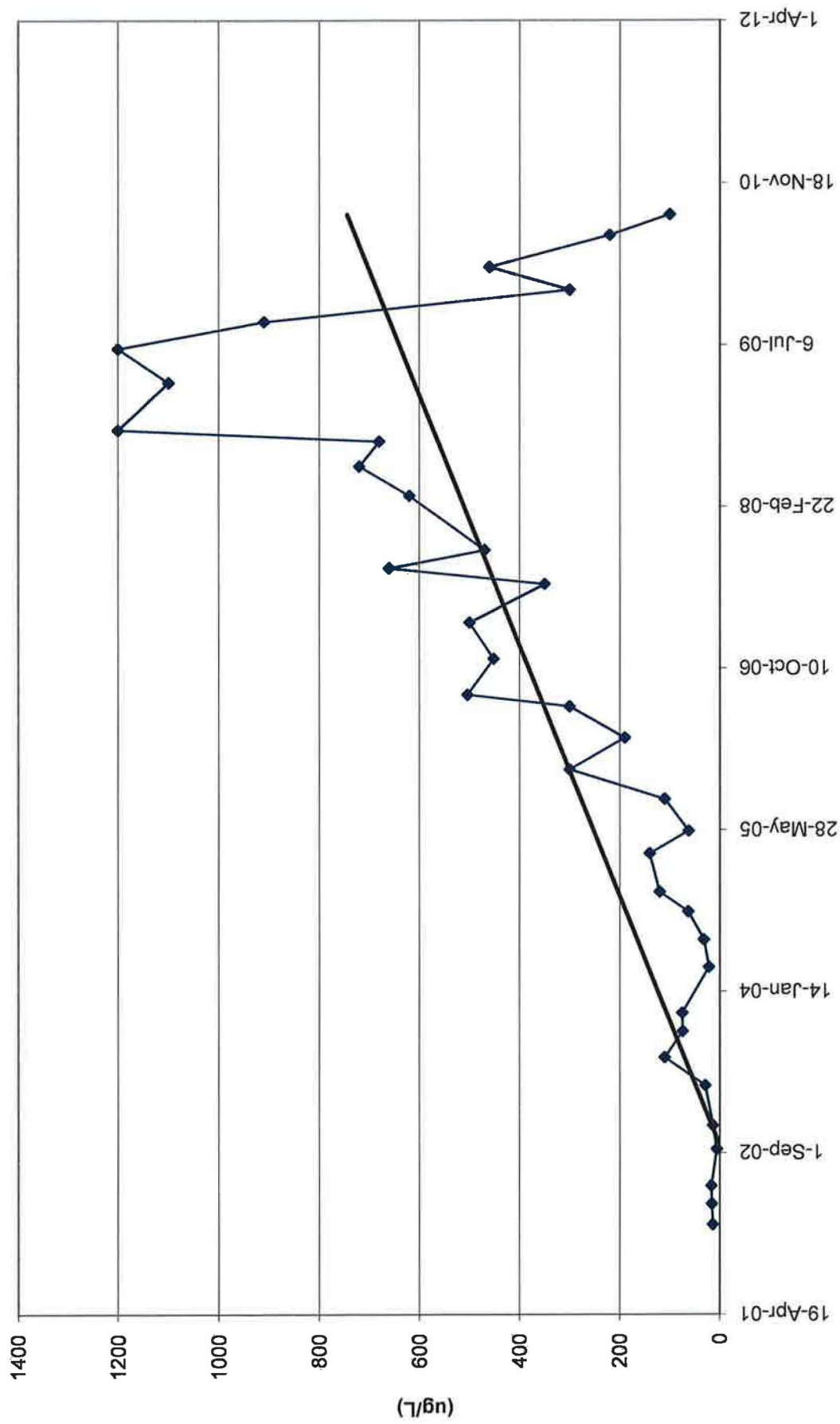




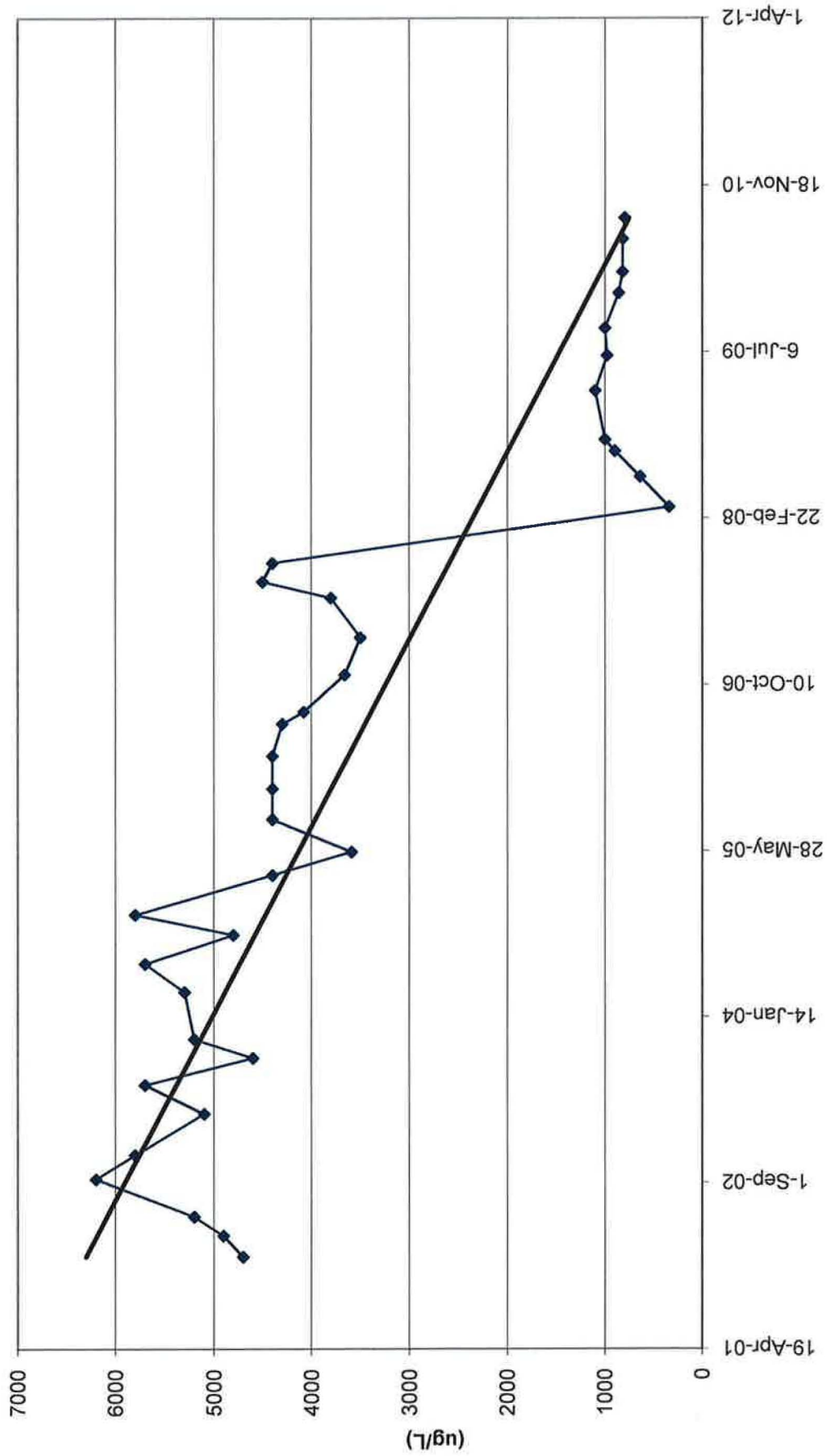
# TW4-9 Chloroform Values



# TW4-10 Chloroform Values

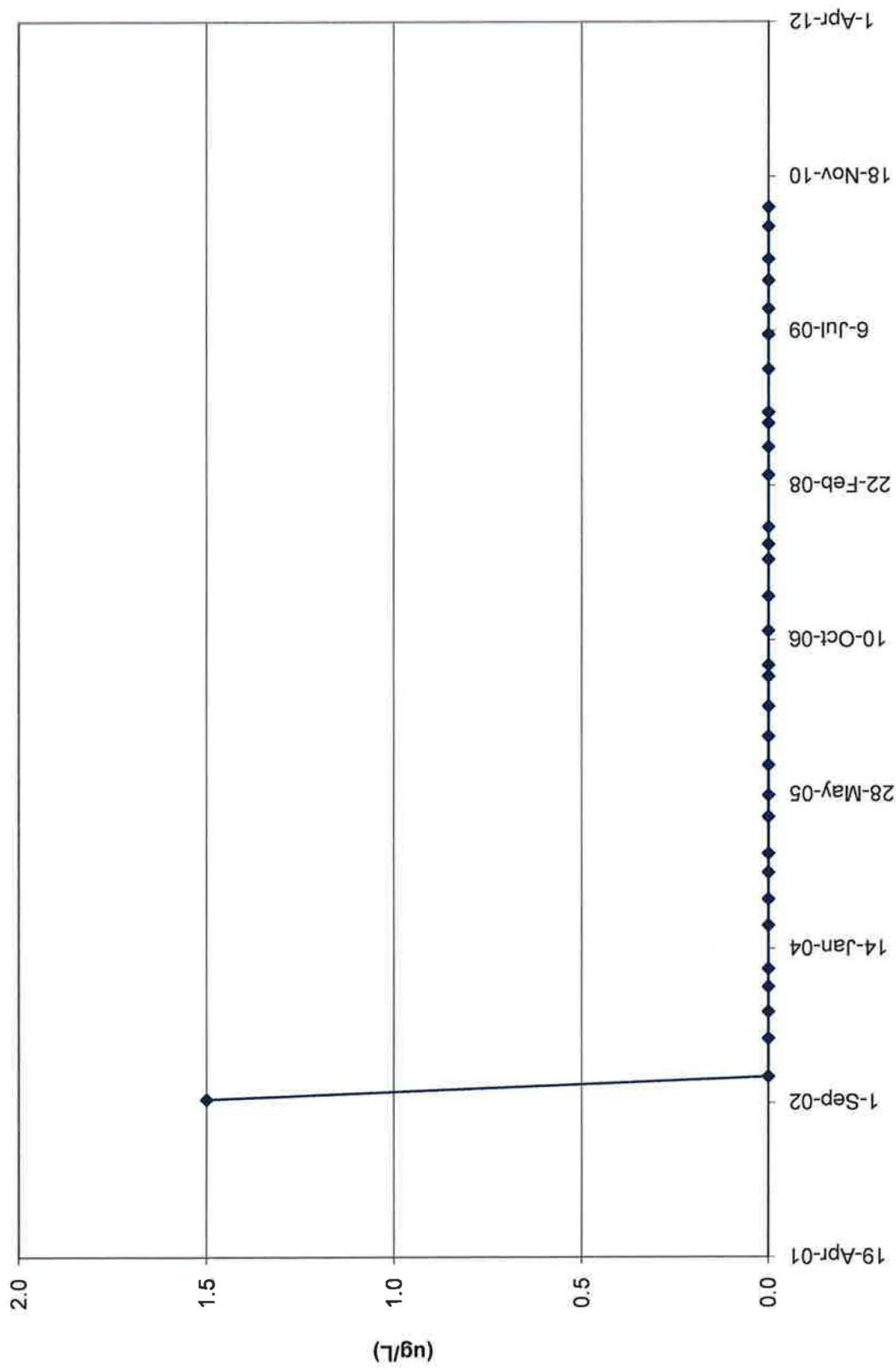


### TW4-11 Chloroform Values

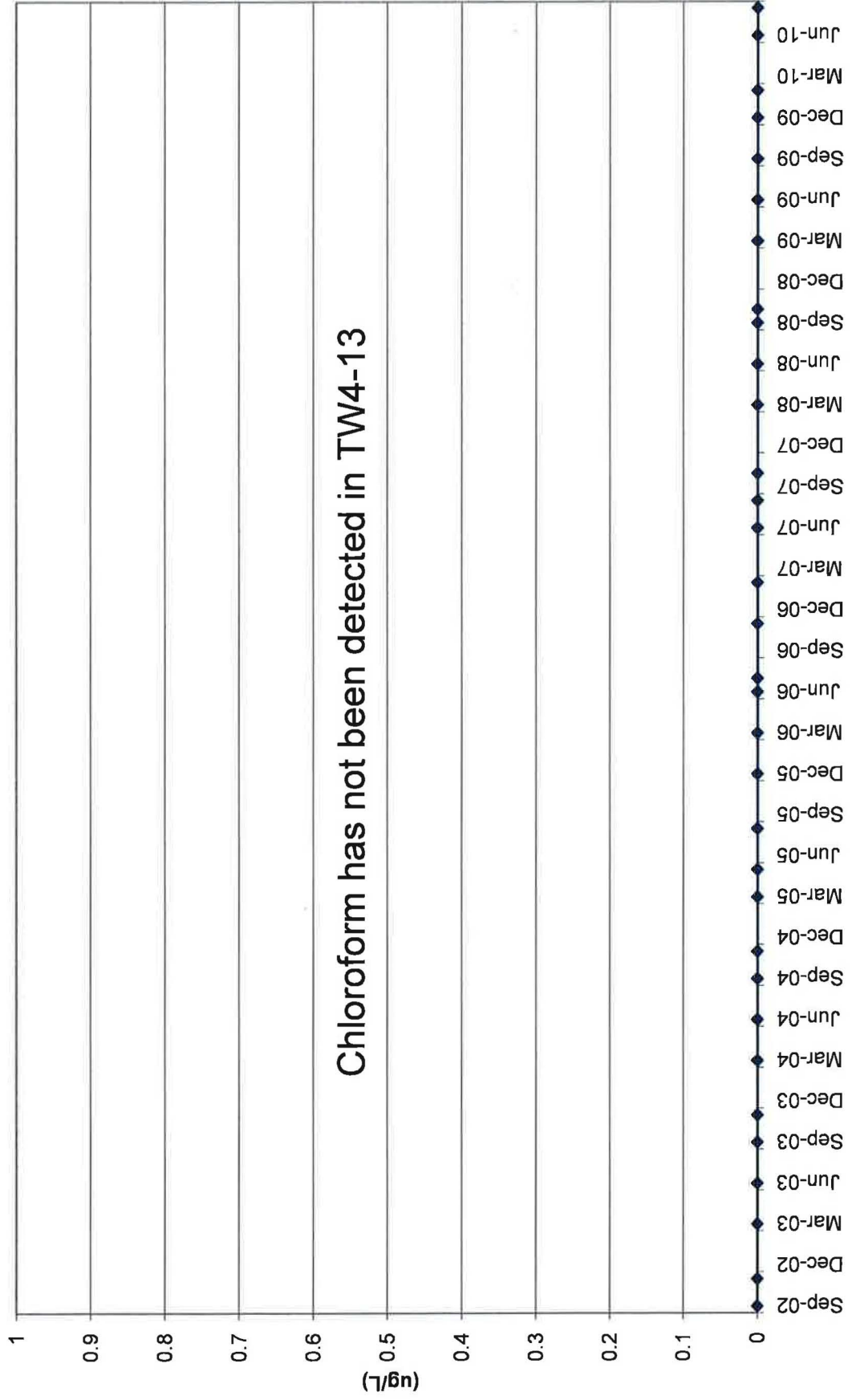




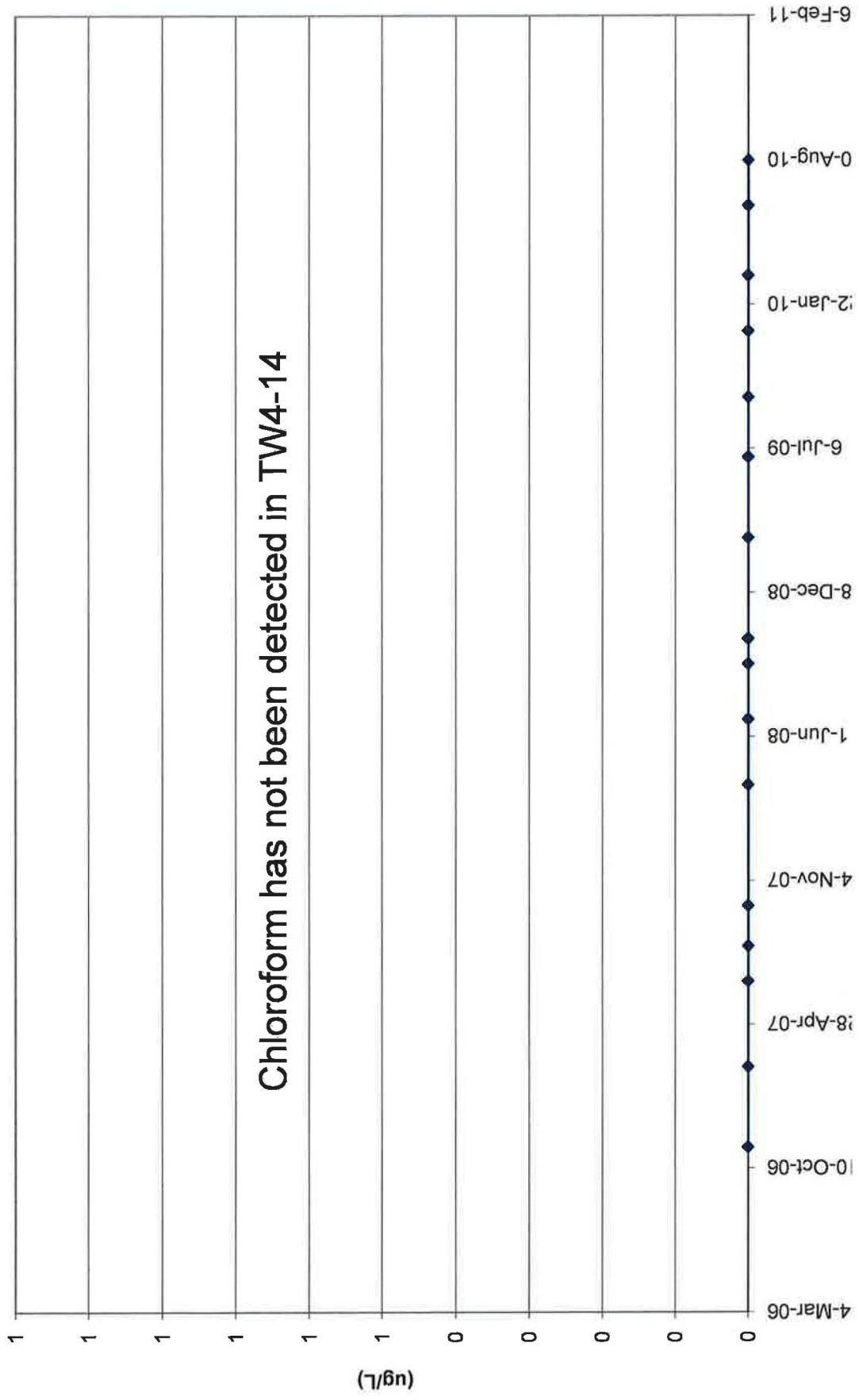
### TW4-12 Chloroform Values



### TW4-13 Chloroform Values

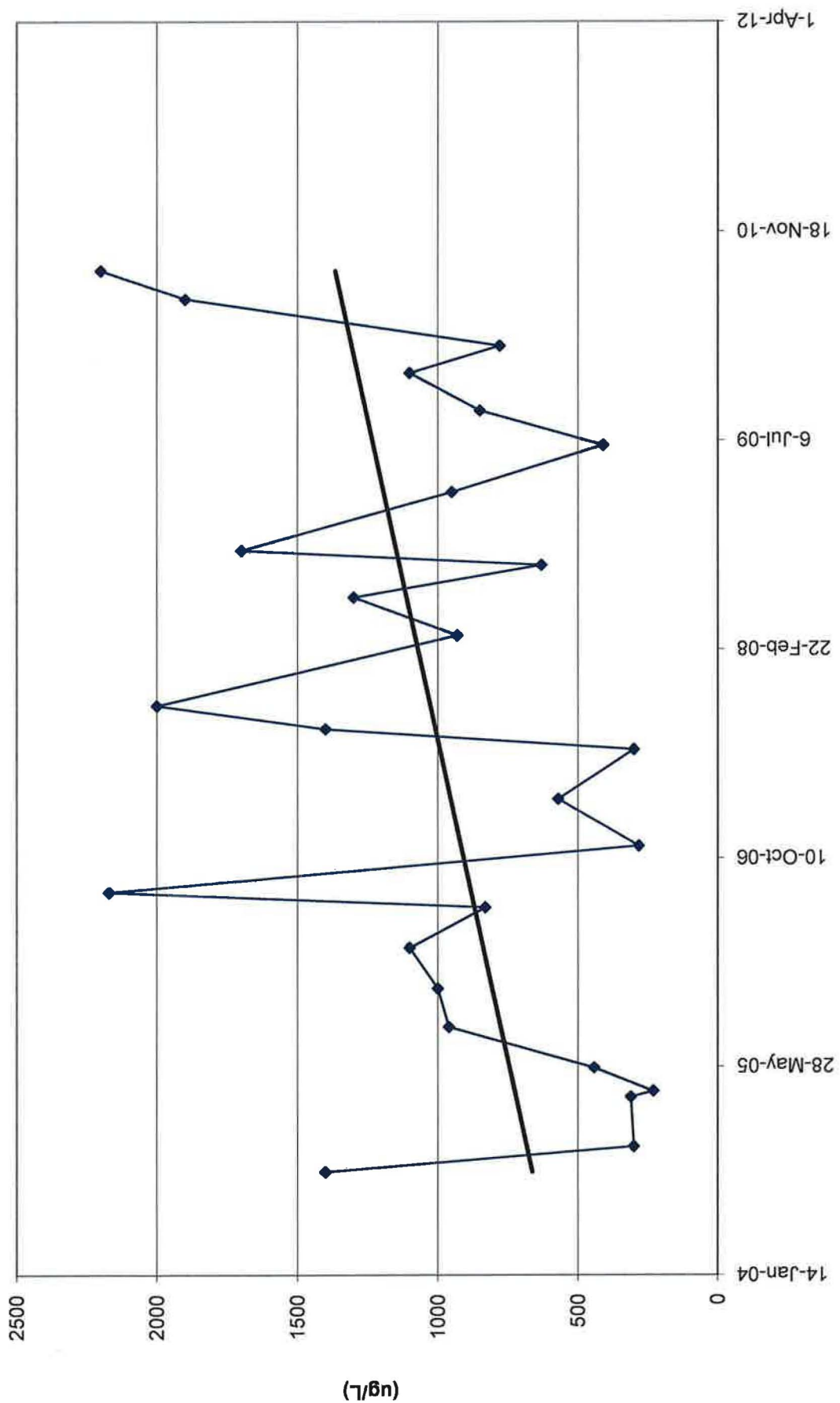


### TW4-14 Chloroform Values

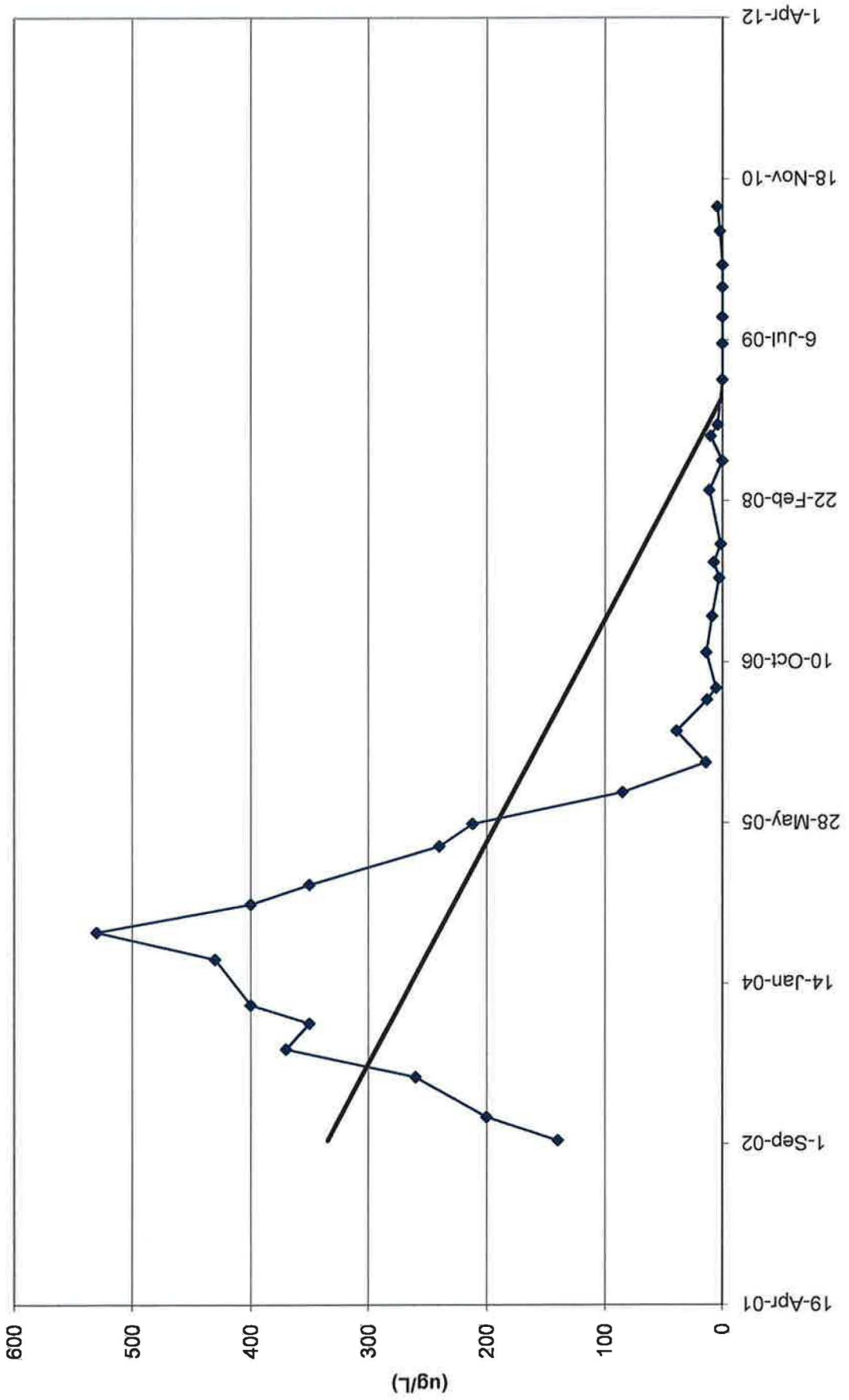




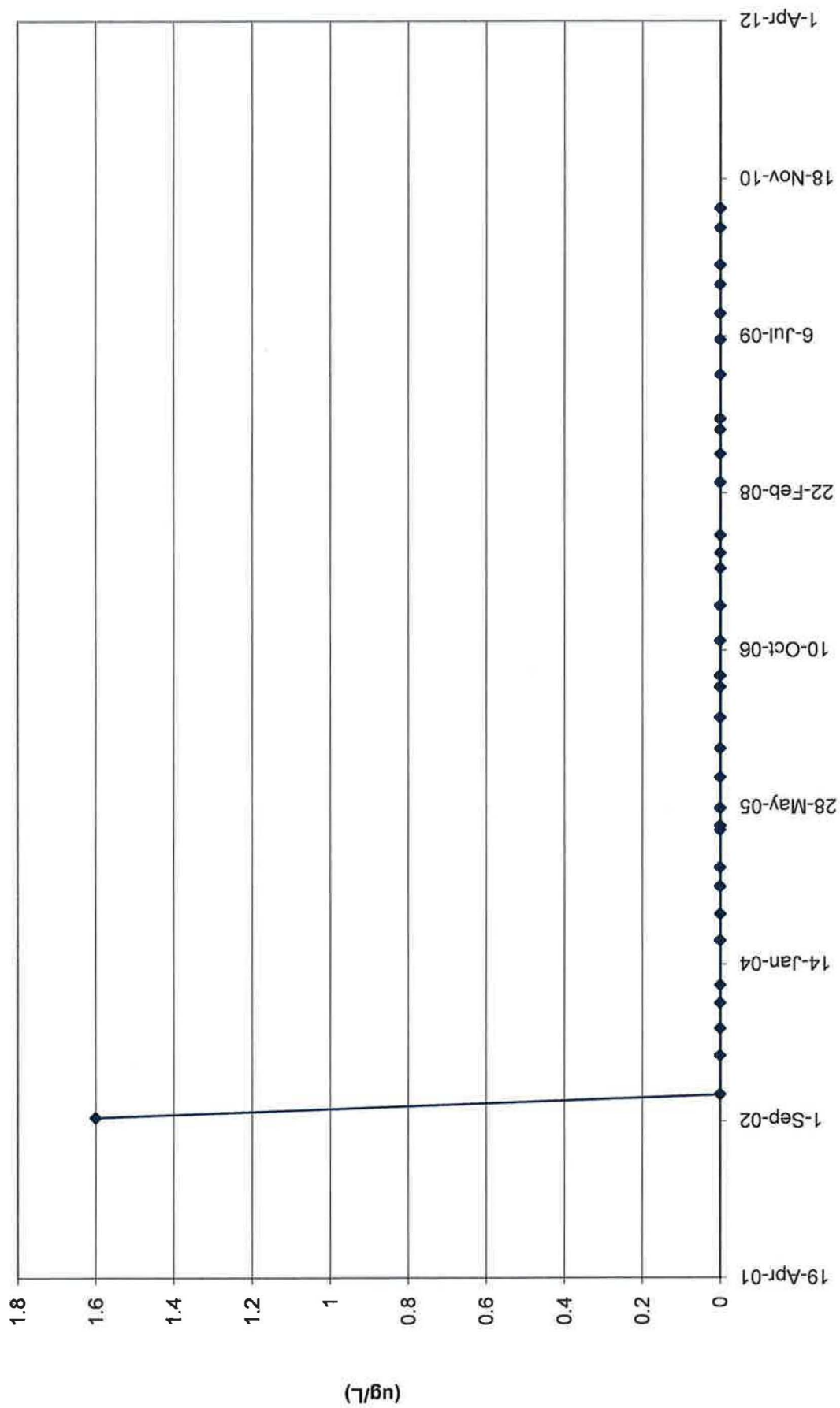
# TW4-15 Chloroform Values



# TW4-16 Chloroform Values

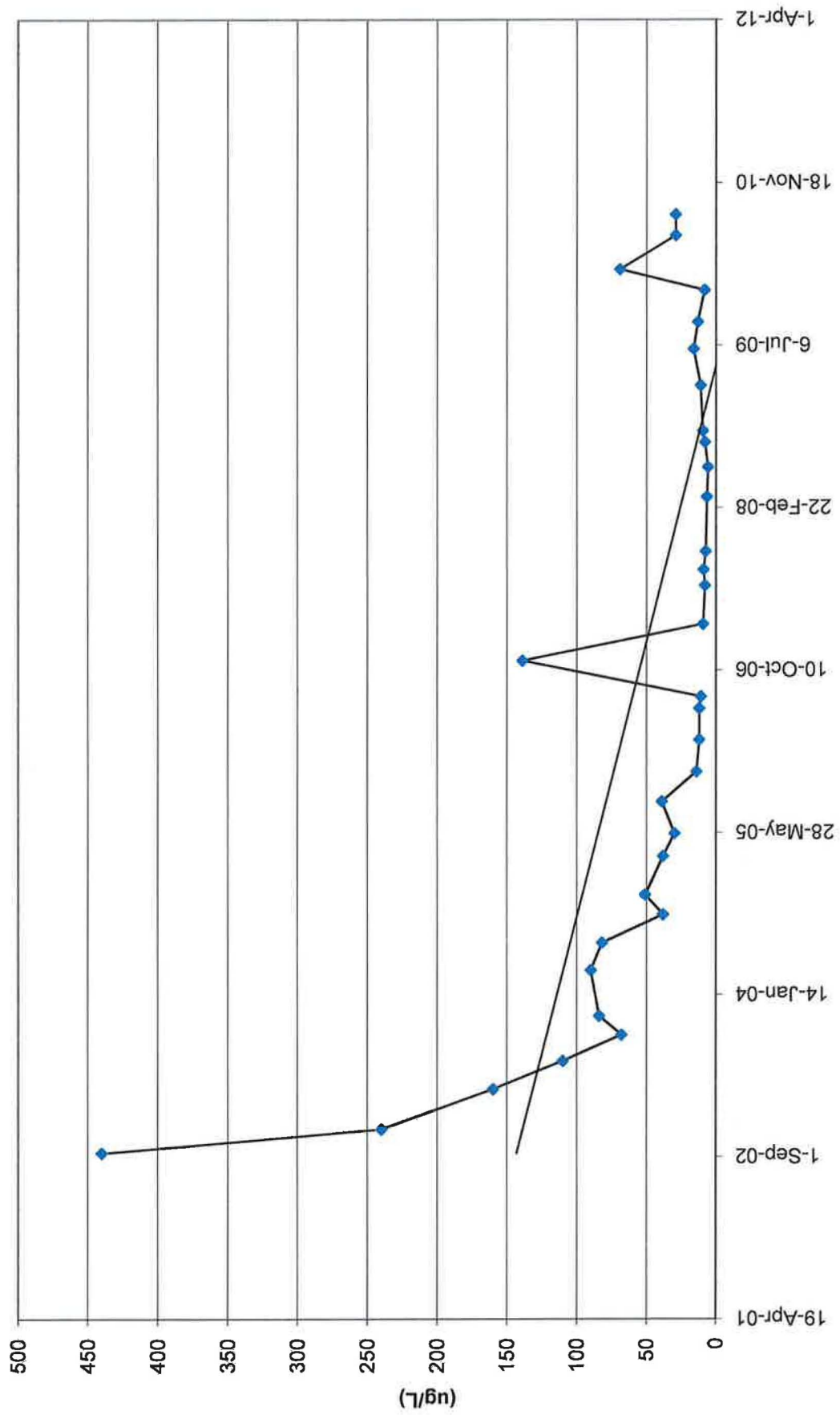


### TW4-17 Chloroform Values

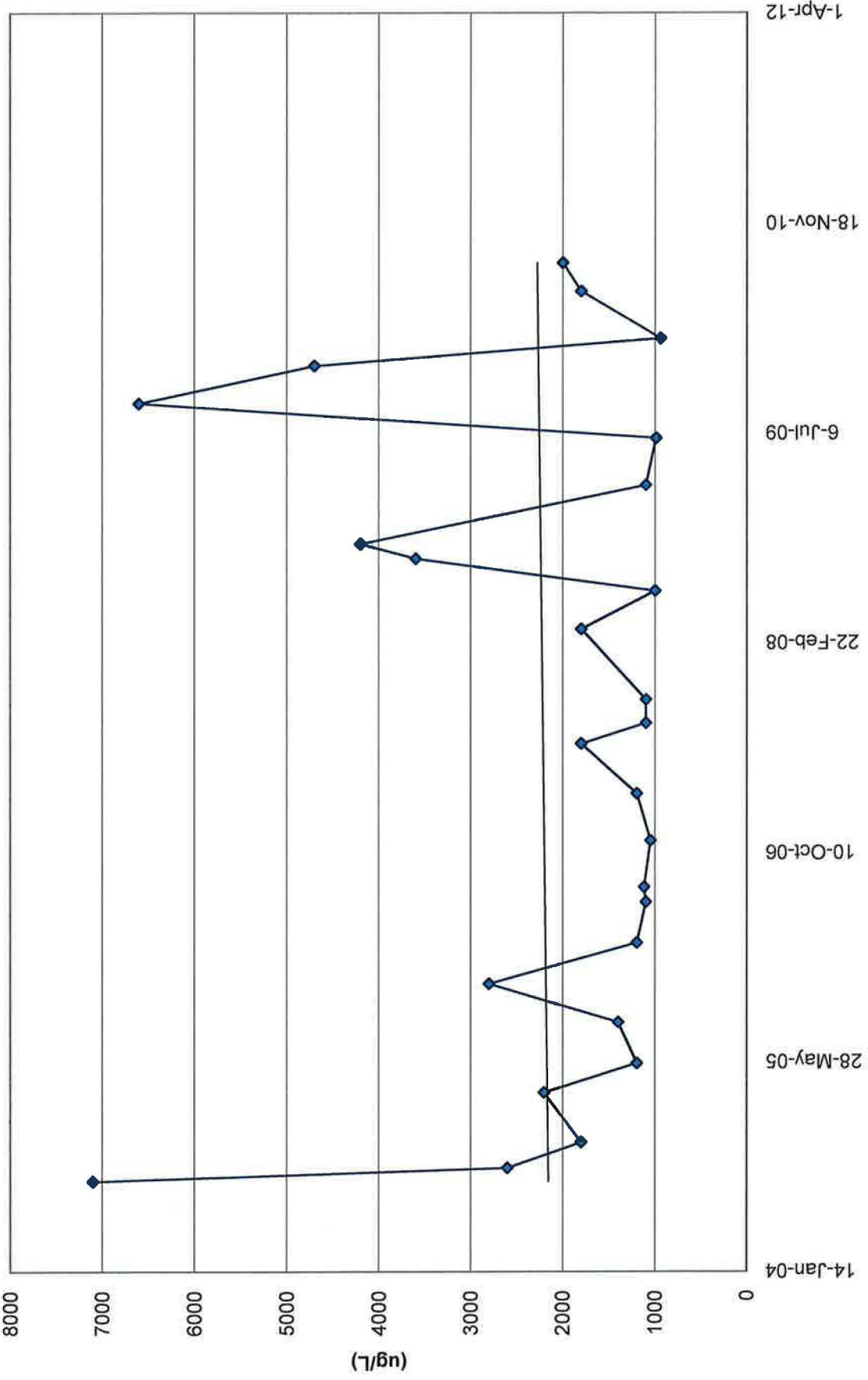




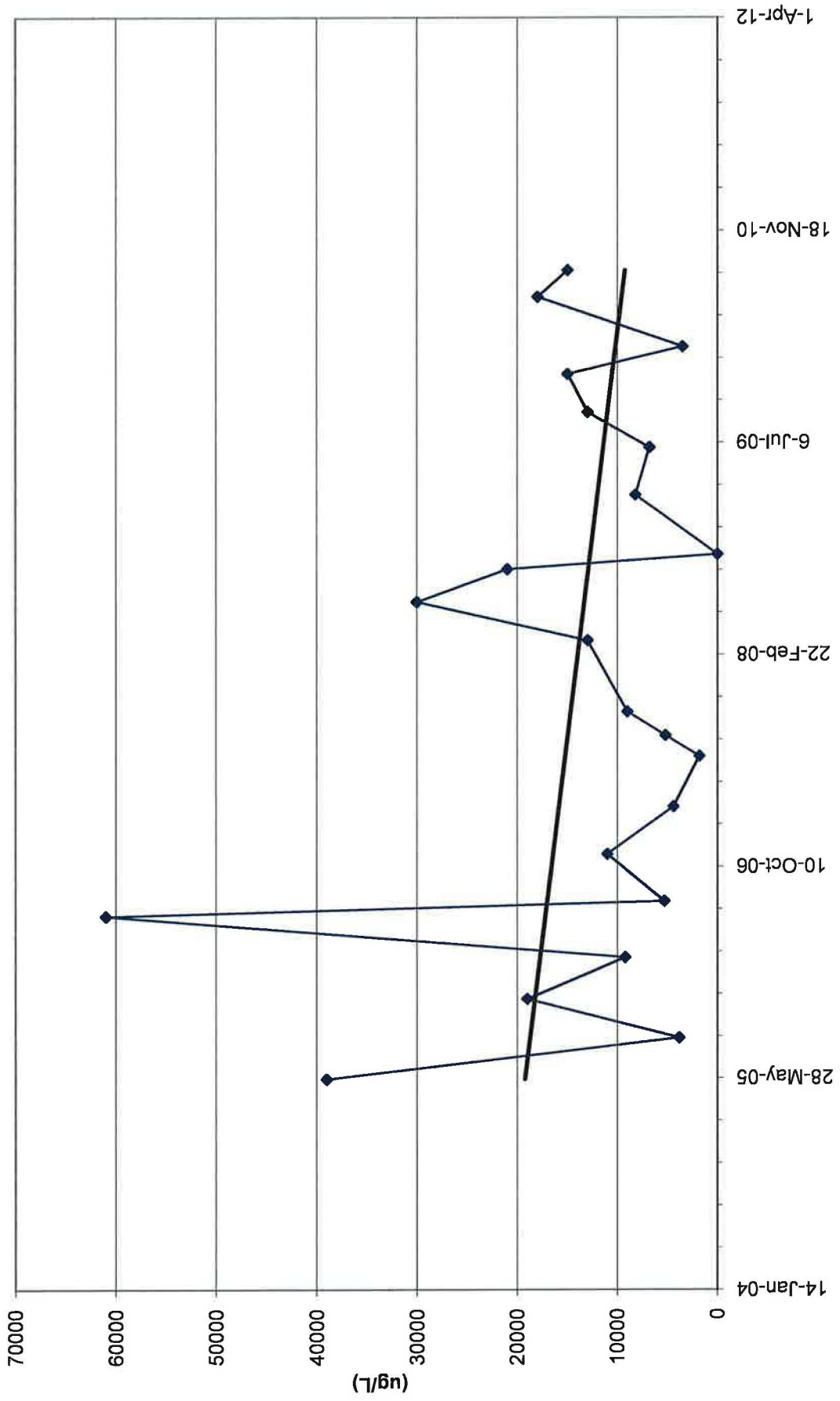
### TW4-18 Chloroform Values



# TW4-19 Chloroform Values

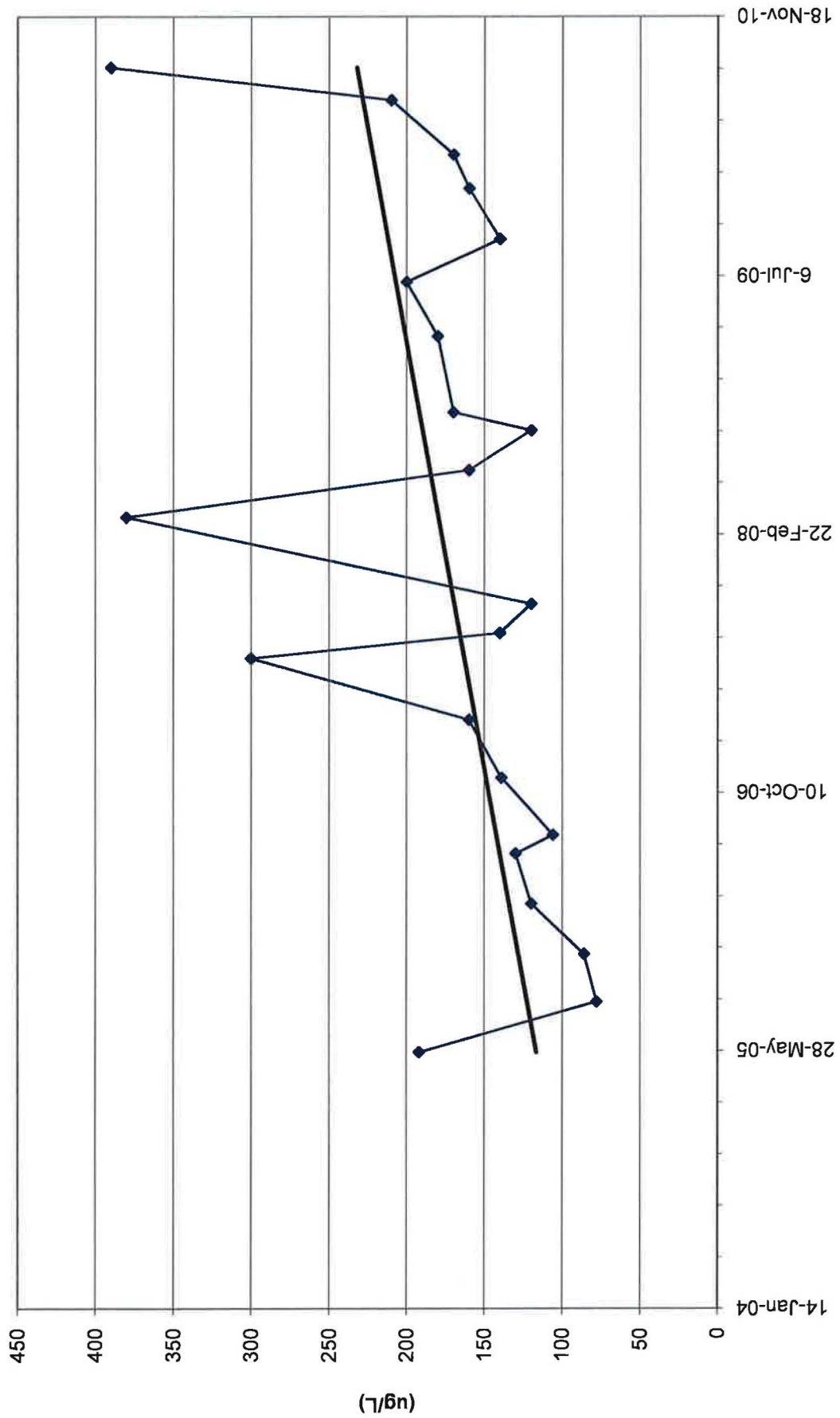


# TW4-20 Chloroform Values

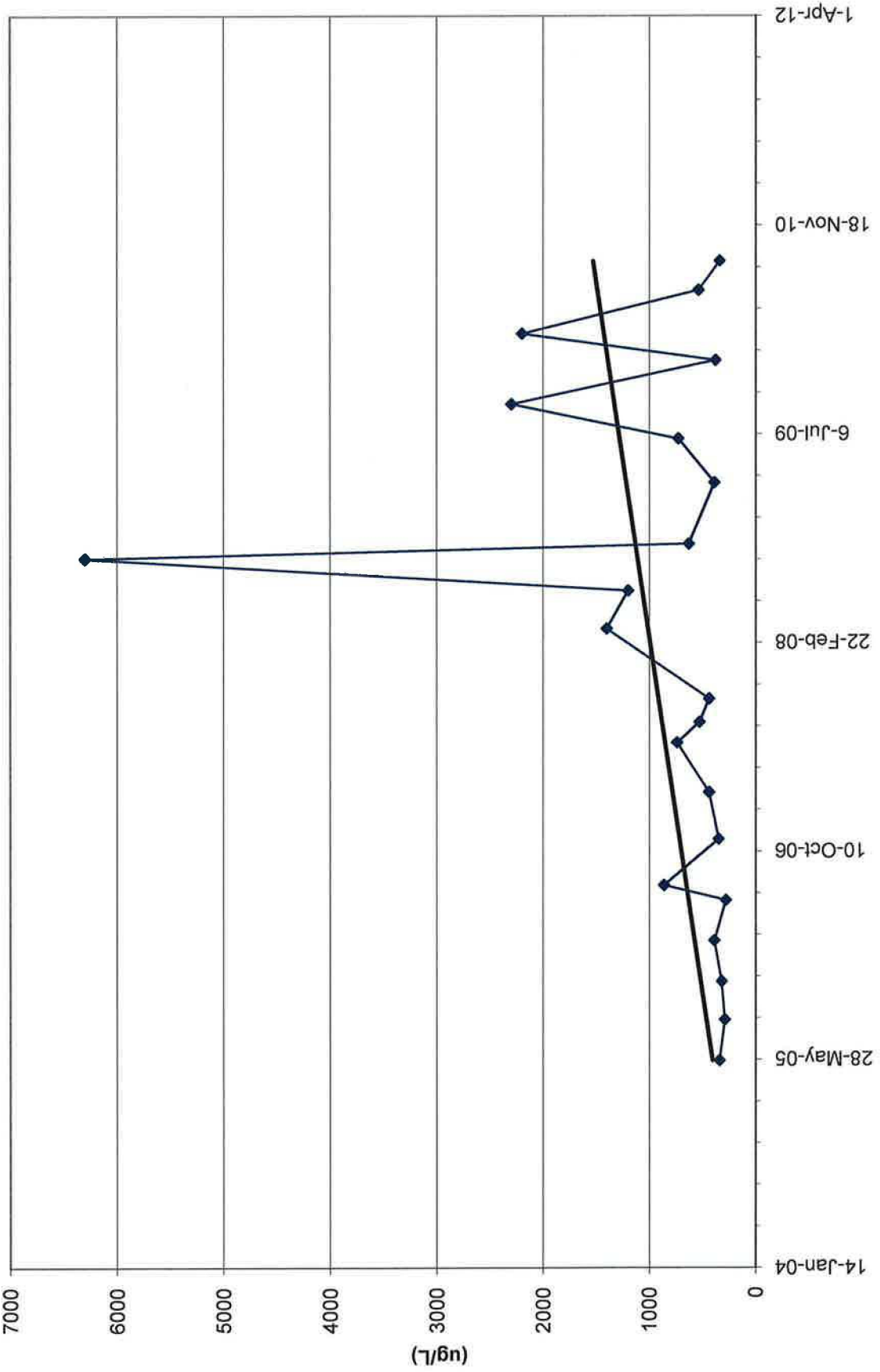




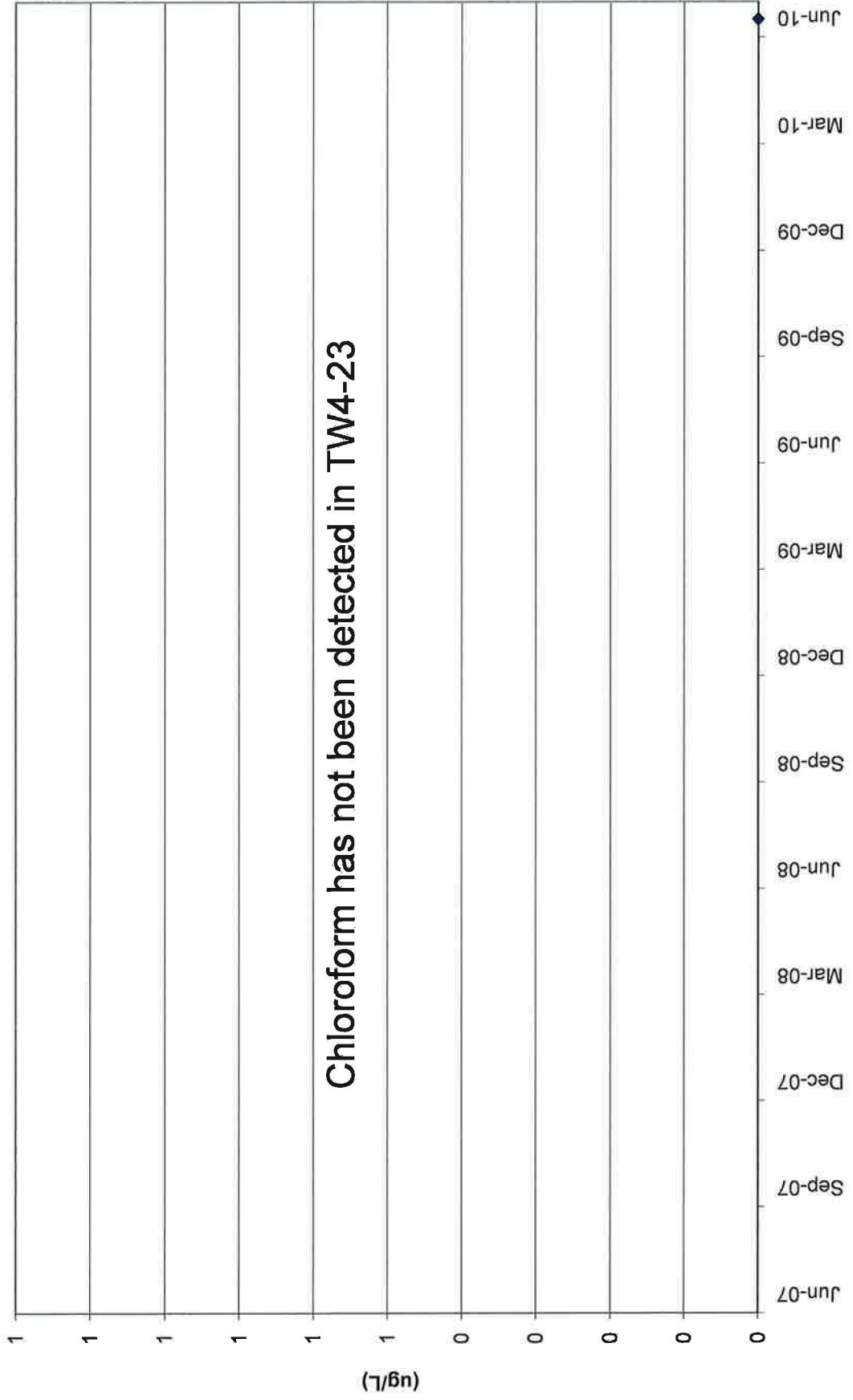
# TW4-21 Chloroform Values



# TW4-22 Chloroform Values

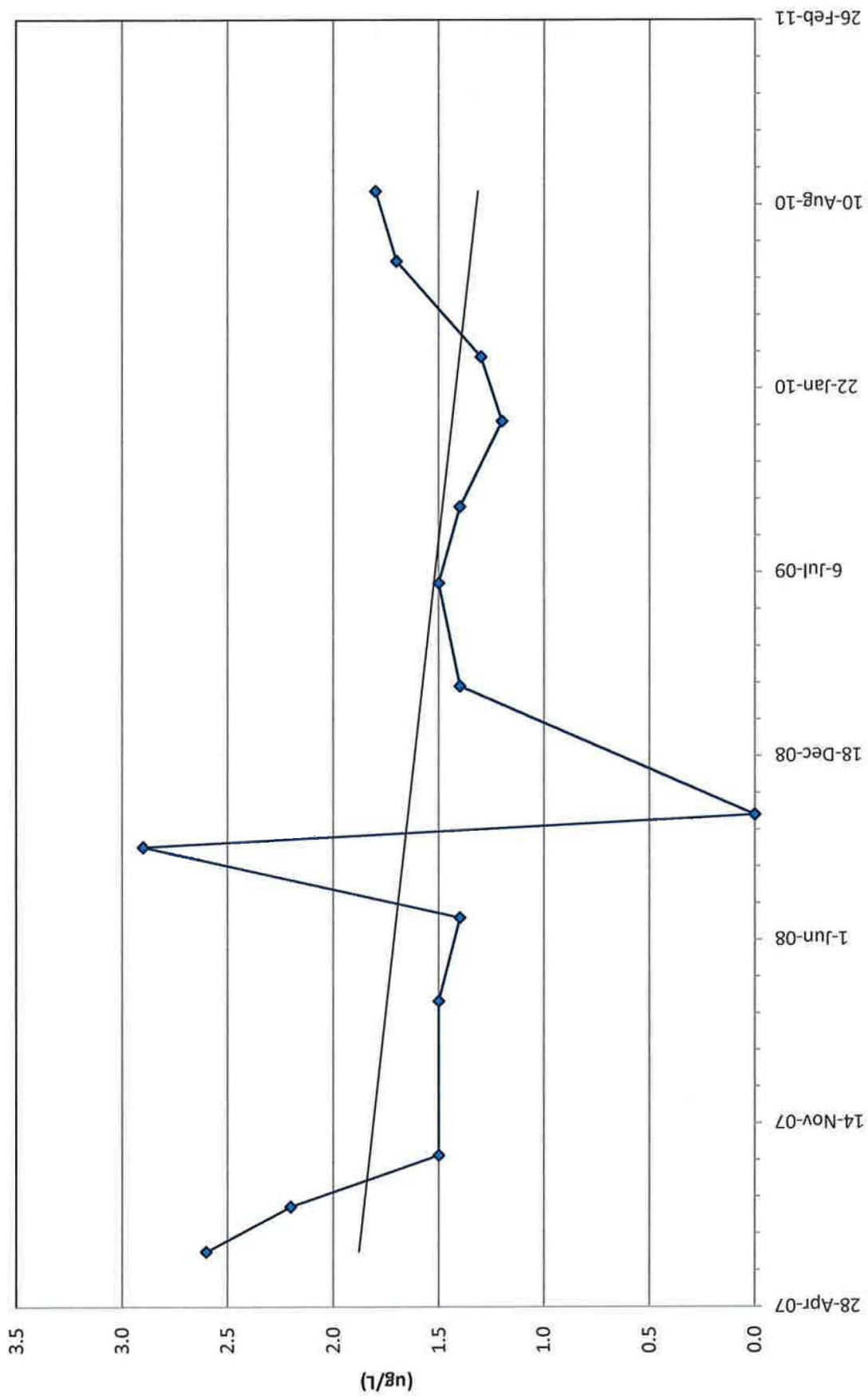


### TW4-23 Chloroform Values

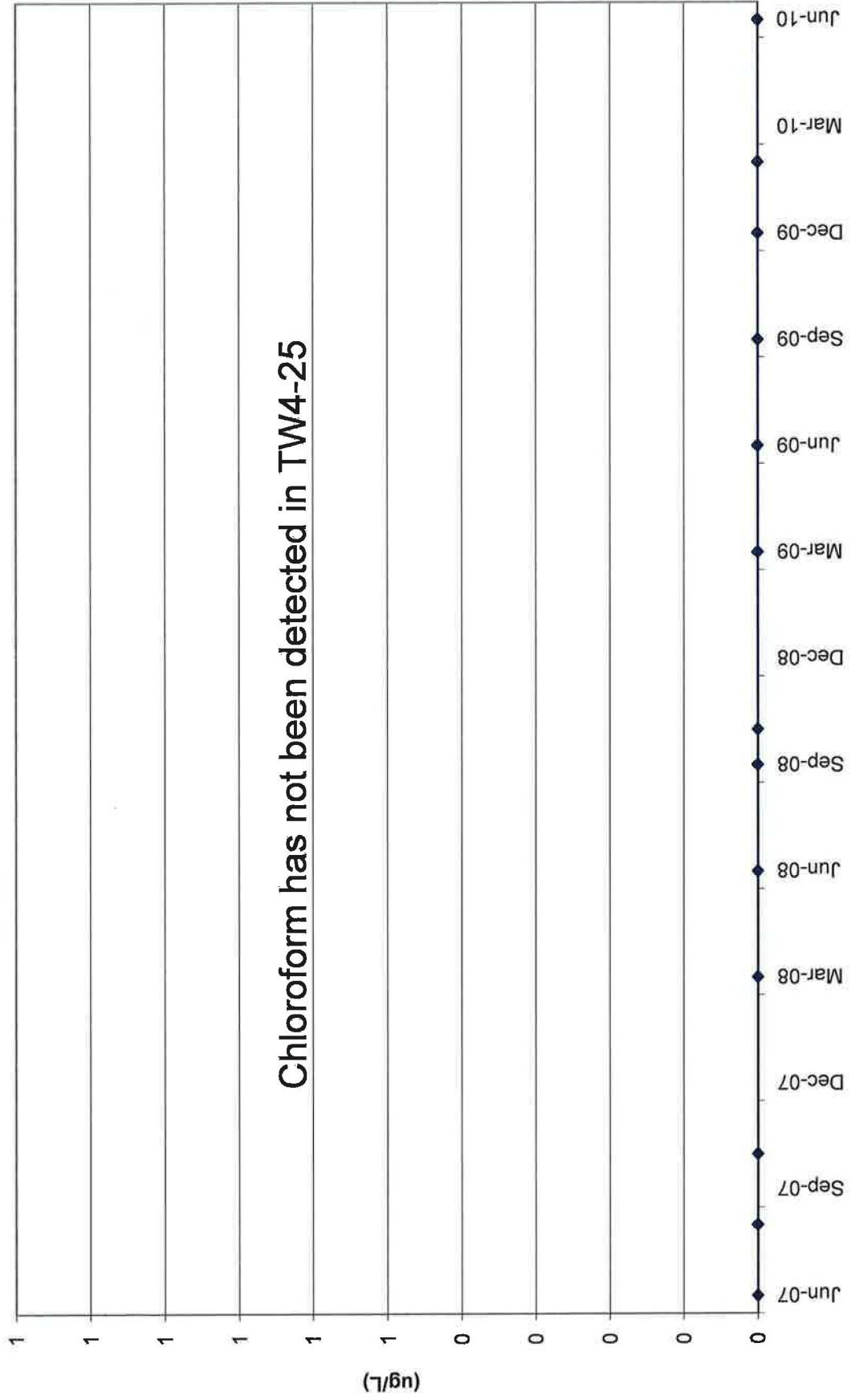


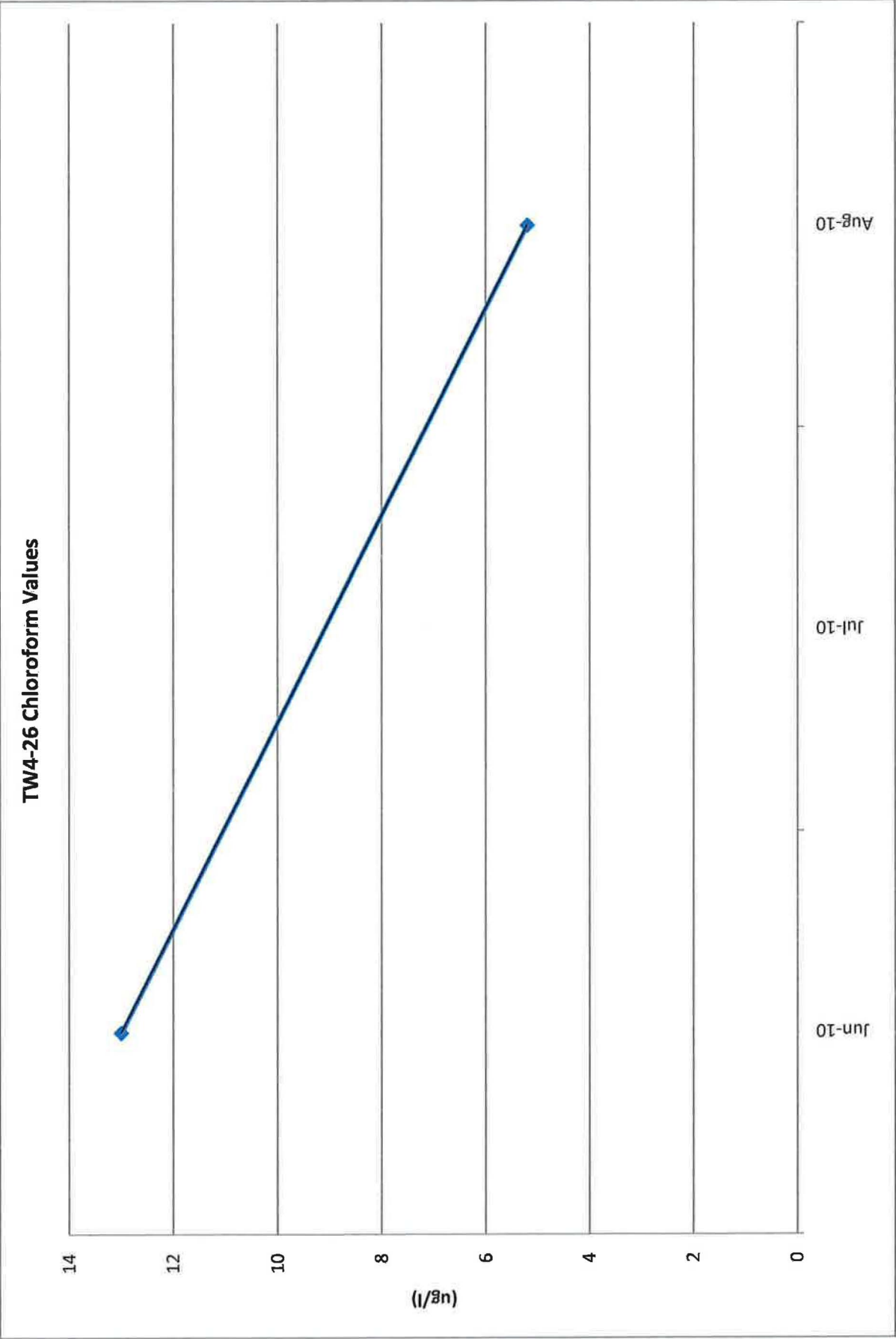


# TW4-24 Chloroform Values



### TW4-25 Chloroform Values







**Tab M**  
**CSV Transmittal Letter**

## Kathy Weinel

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**From:** Kathy Weinel  
**Sent:** Wednesday, October 20, 2010 10:54 AM  
**To:** rlundberg@utah.gov  
**Cc:** Jo Ann Tischler; David Frydenlund  
**Subject:** Transmittal of CSV Files White Mesa Mill 2010 Q3 Chloroform Monitoring  
**Attachments:** C10080518 (2).csv; C10080785.csv; C10081012.csv

Dear Mr. Lundberg,

Attached to this e-mail are electronic copies of laboratory results for chloroform monitoring conducted at the White Mesa Mill during the third quarter of 2010, 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  
Denison Mines (USA) Corp.  
Quality Assurance Manager

Tab N

Disinfection Byproducts - Trihalomethanes





**Basic Information about Regulated Drinking Water Contaminants**

You are here: [Water](#) » [Drinking Water](#) » [Drinking Water Contaminants](#) » [Basic Information about Regulated Drinking Water Contaminants](#) » Basic Information about Disinfection Byproducts in Drinking Water: Total Trihalomethanes, Haloacetic Acids, Bromate, and Chlorite

Share

**Basic Information about Disinfection Byproducts in Drinking Water: Total Trihalomethanes, Haloacetic Acids, Bromate, and Chlorite**

To protect drinking water from disease-causing organisms, or pathogens, water suppliers often add a disinfectant, such as chlorine, to drinking water. However, disinfection practices can be complicated because certain microbial pathogens, such as *Cryptosporidium*, are highly resistant to traditional disinfection practices. Also, disinfectants themselves can react with naturally-occurring materials in the water to form byproducts, which may pose health risks.

A major challenge for water suppliers is how to control and limit the risks from pathogens and disinfection byproducts. It is important to provide protection from pathogens while simultaneously minimizing health risks to the population from disinfection byproducts. For more information, see fact sheets on [Pathogens and Indicators](#) and [Disinfectants](#).

- [What disinfection byproducts does EPA regulate, how are they formed, and what are their health effects in drinking water at levels above the maximum contaminant level?](#)
- [What are EPA's drinking water regulations for disinfection byproducts?](#)
- [How will I know if disinfection byproducts are in my drinking water?](#)
- [How will disinfection byproducts be removed from my drinking water?](#)
- [How do I learn more about my drinking water?](#)

What disinfection byproducts does EPA regulate, how are they formed, and what are their health effects in drinking water at levels above the maximum contaminant level?

Disinfection Byproduct (Chemical Abstract Service Registry Number)	How is it formed?	Health Effects
<b>Total Trihalomethanes</b>		
<i>Bromodichloromethane (75-27-4)</i>		
<i>Bromoform (75-25-2)</i>	Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.	Some people who drink water containing total trihalomethanes in excess of the MCL over many years could experience liver, kidney, or central nervous system problems and increased risk of cancer.
<i>Dibromochloromethane (124-48-1)</i>		
<i>Chloroform (67-66-3)</i>		
<b>Haloacetic acids:</b>		
<i>Dichloroacetic acid (79-43-6)</i>		
<i>Trichloroacetic acid (76-03-9)</i>		
<i>Chloroacetic acid (79-11-8)</i>	Haloacetic acids occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
<i>Bromoacetic acid(79-08-3)</i>		
<i>Dibromoacetic acid (631-64-1)</i>		
<b>Bromate (15541-45-4)</b>	Bromate occurs when bromide in the water reacts with the disinfectant, ozone.	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Chlorite (7758-19-2)</b>	Chlorite occurs when chlorine dioxide breaks down.	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

This health effects language is not intended to catalog all possible health effects for disinfection byproducts. Rather, it is intended to inform consumers of some of the possible health effects associated with disinfection byproducts in drinking water when the rule was finalized.

**What are EPA's drinking water regulations for disinfection byproducts?**

In 1974, Congress passed the Safe Drinking Water Act. This law requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur. These non-enforceable health goals, based solely on possible health risks and exposure over a lifetime, with an adequate margin of safety, are called maximum contaminant level goals (MCLG). Contaminants are any physical, chemical, biological or radiological substances or matter in water. EPA sets MCLGs based on the best available science to prevent potential health problems.

Based on the MCLG, EPA sets an enforceable regulation called a maximum contaminant level (MCL). MCLs are set as close to the health goals as possible, considering cost, benefits and the ability of public water systems to detect and remove contaminants using suitable treatment technologies. MCLs for disinfection byproducts are set at the following levels:

Disinfection Byproduct	MCLG	MCL
<b>Total Trihalomethanes</b>		
<i>Bromodichloromethane</i>	Zero	
<i>Bromoform</i>	Zero	0.080 mg/L or 80 ppb
<i>Dibromochloromethane</i>	0.06 mg/L or 60 ppb	(Sum of the concentrations of all five trihalomethanes) as an annual average
<i>Chloroform</i>	0.07 mg/L or 70 ppb	
<b>Haloacetic acids</b>		
<i>Dichloroacetic acid</i>	Zero	
<i>Trichloroacetic acid</i>	0.02 mg/L or 20 ppb	
<i>Monochloroacetic acid</i>	0.07 mg/L or 70 ppb	0.060 mg/L or 60 ppb (Sum of the concentrations of all five haloacetic acids) as an annual average
<i>Bromoacetic acid</i>	Regulated with this group but has no MCLG	
<i>Dibromoacetic acid</i>	Regulated with this group but has no MCLG	
<b>Bromate</b>	Zero	0.010 milligrams per liter (mg/L) or 10 parts per billion (ppb) as an annual average
<b>Chlorite</b>	0.80 mg/L or 800 ppb	1.0 mg/L or 1 part per million (ppm)

MCLs are set as close to the health goals as possible, considering cost, benefits and the ability of public water systems to detect and remove contaminants using suitable treatment technologies. States may set more stringent drinking water MCLGs and MCLs for disinfection byproducts than EPA.

The following drinking water regulations apply to disinfectants and disinfection byproducts:

- [Stage 1 Disinfectants and Disinfection Byproducts Rule \(Stage 1 DBP\)](#) (December 16, 1998)  
The Stage 1 Disinfectants and Disinfection Byproducts Rule reduces exposure to disinfection byproducts for customers of community water systems and non-transient non-community systems, including those serving fewer than 10,000 people, that add a disinfectant to the drinking water during any part of the treatment process.
- [Stage 2 Disinfectants and Disinfection Byproducts Rule \(Stage 2 DBP\)](#) (December 15, 2005)  
Stage 2 DBP rule builds upon earlier rules that addressed disinfection byproducts to improve your drinking water quality and provide additional public health protection from disinfection byproducts.

The Safe Drinking Water Act requires EPA to periodically review the national primary drinking water regulation for each contaminant and revise the regulation, if appropriate, based on new scientific data. EPA will include the Disinfectants and Disinfection Byproducts rules in a future review cycle.

- [More information on the Six Year Review of Drinking Water Standards](#)

#### How will I know if disinfection byproducts are in my drinking water?

When routine monitoring indicates that disinfection byproduct levels are above the MCL, your water supplier must take steps to reduce the amount of disinfection byproducts so that they are below that level. Water suppliers must notify their customers as soon as practical, but no later than 30 days after the system learns of the violation. Additional actions, such as providing alternative drinking water supplies, may be required to prevent serious risks to public health.

- [See EPA's public notification requirements for public water systems.](#)

#### How will disinfection byproducts be removed from my drinking water?

Water systems that use surface water or ground water under the direct influence of surface water and use conventional filtration treatment are required to remove specified percentages of organic materials that may react with disinfectants to form disinfection byproducts, prior to disinfection. Other control strategies include modification of disinfection practices in a manner that still provides adequate protection against pathogens.

#### How do I learn more about my drinking water?

EPA strongly encourages people to learn more about their drinking water, and to support local efforts to protect the supply of safe drinking water and upgrade the community water system. Your water bill or telephone book's government listings are a good starting point for local information.

Contact your water utility. EPA requires all community water systems to prepare and deliver an annual consumer confidence report (CCR) (sometimes called a water quality report) for their customers by July 1 of each year. If your water provider is not a community water system, or if you have a private water supply, request a copy from a nearby community water system.

- [The CCR summarizes information regarding sources used \(i.e., rivers, lakes, reservoirs, or aquifers\), detected contaminants, compliance and educational information.](#)
- [Some water suppliers have posted their annual reports on EPA's Web site.](#)

#### Other EPA Web sites

- Find an answer or ask a question about drinking water contaminants on [EPA's Question and Answer Web site](#) or call EPA's Safe Drinking Water Hotline at (800) 426-4791
- [EPA's Microbials and Disinfection Byproducts Web site](#)
  - [Stage 2 Disinfectant/Disinfection Byproducts Rule](#)
  - [Stage 1 Disinfectant/Disinfection Byproducts Rule](#)

- [EPA's Envirofacts ICR Web site](#)
  - [Disinfection Byproduct Information](#)
  - [Disinfection Byproducts: A Reference Resource](#)
  - [Disinfection Byproducts Health Effects](#)
- [EPA's Guidance Manual Alternative Disinfectants and Oxidants PDF](#)
- [EPA's Integrated Risk Information System](#)
- [EPA History of Drinking Water Treatment PDF](#)
- [EPA Drinking Water Treatment Fact Sheet PDF](#)

<http://water.epa.gov/drink/contaminants/basicinformation/disinfectionbyproducts.cfm>

#### **Other Federal Departments and Agencies**

- **Bromate**
    - [Centers for Disease & Prevention Control's National Institute for Occupational Safety and Health International Chemical Safety Card for Sodium Bromate](#)
  - **Chlorite**
    - [Agency for Toxic Substances and Disease Registry, ToxFAQs, Chlorine Dioxide and Chlorite](#)
    - [Agency for Toxic Substances and Disease Registry, Toxicological Profile, Chlorine Dioxide and Chlorite](#)
- 

Last updated on Monday, June 14, 2010.



# Disinfection By-Products

## Trihalomethanes



Trihalomethanes (THM) are a group of four chemicals that are formed along with other disinfection by products when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. The trihalomethanes are chloroform, bromodichloromethane, dibromochloromethane, and bromoform. EPA has published the Stage 1 Disinfectants and Disinfection Byproducts Rule to regulate total trihalomethanes (TTHM) at a maximum allowable annual average level of 80 parts per billion.

The four trihalomethanes (THM's) listed below:

Trichloromethane (chloroform)	$\text{CHCl}_3$
Dibromochloromethane	$\text{CHClBr}_2$
Bromodichloromethane	$\text{CHCl}_2\text{Br}$
Tribromomethane (bromoform)	$\text{CHBr}_3$

are all by-products of chlorination. They are Cancer Group B carcinogens (shown to cause cancer in laboratory animals). Trichloromethane (chloroform) is by far the most common in most water systems. Dibromochloromethane is the most serious cancer risk, (0.6 ug/l to cause a  $10^{-6}$  cancer risk increase) followed in order by Bromoform (4 ug/l), and Chloroform (6 ug/l). Current regulations limit the concentration of these 4 chemicals added together (total trihalomethane or TTHM levels) to 100 ug/l.

## Treatment

THM levels tend to increase with pH, temperature, time, and the level of "precursors" present. Precursors are organic material which reacts with chlorine to form THM's. One way to decrease THM's is to eliminate or reduce chlorination before the filters and to reduce precursors.. There are more

precursors present before filtration, so we want to reduce or eliminate the time chlorine is in contact with this water. If some oxidation before filtration is required, an alternative disinfectant like potassium permanganate or peroxide could be considered. Note that this may not be an option if prechlorination is necessary to achieve required CT values.

The EPA has indicated that the best available technology for THM control at treatment plants is removal of precursors through "enhanced coagulation". Enhanced coagulation refers to the process of optimizing the filtration process to maximize removal of precursors. Removal is improved by decreasing pH (to levels as low as 4 or 5), increasing the feed rate of coagulants, and possibly using ferric coagulants instead of alum.

For point of use systems at homes, activated carbon filters are the most effective treatment. Reverse osmosis units will also eliminate trihalomethanes.

## Upcoming Regulations

The EPA is considering extensive revisions to the regulations covering disinfection by-products (DBP's). The limit for TTHM's would be lowered to 80 ug/l, and three additional categories of DBP's. This standard will replace the current standard of a maximum allowable annual average level of 100 parts per billion in December 2001 for large surface water public water systems. The standard will become effective for the first time in December 2003 for small surface water and all ground water systems

**Haloacetic acids** (monobromoacetic acid, dibromoacetic acid, monochloroacetic acid, dichloroacetic acid, and trichloroacetic acid) are byproducts of chlorination similar to THM's. An MCL for total haloacetic acids of 60 ug/l is expected. Excessive levels can cause nervous system and liver effects.

**Chlorite** is to be regulated with an MCL set at 1 mg/l. Excessive levels can cause hemolytic anemia.

**Bromate**, the other newly regulated DBP, is a concern only for systems using ozone. An MCL of 10 ug/l is expected. Excessive levels causes gastrointestinal, kidney, and hearing effects.

### Stage 1 Disinfectants and Disinfection Byproducts Rule

### **More Comprehensive Information on Trihalomethanes**

University of Florida  
<http://www.gen.ufl.edu/~wq/thm/>

Canadian Website  
<http://www.watermill.com.au/chlorine.htm>

Water Quality Help Guides  
Glossary of Water Terminology

Note: ug/l is used as an abbreviation for micrograms/liter or parts per billion.

Note: THM's are not a major concern for treating groundwater wells with low organic matter content. THM's form through the partial oxidation of organic material, therefore it is a more important concern to