March 1, 2013

Mr. Weiquan Dong, PE
Bureau of Corrective Actions, Special Projects Branch
Nevada Division of Environmental Protection
2030 E. Flamingo Rd., Suite 230
Las Vegas, Nevada 89119

Re: Semi-Annual Remedial Performance Report for Chromium and Perchlorate July 2012-December 2012; Nevada Environmental Response Trust Site, Henderson, Nevada

Dear Mr. Dong:

Please find enclosed the Semi-Annual Remedial Performance Report for Chromium and Perchlorate July 2012-December 2012 for the Nevada Environmental Response Trust (NERT) Site in Henderson, Nevada. This report was prepared by ENVIRON International Corporation (ENVIRON) on behalf of the Nevada Environmental Response Trust (the Trust). The entire document is available in electronic format on CD located in the back folder of this binder.

Please contact John Pekala at (602) 734-7710 or Allan DeLorme at (510) 420-2565 if you have any comments or questions concerning this report.

Sincerely,

John M. Pekala, CEM #2347
Senior Manager

Allan J. DeLorme, PE
Managing Principal

cc: BMI Compliance Coordinator, NDEP, BCA, Las Vegas
Brian Rakvica, McGinley and Associates, Las Vegas
NDEP c/o McGinley and Associates, Reno

ec: Shannon Harbour, NDEP
Greg Lovato, NDEP
Stephen Tyahla, USEPA
Rebecca Shircliff, Neptune and Company
Jay Steinberg, Le Petomane XXVII, Inc.
Andrew Steinberg, Le Petomane XXVII, Inc.
Tanya O'Neill, Foley & Lardner LLP
Jeff Gibson, AMPAC
Mark Paris, BMI
Lee Farris, Landwell
Ranajit Sahu, BMI
Joe Kelly, Montrose
Paul Sundberg, Montrose
Curt Richards, Olin
Jay Gear, Olin
Ed Modiano, de maximis
Chuck Elmendorf, Stauffer
Nick Pogoncheff, Stauffer
George Crouse, Syngenta
Kirk Stowers, TIMET
Victoria Tyson, Tyson Contracting (for TIMET)
Enoe Marcum, WAPA

ENVIRON International Corp. 2200 Powell Street, Suite 700, Emeryville, CA 94608
V +1 510.655.7400 F +1 510.655.9517

environcorp.com

Semi-Annual Remedial Performance Report for Chromium and Perchlorate

Nevada Environmental Response Trust Site
Henderson, Nevada
July 2012 – December 2012

Prepared for:
Nevada Environmental Response Trust

Prepared by:
ENVIRON International Corporation
Emeryville, California

Date:
March 1, 2013

Project Number:
21-32100H

ENVIRON

Semi-Annual Remedial Performance Report for Chromium and Perchlorate

Nevada Environmental Response Trust
(Former Tronox LLC Site)
Henderson, Nevada

Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of the Trust. Based on my own involvement and/or my inquiry of the person or persons who manage the system(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

Signature: Jay A Steinberg, President, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

Name: Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

Title: Solely as President and not individually

Company: Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

Date: 8/28/13

Persons responsible for preparing this report

Allan J. DeLorme, P.E.
Principal

ENVIRON International Corporation
2200 Powell St, Suite 700
Emeryville, California

Other individuals who provided input to this report
Edward J. Krish, Edward J. Krish Consulting

Responsible CEM for this project

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.

John M. Pekala, PG
Senior Manager

Certified Environmental Manager
ENVIRON International Corporation
CEM Certificate Number: 2347
CEM Expiration Date: September 20, 2014

Contents

List of Tables

List of Figures

List of Plates

List of Appendices

1 Introduction

In accordance with the Interim Consent Agreement between the Nevada Environmental Response Trust (the Trust) and the Nevada Division of Environmental Protection (NDEP), ENVIRON International Corporation (ENVIRON) submits this performance report to NDEP on behalf of the Trust for the Nevada Environmental Response Trust Site (the Site) in Henderson, Nevada.

Tronox LLC (Tronox) formerly owned and operated the Site. In conjunction with the settlement of Tronox's bankruptcy proceeding, the Trust took title to the Site and the groundwater extraction and treatment system (GWETS).[1] The effective date of the property transfer to the Trust and the Interim Consent Agreement between the Trust and NDEP was February 14, 2011. The Tronox facility remains within a portion of the Site leased from the Trust in order to continue manufacturing operations.

This report is a mid-period report for chromium and perchlorate. A detailed evaluation and presentation of data will be contained in the Annual Remedial Performance Report for Chromium and Perchlorate (the "Annual Performance Report") due to the NDEP in August 2013.

This report, covering the period July 2012 through December 2012, summarizes performance data for both the chromium and perchlorate removal programs based on sampling performed during this period. Specifically, this report describes:

- Regional groundwater conditions based on July through December 2012 groundwater levels;
- The hexavalent chromium remediation system (consisting of the on-site Interceptor well field [IWF], the off-site Athens Road well field [AWF],[2] and the related treatment systems) and its performance in carrying out the chromium removal program;
- The perchlorate remediation system (consisting of the on-site IWF, the off-site AWF, the off-site Seep well field [SWF], the off-site Seep surface-flow capture sump, and related treatment systems) and its performance in carrying out the perchlorate removal program;
- The distribution of total dissolved solids (TDS) concentrations at the Site; and
- Proposed future activities.

This report is provided in both hard copy and electronic forms. Appendix A contains Table A-1 (as hardcopy and on the report CD), which has five quarters of groundwater elevation and analytical data from the Site. The analytical lab reports for the third and fourth quarter 2012 groundwater monitoring events are also included in Appendix A (on the report CD). Appendix B

[1] Herein "GWETS" will be used to refer to the entirety of all systems and components of the groundwater extraction and treatment systems owned and operated by the Trust, both on-site and off-site, including extraction well fields, treatment facilities, and groundwater conveyance systems.

[2] Although Athens Road has been renamed Galleria Drive, the Athens Road designation has been retained for the well field to maintain consistency with past reports.

contains the field records from July to December 2012 (on the report CD). Appendix C contains the Data Validation Summary Report (DVSR) (on the report CD). Appendix D contains the Electronic Data Deliverable (EDD). The EDD includes an Access© compatible data file (on the report CD) containing the analytical results from the period July to December 2012, and an Access© compatible data file (on the report CD) containing water level monitoring data from the period July to December 2012.

2 Area Groundwater Conditions

The locations of the groundwater extraction well fields are shown on Figure 1, a location map covering the area between the Site and Las Vegas Wash. This section provides a discussion of the performance of each of the well fields, starting with the on-site extraction well field and proceeding to the successively northward (downgradient) extraction well fields. Plate 1 shows the locations of all former and current groundwater wells in the vicinity.

Ground surface elevations across the Site range from 1,677 to 1,873 feet above mean sea level. The ground surface across the Site generally slopes downward to the north at a gradient of approximately 0.022 feet per foot (ft/ft). Offsite to the north, the topographic surface continues at the same gradient to approximately Sunset Road, at which point it flattens to a gradient of 0.011 ft/ft to the Las Vegas Wash. The shallow groundwater gradient generally mimics the surface topography.

The NDEP has defined three water-bearing zones (WBZs) that are of interest in the vicinity of the Site, including the Shallow, Middle, and Deep Zones. The Shallow Zone, which extends to approximately 90 feet below ground surface (bgs), is unconfined to partially confined, and is considered the water table aquifer. Unless otherwise stated, discussions of groundwater in this report refer to the Shallow Zone, which contains the saturated portions of the Quaternary alluvium (Qal) and the uppermost portion of the Muddy Creek Formation (UMCf).

During the current reporting period, shallow groundwater was generally encountered in on-site wells between 20 and 50 feet bgs and is generally deepest in the southernmost portion of the Site. North of the Site, beyond Boulder Highway, shallow groundwater is generally encountered between four and 30 feet bgs, becoming shallower as it approaches the Las Vegas Wash. As discussed in the report entitled *Annual Remedial Performance Report for Chromium and Perchlorate, Nevada Environmental Response Trust Site; Henderson, Nevada; July 2011 – June 2012 dated August 31, 2012* (the "2012 Annual Performance Report"), the groundwater flow direction beneath the Site is generally north to north-northwesterly; whereas north of the Site, the direction changes slightly to the north-northeast. This generally uniform flow pattern may be modified locally by subsurface alluvial channels (the Qal) cut into the underlying UMCf, the on-site bentonite-slurry groundwater barrier wall (the "barrier wall"), on- and off-site artificial groundwater highs or "mounds" created around the on-site recharge trenches,[3] the City of Henderson (COH) Water Reclamation Facility (WRF) Rapid Infiltration Basins (RIBs)[4], and the groundwater extraction wells at the three well fields.

During the current reporting period ending December 2012, groundwater levels at the Site were relatively consistent with the previous five quarters, with the exception of wells in the vicinity of the barrier wall. Many of the active IWF pumping wells (I-series wells), which are located

[3] Reinjection of stabilized Lake Mead water ceased in September 2010 as the recharge trenches were removed to accommodate soil excavation and remediation activities at the Site. They have not been replaced.

[4] Since the completion of the COH WRF in 2008, discharge of treated effluent to the Pabco Road RIBs has ceased; however, groundwater mounding events, although lessening in intensity, continued to be observed into late 2011. The most recent mounding events are likely attributable to the operation of the birding preserve ponds located west of the RIBs.

directly upgradient of the barrier wall, had water levels that were approximately five to 15 feet higher during November 2012 than anytime during the previous five quarters. The water levels in the pumping IWF wells decreased in December 2012, back to levels consistent with those measured during the previous five quarters, but monitoring wells in the vicinity of the barrier wall remained elevated. Water levels just south (upgradient) of the barrier wall (e.g. wells M-36, M-38, M-56, M-60, M-65, and M-66) were generally two to four feet higher during November 2012 than anytime during the previous five quarters. Water elevations to the north (downgradient) of the barrier wall (e.g. wells M-70, M-71, M-72, M-73) were generally about two feet higher during November 2012 than anytime during the previous five quarters. The increases in water levels occurred primarily in the measurements from August through November 2012, which coincided with heavy rainfall at the Site (see below).

Rainfall was higher than average during the current reporting period with approximately 4.4 inches of rainfall between August and October 2012. Historical rainfall for the August through October time period averaged only 1.3 inches over the last 10 years of recorded data.[5] It appears that the higher than average rainfall has influenced Site groundwater conditions during the current reporting period, particularly conditions near the IWF.

2.1 Interceptor Well Field Area

The location of the IWF area is shown on Figure 1. A bentonite-slurry wall was constructed as a physical barrier across the higher concentration portion of the perchlorate/chromium plume on the Site in 2001. The barrier wall is approximately 1,600 feet in length and 60 feet deep and constructed to tie vertically into approximately the uppermost 30 feet of UMCf. The IWF consists of a series of 23 groundwater extraction wells that are situated south (upgradient) of the barrier wall. Seven additional extraction wells (I-W, I-X, I-Y, I-AA, I-AB, I-AC, and I-AD) were installed and connected to the well field in 2010-2011; however, extraction from these wells has not commenced. These additional extraction wells were installed in response to Data Gap #3 identified in the March 2010 Interim Groundwater Capture Evaluation and Vertical Delineation Report prepared by Northgate Environmental Management Inc. (Northgate) on behalf of Tronox.[6] An initial analysis of groundwater capture at the IWF, completed as part of the 2012 Annual Performance Report, led to recommendations for adjusting extraction rates of individual wells and turning on the new extraction wells (I-W, I-X, I-Y, I-AA, I-AB, I-AC and I-AD). These proposed pumping changes are currently under review by NDEP and have not yet been implemented. Upon approval by NDEP, a work plan will be prepared describing the startup procedures and the additional monitoring and analysis that would be required to evaluate the proposed changes in operation of the IWF.

The monthly average discharge rate for each IWF well active during July through December 2012 is shown in Table 1, along with the annual average discharge rates from the previous four years. The combined discharge of the IWF averaged 69.0 gallons per minute (gpm) from July to December 2012, which is generally consistent with previous years. Over the last four and a

[5] Rainfall obtained from the National Oceanic and Atmospheric Administration's Las Vegas McCarran International Airport Station, GHCND:USW00023169.

[6] Northgate Environmental Management, Inc. 2010. Interim Groundwater Capture Evaluation and Vertical Delineation Report, Tronox LLC, Henderson, Nevada. March 23.

half years of operation, the combined discharge of the IWF averaged 68.4 gpm. In June 2001, prior to the installation of the barrier wall, the 22 wells comprising the IWF at that time averaged a combined discharge of 24.7 gpm.

Groundwater recharge trenches located north (downgradient) of the barrier wall were originally installed to receive extracted and treated groundwater, but have been used in the recent past to inject stabilized Lake Mead water into the subsurface to replace water extracted by the IWF. Reinjection ceased in September 2010 when the recharge trenches were removed to accommodate soil excavation and remediation activities at the Site. While the trenches are not currently in operation, evaluating the effectiveness of the recharge trench system and providing recommendations for the resumption of artificial recharge at the Site have been proposed (if deemed to be an effective strategy and consistent with future Remedial Action Objectives for groundwater). The Trust is in the process of obtaining NDEP's approval of the groundwater flow model developed for the Site as part of Northgate's December 2010 Capture Zone Evaluation Report (2010 CZE Report)[7] and will conduct the evaluation of the recharge trench system once the model has been approved for use.

Figures 2a through 2d present historic (May 2006 to December 2012) water elevations for selected pairs of monitoring wells located on opposite sides of the barrier wall. As shown on the figures, between July and December 2012, water levels in wells directly downgradient (north) of the barrier wall (wells M-69 through M-72) were generally five to 10 feet lower than water elevations in corresponding wells upgradient (south) of the wall (wells I-Y, M-55, M-56, and M-58). The large drop in measured groundwater elevations across the barrier wall indicates that the wall remains an effective barrier to groundwater flow.

Figures 2a through 2d show that since May 2006 water levels in downgradient wells showed a continual decline until February 2008 when refurbishment of the recharge trench was completed allowing increased recharge rates and a corresponding rise in water levels. Peaks in water levels in downgradient wells around July 2008 and May 2010 observed on Figures 2a through 2c (and to a lesser extent on Figure 2d) are in response to increased recharge rates during those times. These figures also show a significant decline in water elevations in the downgradient wells beginning around September 2010, when the recharge trenches were shut down and groundwater mounding associated with the recharge trench began to dissipate. NDEP refers to this area between the barrier wall and the recharge trenches as a "dead zone" where elevated perchlorate concentrations have historically been observed. Further analysis of the fate and transport of groundwater in this "dead zone" is planned during the evaluation of the recharge trench system using the approved groundwater flow model.

Starting in September 2012, and as seen on Figures 2a through 2d, water levels downgradient of the barrier wall were approximately two feet higher than during the previous 12 months and remained elevated during the remainder of the reporting period. During November 2012, water elevations in upgradient wells were approximately two to four feet higher than typical, but returned to previous levels in December 2012. These fluctuations in groundwater elevation

[7] Northgate Environmental Management, Inc. 2010. Capture Zone Evaluation Report, Tronox LLC, Henderson, Nevada. December 10.

during November 2012 appear to be the result of heavy precipitation at the Site in August, September and October 2012.

2.2 Athens Road Field Area

Figure 1 shows the location of the AWF, which is approximately 8,200 feet north (downgradient) of the barrier wall and the IWF. The AWF was constructed as a series of 14 groundwater extraction wells screened in the Qal at seven paired well locations that span approximately 1,200 feet across two alluvial paleochannels located on either side of an UMCf ridge. The AWF was completed in March 2002 and continuous pumping began in mid-October of that year. The well pairs act in concert with one well pumping while the adjacent well is used to measure water levels and monitor the effect of pumping on the aquifer. In September 2006, a 15th standalone well, ART-9, began full-time operation replacing ART-6A after groundwater elevations at the AWF dropped below a level where ART-6/6A could be effective. ART-6 is used as the recovery well for ART-9.

The annual average discharge rate for each AWF pumping well from July to December 2012 is shown in Table 2, along with the average annual discharge rates for the previous four years. The combined discharge rate of the AWF averaged 280.7 gpm from July to December 2012, which is generally consistent with the previous four years. Over the last four and a half years of operation, the combined discharge of the AWF averaged 267.1 gpm.

Groundwater levels are currently much lower than they were in 2002 before pumping began, and the Qal overlying the highest portion of the UMCf has been partially dewatered. In general, the water elevations in the AWF are similar to the water elevations from one year ago. Historical groundwater level trends for selected wells are shown on Figure 3.

In June/July 2010, additional groundwater wells were installed in the AWF including seven monitoring wells (PC-141 through PC-147) and four large diameter monitoring wells (ART-7B, PC-148, PC-149, and PC-150) that could be (but are not currently) used as additional extraction wells. The new eight-inch diameter well, ART-7B, is co-located with the ART-7/ART-7A extraction well pair, but with a screened interval extending deeper to the Qal/UMCf interface at the bottom of the eastern alluvial channel. Two new six-inch diameter wells, PC-148 and PC-149, are standalone wells that are situated across the top of the UMCf ridge with screened intervals almost entirely within the UMCf. Another new six-inch diameter well, PC-150, is a standalone well located west of the UMCf ridge in the western channel and is screened within the Qal.

As with the new IWF wells discussed in Section 2.1, an initial evaluation of these new wells and the performance of the AWF in general was included as part of the 2012 Annual Performance Report. As a result of that evaluation, a potential gap was identified in the capture zone of the AWF centered at well PC-149 and extending to the east and west past wells PC-148 and PC-150, respectively. The initial capture zone analysis suggested that adjusting extraction rates for individual wells within the AWF and turning on wells ART-7B and PC-150 could improve capture efficiency and address shallow groundwater in the UMCf ridge; however, these proposed pumping changes are currently under review by NDEP and have not yet been implemented. Upon approval by NDEP, a work plan will be prepared describing the startup procedures and

the additional monitoring and analysis that would be required to evaluate the proposed changes in operation of the AWF.

2.3 Seep Well Field Area

The SWF and the seep surface-flow capture sump, located approximately 4,500 feet north (downgradient) of the AWF near the Las Vegas Wash, are shown on Figure 1. When pumping began in July 2002, the SWF consisted of three recovery wells (PC-99R2/R3, PC-115R, and PC-116R) situated over the deepest part of the alluvial channel and a surface-capture sump for an intermittent surface stream. Five additional wells (PC-117, PC-118, PC-119, PC-120, and PC-121) were completed in February 2003 and an additional well (PC-133) was completed in December 2004, all in the SWF area. Presently, the SWF consists of 10 extraction wells—two of which (PC-99R2 and PC-99R3) are connected and operate as one combined well. The wells comprising the SWF are screened across the full thickness of the Qal across the deepest portion of an alluvial channel. Because of lowered groundwater levels in the vicinity, the seep stream has not flowed since April 2007.

The monthly average discharge rate for each SWF pumping well during July through December 2012 is shown in Table 3, along with the discharge rates for the previous four years. The combined discharge rate of the SWF averaged 593.7 gpm over the last six months (July – December 2012), which is the highest combined discharge rate in the previous four years. During the four years before the current reporting period, the combined discharge of the SWF had been steadily decreasing. Over the last four and a half years of operation, the combined discharge of the SWF averaged 551.5 gpm.

2.4 Groundwater Treatment Overview

Treatment of chromium-contaminated groundwater (primarily from the IWF) occurs via the on-site Groundwater Treatment Plant (GWTP),[8] which chemically reduces hexavalent chromium and removes total chromium via chemical precipitation. A small ferrous sulfate drip system is located at the AWF lift station (Lift Station #3) to treat chromium present (at lower concentrations) in groundwater extracted by the AWF. Treatment of perchlorate-contaminated groundwater from all well fields occurs via the on-site Fluidized-Bed Reactors (FBRs), which biologically remove perchlorate as well as chlorate, nitrate, and trace concentrations of residual chromium. A simplified process flow diagram is presented on Figure 4. Monthly extraction rates for individual IWF, AWF, and SWF wells are presented in Table 4. Routine maintenance is completed as needed at the GWTP and FBRs. The performances of the chromium and perchlorate treatment systems are described in Sections 3.2 and 4.2, respectively.

[8] By convention, the "GWTP" consists of only the on-site hexavalent chromium treatment plant. The name pre-dates the installation of any of the perchlorate treatment systems and related components.

3 Chromium Mitigation Program

The components of the chromium capture system consist of the IWF, the barrier wall, the former recharge trenches, and the AWF. The locations of these components are shown on Figure 1. For the 6-month period lasting from July to December 2012, a total of approximately 1,500 pounds of chromium were captured and removed from groundwater. The treatment of chromium-contaminated groundwater is discussed in Section 3.2.

3.1 Chromium Plume Configuration

A chromium plume map is not included in this mid-period report. Plume maps are included as part of the detailed evaluation and presentation of data contained in the Annual Remedial Performance Report submitted in August of each year. This section presents data to supplement the 2012 Annual Remedial Performance Report and the plume maps contained therein.

Table A-1 in Appendix A contains analytical and groundwater elevation data for the last five quarters. Based on November 2012 total chromium analytical results, the portion of the chromium plume with the highest concentrations remains south of the barrier wall where it is captured by the IWF. In this area, the highest total chromium concentration occurred in extraction well I-G (30 mg/L). North of the barrier wall, the highest total chromium concentration was 10 mg/L in well M-73, located north of wells I-I and I-Z. This is an increase from 8.9 mg/L measured in November 2011. North of the former recharge trenches, the highest total chromium concentration detected was 1.7 mg/L in well PC-136, located at the AWF and screened within an alluvial sub-channel east of the UMCf ridge. This concentration is a decrease from 2.1 mg/L measured in November 2011. Concentrations in well M-12A, located on the trailing edge of the main plume, have generally been declining. In November 2012, the concentration in well M-12A was 9 mg/L compared with 25 mg/L in May 2002. The lower concentrations observed in on-site wells located downgradient of the barrier wall indicate that the IWF is an effective barrier to migration of the main portion of the chromium plume.

Total chromium concentrations in wells immediately downgradient of the barrier wall (M-70, M-71, M-72, M-73 and M-74) in the so called “dead zone” have increased slightly, except in well M-70 where the concentration decreased from last year. Soil excavation activities in the vicinity of the former recharge trenches in 2010 and 2011 resulted in the plugging and abandonment of groundwater monitoring wells in this area including M-84, M-85, M-86A, M-87, and M-88. As mentioned above, further analysis of the fate and transport of groundwater in the “dead zone” is planned during the evaluation of the recharge trench system. Replacement of the “dead zone” monitoring wells in this area will be evaluated as part of this analysis.

3.1.1 On-Site Interceptor Well Field Area

The IWF captures the highest concentrations and the main portion of the groundwater plume located downgradient of the on-site source area. Figure 5 shows the concentration of total chromium in the 23 IWF pumping wells over the last five quarters. Chromium concentrations during November 2012 were generally similar to previous quarters with the exception of wells I-T and I-U, which are adjacent wells near the center of the IWF. As shown on Figure 5, chromium concentrations were markedly lower in these wells than during the previous four

quarters. This decrease in chromium concentration will be evaluated using additional groundwater data collected in 2013 as part of the ongoing groundwater monitoring program.

Chromium concentration data from select wells (M-11, M-23, M-36, M-72, and M-86)[9] over time are presented on Figure 6. In monitoring well M-11, immediately downgradient from the former primary source area (Units 4 and 5), concentrations have remained relatively stable over the last eight years, with a concentration of 1.6 mg/L reported in November 2012. Total chromium concentrations measured in well M-36, located upgradient of the IWF, declined over the reporting period (to 26 mg/L), a continuation of a trend dating back to February 2004, when the concentration was 43 mg/L. Concentrations in monitoring well M-23, downgradient of the IWF near Warm Springs Road, have been stable over the last six years with concentrations less than 1 mg/L. Concentrations in well M-72, located in the so-called "dead zone" between the barrier wall and former recharge trenches, have increased slightly during the reporting period to a concentration of 6.6 mg/L in the November 2012 sampling event from 5.7 mg/L in November 2011. Since August 2007, concentrations had been increasing slightly (from 0.43 mg/L to 2.7 mg/L) in well M-86, located just northeast of the recharge trenches. It should be noted that there is only one data point from well M-86 after May 2008. Well M-86 was damaged during recharge trench refurbishment activities in 2008 and was subsequently plugged and abandoned.

3.1.2 Athens Road / Seep Well Fields Area

The AWF is designed to intercept residual chromium in groundwater downgradient of the IWF and the Site. Based on total chromium concentrations in groundwater downgradient of the AWF, the system is operating effectively; however, capture gaps identified in the 2012 Annual Report indicate that chromium capture could be further improved by adjusting pumping rates in active extraction wells, as well as bringing certain new extraction wells online. Downgradient of the AWF, the highest measured concentration of total chromium during the November 2012 sampling event was 0.60 mg/L in well PC-144. This is an increase from 0.48 mg/L measured in November 2011.

Figure 7 shows the concentrations of total chromium across the seven AWF pumping wells in addition to monitoring wells PC-18, PC-55, PC-122, PC-148, PC-149, and PC-150 over the last five quarters, where data are available. As mentioned previously, PC-148 and PC-149 are monitoring wells that are situated across the top of the UMCf ridge with screened intervals almost entirely within the UMCf. As shown on the figure, chromium concentrations in the western sub-channel (represented by wells west of PC-149) have been low relative to those in the eastern sub-channel (represented by wells east of PC-148). Total chromium present in groundwater collected in this area continues to be treated at Lift Station #3 where metered ferrous water is sent to the on-site perchlorate treatment system.

Wells in the SWF continue to contain generally less than 0.01 mg/L total chromium. Total chromium concentrations in wells located to the east of the SWF were slightly higher, but generally decreased over the reporting period. For example, concentrations of total chromium

[9] These wells were selected because they are the five "Consent Order Appendix J Wells" that were historically presented for evaluating performance of the chromium mitigation program.

in monitoring well PC-94, located east of the well field, were measured at 0.011 mg/L in November 2012, compared to a concentration of 0.033 mg/L in November 2011.

3.2 On-Site Chromium Treatment System

The operation and maintenance of the chromium mitigation program, as well as the rest of the GWETS, was contracted to Veolia Water North America (Veolia)[10] in 2003. The Trust took title to the GWETS in February 2011 and Veolia continues to operate and maintain the GWETS on behalf of the Trust.

Table 5 contains the July 2012 to December 2012 process treatment data from the on-site GWTP. The treated groundwater from the GWTP is pumped to the equalization tanks where it is combined with water from the off-site groundwater collection systems. From the equalization tanks, the blended water flows through activated carbon beds before being filtered and pumped to the FBRs for treatment to remove perchlorate, chlorate, and nitrate.

As shown in Table 5, the total chromium inflow concentration to the GWTP has been relatively stable in the range of 8.7 to 10.5 mg/L, which is similar to the range of 9.5 to 10.2 mg/L from one year ago. The chemical reduction of hexavalent chromium and removal of total chromium via the GWTP during the reporting period has been consistently effective. Total chromium outflow concentrations for the last six months ranged from 0.098 to 0.192 mg/L. The hexavalent chromium outflow concentration during the reporting period ranged from non-detectable to 0.03 mg/L. As seen in Table 5, for the period between July and December 2012, approximately 1,500 pounds of chromium were removed from the groundwater by the GWTP.

A lesser amount of chromium is also removed in the FBRs. Results of total chromium analysis from weekly FBR influent and effluent samples are presented in Table 6. These data, between July and December 2012, show that the FBR's influent total chromium concentrations varied from 0.0034J[11] to 0.34 mg/L. Based on an average total chromium concentration of approximately 0.070 mg/L and an average flow rate of 908 gpm[12], the FBRs were receiving about 0.77 pounds of chromium per day from the equalization tanks. This includes chromium captured in the AWF and reductively treated with ferrous sulfate drip at Lift Station #3.

The FBRs discharge treated water to the Las Vegas Wash just upgradient of the Pabco Road erosion control structure under authority of NPDES Permit NV0023060. Results of discharge monitoring performed between July and December 2012 are presented in Table 6. Effluent hexavalent chromium concentrations have been between non-detect (<0.000009 mg/L) and 0.00025 mg/L – well below the effluent discharge limitation of 0.01 mg/L (7-day average). Total chromium was detected in effluent samples at concentrations ranging from 0.0043J to 0.017J

[10] Formerly US Filter Operating Services.

[11] Result was "J"-flagged by the laboratory. A J flag indicates results that are an estimate because they were detected above the Sample Quantitation Limit (SQL), but below the Method Reporting Limit (MRL).

[12] This flow rate is measured at the effluent totalizer and measures the throughput at the FBRs. This flow is not the same as the cumulative groundwater extraction rate as measured by the extraction well totalizers, since these readings do not account for flow into and out of GW-11 as well as additions of stabilized Lake Mead water, which is used to maintain the mechanical pump seals.

mg/L and at an average concentration of 0.0092 mg/L – well below the effluent discharge limitation of 0.1 mg/L (7-day average).

At an influent mass loading of approximately 0.77 pounds per day, the FBR system removed an additional 120 pounds of chromium over the 6-month period. The sum of the chromium captured and removed by the GWETS between July and December 2012 totals approximately 1,620 pounds.

4 Perchlorate Recovery Program

The components of the perchlorate capture system consist of the IWF, the barrier wall, the former recharge trenches, the AWF, the SWF, and the seep surface-flow capture sump. The locations of these components are shown on Figure 1. The daily average mass of perchlorate removed by the IWF, AWF, and SWF is presented in Table 7. Figure 8 presents the monthly perchlorate recovery totals and the relative contribution of the IWF, AWF, and SWF.

During the period July through December 2012, a total of approximately 311,200 pounds of perchlorate (approximately 1,700 pounds per day) have been captured and removed from groundwater by the GWETS. Of this total, approximately 186,800 pounds (approximately 1,020 pounds per day) were captured by the IWF; approximately 113,800 pounds (approximately 620 pounds per day) were captured by the AWF; and approximately 10,600 pounds (approximately 60 pounds per day) were captured by the SWF.

The quantity of perchlorate removed during the current reporting period represents a significant increase over the previous year when a total of approximately 250,000 pounds of perchlorate were captured and removed from groundwater by the GWETS. As described below, the increase in perchlorate concentrations and removal was particularly pronounced in the IWF.

4.1 Perchlorate Plume Configuration

A perchlorate plume map is not included in this mid-period report. Plume maps are included as part of the detailed evaluation and presentation of data contained in the Annual Remedial Performance Report submitted in August of each year. This section presents data to supplement the 2012 Annual Remedial Performance Report and the plume maps contained therein.

Appendix A contains analytical and groundwater elevation data for the last five quarters. Based on November 2012 perchlorate analytical results, the highest perchlorate concentration south (upgradient) of the barrier wall occurred in well I-N (5,600 mg/L). During the previous four quarters, the highest perchlorate concentration south of the barrier wall was typically about 2,100 mg/L and centered at well I-AR. Recent changes in perchlorate concentrations within the IWF are further discussed in Section 4.1.1. North of the barrier wall, the highest perchlorate concentration detected was 1,200 mg/L in well M-72. This is an increase from 1,100 mg/L in November 2011. North of the former recharge trenches, the highest perchlorate concentration was 750 mg/L in well M-44, located between Warm Springs Road and Boulder Highway. This is an increase from 610 mg/L in November 2011. North of the AWF, the highest concentration was in well PC-144 (330 mg/L) just north of the well field. The highest perchlorate concentration reported at the SWF was 18 mg/L in well PC-90.

4.1.1 Interceptor Well Field Area

The IWF targets the highest concentrations of perchlorate at the Site. In general, perchlorate concentrations downgradient of the barrier wall (up to 1,200 mg/L) are significantly below concentrations upgradient of the barrier wall. Figure 9 represents a west-east transect through the IWF showing perchlorate concentrations for the 23 active IWF wells in May 2002 compared to the last five quarters. Prior to November 2012, perchlorate concentrations in IWF wells were

generally less than 1,800 mg/L. During four of the last five quarters, the perchlorate plume captured by the IWF was typically divided into two areas of higher perchlorate concentrations separated by an area of lower concentrations centered on well I-M. The elevated perchlorate concentrations west of I-M typically exist in a relatively narrow area centered on wells I-R and I-AR,[13] while the elevated perchlorate concentrations east of I-M typically span a broader area extending from wells I-E to I-I. During November 2012, higher than typical perchlorate concentrations were detected in the central portion of the IWF (centered at well I-N). Increases in perchlorate were also detected in certain western (centered at well I-S) and eastern (centered at well I-V) IWF wells. While perchlorate concentrations had been gradually declining in the IWF since sampling began in May 2002, concentrations in wells I-M, I-E, I-N, I-F, I-V, and I-I exceeded these historic levels during the most recent sampling period.

A combination of factors that may be responsible for the changes in perchlorate concentrations within the IWF wells, including high levels of precipitation during the period of performance, the alteration of site drainage patterns resulting from recent Site excavation and grading, the potential mobilization of soil-bound perchlorate from infiltration at the newly constructed central retention basin, and the influence of subsurface alluvial channels within the UMCf, are being evaluated as part of ongoing groundwater monitoring activities. Perchlorate concentrations in individual IWF and nearby wells will continue to be monitored in an effort to determine whether the November 2012 results are attributable to any of these factors and if the conditions are expected to continue.

Figure 10 charts perchlorate concentrations at the IWF over time and shows generally decreasing trends since sampling for perchlorate began in 2002. Fluctuations in concentrations observed in individual IWF wells have generally moderated over time since 2002. Figure 10a shows perchlorate concentrations over the last five quarters indicating that concentrations were relatively stable until November 2012. The changes in perchlorate concentrations within the IWF during November 2012 coincide with groundwater elevations which were often significantly higher in IWF and nearby wells than during the previous four quarters. Individual IWF and nearby wells will continue to be monitored in an effort to understand the relationship between groundwater elevations and perchlorate concentrations.

Figure 11 is a west-east transect through the IWF which charts total dissolved solids (TDS) concentrations over the last five quarters. A comparison of Figure 9 and Figure 11, which show perchlorate and TDS, respectively, in each of the IWF wells, indicates that a broad zone of high TDS in the central part of the IWF remains present as of the most recent sampling and coincides with the eastern area of elevated perchlorate concentrations. Contrastingly, the high perchlorate area on the west side of the IWF is not typically associated with high TDS. It is possible that the area of high perchlorate on the west side of the IWF, having comparatively low concentrations of TDS, represents a separate perchlorate source from the high perchlorate concentrations east of well I-E. During November 2012, TDS concentrations in some IWF wells were markedly different than during the previous four quarters. TDS concentrations were higher than typical in the central portion of the IWF (centered at well I-N) and lower than typical in well

[13] Well I-AR is a pumping well located approximately 350 feet south of the primary IWF well line.

I-T. Lesser increases in TDS were also noted in certain western (I-L and I-S) and eastern (centered at well I-V) IWF wells. Wells with higher than normal concentrations of TDS during November 2012 generally align with the anomalous perchlorate results discussed above with the notable exception of well I-T. As with perchlorate, individual IWF wells will continue to be monitored for TDS in order to evaluate potential causes of the November 2012 results and whether the conditions are expected to continue.

As shown on Figure 12, the monthly average perchlorate concentration captured at the IWF generally decreased from a high of about 1,890 mg/L in October 2002 to 732 mg/L in June 2012, the lowest recorded average concentration. The IWF's monthly average perchlorate concentration then doubled to 1,491 mg/L in December 2012. The calculated perchlorate mass removal has generally followed a similar trend, from a high of about 45,000 pounds removed in the month of January 2003 to a low of approximately 20,300 pounds removed during the month of August 2012. By December 2012, the calculated perchlorate mass removal increased to approximately 40,300 pounds, the highest estimated monthly mass removal since January 2003.[14] The performance of the IWF, including the concentrations within individual wells, will be closely monitored to evaluate the potential causes of the elevated concentrations and corresponding high mass removals.

Figure 13 charts perchlorate concentrations and water elevation trends in monitoring wells M-100 and M-23, located 700 and 1,300 feet north (downgradient) of the former recharge trenches, respectively. Figure 13 indicates a sharp decrease in perchlorate concentrations in both wells beginning in early 2002, shortly after the barrier wall was installed at the IWF. Water level trends reflect infiltration and mounding of water recharged to the subsurface through the former recharge trenches. Clogging of the trenches and reduced infiltration are reflected in the decreasing water levels beginning about May 2007. The trenches were subsequently refurbished in July 2009 with water levels in M-100 rebounding quickly and water levels in well M-23 rebounding somewhat slower. Due to conflicts with the soil excavation program at the Site, operation of the trenches was again suspended in September 2010, which corresponds with a decrease in water levels in both wells M-100 and M-23. The recharge trenches are not currently operational and well M-100 has been dry since December 2010. The water level in well M-23 has decreased approximately seven feet since the trenches were shut down. Perchlorate concentrations in well M-100 remained relatively stable from 2008 through 2010 and perchlorate concentrations in well M-23 have remained relatively stable since July 2006.

4.1.2 Athens Road Well Field Area

The AWF captures perchlorate in groundwater at concentrations generally less than 500 mg/L. A west-east transect through the AWF which charts perchlorate concentrations for the last five quarters is shown on Figure 14. Perchlorate concentrations in the seven pumping wells are shown, in addition to monitoring wells PC-18, PC-55, PC-122, PC-148, PC-149, and PC-150. As shown on the figure, the plume is stable and perchlorate concentrations on the western (PC-55 and ART-1) and eastern (PC-122) edges of the well field continue to remain relatively low.

[14] Although the IWF mass removals are calculated on a monthly basis, the Interceptor wells are only sampled quarterly and the concentrations extrapolated until the next available data point; therefore, a short-term elevated concentration of perchlorate results in high bias in the calculated mass removals.

The perchlorate concentration trends of the pumping wells in the AWF are shown on Figures 15 and 15a. Figure 15 shows that overall perchlorate concentrations in the AWF have generally been declining since 2002. Concentrations in individual wells fluctuate with each sampling event, but for most wells these fluctuations have moderated with time. Figure 15a, an expanded view of the last five quarters of Figure 15, indicates that recent concentrations in the AWF pumping wells have remained relatively stable. The perchlorate concentration measured in well ART-8 in December 2012 (Figure 16) is near the bottom of its historical range. Also shown on Figure 16 is the monthly average perchlorate mass removed from the AWF, which was approximately 19,190 pounds in December 2012.

Starting in August 2006, TDS data have been collected from the AWF. Figure 17 is a west-east transect through the AWF which charts TDS concentrations for the last five quarters. The figure shows that two zones of higher TDS exist at the AWF, centered on well PC-18 on the west (9,600 mg/L in November 2012) and at well PC-122 to the east (9,500 mg/L in November 2012).

Approximately 250 feet north of the AWF, eight wells comprise the Athens Road Piezometer or "ARP" well line. A graph of perchlorate concentrations across the ARP well line transect is presented on Figure 18, and perchlorate concentrations in these wells over time are shown on Figures 19 and 19a. Figure 19 contains concentration-time plots beginning in late 2001, and Figure 19a shows an expanded view of the last five quarters.

As shown on Figure 18, perchlorate concentrations in the western side of the well line (represented by wells ARP-1, ARP-2/2A, and ARP-3/3A) and the eastern side of the well line (represented by wells ARP-4/4A, ARP-5/5A, ARP-6/6A/6B and ARP-7) have significantly decreased since 2002. This indicates that the AWF has been effective in capturing perchlorate contaminated groundwater in these sections of the plume. As shown on Figures 19 and 19a, with the exception of wells MW-K4 and ART-6/6A/6B, concentration trends in the ARP well line appear relatively stable. Concentrations in well MW-K4 initially declined with the onset of AWF operation in 2002 and dropped further when ART-9 began pumping in September 2006. Perchlorate concentrations in well MW-K4 generally trended upwards from mid-2008 to the beginning of 2010, rising from 57.8 mg/L in June 2008 to 300 mg/L in January 2010. Perchlorate concentrations in MW-K4 generally declined between January 2010 (300 mg/L) and December 2011 (150 mg/L), but rebounded from January 2012 to September 2012, once again reaching 300 mg/L. During the last three months of the reporting period, perchlorate levels in MW-K4 declined to a low of 210 mg/L in December 2012. These increases and decreases in perchlorate concentration in MW-K4 do not appear related to changes in water elevation. The higher and more variable perchlorate concentrations in well MW-K4 may be influenced by the well's location with respect to subsurface alluvial channels within the UMCf. Perchlorate concentration in MW-K4 may also be influenced by the length of the well's screened interval, which extends deeper into the UMCf than other ART-series wells. Concentrations in well ARP-6/6A/6B have decreased in the past six months from 56 mg/L in October 2012 to 22 mg/L in December 2012.

Between the ARP well line and the SWF are the City of Henderson (COH) WRF and the Lower Ponds monitoring well lines. Perchlorate concentrations in the COH WRF wells on a west-east transect are shown on Figure 20. Figures 21 and 21a present perchlorate concentration trends

for these same wells over time. As shown in the figures, current perchlorate concentrations are well below levels measured in the same wells in May 2002, especially in the center of the well line as shown on Figure 20. As shown on Figure 21, perchlorate concentrations at the COH WRF well line have been relatively stable since mid-2007.

Figure 22 shows historical water elevations at the COH WRF well line. This figure indicates that many of the historical low-concentration events in the wells appear to be associated with a rapid increase in the water levels, likely the result of increased infiltration from the COH WRF surface ponds. The significant groundwater "mounding events" since 2008 (when the operation of the COH RIBs ceased) are not as pronounced as previous ones and are presumed to be related to operation of the COH birding ponds. However, no significant mounding events have occurred since late-2011.

The Lower Ponds well line is approximately 2,200 feet north of the COH WRF well line. Figures 23, 24, and 24a, the perchlorate west-east transect and trend graphs for the Lower Ponds well line, show that current perchlorate concentrations are well below levels measured in the same wells in May 2002, especially at well PC-56 (Figure 23). Figure 24 shows that perchlorate concentrations present in the Lower Ponds well line are well below levels measured in the same wells in May 2002, especially at well PC-56 (Figure 23), and have been stable since 2007. As shown on Figures 24 and 24a, perchlorate concentrations in well PC-56 historically have been more variable than in other wells on the Lower Ponds well line. Concentrations in well PC-56 were 3.3 mg/L in January 2011, increased to 12 mg/L in February 2011, decreased to 7 mg/L in June 2011, and increased to a high of 23 mg/L in September 2012. During the current reporting period, the concentrations have decreased slightly to 16 mg/L in November 2012. The higher and more variable perchlorate concentrations in well PC-56 may be influenced by the well's location with respect to a mapped subsurface alluvial channel that runs north-south back towards the AWF. According to boring logs for these wells, the UMCf was encountered 12 to 20 feet deeper in PC-56 compared to nearby wells PC-58 and PC-60 indicating it is within a narrow alluvial channel incised within the UMCf.

4.1.3 Seep Well Field Area

At present, the SWF consists of 10 extraction wells – two of which (PC-99R2 and PC-99R3) are connected and operate as one – positioned over the deepest part of the alluvium channel that contains the highest concentrations of perchlorate (relative to other SWF wells). Wells PC-120 and PC-121, located at the west end of the SWF line and away from the deepest portion of the subsurface alluvial channel, have not been continuously pumped since 2005 due to their low perchlorate removal efficiencies when compared with the remainder of SWF wells. Wells PC-120 and PC-121 are turned on for sampling and are actively pumped when other SWF wells are not operating due to malfunction or maintenance. The SWF contributes the highest flows (594 gpm between July and December 2012) compared with the IWF (69 gpm) and the AWF (281 gpm) to the GWETS, but captures significantly lower concentrations of perchlorate (generally less than 10 mg/L). Because of the low concentrations captured at the SWF, the perchlorate mass removed from the environment via the SWF is substantially less than that removed via the IWF or AWF (see Figure 8 and Table 7).

Figure 25 shows perchlorate concentrations for the last five quarters along with concentrations for each well during its first month of operation. This figure shows that perchlorate concentrations have significantly decreased in the original pumping wells since 2002. As seen on Figure 26, data for wells PC-99R2/R3, PC-115R, and PC-116R is markedly lower during November 2012 than during the months directly preceding and following. Therefore, because Figure 25 only depicts quarterly data, it does not accurately portray the overall increase in perchlorate concentration in these wells during the reporting period. Figure 26 and 26a present the perchlorate trend graphs for the SWF. Figure 26 shows the steep initial decreases in perchlorate concentrations that occurred after pumping began. As shown on Figure 26a, SWF wells with low concentrations of perchlorate (PC-119, PC-120, and PC-121) have been relatively stable over the last year with the exception of PC-133, which increased from 0.63 mg/L in May 2012 to 13 mg/L in December 2012. As discussed above, SWF wells with the highest concentrations of perchlorate (PC-99R2/R3, PC-115R, and PC-116R), have increased and exhibited more variability over the current reporting period. The decrease in perchlorate concentration during November 2012 will be evaluated as part of the ongoing groundwater monitoring program. TDS concentrations for the last five quarters are plotted on Figure 27. The highest TDS concentration (5,300 mg/L) is currently measured in well PC-99R2/R3, which has historically corresponded with the highest perchlorate concentration for the SWF. While perchlorate concentrations were higher in PC-133 than PC-99R2/R3 during November 2012, higher TDS concentrations still generally correspond with higher perchlorate concentrations. TDS concentrations generally increased in the central portion of the SWF (centered on well PC-99R2/R3) and well PC-133 over the reporting period, while the remainder of the plume remained stable.

As shown on Figure 28, the monthly average perchlorate concentration captured at the SWF generally decreased from a high of about 82 mg/L in March 2003 to an average of approximately 8.1 mg/L between July 2012 and December 2012. The calculated perchlorate mass removal has generally followed a similar trend, from a high of about 19,900 pounds removed in the month of April 2003 to an average of approximately 1,770 pounds removed per month between July 2012 and December 2012. The total amount of perchlorate removed by the SWF during the current reporting period is approximately 3,200 pounds greater than the same period in 2011.

4.2 On-Site Perchlorate Groundwater Treatment System and Remediation

Throughout the reporting period, groundwater was captured both on-site and off-site, conveyed to the on-site treatment facilities, and treated biologically in the FBRs to remove nitrate, chlorate and perchlorate. Effluent from the FBRs has been discharged into Las Vegas Wash consistently within the limits specified in the NPDES NV0023060 discharge permit. As shown in Table 8, between July and December 2012, the perchlorate influent to the FBRs ranged from 98 mg/L to 170 mg/L. Perchlorate was generally not detected at concentrations exceeding the laboratory SQL (0.000508 or 0.00127 mg/L) with the exception of a composite effluent sample from the week of July 7, 2012. Initial laboratory results for the 7-day composite for the week of July 7th indicated an effluent perchlorate concentration of 0.22 mg/L, above the permit limit of 0.018 mg/L; however, upon evaluation of sampling procedure and plant performance, it was determined the apparent exceedance was likely due to sampling error. The exceedance was subsequently reported to NDEP's Bureau of Water Pollution Control on September 28, 2012.

5 Conclusions

The GWETS consists of three groundwater capture well fields: the IWF, the AWF, and the SWF. The IWF coupled with the barrier wall provides capture of the highest concentrations of perchlorate and chromium at the Site and significantly reduces the amount of perchlorate in downgradient groundwater. The off-site AWF, located approximately 8,200 feet downgradient of the IWF, has been in continuous operation since October 2002. The AWF captures significantly lower concentrations of both perchlorate and chromium; however due to its higher extraction rates compared with the IWF, it significantly contributes to the overall mass of perchlorate removed from the environment and mitigates its impact in downgradient groundwater. The SWF, located over the main part of the alluvium channel in close proximity to Las Vegas Wash, contributes the highest flows (average of 594 gpm between July and December 2012) compared with the IWF (69 gpm) and the AWF (281 gpm); however, it captures significantly lower concentrations than the other well fields. The seep stream has not flowed since April 2007.

Treatment of chromium-contaminated groundwater (primarily from the IWF) occurs via the on-site GWTP, which chemically reduces hexavalent chromium and removes total chromium. A small ferrous sulfate drip system also treats lower concentrations of chromium from the AWF. Treatment of perchlorate-contaminated groundwater from all well fields occurs via the on-site FBRs, which biologically remove perchlorate as well as chlorate, nitrate, and residual chromium. Routine maintenance is completed as needed at the GWTP and FBRs.

For the 6-month period ending in December 2012, the capture of chromium-contaminated groundwater at the IWF and AWF, and treatment at the on-site GWTP, has removed approximately 1,500 pounds of chromium. Adding the 120 pounds of chromium removed by the FBRs for the same period, a total of 1,620 pounds of chromium were removed from groundwater between July 2012 and December 2012.

For the same 6-month period, the capture of perchlorate-contaminated groundwater from all three well fields, and biological treatment in the on-site FBRs, has removed a total of approximately 311,200 pounds of perchlorate from the environment. This was an increase from 252,600 pounds of perchlorate removed during 6-month period ending in December 2011.

During the current reporting period, groundwater elevations increased in areas adjacent to the barrier wall. Within the IWF itself, significant increases in perchlorate concentration were observed in November 2012. A number of factors that may have contributed to the changes observed in the IWF are being evaluated, including the above average rainfall during the performance period and influence of subsurface alluvial channels. In addition, removal of contaminated soils during 2010 and 2011 likely mitigated on-site sources of groundwater contamination, but may have altered historic infiltration pathways. Continued monitoring of Site groundwater will allow for evaluation of the magnitude of any such impacts and what operational changes, if any, are required to optimize groundwater capture and treatment.

In addition, concentrations in PC-133, located in the eastern edge of the SWF, have increased from 0.63 mg/L in May 2012 to 13 mg/L in December 2012. This well will be monitored closely

as part of the ongoing groundwater monitoring program in order to evaluate the potential causes of the increasing concentrations.

6 Proposed Future Activities

As part of the 2012 Annual Groundwater Monitoring report, an initial analysis of current groundwater capture was performed that recommended both adjusting extraction rates of individual wells and adding several new extraction wells in order to improve capture efficiency and maximize mass removal. Further refinement of groundwater capture analysis will continue as part of forthcoming work. Specifically, refinement of a site-specific calibrated groundwater flow model has been proposed to conduct further analysis and optimization of the GWETS.

Future activities include using the approved groundwater flow model to analyze the fate and transport of groundwater in the IWF, the barrier wall, the "dead zone," the former recharge trenches, the AWF, and the SWF areas; using the approved groundwater model for perchlorate and chromium capture in all of the well fields; evaluating the effect of the proposed operational changes of the extraction wells in the IWF and AWF (described above) on the capture zones of the IWF and AWF; refining the model to include the influence on groundwater flow and from surface water bodies; and evaluating the effectiveness of the former recharge trench system.

Other proposed future activities include commencement of additional aspects of the scope of work outlined in the 2012 Remedial Investigation/Feasibility Study (RI/FS) Work Plan, which was submitted to NDEP on December 17, 2012. All of the proposed future activities described above are contingent on the approval of the RI/FS Work Plan.

Tables

TABLE 1: INTERCEPTOR WELL FIELD DISCHARGE RATES

Nevada Environmental Response Trust Site
Henderson, Nevada

WELL ID	July 2008-June 2009 (gpm)	July 2009 - June 2010 (gpm)	July 2010 - June 2011 (gpm)	July 2011 - June 2012 (gpm)	July - December 2012 (gpm)	Well Screened In
I-AR	1.1	1.1	0.8	1.1	1.6	Qal/UMCf
I-B	1.6	2.3	2.5	1.5	1.6	Qal/UMCf
I-C	3.8	5.3	4.1	5.9	4.9	Qal/UMCf
I-D	1.4	3.1	4.2	1.3	1.6	Qal/UMCf
I-E	1.3	1.5	1.5	1.3	1.7	Qal/UMCf
I-F	6.2	6.3	4.1	5.7	4.9	Qal/UMCf
I-G	0.2	0.2	0.3	0.1	0.2	Qal/UMCf
I-H	0.8	0.9	0.9	0.9	1.0	Qal/UMCf
I-I	5.0	5.0	5.1	5.0	4.7	Qal/UMCf
I-J	8.3	7.4	7.3	6.3	6.2	Qal/UMCf
I-K	4.4	4.2	4.0	3.9	3.8	Qal/UMCf
I-L	2.0	1.6	1.5	1.9	2.1	Qal/UMCf
I-M	2.7	2.7	2.2	2.6	3.8	Qal/UMCf
I-N	3.6	3.7	3.7	3.1	3.7	Qal/UMCf
I-O	1.9	2.8	2.8	1.7	2.2	Qal/UMCf
I-P	2.9	3.8	3.4	2.1	2.9	Qal/UMCf
I-Q	0.3	0.4	0.6	0.3	0.2	Qal/UMCf
I-R	1.9	1.3	1.2	2.5	3.2	Qal/UMCf
I-S	4.0	5.9	6.1	5.2	4.5	Qal/UMCf
I-T	0.3	0.5	0.4	0.4	0.5	Qal/UMCf
I-U	0.9	0.9	0.8	0.7	0.7	Qal/UMCf
I-V	4.7	4.3	4.0	4.8	5.3	Qal/UMCf
I-Z	6.9	7.5	7.3	6.7	7.7	Qal/UMCf
TOTAL	**66.3**	**72.8**	**68.9**	**65.1**	**69.0**	

Notes:
gpm = gallons per minute
Qal = Quaternary Alluvium
UMCf = Upper Muddy Creek Formation (first fine-grained unit)

TABLE 2: ATHENS ROAD WELL FIELD DISCHARGE RATES

Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	July 2008-June 2009 (gpm)	July 2009 - June 2010 (gpm)	July 2010 - June 2011 (gpm)	July 2011 - June 2012 (gpm)	July - December 2012 (gpm)	Well Screened In
ART-1/1A	1.6	6.3	16.5	14.1	20.6	Qal
ART-2/2A	77.8	64.0	62.2	62.4	62.1	Qal
ART-3/3A	40.5	39.2	46.8	46.8	44.9	Qal
ART-4/4A	4.2	5.6	7.9	8.5	8.6	Qal
ART-7/7A	30.6	24.9	31.2	31.2	31.1	Qal
ART-8/8A	69.2	60.3	61.7	62.7	63.5	Qal
ART-9/ART-6[1]	46.3	45.6	46.8	46.5e[2]	50.0	Qal
TOTAL	**270.3**	**245.9**	**273.1**	**272.2**	**280.7**	

Notes:

ART-1, 2, 3, 4, 7 and 8 have adjacent recovery wells - "Buddy Wells" - designated by the letter "A".

[1] Starting in September 2006, ART-9 replaced the pumping of ART-6/6A due to the low water levels in that well pair. The electrical and plumbing system from ART-6A was removed and is being used in ART-9.

[2] The flow meter for well ART-9 malfunctioned for several days in April and May 2012. For these days, an average flow rate for well ART-9 was used to calculate the annual average (from July 2011 to June 2012).

e = estimate

gpm = gallons per minute

Qal = Quaternary Alluvium

TABLE 3: SEEP WELL FIELD DISCHARGE RATES

Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	July 2008-June 2009 (gpm)	July 2009 - June 2010 (gpm)	July 2010 - June 2011 (gpm)	July 2011 - June 2012 (gpm)	July - December 2012 (gpm)	Well Screened In
PC-116R	184.7	183.6	132.4	124.8	124.4	Qal
PC-99R2/R3[1]	112.4	89.8	63.9	61.6	56.2	Qal
PC-115R	85.2	70.3	82.8	91.4	99.3	Qal
PC-117	86.0	81.1	99.0	92.5	124.5	Qal
PC-118	59.2	71.0	70.7	76.3	93.4	Qal
PC-119	52.2	54.0	62.8	65.1	91.5	Qal
PC-120[2]	1.2	2.0	3.2	0.0	0.0	Qal
PC-121[2]	0.7	2.6	1.0	0.0	0.0	Qal
PC-133	7.0	6.2	5.0	3.1	4.4	Qal
TOTAL	**588.7**	**560.5**	**520.9**	**514.7**	**593.7**	

Notes:

[1] Wells PC-99R2 and PC-99R3 are connected and operate as a single pumping well.

[2] Wells PC-120 and PC-121 have not been continuously pumped since October 2005 due to their low perchlorate removal efficiencies and because they are located at the end of the well line in the shallowest portion of the subsurface alluvial channel.

gpm = gallons per minute

Qal = Quaternary Alluvium

TABLE 4: MONTHLY WELL FIELD EXTRACTION RATES, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Well	July 2012 (gpm)	August 2012 (gpm)	September 2012 (gpm)	October 2012 (gpm)	November 2012 (gpm)	December 2012 (gpm)
Interceptor Well Field (IWF)						
I-A-R	1.1	1.1	2.0	2.0	1.7	1.6
I-B	1.3	1.2	1.5	1.7	2.1	2.0
I-C	5.1	5.2	6.0	2.9	4.2	5.9
I-D	0.8	0.9	2.2	2.3	1.7	1.7
I-E	1.2	1.2	1.5	1.9	2.1	2.2
I-F	5.5	5.5	4.6	5.5	4.3	3.9
I-G	0.2	0.2	0.2	0.3	0.3	0.2
I-H	0.8	0.9	1.0	1.3	1.0	1.0
I-I	5.1	5.0	4.9	4.9	3.6	4.7
I-J	5.9	6.0	6.9	7.5	5.5	5.5
I-K	3.9	3.6	4.1	5.1	3.0	2.9
I-L	2.0	2.1	1.2	1.7	2.3	3.2
I-M	2.8	2.7	3.3	4.3	4.9	5.0
I-N	3.0	3.0	4.7	4.6	3.6	3.5
I-O	1.0	1.1	2.0	2.6	3.1	3.2
I-P	1.8	1.8	2.6	3.2	3.8	4.1
I-Q	0.2	0.2	0.1	0.2	0.1	0.1
I-R	2.8	2.8	3.2	3.8	3.3	3.3
I-S	5.0	5.2	7.6	4.0	2.5	2.9
I-T	0.4	0.4	0.5	0.6	0.6	0.6
I-U	0.5	0.4	0.7	0.9	1.0	1.0
I-V	5.3	5.4	5.4	5.2	5.3	5.3
I-Z	6.3	6.4	7.6	8.1	8.8	8.9
Total for IWF:	**61.8**	**62.4**	**73.7**	**74.4**	**68.6**	**72.8**
Athens Road Well Field (AWF)						
ART-1/1A	15.6	15.6	22.0	23.4	23.4	23.4
ART-2/2A	62.3	61.7	62.5	61.7	62.3	62.2
ART-3/3A	46.7	41.7	46.9	40.8	46.7	46.7
ART-4/4A	7.8	8.0	8.6	9.3	9.3	8.6
ART-7/7A	31.1	30.9	31.2	30.8	31.1	31.1
ART-8/8A	62.3	68.5	62.5	63.1	62.3	62.2
ART-9/ART-6	45.7	45.9	47.1	49.6	55.7	56.1
Total for IWF:	**271.5**	**272.2**	**280.7**	**278.7**	**290.9**	**290.3**
Seep Well Field (SWF)						
PC-116R	124.2	124.2	123.6	124.7	125.0	124.9
PC-99R2/R3	56.2	54.4	56.8	56.9	56.5	56.3
PC-115R	95.8	94.2	108.4	104.9	99.2	93.3
PC-117	124.4	124.3	123.8	124.8	125.0	124.9
PC-118	93.3	93.2	92.8	93.6	93.8	93.7
PC-119	92.2	84.0	92.7	93.4	93.3	93.1
PC-120[1]	0.0	0.1	0.0	0.0	0.0	0.0
PC-121[1]	0.0	0.1	0.0	0.0	0.0	0.0
PC-133	4.4	4.4	4.4	4.5	4.4	4.2
Total for SWF:	**590.4**	**578.8**	**602.4**	**602.8**	**597.2**	**590.5**

Notes:

gpm = gallons per minute

[2] Wells PC-120 and PC-121 have not been continuously pumped since October 2005 due to their low perchlorate removal efficiencies and because they are located at the end of the well line in the shallowest portion of the subsurface alluvial channel.

TABLE 5: CHROMIUM TREATMENT DATA FOR GWTP, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Month	Average Flow to GWTP (MM Gals)	Average Total Cr Inflow (mg/L)	Average Total Cr Outflow[1] (mg/L)	Average Cr VI Outflow[1] (mg/L)	Average Total Cr Removed (lbs/day)	Total Cr Removed (lbs/month)
July	2.76	10.0	0.161	0.003	7.423	230
August	2.79	10.1	0.098	0.004	7.555	234
September	3.18	8.7	0.120	0.003	7.694	231
October	3.32	10.5	0.161	0.010	9.357	290
November	2.96	10.3	0.192	0.030	8.479	254
December	3.25	9.7	0.123	0.003	8.430	261
					Total:	**1,500**

Notes:

[1] Treated Outflow is directed to Bioplant Equalization Area and Carbon Treatment before being fed to the Fluidized Bed Reactors (FBRs).

Cr = chromium
Cr VI = hexavalent chromium
gpm = gallons per minute
GWTP = groundwater treatment plant
lbs = pounds
mg/L = milligrams per liter
MM gals = million gallons

TABLE 6: WEEKLY CHROMIUM IN FBR INFLUENT AND EFFLUENT, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Sample Date	Influent/ Effluent	Total Chromium EPA 200.7 (mg/L)	Total Chromium SQL (mg/L)	Hexavalent Chromium EPA 218.6 (mg/L)	Hexavalent Chromium SQL (mg/L)
7/2/2012	INFLUENT	0.049	0.00044	0.046	0.000045
7/2/2012	EFFLUENT	0.0063 J	0.00044	<0.000009	0.000009
7/9/2012	INFLUENT	0.056	0.00044	0.05	0.000045
7/9/2012	INFLUENT	0.08	0.000088	0.05	0.000045
7/9/2012	EFFLUENT	0.0077 J	0.00044	<0.000009	0.000009
7/9/2012	EFFLUENT	0.0084	0.000088	<0.000009	0.000009
7/16/2012	INFLUENT	0.045	0.00044	0.046	0.000045
7/16/2012	EFFLUENT	0.0069 J	0.00044	<0.000009	0.000009
7/23/2012	INFLUENT	0.029	0.00044	0.025	0.000045
7/23/2012	EFFLUENT	0.0043 J	0.00044	<0.000009	0.000009
7/30/2012	INFLUENT	0.056	0.00044	0.052	0.000045
7/30/2012	EFFLUENT	0.0062 J	0.00044	0.000057	0.000009
8/6/2012	INFLUENT	0.052	0.00044	0.049	0.000045
8/6/2012	EFFLUENT	0.0080 J	0.00044	<0.000009	0.000009
8/13/2012	INFLUENT	0.054	0.00044	0.051	0.000045
8/13/2012	EFFLUENT	0.0074 J	0.00044	0.000021	0.000009
8/20/2012	INFLUENT	0.059	0.00044	0.053	0.000225
8/20/2012	EFFLUENT	0.0062 J	0.00044	0.000072	0.000009
8/27/2012	INFLUENT	0.050	0.00044	0.047	0.000045
8/27/2012	EFFLUENT	0.0084 J	0.00044	0.000071	0.000009
9/4/2012	INFLUENT	0.0081 J	0.00044	0.0054	0.000045
9/4/2012	EFFLUENT	0.012	0.00044	0.00023	0.000009
9/10/2012	INFLUENT	0.077	0.00044	0.074	0.000045
9/10/2012	EFFLUENT	0.0090 J	0.00044	0.000079	0.000009
9/17/2012	INFLUENT	0.0034 J	0.00044	0.016	0.000045
9/17/2012	EFFLUENT	0.0068 J	0.00044	0.000049	0.000009
9/24/2012	INFLUENT	0.061	0.00044	0.06	0.000045
9/24/2012	EFFLUENT	0.0089 J	0.00044	<0.000009	0.000009
10/1/2012	INFLUENT	0.090	0.00044	0.077	0.00009
10/1/2012	EFFLUENT	0.0095 J	0.00044	<0.000009	0.000009
10/8/2012	INFLUENT	0.053	0.00044	0.044	0.000045
10/8/2012	INFLUENT	0.052	0.000088	0.044	0.000045
10/8/2012	EFFLUENT	0.011	0.00044	0.000052	0.000009
10/8/2012	EFFLUENT	0.013	0.000088	0.000052	0.000009
10/15/2012	INFLUENT	0.014	0.00044	0.01	0.000045
10/15/2012	EFFLUENT	0.0078 J	0.00044	<0.000009	0.000009
10/22/2012	INFLUENT	0.12	0.00044	0.1	0.00009
10/22/2012	EFFLUENT	0.011 J	0.00088	<0.000009	0.000009
10/29/2012	INFLUENT	0.067	0.00088	0.064	0.000045
10/29/2012	EFFLUENT	0.010	0.00044	<0.000009	0.000009
11/5/2012	INFLUENT	0.090	0.00088	0.086	0.000045
11/5/2012	EFFLUENT	0.0069 J	0.00088	<0.000009	0.000009
11/12/2012	INFLUENT	0.34	0.00088	0.34	0.000225
11/12/2012	EFFLUENT	0.013 J	0.00088	0.00025	0.000009
11/19/2012	INFLUENT	0.054	0.00088	0.049	0.000045
11/19/2012	EFFLUENT	0.0043 J	0.00088	<0.000009	0.000009

TABLE 6: WEEKLY CHROMIUM IN FBR INFLUENT AND EFFLUENT, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Sample Date	Influent/ Effluent	Total Chromium EPA 200.7 (mg/L)	Total Chromium SQL (mg/L)	Hexavalent Chromium EPA 218.6 (mg/L)	Hexavalent Chromium SQL (mg/L)
11/26/2012	INFLUENT	0.066	0.00044	0.062	0.000045
11/26/2012	EFFLUENT	0.0091 J	0.00088	0.000096	0.000009
12/3/2012	INFLUENT	0.091	0.00088	0.082	0.000045
12/3/2012	EFFLUENT	0.0098 J	0.00088	0.000045	0.000009
12/10/2012	INFLUENT	0.080	0.00088	0.078	0.000045
12/10/2012	EFFLUENT	0.017 J	0.00088	<0.000009	0.000009
12/17/2012	INFLUENT	0.097	0.00088	0.089	0.000045
12/17/2012	EFFLUENT	0.013 J	0.00088	0.000047	0.000009
12/26/2012	INFLUENT	0.080	0.00088	0.071	0.000045
12/26/2012	EFFLUENT	0.015 J	0.00088	<0.000009	0.000009

Notes:
FBR = Fluidized Bed Reactor
J = Estimated Concentration
mg/L = milligrams per liter
SQL = Sample Quantitation Limit

TABLE 7: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site
Henderson, Nevada

Date	Seep Wells and Seep (lbs/day)	Athens Road Well Field (lbs/day)	Interceptor Well Field (lbs/day)	Total (lbs/day)	Total Tons Removed (per month)
OCT 2002[1]	495	331	1,402	2,228	34.5
NOV 2002	422	1,001	1,146	2,569	38.5
DEC 2002	208	1,164	1,292	2,664	41.3
JAN 2003	408	1,077	1,467	2,952	45.7
FEB 2003	482	785	1,060	2,327	32.6
MAR 2003[2]	576	806	1,067	2,449	38.0
APR 2003	664	708	1,033	2,405	36.1
MAY 2003	640	728	1,148	2,517	39.0
JUN 2003	628	909	1,098	2,634	39.5
JUL 2003	550	764	1,034	2,348	36.4
AUG 2003	431e	742	999	2,172e	33.7e
SEP 2003	415	769	937	2,121	31.8
OCT 2003	370	767	1,003	2,140	33.2
NOV 2003	337	714	949	2,000	30.0
DEC 2003	318	734	932	1,984	30.8
JAN 2004	306	690	938	1,934	30.0
FEB 2004	322	652	881	1,856	26.9
MAR 2004	221	742	917	1,879	29.1
APR 2004	151	735	854	1,740	26.1
MAY 2004	122	741	890	1,753	27.2
JUN 2004	157	753	978	1,888	28.3
JUL 2004	195	758	985	1,938	30.0
AUG 2004	201	803	941	1,945	30.2
SEP 2004	169	835	970	1,973	29.6
OCT 2004	262	799	1,038	2,099	32.5
NOV 2004	168	814	1,016	1,997	30.0
DEC 2004	122	811	917	1,850	28.7
JAN 2005	142	776	993	1,910	29.6
FEB 2005	139e	762e	942	1,843e	25.8e
MAR 2005	158	781	964	1,902	29.5
APR 2005	145	787	971	1,904	28.6
MAY 2005	152	756	966	1,875	29.1
JUN 2005[3]	151	792	970	1,913	28.7
JUL 2005	154	769	1,060	1,983	30.7
AUG 2005	135	800	1,092	2,028	31.4
SEP 2005	85	806	1,122	2,013	30.2
OCT 2005	99	797	1,060	1,957	30.3
NOV 2005	111	773	1,072	1,956	29.3
DEC 2005	121	726	1,123	1,971	30.5
JAN 2006	141	750	984	1,875	29.1
FEB 2006	120	778	978	1,876	26.3
MAR 2006	107	736	967	1,810	28.1
APR 2006	129	755	1,011	1,895	28.4
MAY 2006	131	713	945	1,789	27.7
JUN 2006	135	753	874	1,762	26.4
JUL 2006	123	647	920	1,690	26.2
AUG 2006	141	652	918	1,710	26.5
SEP 2006[4]	142	762	1,045	1,949	29.2

TABLE 7: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site
Henderson, Nevada

Date	Seep Wells and Seep (lbs/day)	Athens Road Well Field (lbs/day)	Interceptor Well Field (lbs/day)	Total (lbs/day)	Total Tons Removed (per month)
OCT 2006	134	778	1,018	1,930	29.9
NOV 2006	101	714	867	1,682	25.2
DEC 2006	121	745	870	1,736	26.9
JAN 2007	100	786	948	1,833	28.4
FEB 2007	89	736	871	1,695	23.7
MAR 2007	88	689	915	1,693	26.2
APR 2007	89	689	896	1,675	25.1
MAY 2007	102	699	890	1,690	26.2
JUN 2007	91	642	832	1,565	23.5
JUL 2007	67	659	912	1,638	25.4
AUG 2007	55	632	840	1,527	23.7
SEP 2007	53	631	842	1,526	22.9
OCT 2007	53	686	841	1,580	24.5
NOV 2007	55	682	762	1,500	22.5
DEC 2007	59	664	742	1,465	22.7
JAN 2008	58	633	873	1,565	24.3
FEB 2008	63	656	861	1,580	22.9
MAR 2008	60	666	865	1,591	24.7
APR 2008	54	656	851	1,561	23.4
MAY 2008	46	627	721	1,394	21.6
JUN 2008	44	637	732	1,413	21.2
JUL 2008	54	673	817	1,544	23.9
AUG 2008	59	691	945	1,695	26.3
SEP 2008	56	639	798	1,493	22.4
OCT 2008	51	626	801	1,477	22.9
NOV 2008	48	643	807	1,497	22.5
DEC 2008	58	678	809	1,544	23.9
JAN 2009	44	659	864	1,567	24.3
FEB 2009	32	622	796	1,450	20.3
MAR 2009	36	723	865	1,624	25.2
APR 2009	32	685	833	1,550	23.2
MAY 2009	35	655	835	1,525	23.6
JUN 2009	36	611	866	1,512	22.7
JUL 2009	40	571e	833	1,444e	22.4e
AUG 2009	43	652	859	1,554	24.1
SEP 2009	48	671	938	1,657	24.9
OCT 2009	44	625	847	1,516	23.5
NOV 2009	47	613	894	1,554	23.3
DEC 2009	49	635	891	1,575	24.4
JAN 2010	55	661	912	1,629e	25.2e
FEB 2010	53	675	853	1,581e	22.1e
MAR 2010	49	629	949	1,626e	25.2e
APR 2010	50	630	926	1,607	24.1
MAY 2010	53	758	983	1,794	27.8
JUN 2010	53	733	942	1,728	25.9
JUL 2010	46	652	838	1,535	23.8
AUG 2010	44	658	846	1,548	24.0
SEP 2010	42	728	833	1,602	24.0

TABLE 7: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site
Henderson, Nevada

Date	Seep Wells and Seep (lbs/day)	Athens Road Well Field (lbs/day)	Interceptor Well Field (lbs/day)	Total (lbs/day)	Total Tons Removed (per month)
OCT 2010	50	634	794	1,478	22.9
NOV 2010	50	635	761	1,446	21.7
DEC 2010	42	636	690	1,368	21.2
JAN 2011	32	598	735	1,364	21.1
FEB 2011	40	588	709	1,336	18.7
MAR 2011	43	634	733	1,410	21.8
APR 2011	48	616	791	1,455	21.8
MAY 2011	57	632	734	1,423	22.1
JUN 2011	46	639	754	1,438	21.6
JULY 2011	41	646	756	1,443	22.4
AUG 2011	39	630	768	1,438	22.3
SEP 2011	41	619	751	1,410	21.2
OCT 2011	41	585	691	1,317	20.4
NOV 2011	41	570	696	1,307	19.6
DEC 2011	38	567	659	1,263	19.6
JAN 2012	41	606	694	1,341	20.8
FEB 2012	44	669	726	1,439	20.9
MAR 2012	46	623	720	1,389	21.5
APR 2012	44e	607e	686	1,337e	20.0e
MAY 2012	47e	665e	687	1,399e	21.7e
JUN 2012	48e	641	541	1,229e	18.4e
JULY 2012	52e	635	661	1,348e	20.9e
AUG 2012	48e	601	655	1,304e	20.2e
SEP 2012	61e	626	1,042	1,728e	25.9e
OCT 2012	65e	621	1,294	1,980e	30.7e
NOV 2012	63e	609	1,145	1,817e	27.2e
DEC 2012	58e	619	1,301	1,978e	30.7e

Notes:

[1] Athens Rd recovery wells began full time operation on 10/22/02.

[2] Five new Seep Area recovery wells began operation on 3/24/03.

[3] One new Seep Area recovery well began operation on 6/21/05.

[4] One new Athens Rd recovery well began full time operation on 9/8/06.

lbs/day = pounds per day

e=estimate; due to malfunctioning flow meters, the flow rate for one or more wells in the well field was manually adjusted in the spreadsheet to calculate an average flow rate. The adjusted flow rate was used to calculate the perchlorate mass removal.

In some cases, the monthly perchlorate mass removal numbers in this table differ slightly from those presented in previous reports due to minor corrections made in the historical calculations. These adjustments did not substantively affect the mass removal numbers.

TABLE 8: WEEKLY PERCHLORATE IN FBR INFLUENT AND EFFLUENT, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Sample Date	Influent/Effluent Weekly Composite	Perchlorate EPA 314 (mg/L)	Perchlorate SQL (mg/L)
7/7/2012	INFLUENT	100	1.27
7/7/2012	INFLUENT	98	1.27
7/7/2012	EFFLUENT	0.22	0.00127
7/7/2012	EFFLUENT	0.22	0.00127
7/14/2012	INFLUENT	110	1.27
7/14/2012	EFFLUENT	<0.000508	0.000508
7/21/2012	INFLUENT	120	1.27
7/21/2012	EFFLUENT	<0.00127	0.00127
7/28/2012	INFLUENT	100	1.27
7/28/2012	EFFLUENT	<0.000508	0.000508
8/4/2012	INFLUENT	100	1.27
8/4/2012	EFFLUENT	<0.000508	0.000508
8/11/2012	INFLUENT	100	1.27
8/11/2012	EFFLUENT	<0.000508	0.000508
8/18/2012	INFLUENT	100	1.27
8/18/2012	EFFLUENT	<0.000508	0.000508
8/25/2012	INFLUENT	100	1.27
8/25/2012	EFFLUENT	<0.000508	0.000508
9/1/2012	INFLUENT	100	1.27
9/1/2012	EFFLUENT	<0.000508	0.000508
9/8/2012	INFLUENT	98	1.27
9/8/2012	EFFLUENT	<0.000508	0.000508
9/15/2012	INFLUENT	130	1.27
9/15/2012	EFFLUENT	<0.000508	0.000508
9/22/2012	INFLUENT	110	1.27
9/22/2012	EFFLUENT	<0.000508	0.000508
9/29/2012	INFLUENT	150	2.54
9/29/2012	EFFLUENT	<0.000508	0.000508
10/6/2012	INFLUENT	150	1.27
10/6/2012	EFFLUENT	<0.000508	0.000508
10/13/2012	INFLUENT	150	1.27
10/13/2012	EFFLUENT	<0.000508	0.000508
10/20/2012	INFLUENT	150	1.27
10/20/2012	EFFLUENT	0.002 J	0.000508
10/27/2012	INFLUENT	150	1.27
10/27/2012	EFFLUENT	<0.000508	0.000508
11/3/2012	INFLUENT	150	1.27
11/3/2012	EFFLUENT	<0.000508	0.000508
11/10/2012	INFLUENT	140	1.27
11/10/2012	EFFLUENT	0.0038 J	0.00127

TABLE 8: WEEKLY PERCHLORATE IN FBR INFLUENT AND EFFLUENT, JULY - DECEMBER 2012

Nevada Environmental Response Trust Site
Henderson, Nevada

Sample Date	Influent/Effluent	Perchlorate EPA 314 (mg/L)	Perchlorate SQL (mg/L)
11/17/2012	INFLUENT	160	1.27
11/17/2012	EFFLUENT	<0.000508	0.000508
11/24/2012	INFLUENT	150	1.27
11/24/2012	EFFLUENT	<0.000508	0.000508
12/1/2012	INFLUENT	170	1.27
12/1/2012	EFFLUENT	<0.00127	0.00127
12/8/2012	INFLUENT	170	1.27
12/8/2012	EFFLUENT	<0.000508	0.000508
12/15/2012	INFLUENT	170	1.27
12/15/2012	EFFLUENT	<0.000508	0.000508
12/22/2012	INFLUENT	170	1.27
12/22/2012	EFFLUENT	<0.000508	0.000508

Notes:

FBR = Fluidized Bed Reactor
J = Estimated Concentration
mg/L = milligrams per liter
SQL = Sample Quantitation Limit

Figures

N
W E
S

1:24,000

1 inch = 2,000 feet

0 1,200 2,400
Feet

INSET B

ARP-1 ARP-2A ARP-3A MW-K4 ARP-4A ARP-5A ARP-6B ARP-7
PC-144 PC-137 PC-136 PC-135A PC-150 PC-149 PC-148 ART-6 ART-7B PC-122
ART-1A ART-1 PC-101R ART-2 ART-4 ART-4A ART-8 ART-7A ART-7 ART-9
PC-55 ART-2A ART-8A ART-3 ART-3A PC-18

0 300 600
Feet

INSET C

PC-97 PC-117 PC-133
PC-121 PC-86 PC-119 PC-90 PC-116R
PC-120 PC-118 PC-99R2/R3 PC-91
PC-115R

0 300 600
Feet

INSET A

0 300 600
Feet

Former Recharge Trenches

M-83 M-81A M-80 M-79 M-74 M-73 M-72 M-71 M-70 M-69
M-176 M-177 I-K I-AC I-Z I-J M-175 I-V I-I I-P I-O I-U I-H I-T I-G I-Q I-F I-X M-78 M-55 I-D I-M I-WM-58 M-174 M-173 M-60 M-56 M-68 M-67
I-AB I-R I-Y I-S M-168 I-B I-L I-C I-E I-N M-172 M-170 M-64 M-166 M-167 M-169 M-66 M-65 I-AD
Barrier Wall
M-36 M-38 M-25 M-22A I-AR M-37

Las Vegas Wash

Inset C
PC-68 PC-62 PC-94 PC-59 PC-60 PC-56 PC-58
Seep Well Field

City of Henderson
Northern Rapid
Infiltration Basins
(RIBs)

City of Henderson
Bird Viewing Preserve

PC-98R MW-K5 PC-103 PC-53

City of Henderson
Water Reclamation
Facility

Athens Road Well Field

Pittman Lateral

Inset B
PC-123 PC-128 PC-130 PC-127 PC-125 PC-124 PC-132 PC-131 PC-129 PC-126

BMI
Common Areas
(Eastside)

SUNSET RD

BOULDER HWY

PABCO RD

Former
TIMET

Parcel 4B

PC-73 PC-71 M-95 PC-72 M-44 M-96 PC-37 PC-54

Former COH
Southern RIBs

PARCEL OWNED
BY MULTIPLE
ENTITIES

NERT

M-23 M-48A H-28A M-6A M-99 M-100 M-101 M-7B

Interceptor Well Field

Inset A

Parcel 4A

BMI
(CAMU)

M-5A M-135 M-131 M-57A I-AA M-14A M-19 M-35 M-76 M-115 M-75 M-31A M-52 M-77 M-97 M-93 M-92 M-12A M-11

TIMET

Olin

M-10

AMPAC
(Former Pepcon)

TIMET

Lhoist

WAPA

LAKE MEAD DR

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

LEGEND

- Sampled / Measured Well
- Seep Surface-Flow Capture Sump (no longer operating)
- Nevada Environmental Response Trust Property Boundary

LAND OWNERSHIP

- City of Henderson
- Timet
- BMI
- Lhoist
- Former Pepcon
- Parcel Owned by Multiple Entities
- Olin

Figure
1

LOCATION MAP

Semi-Annual Remedial
Performance Report
Nevada Environmental Response Trust Site
Henderson, Nevada

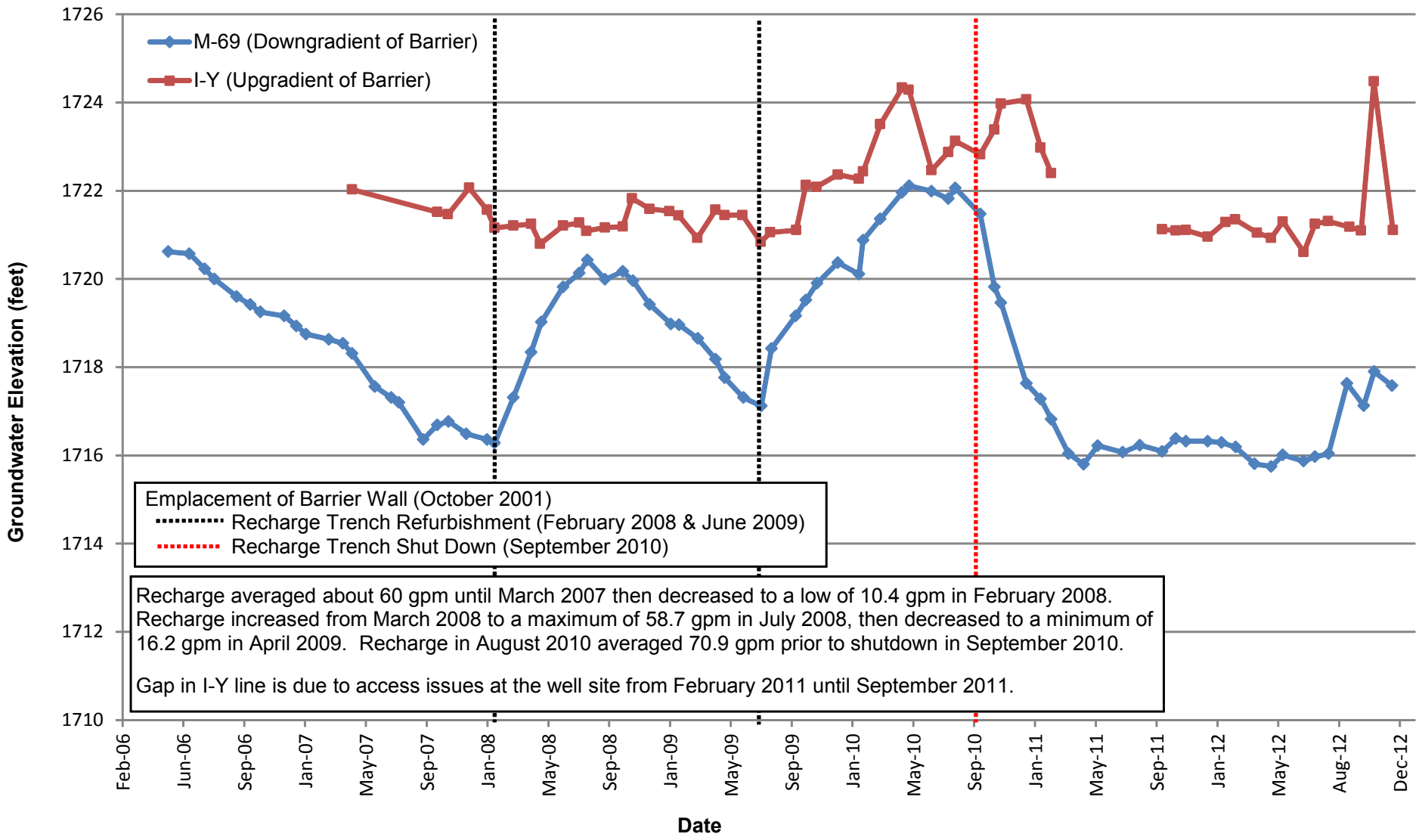
Project No.: 21-32100H

DESIGNED BY:	REVISIONS			
EJK	No.	DESCRIPTION:	DATE:	BY:
DRAWN BY:	0	GENERATE APPROVED MAP	2/28/2013	RS
RS				
CHECKED BY:				
CJR				
APPROVED BY:				
CJR/KPL				

ENVIRON

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\Figure 1 - Location Map-3-1-13.mxd

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG2A.mxd



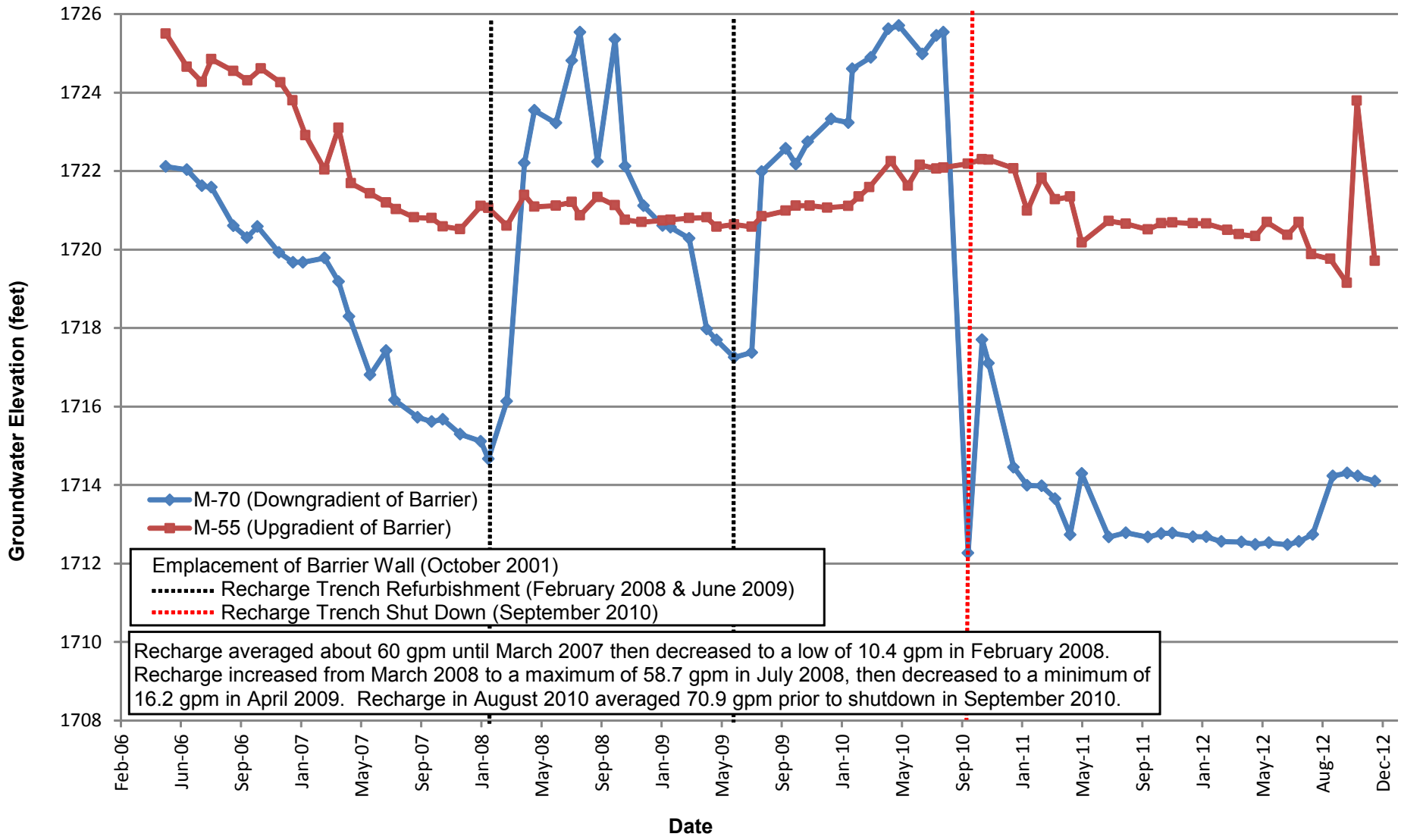
ENVIRON

Hydrograph Pair Across the Barrier Wall - M-69 and I-Y
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
2a

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG2B.mxd



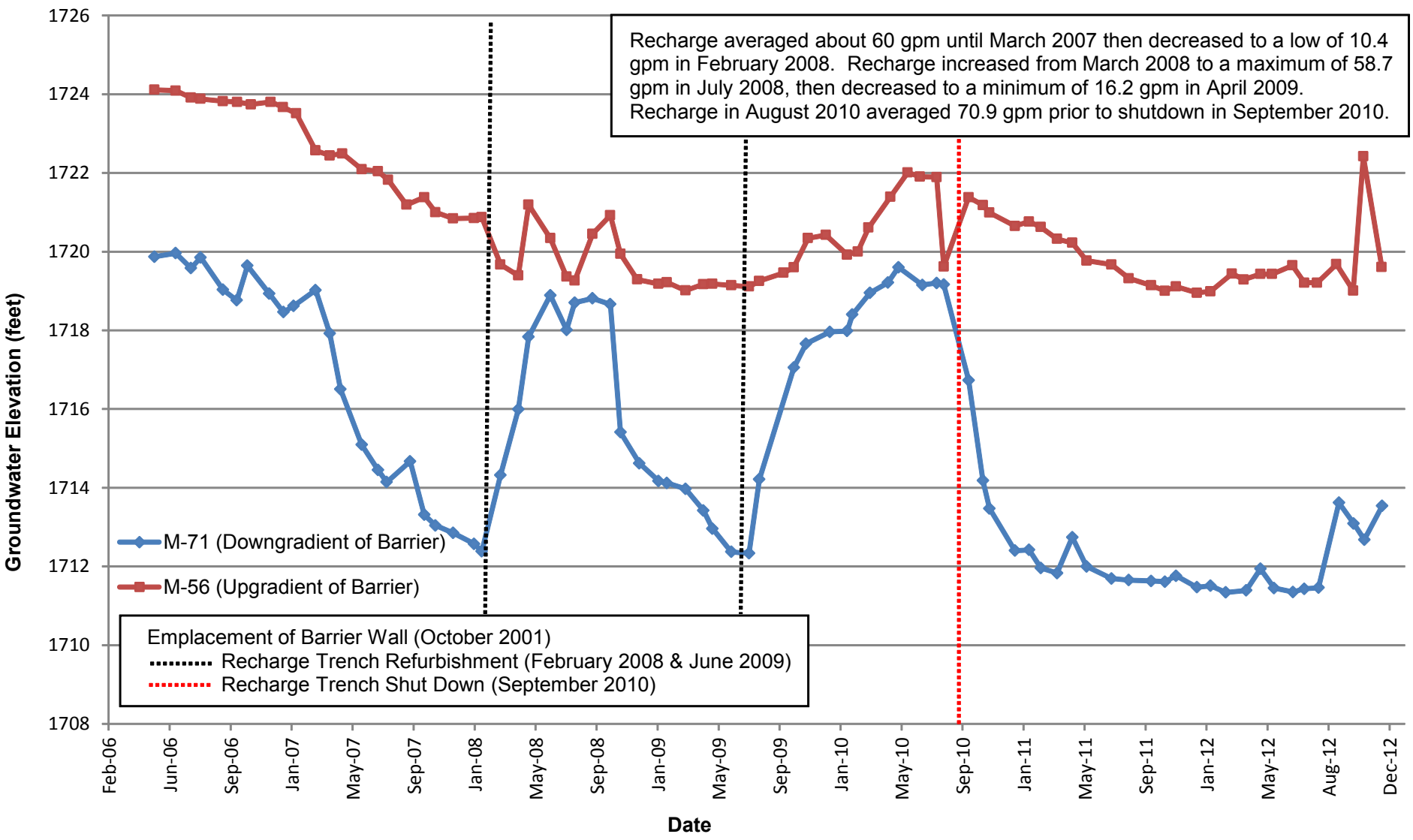
ENVIRON

Hydrograph Pair Across the Barrier Wall - M-70 and M-55
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
2b

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG2C.mxd



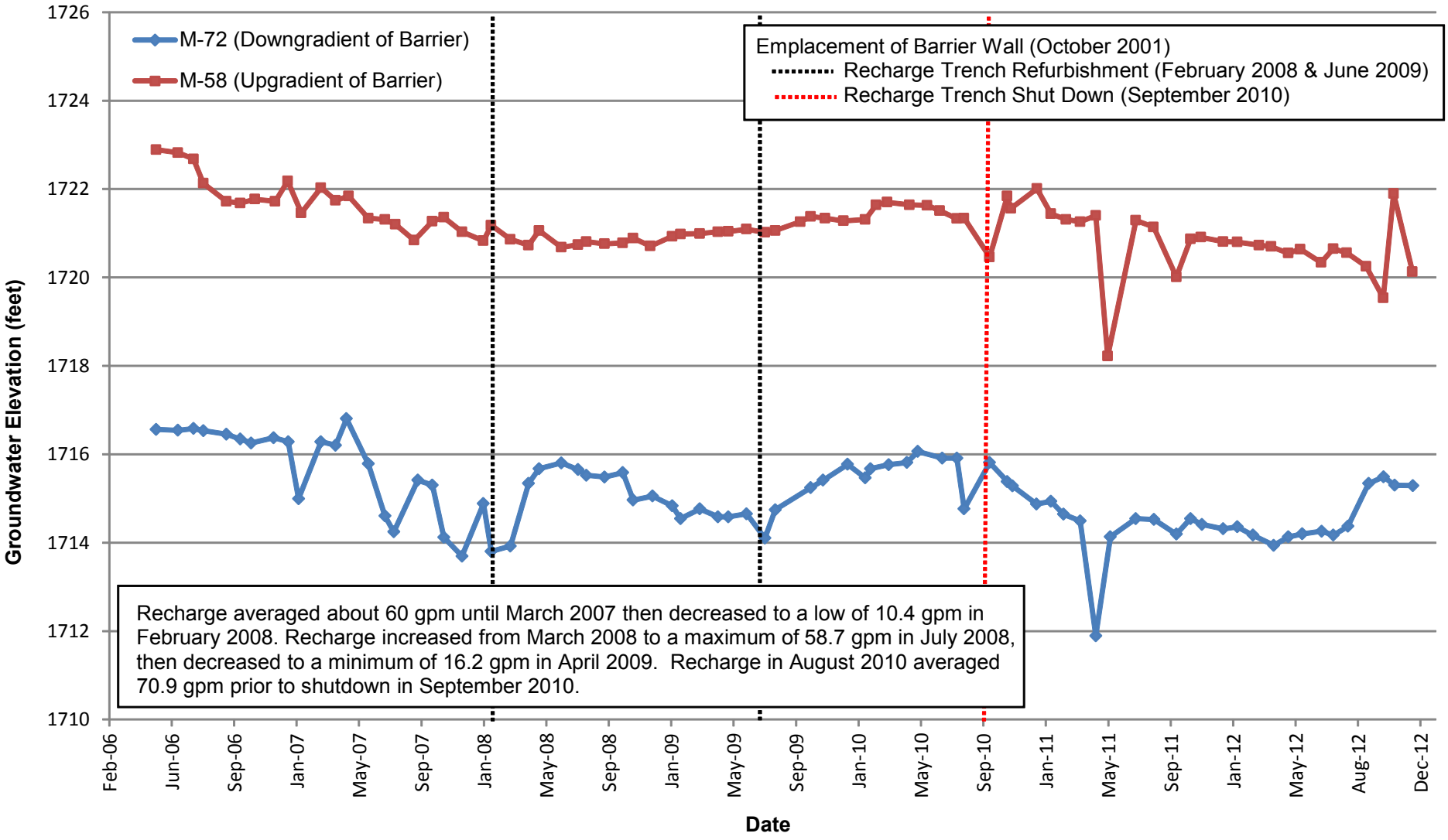
ENVIRON

Hydrograph Pair Across the Barrier Wall - M-71 and M-56
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
2c

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG2D.mxd



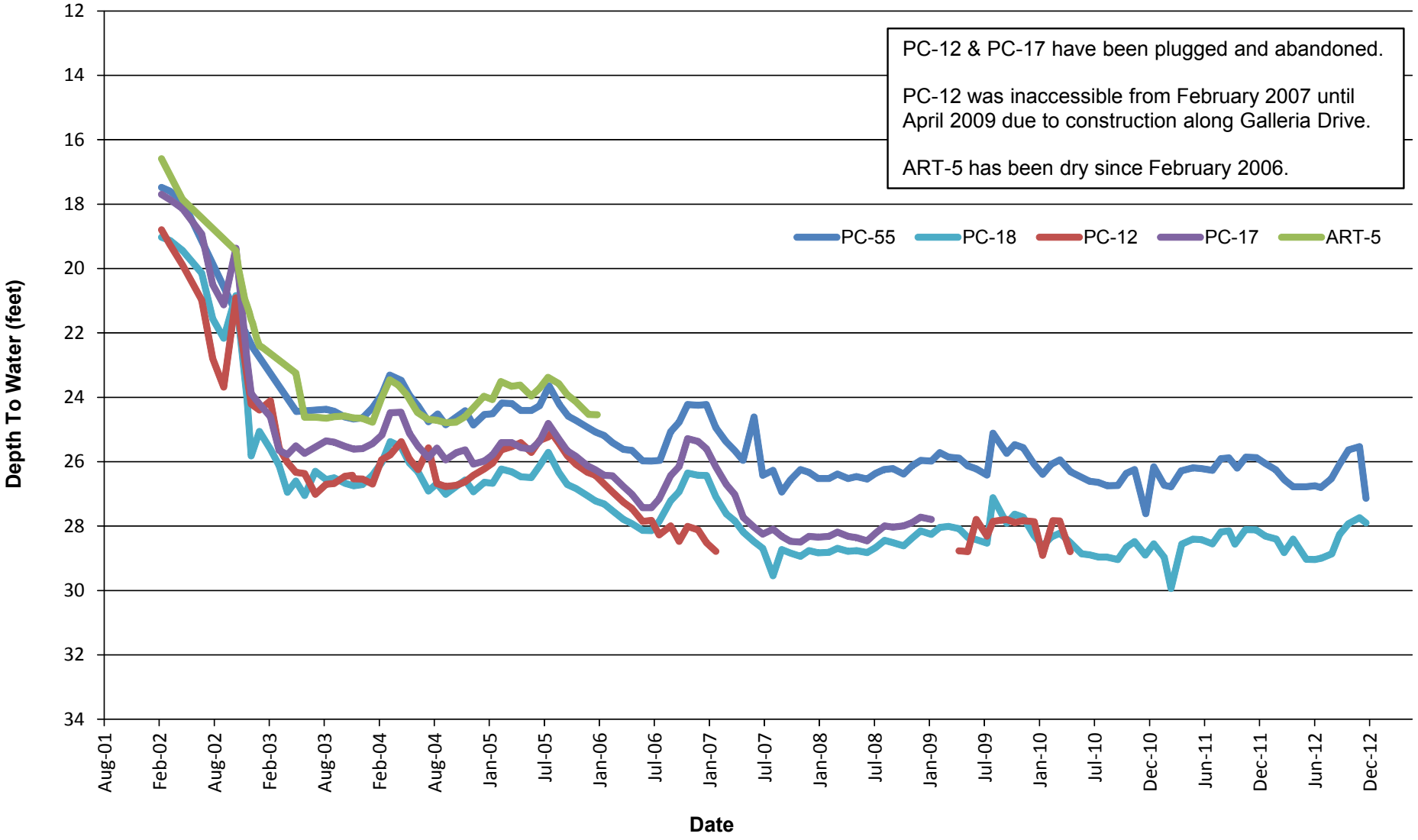
ENVIRON

Hydrograph Pair Across the Barrier Wall - M-72 and M-58
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
2d

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG3.mxd



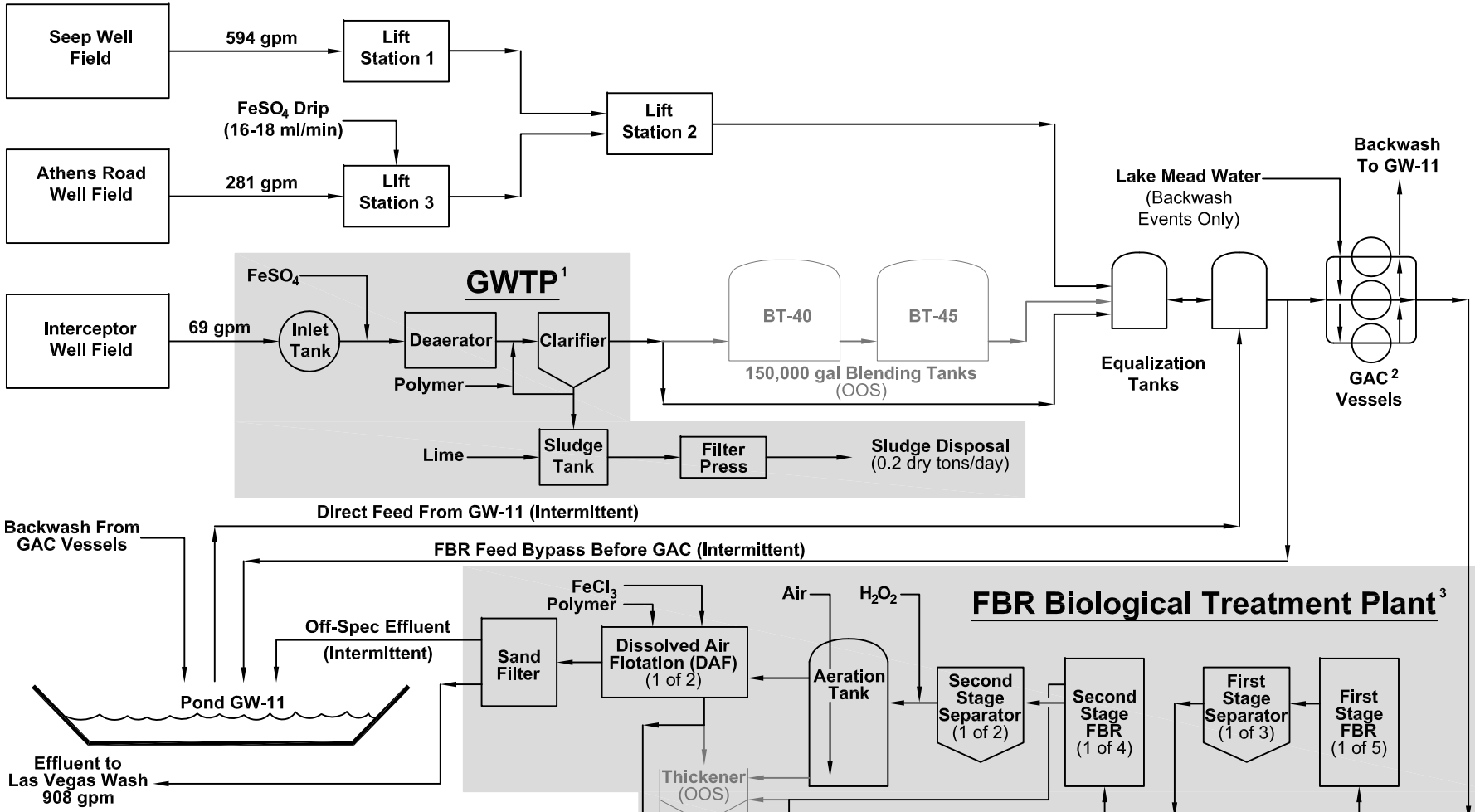
ENVIRON

Athens Road Well Field Drawdown
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
3

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 Annual\Figures\Plates\cad\Process Flow Diagram-July2012.dwg – Wed, 27 Feb 2013 – 10:40am



NOTES:

The process flows shown are average flow rates from July 2012 through December 2012.
gpm = gallons per minute
ml/min = milliliters per minute
OOS = Out of Service

1) Groundwater Treatment Plant (GWTP) for hexavalent chromium removal. Ferrous sulfate ($FeSO_4$) added to chemically reduce hexavalent chromium. Clarifier settles solids. Sludge is removed and landfilled.
2) Carbon treatment to remove organic compounds consists of three 20,000-pound granular activated carbon (GAC) vessels.
3) Fluidized Bed Reactor (FBR) Biological Treatment Plant for removal of perchlorate consists of five 33,000 gallon first-stage FBRs, four 28,800 gallon second-stage FBRs, aeration (air and hydrogen peroxide, H_2O_2), dissolved air flotation (DAF), two plate and frame filter presses, and a sand filter.

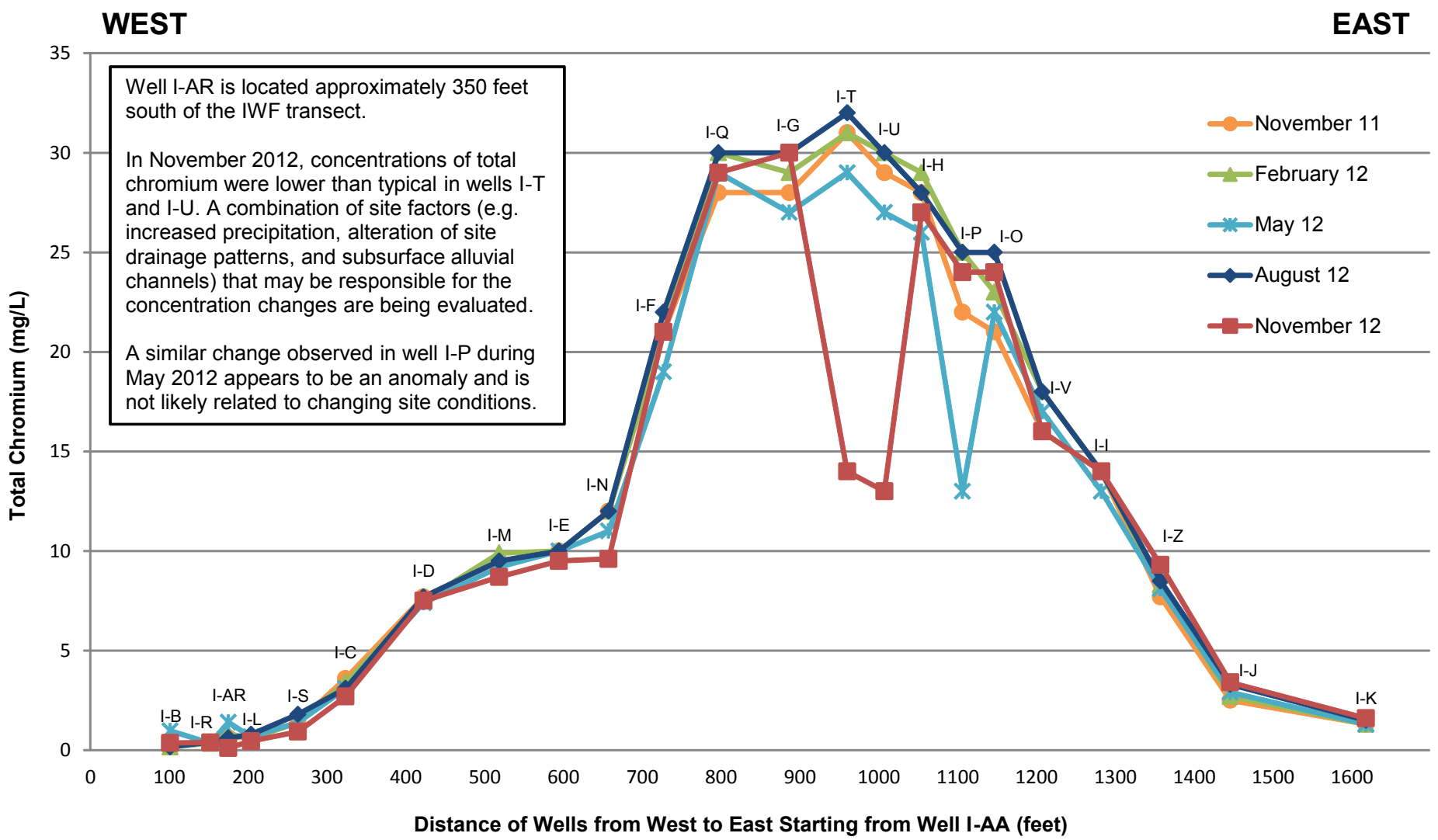
ENVIRON

Groundwater Extraction and Treatment System (GWETS) Flow Diagram
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure **4**

Drafter: RS | Date: 2/28/13 | Contract Number: 21-29100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG5.mxd



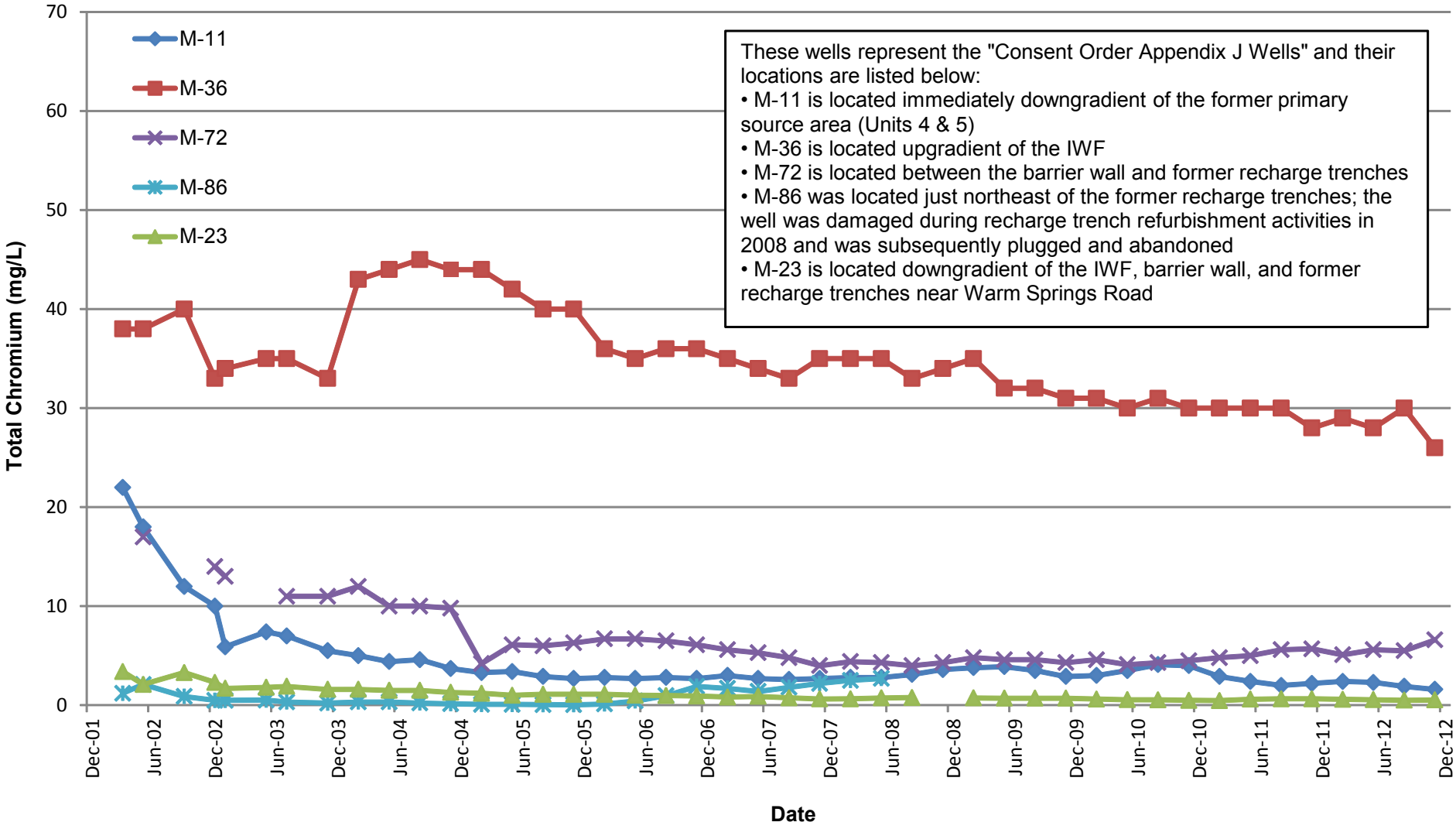
ENVIRON

Interceptor Well Field Transect Total Chromium Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
5

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG6.mxd



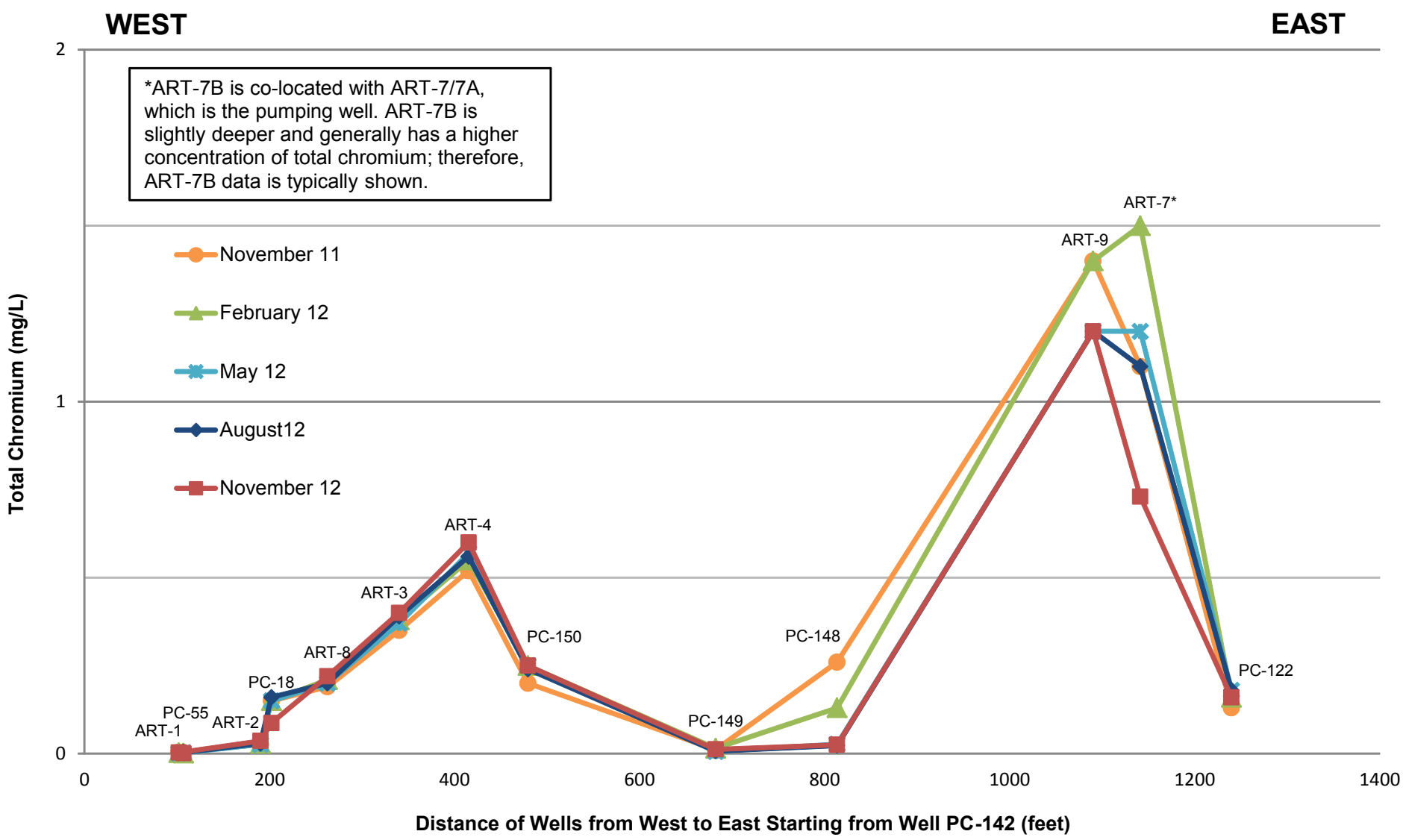
ENVIRON

Total Chromium Concentration Trends in Select Wells
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
6

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG7.mxd



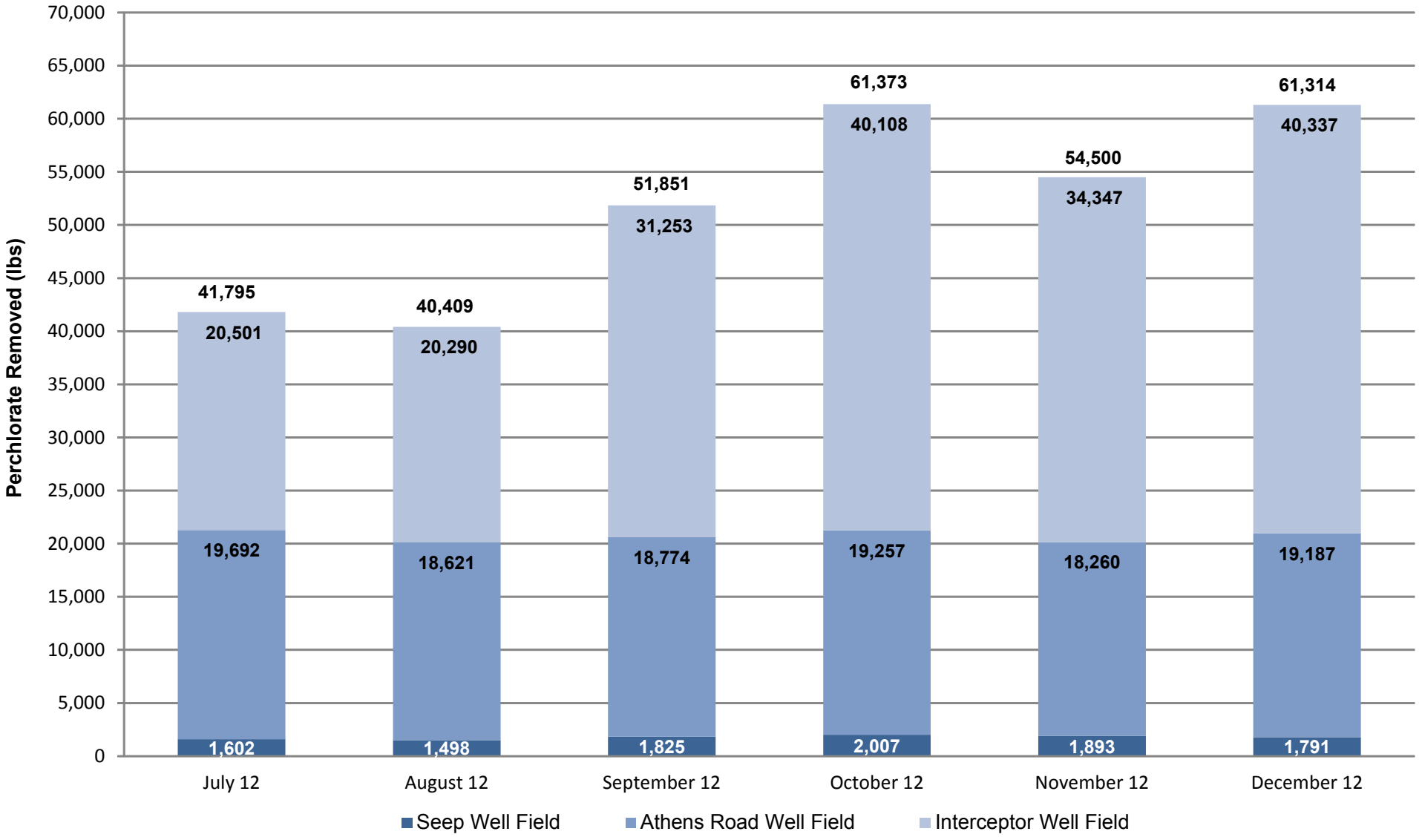
ENVIRON

Athens Road Well Field Transect Total Chromium Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
7

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG8.mxd



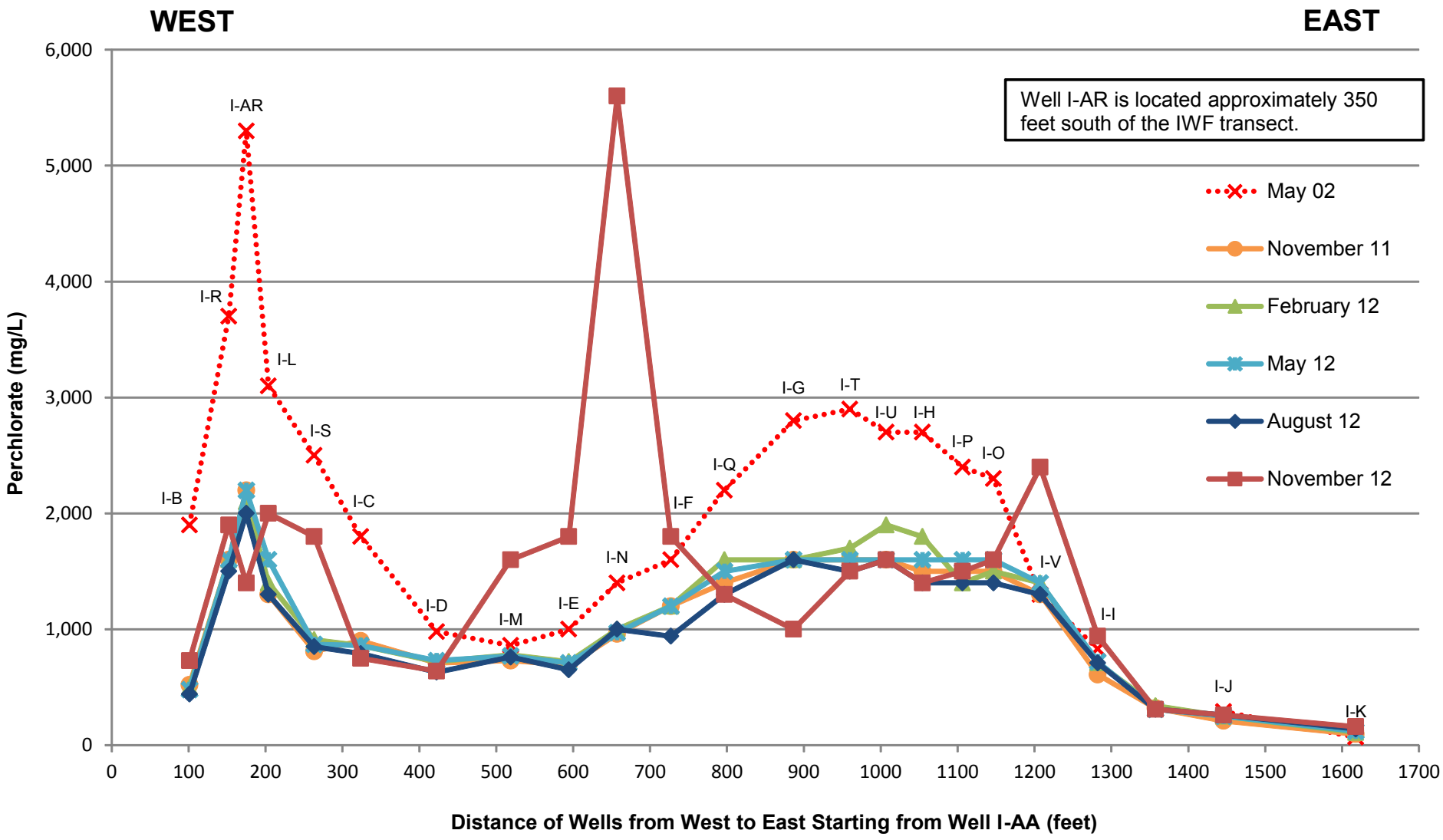
ENVIRON

Perchlorate Removed from the Environment July - December 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
8

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG9.mxd



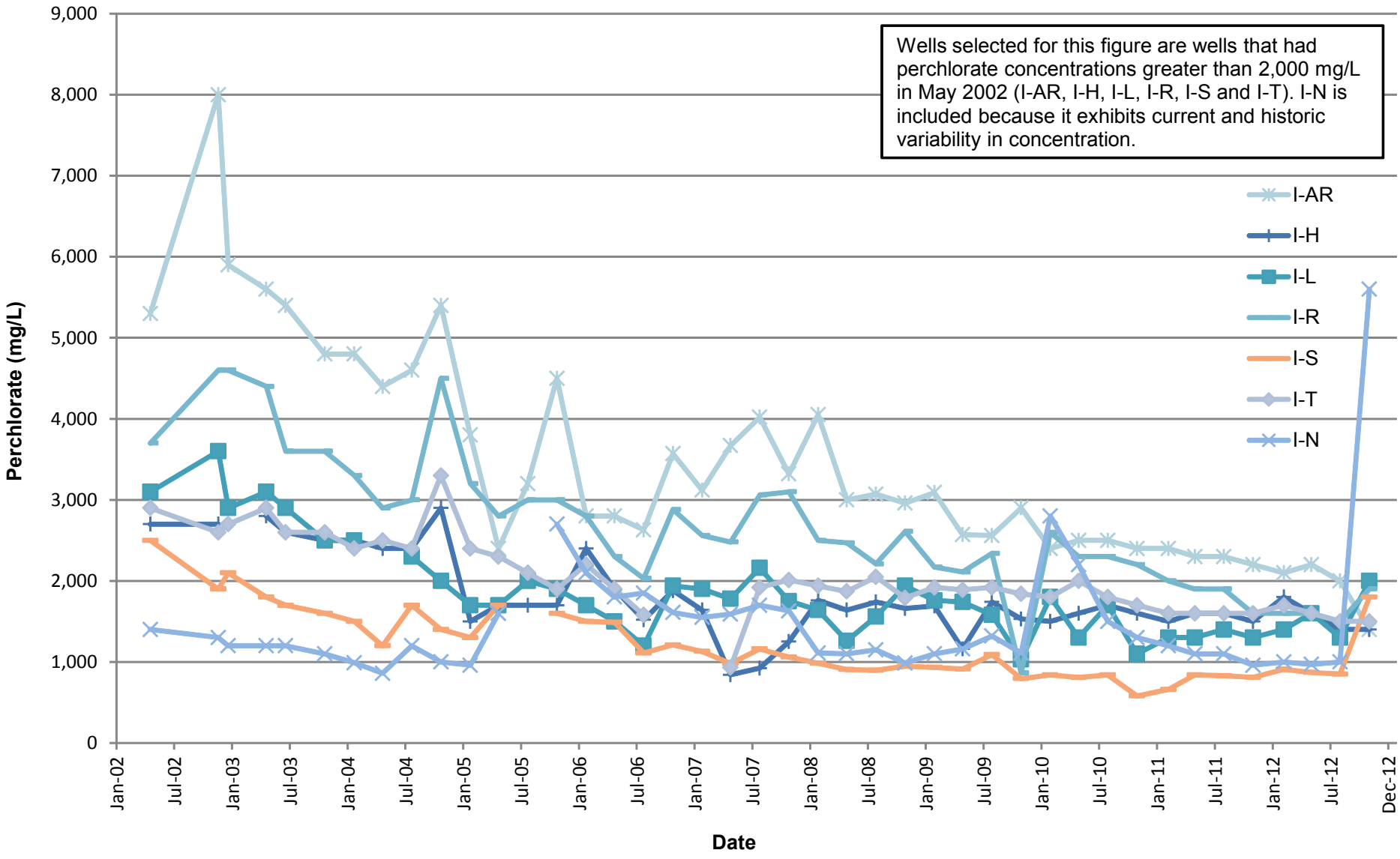
ENVIRON

Interceptor Well Field Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
9

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG10.mxd



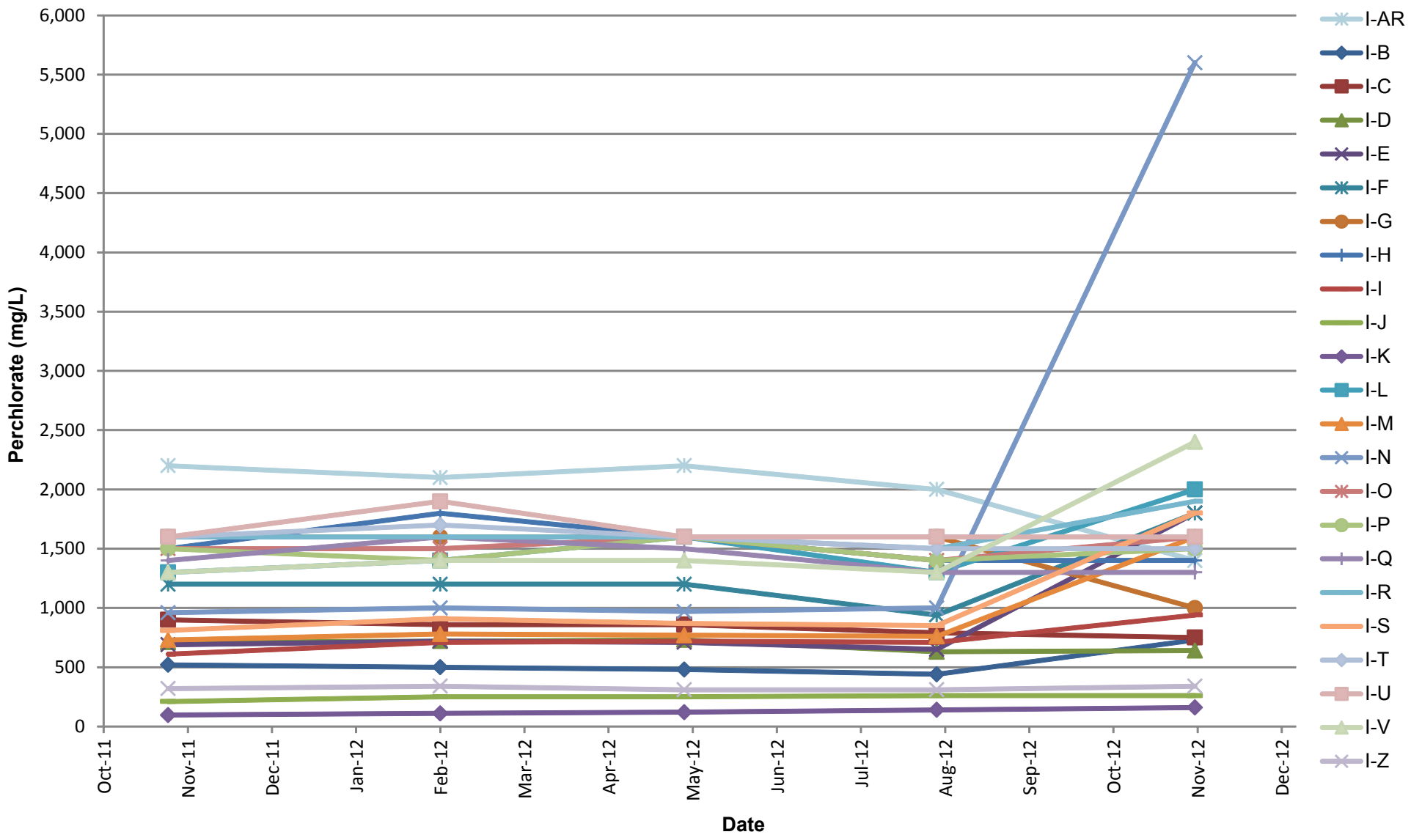
ENVIRON

Interceptor Well Field Perchlorate Concentration Trends for Select Wells
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
10

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG10A.mxd



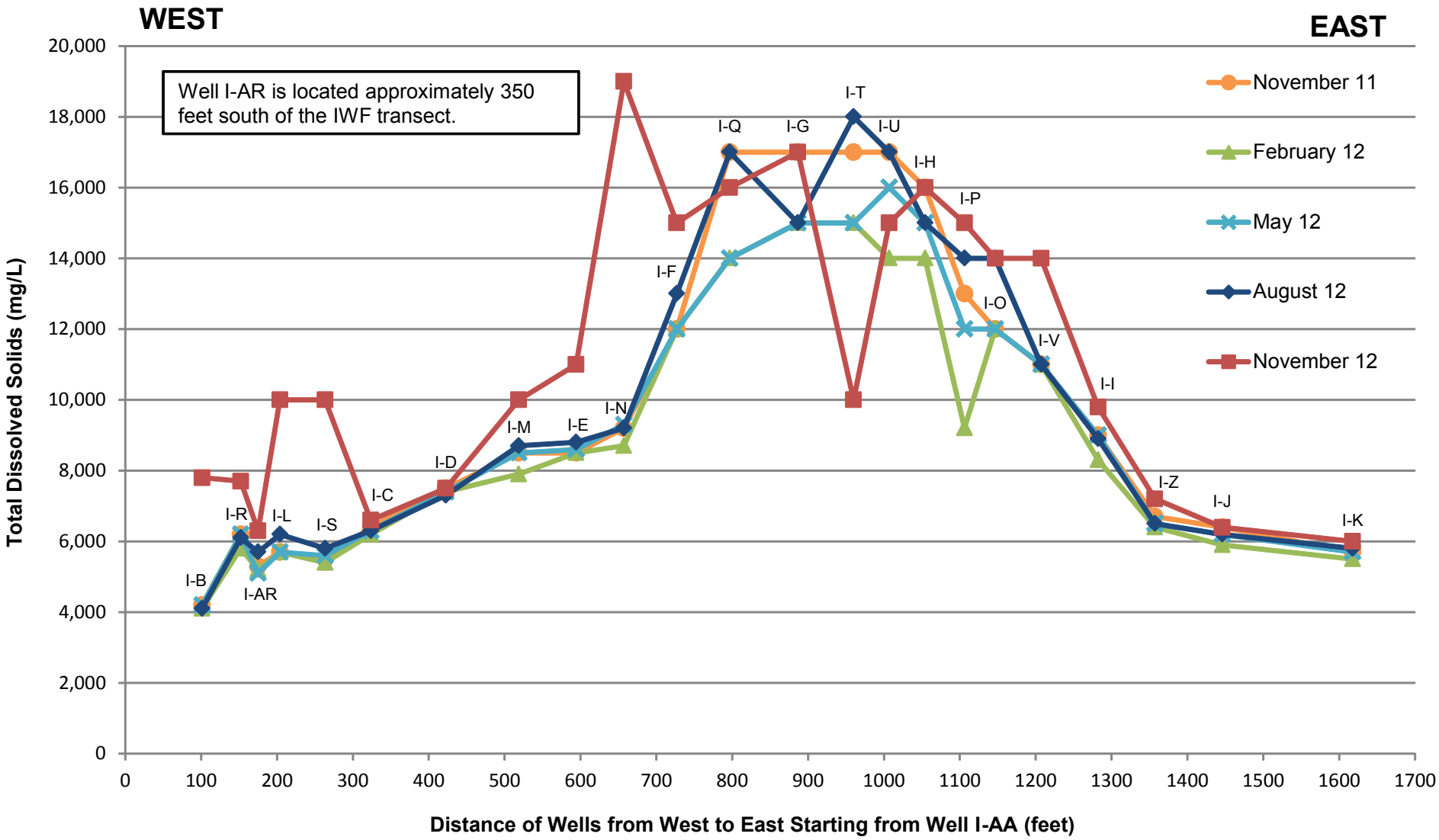
ENVIRON

Interceptor Well Field Perchlorate Concentration Trends, November 2011 - November 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
10a

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG11.mxd



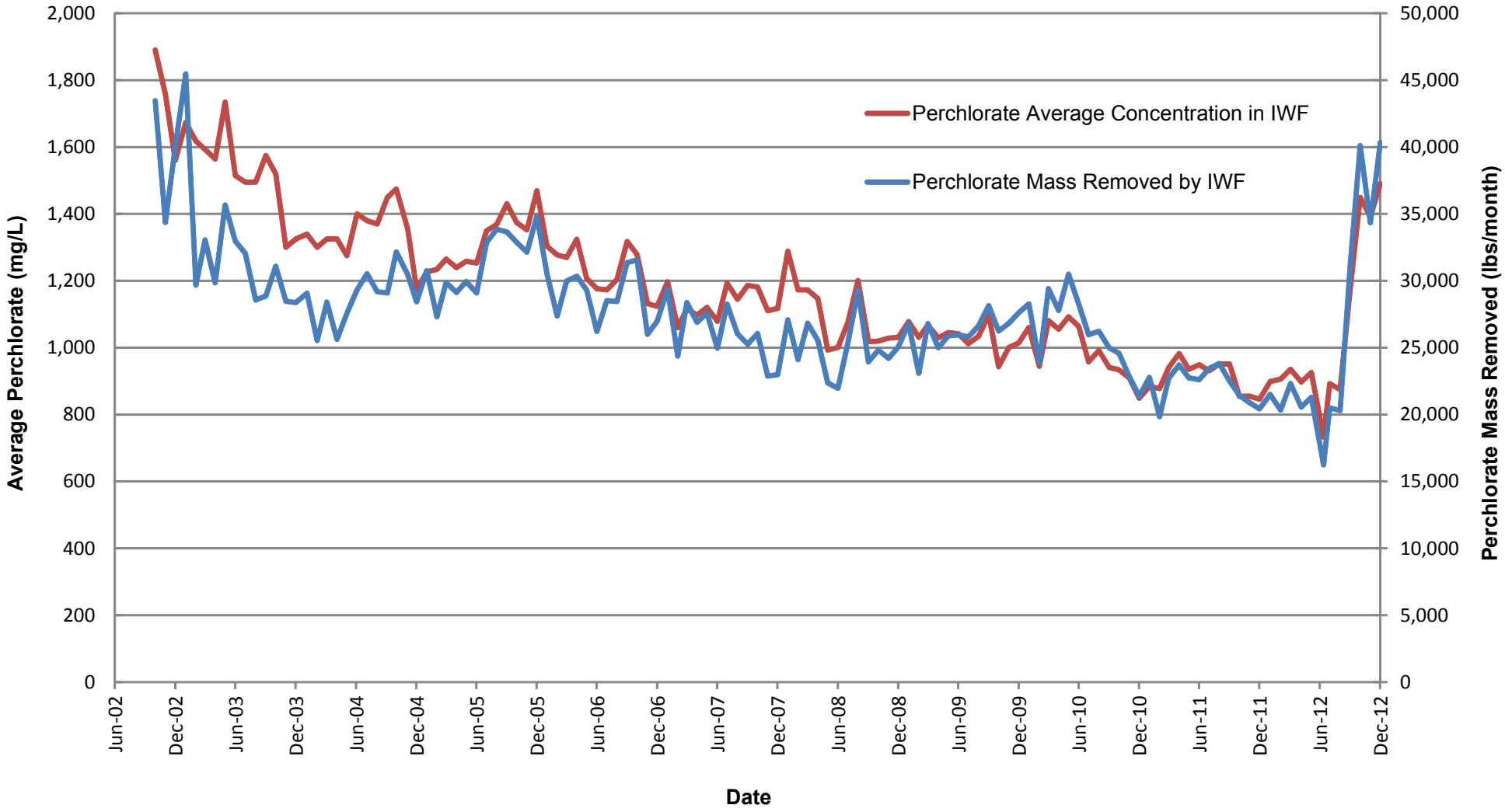
ENVIRON

Interceptor Well Field Transect Total Dissolved Solids Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
11

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG12.mxd



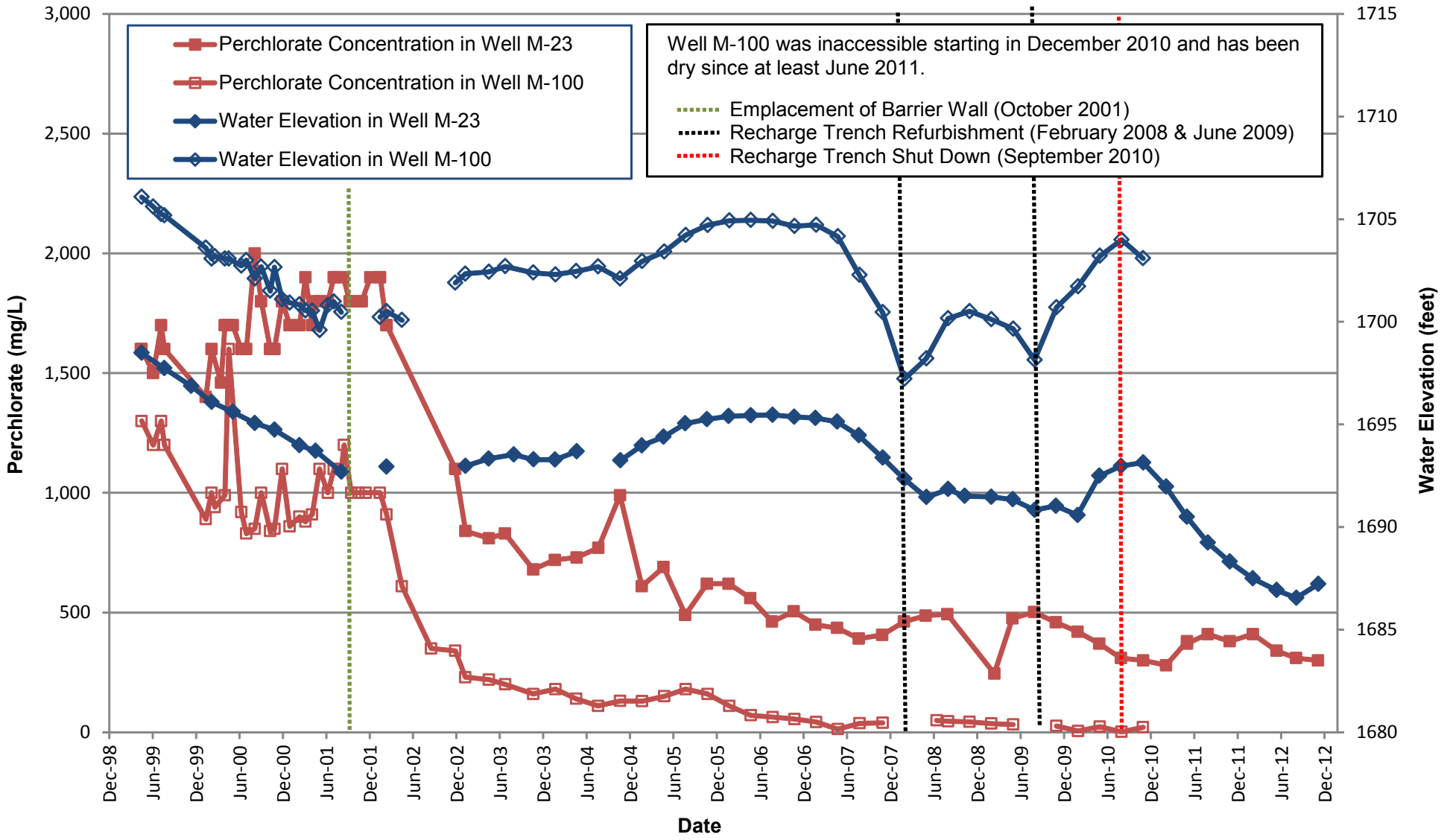
ENVIRON

Interceptor Well Field Average Perchlorate Concentration and Mass Removed
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
12

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG13.mxd



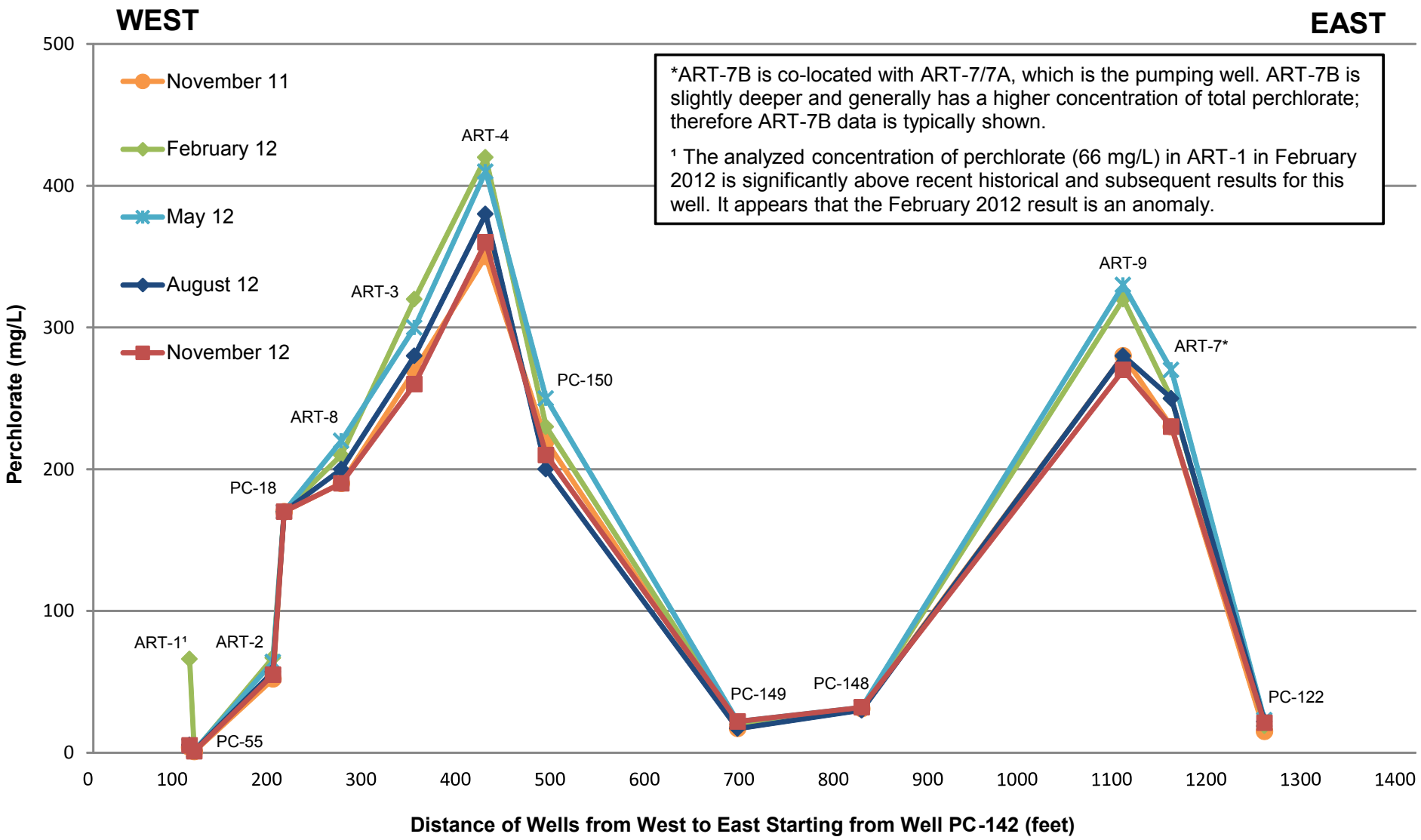
ENVIRON

Wells M-23 and M-100 Perchlorate Concentration vs. Water Elevation Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
13

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG14.mxd



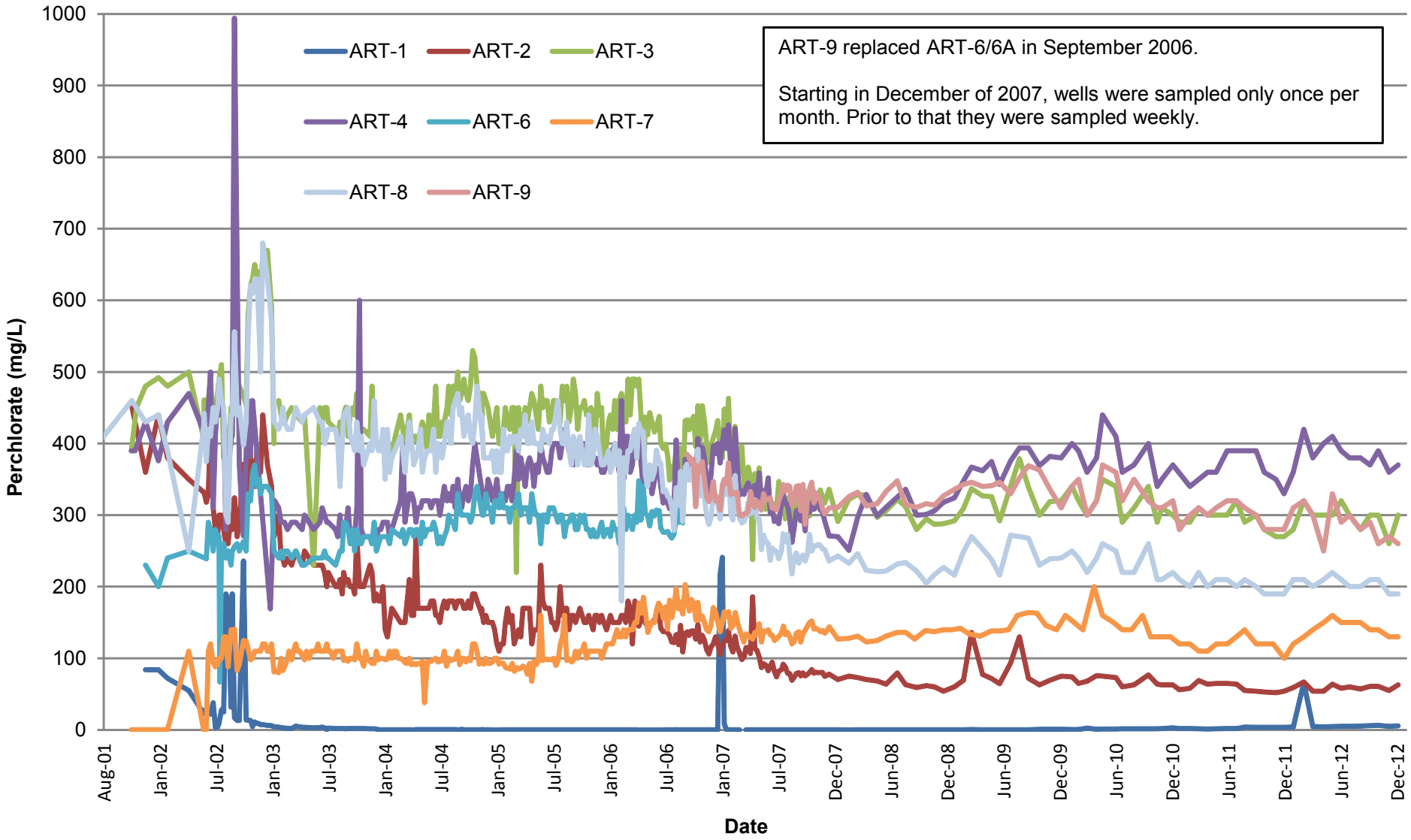
ENVIRON

Athens Road Well Field Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
14

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG15.mxd



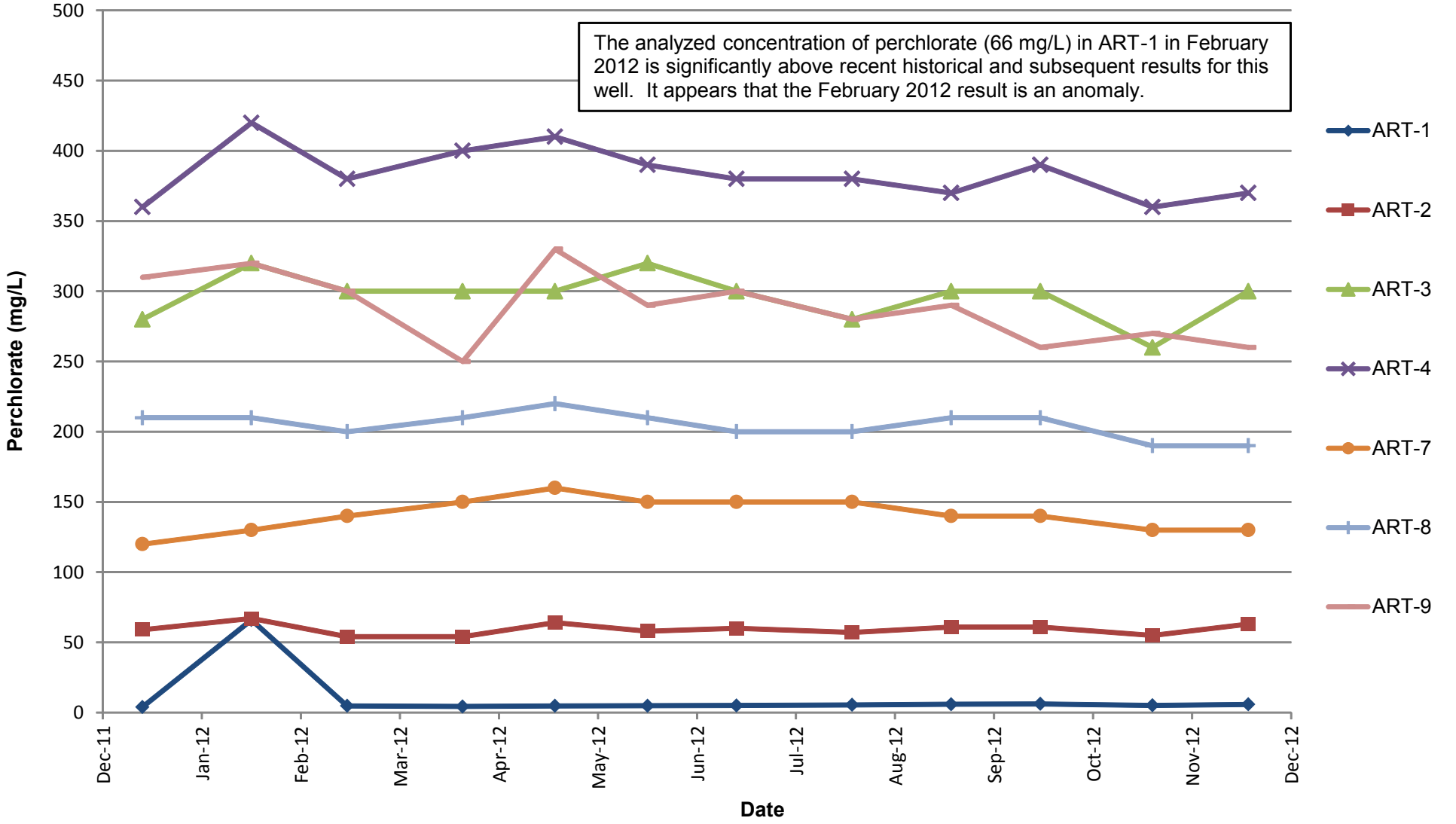
ENVIRON

Athens Road Well Field Perchlorate Concentration Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
15

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG15A.mxd



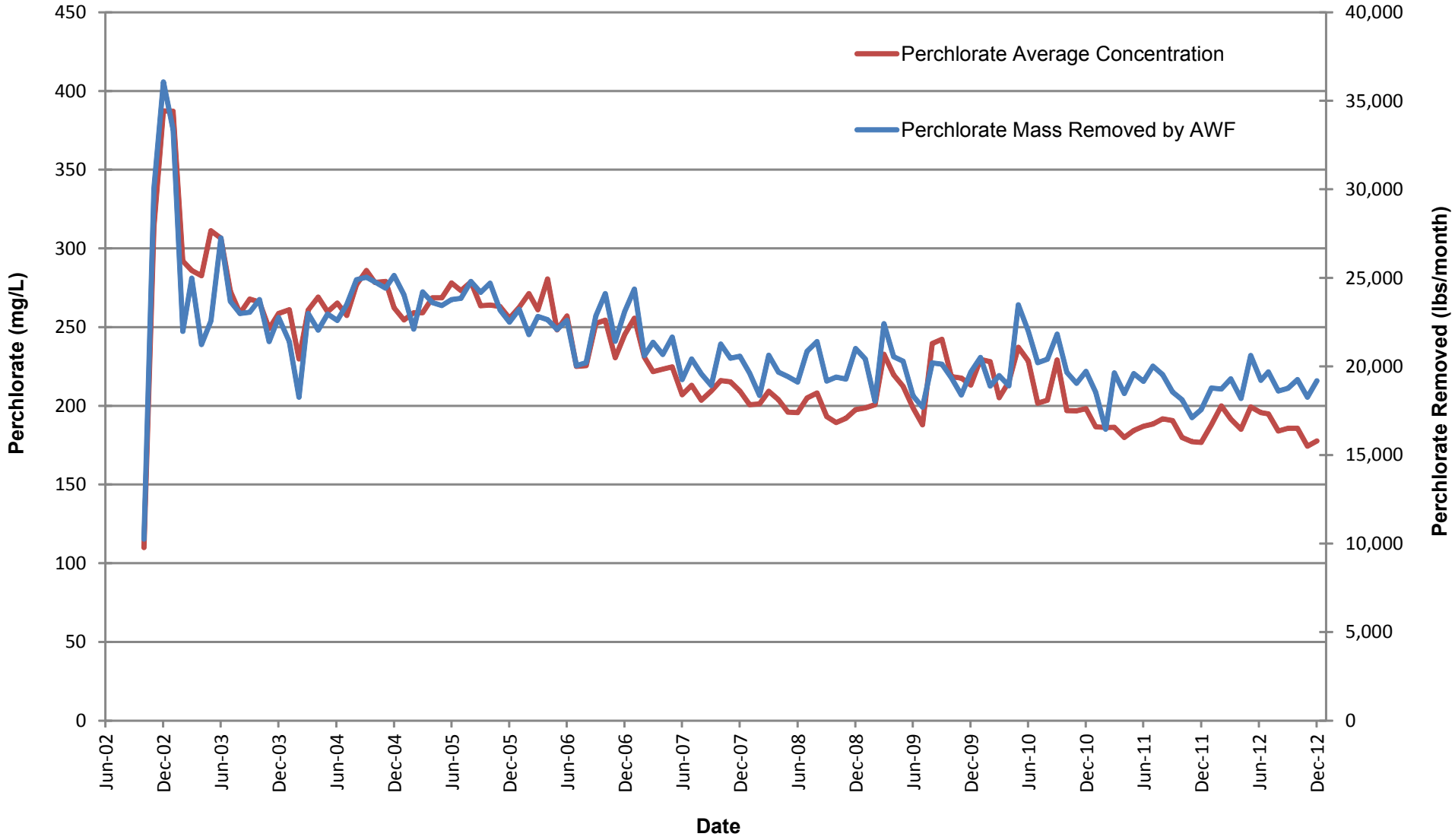
ENVIRON

Athens Road Well Field Perchlorate Concentration Trends, November 2011 - December 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
15a

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG16.mxd



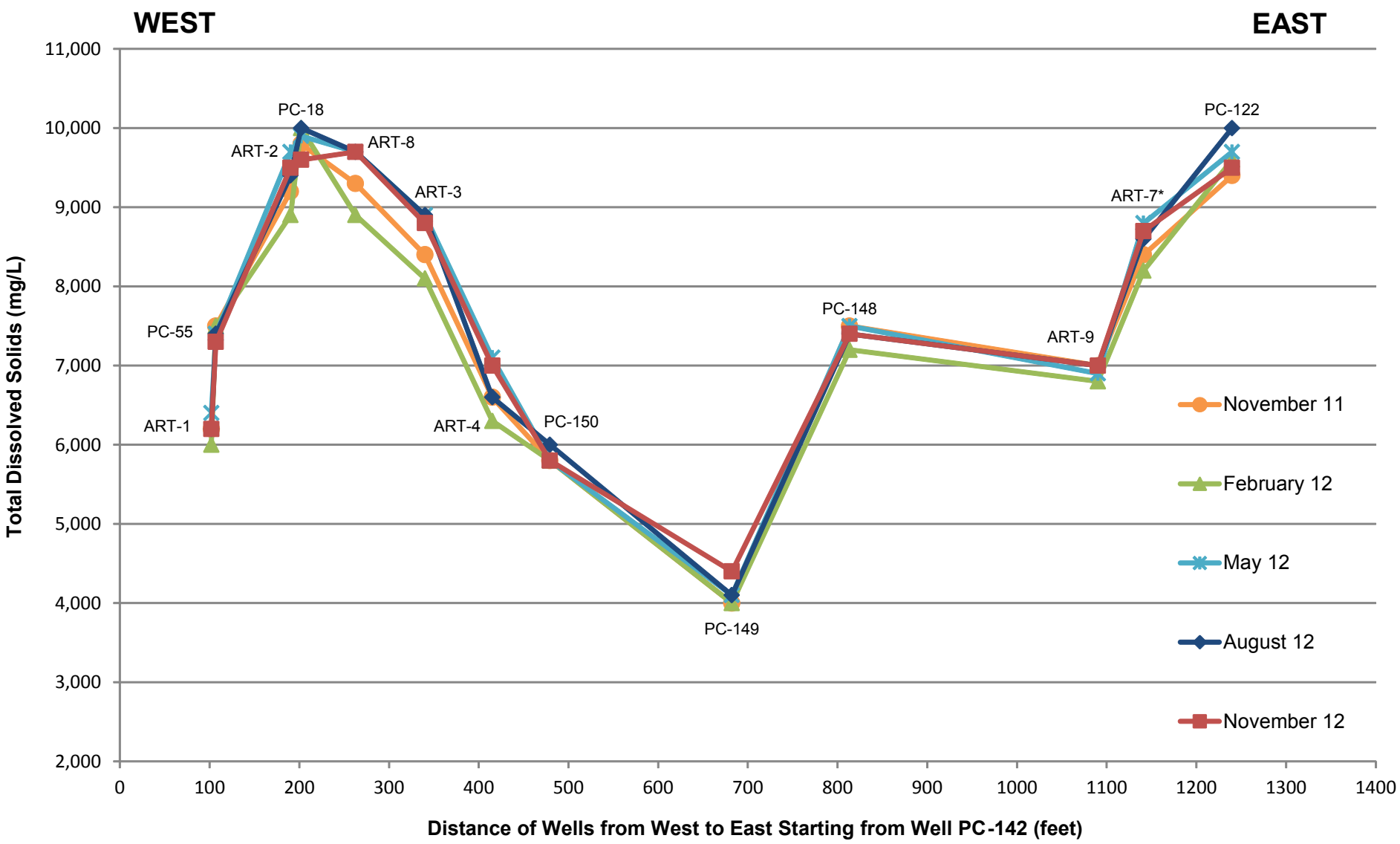
ENVIRON

Athens Road Well Field Average Perchlorate Concentration and Mass Removed
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
16

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG17.mxd



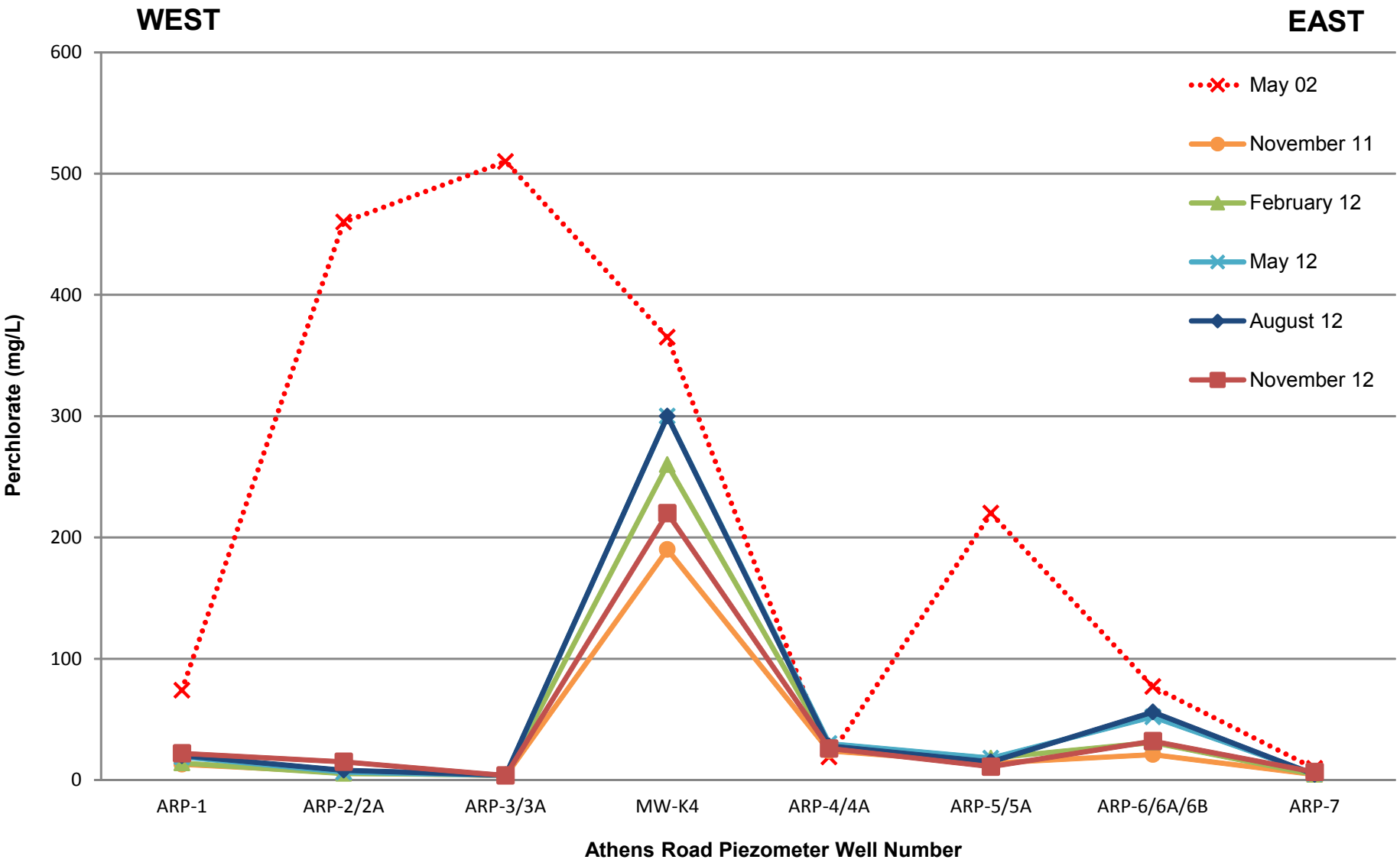
ENVIRON

Athens Road Well Field Transect Total Dissolved Solids Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
17

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG18.mxd



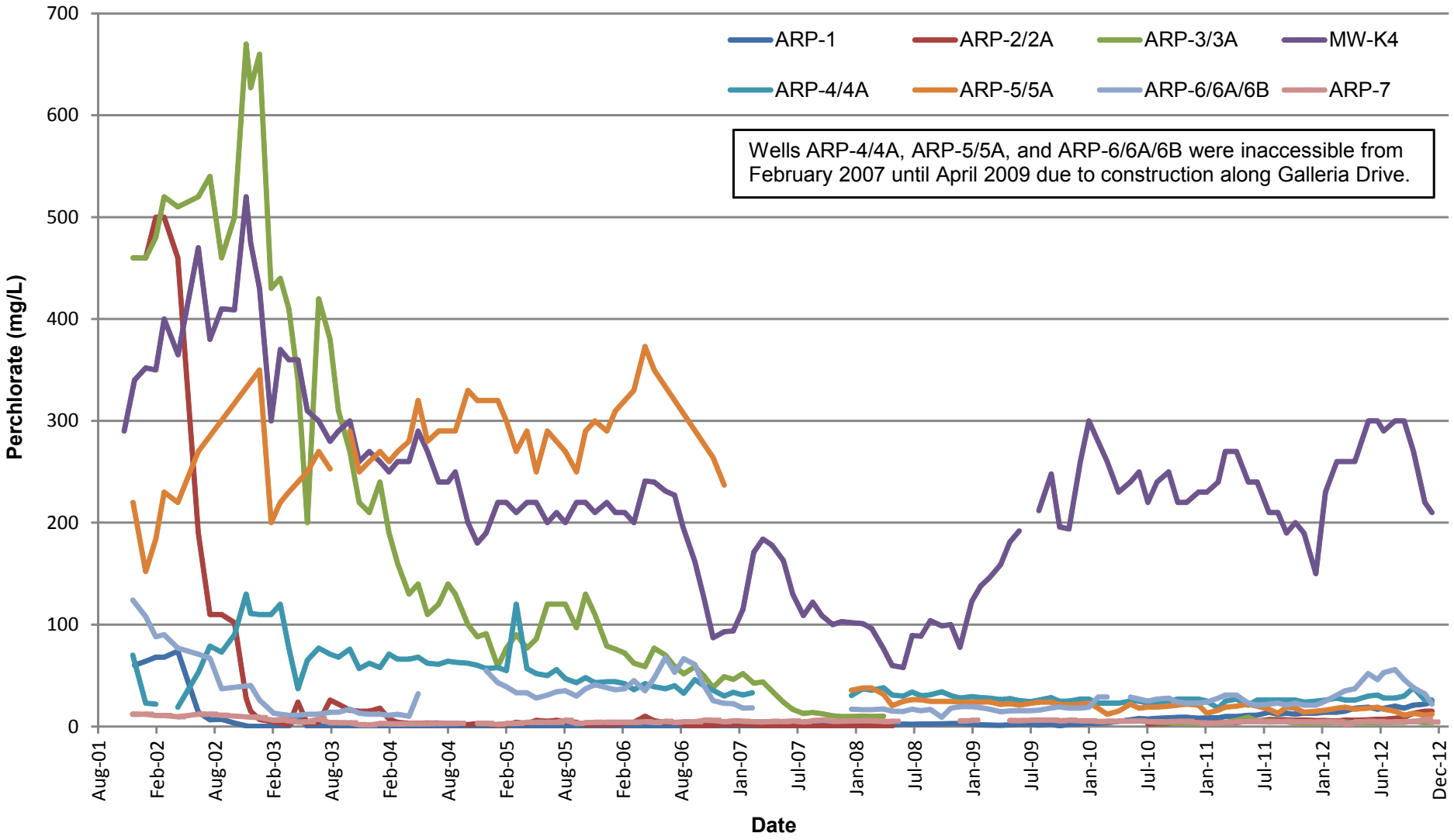
ENVIRON

Athens Road Piezometer Well Line Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
18

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG19.mxd



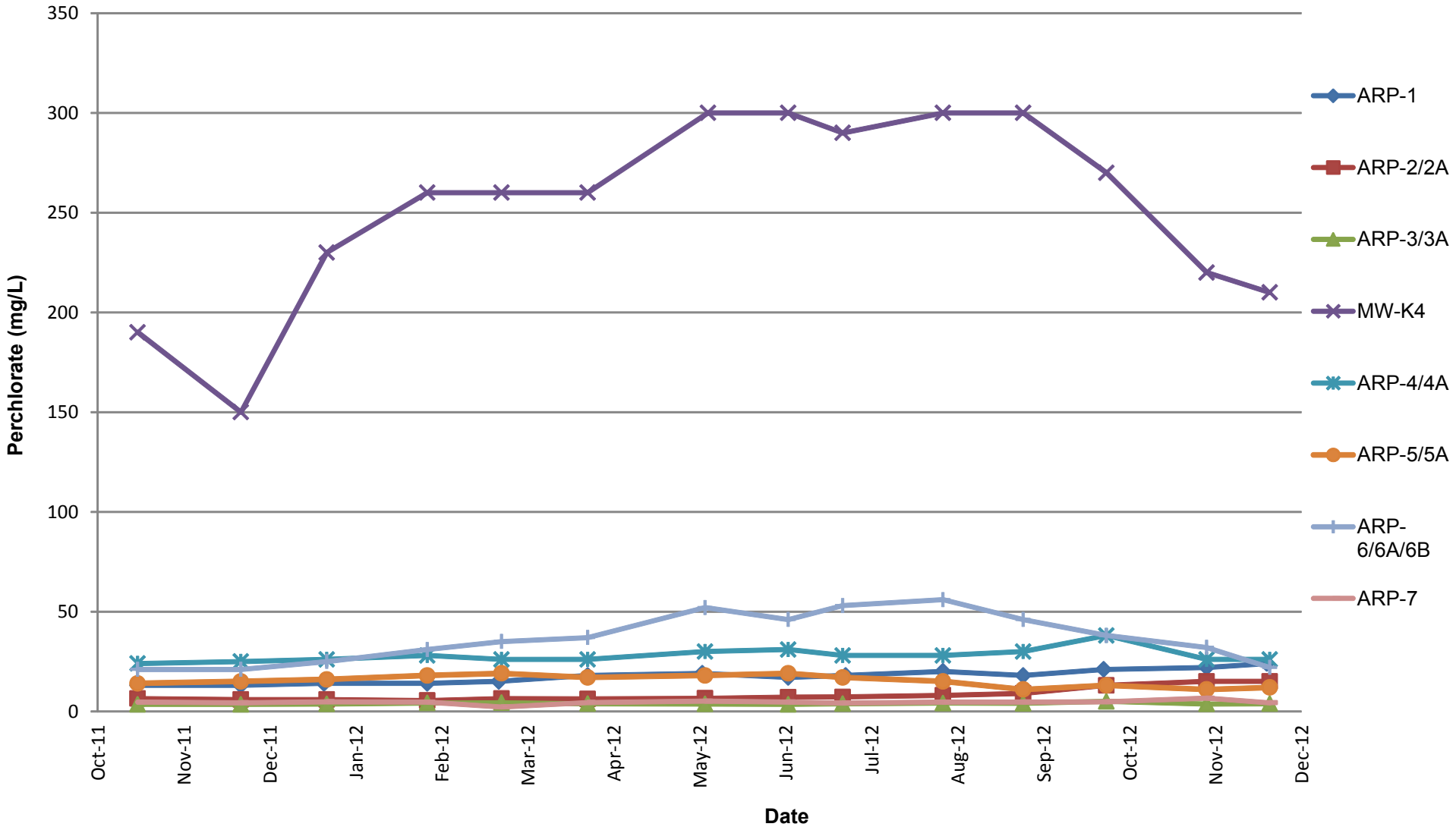
ENVIRON

Athens Road Piezometer Well Line Perchlorate Concentration Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
19

Drafter: RS	Date: 2/28/13	Contract Number: 21-32100H	Approved:	Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG19A.mxd



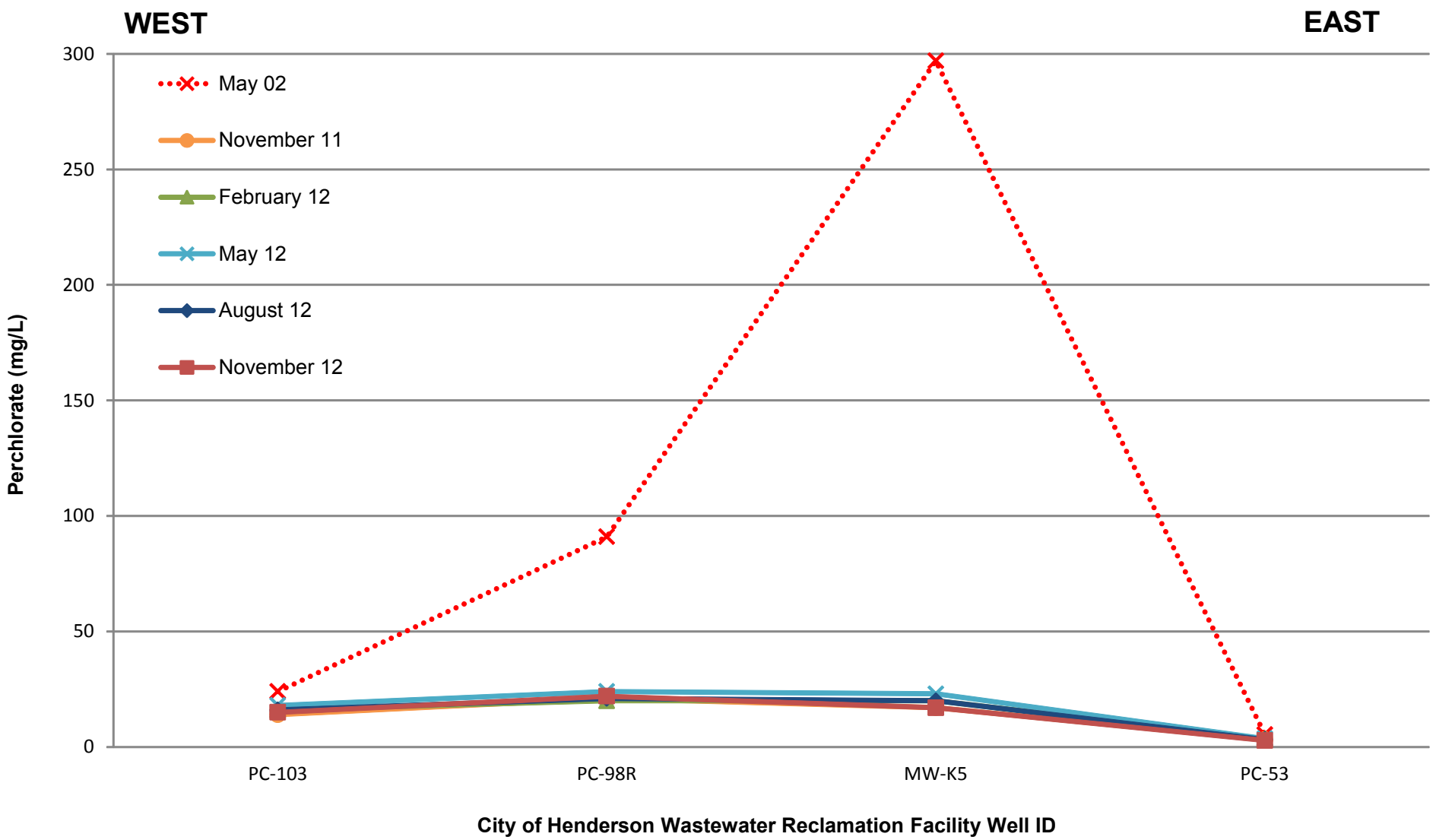
ENVIRON

Athens Road Piezometer Well Line Perchlorate Concentration Trends, Nov 2011 - Dec 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
19a

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG20.mxd



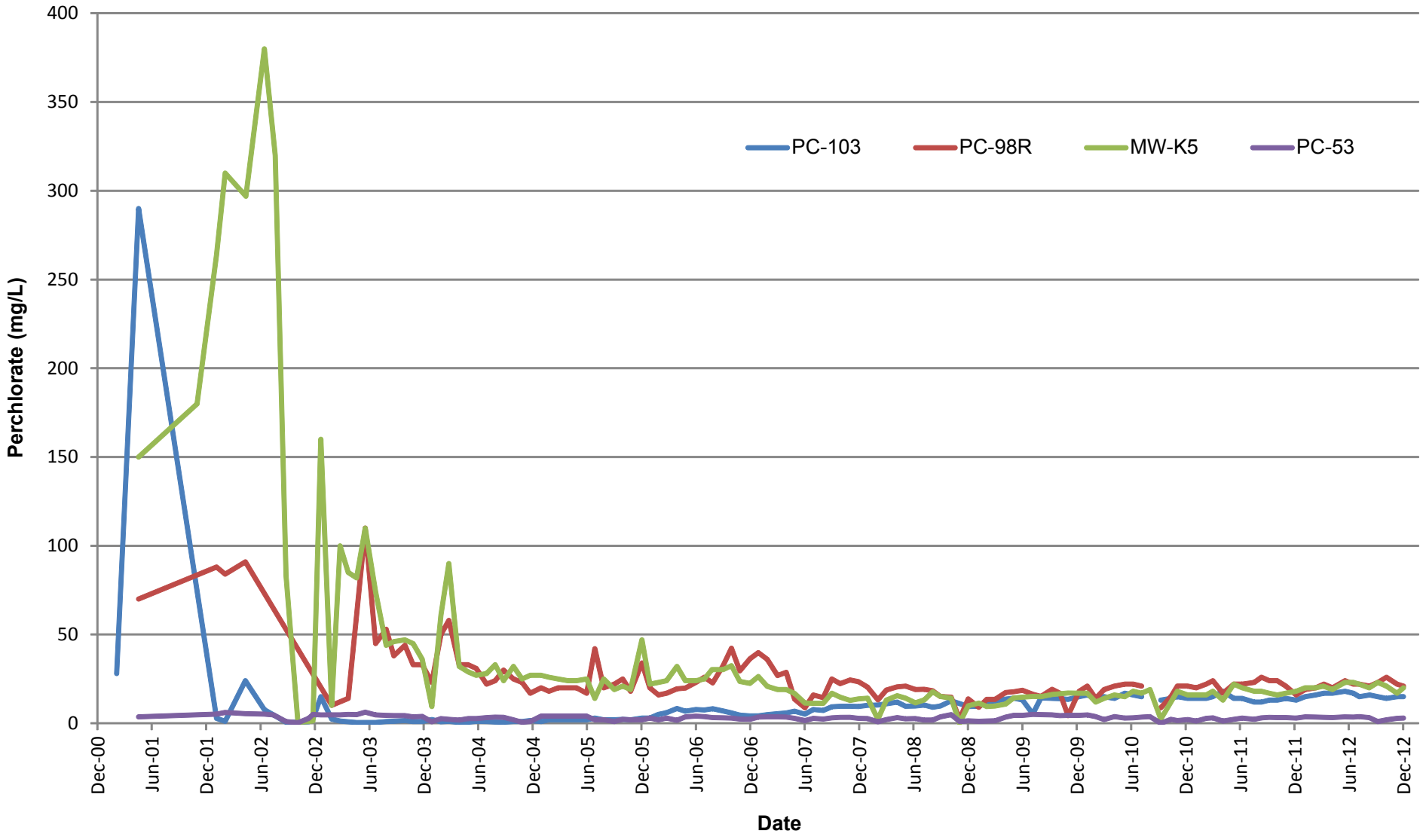
ENVIRON

City of Henderson WRF Well Line Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
20

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG21.mxd



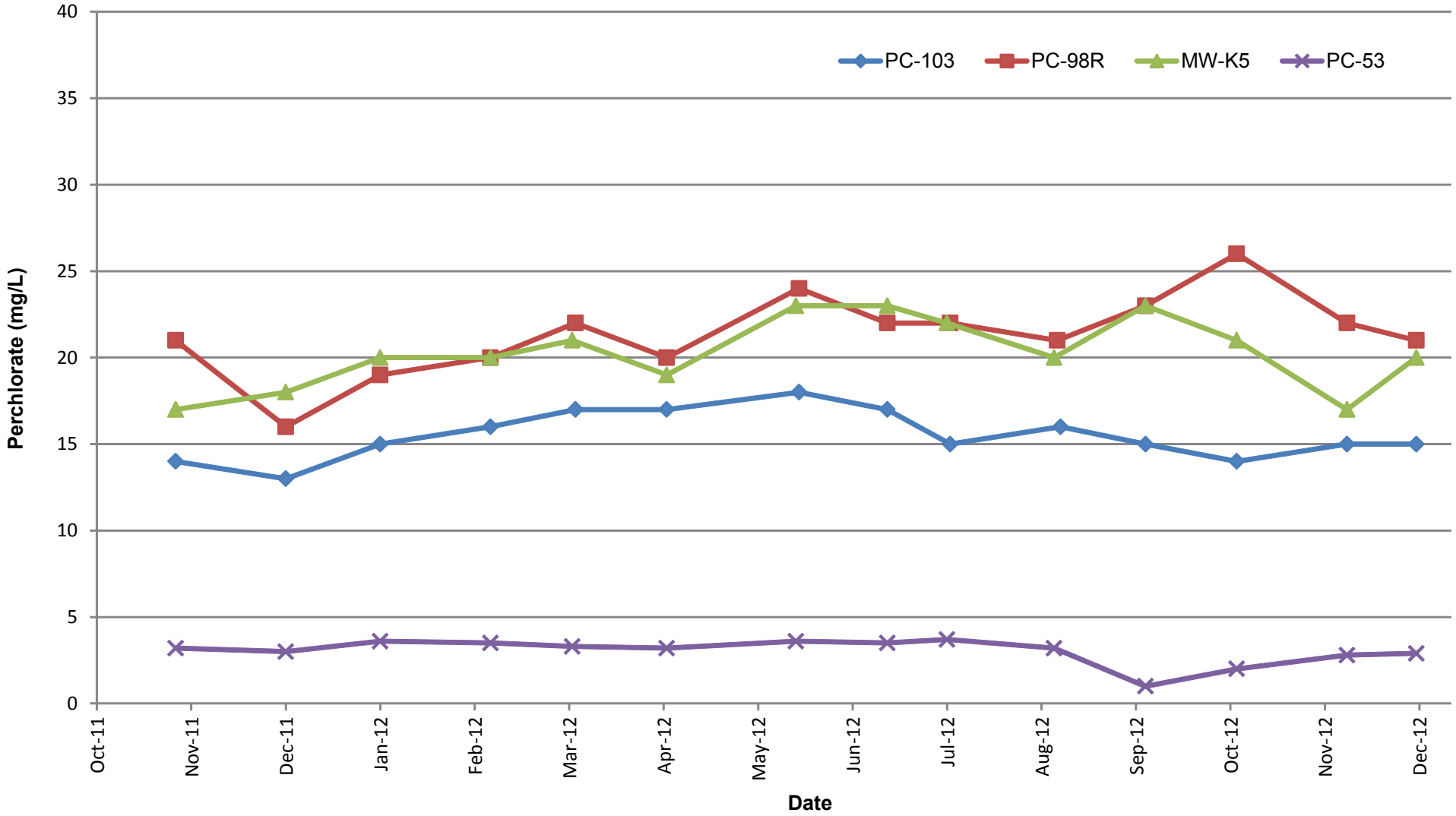
ENVIRON

City of Henderson WRF Well Line Perchlorate Concentration Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
21

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG21A.mxd



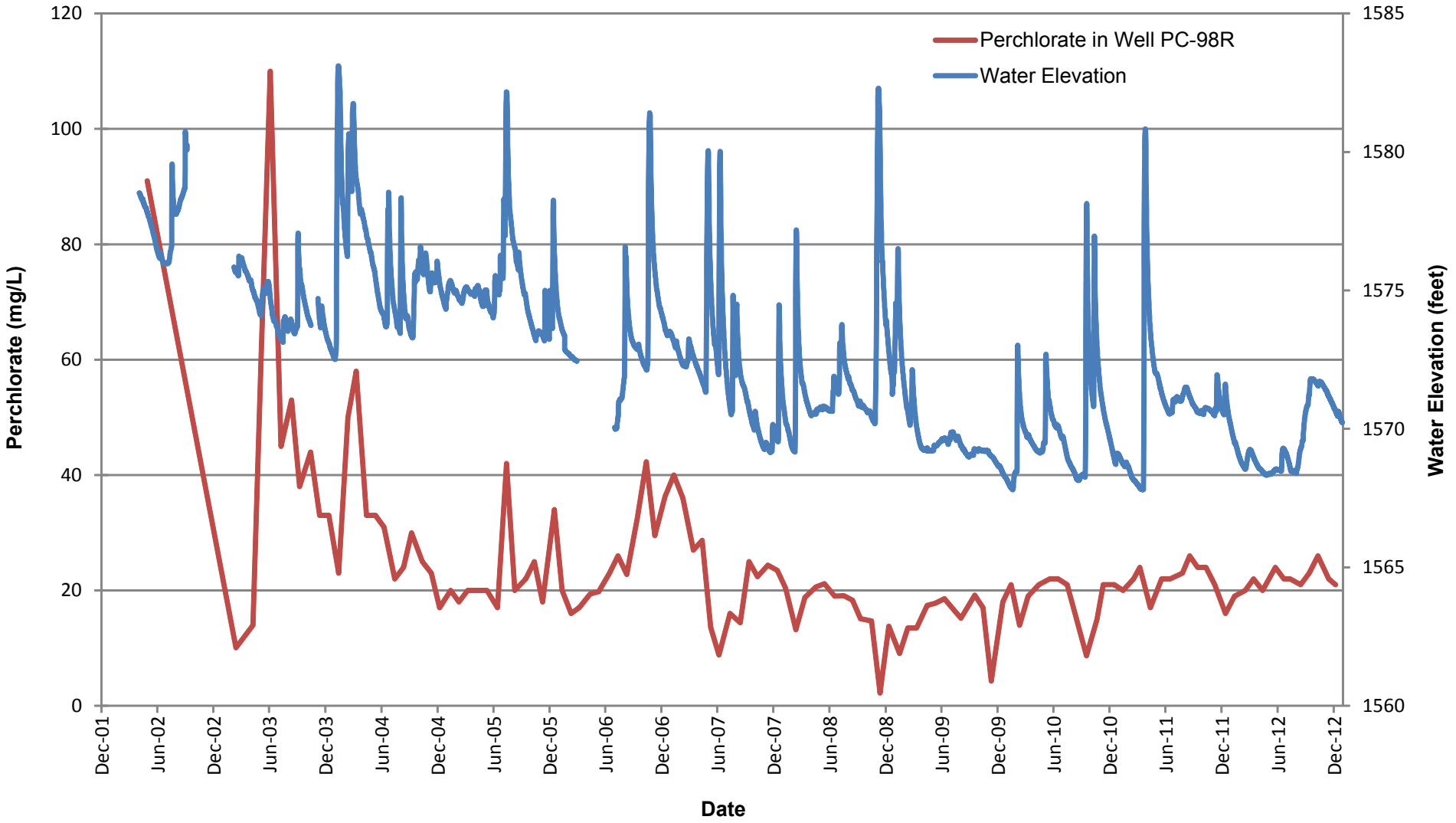
ENVIRON

City of Henderson WRF Well Line Perchlorate Concentration Trends, Nov 2011 - Dec 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
21a

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG22.mxd



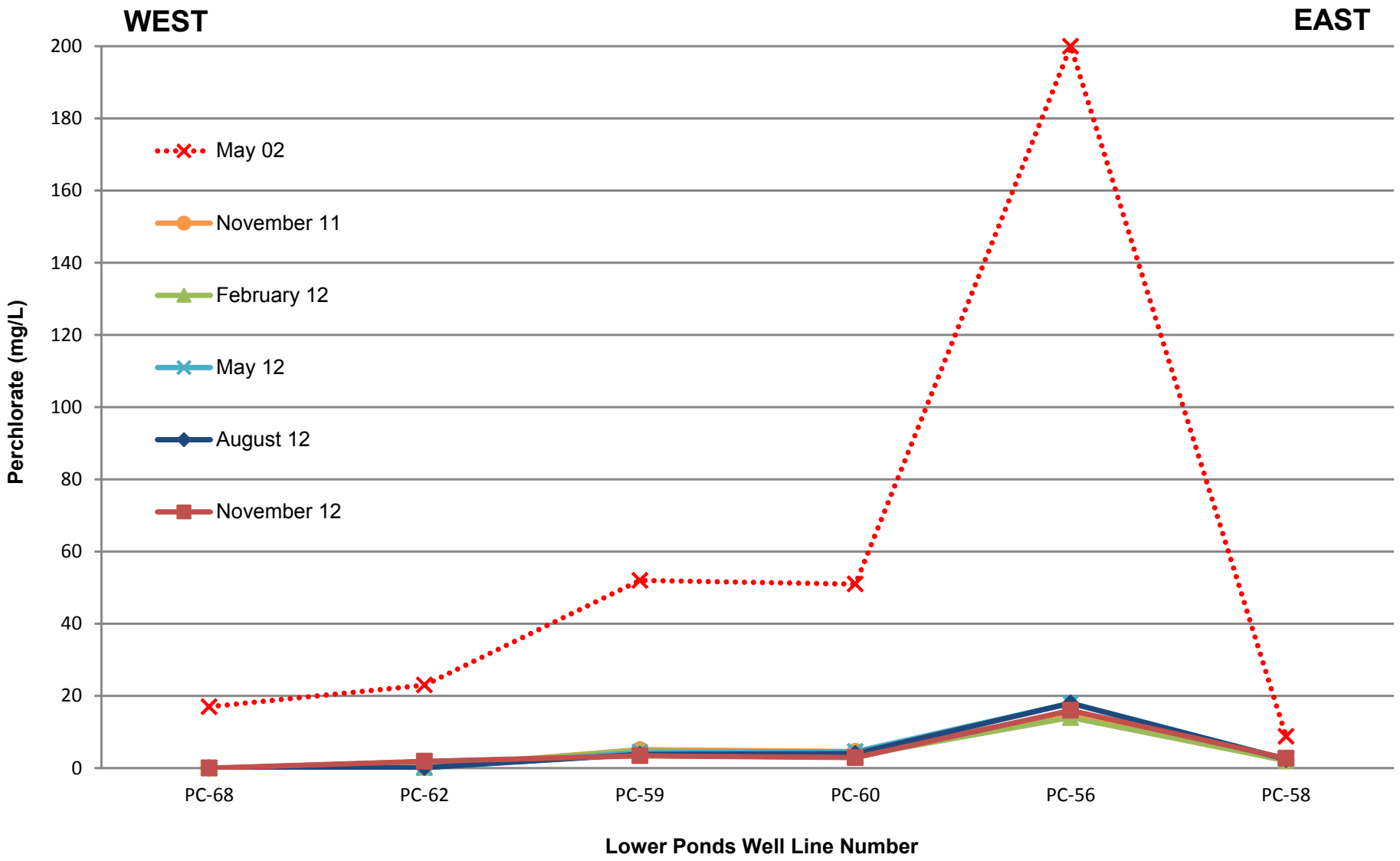
ENVIRON

Well PC-98R Perchlorate Concentration vs. Water Elevation Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
22

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG23.mxd



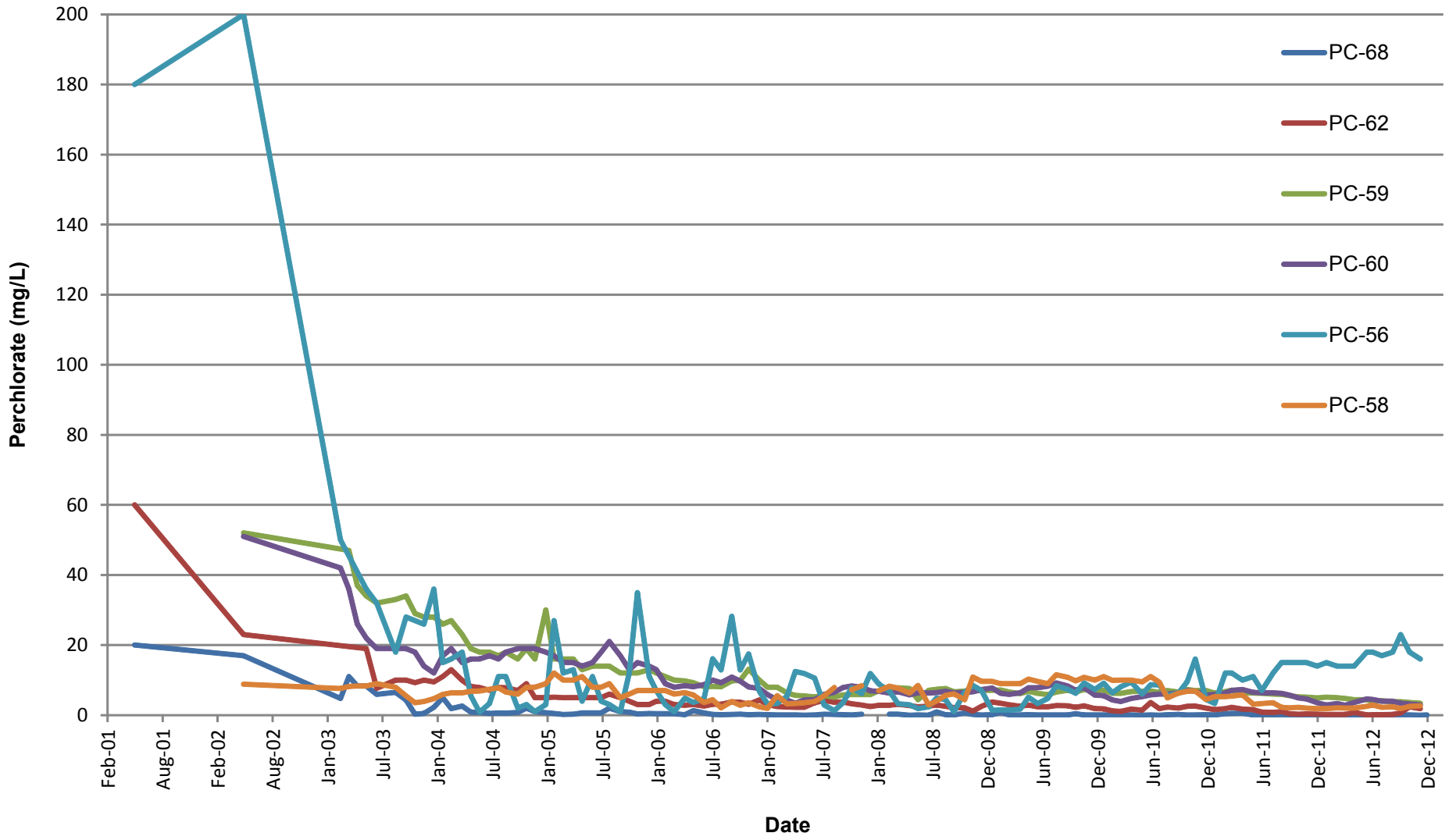
ENVIRON

Lower Ponds Well Line Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
23

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG24.mxd



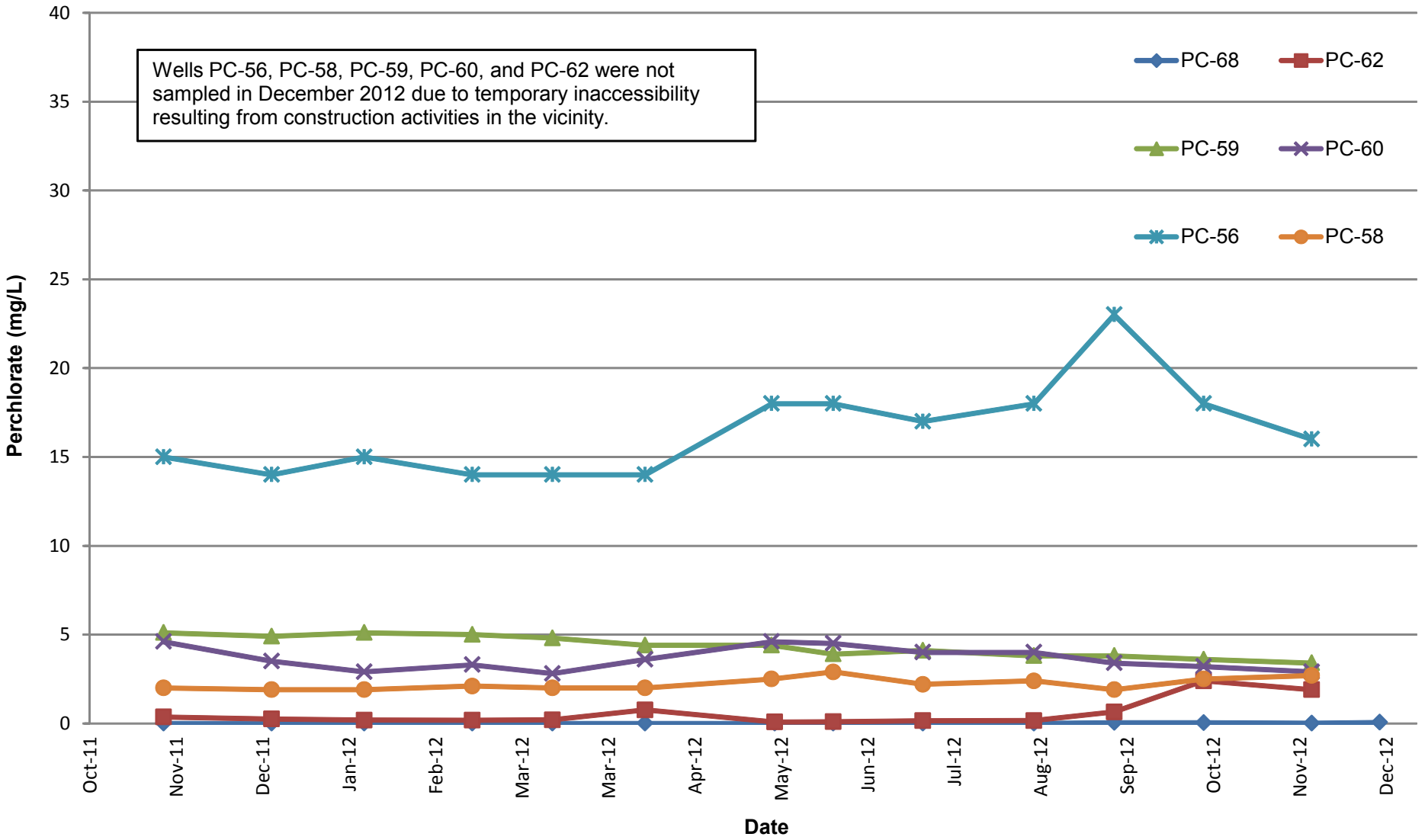
ENVIRON

Lower Ponds Well Line Perchlorate Concentration Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
24

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG24A.mxd



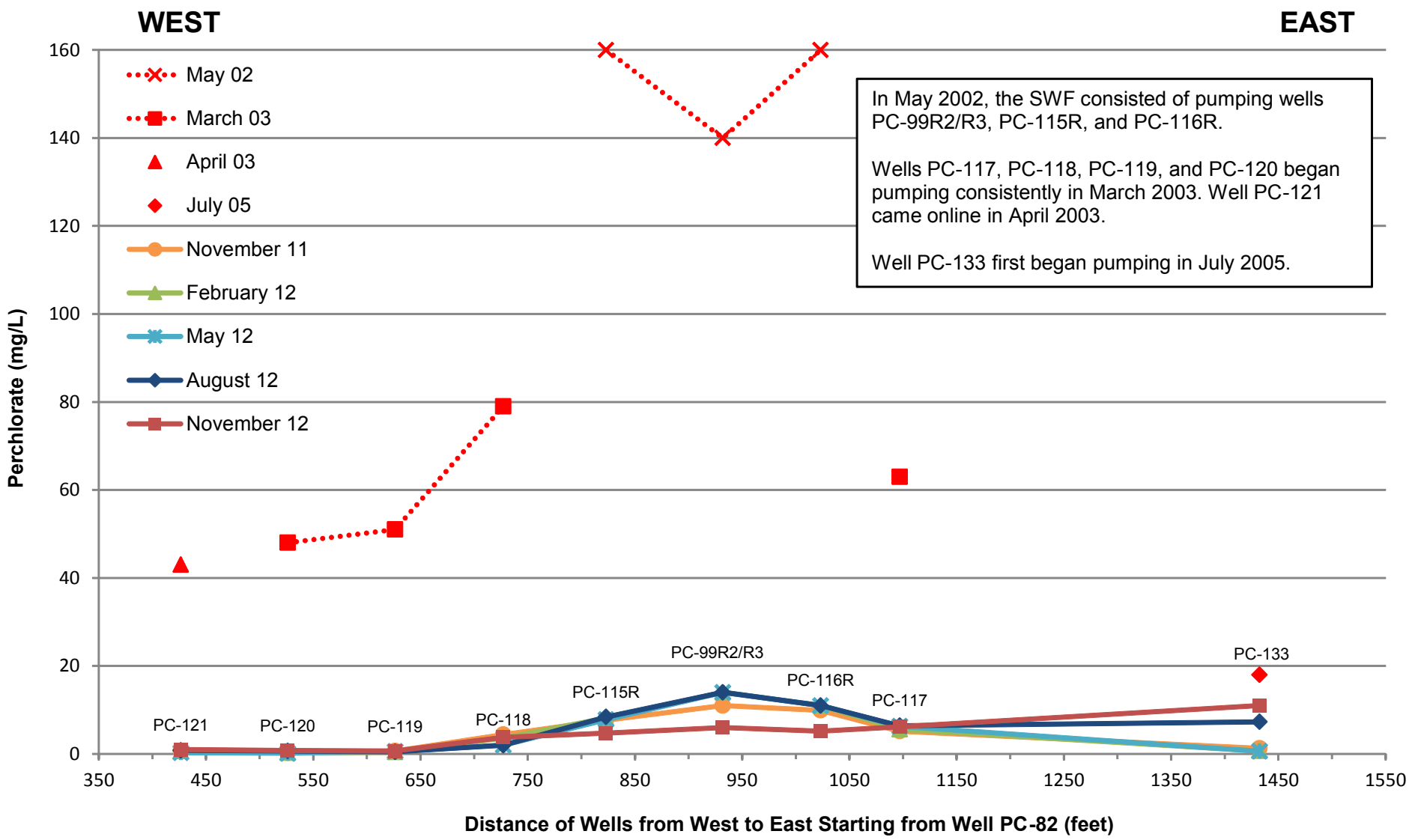
ENVIRON

Lower Ponds Well Line Perchlorate Concentration Trends, Nov 2011 - Dec 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
24a

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG25_new.mxd



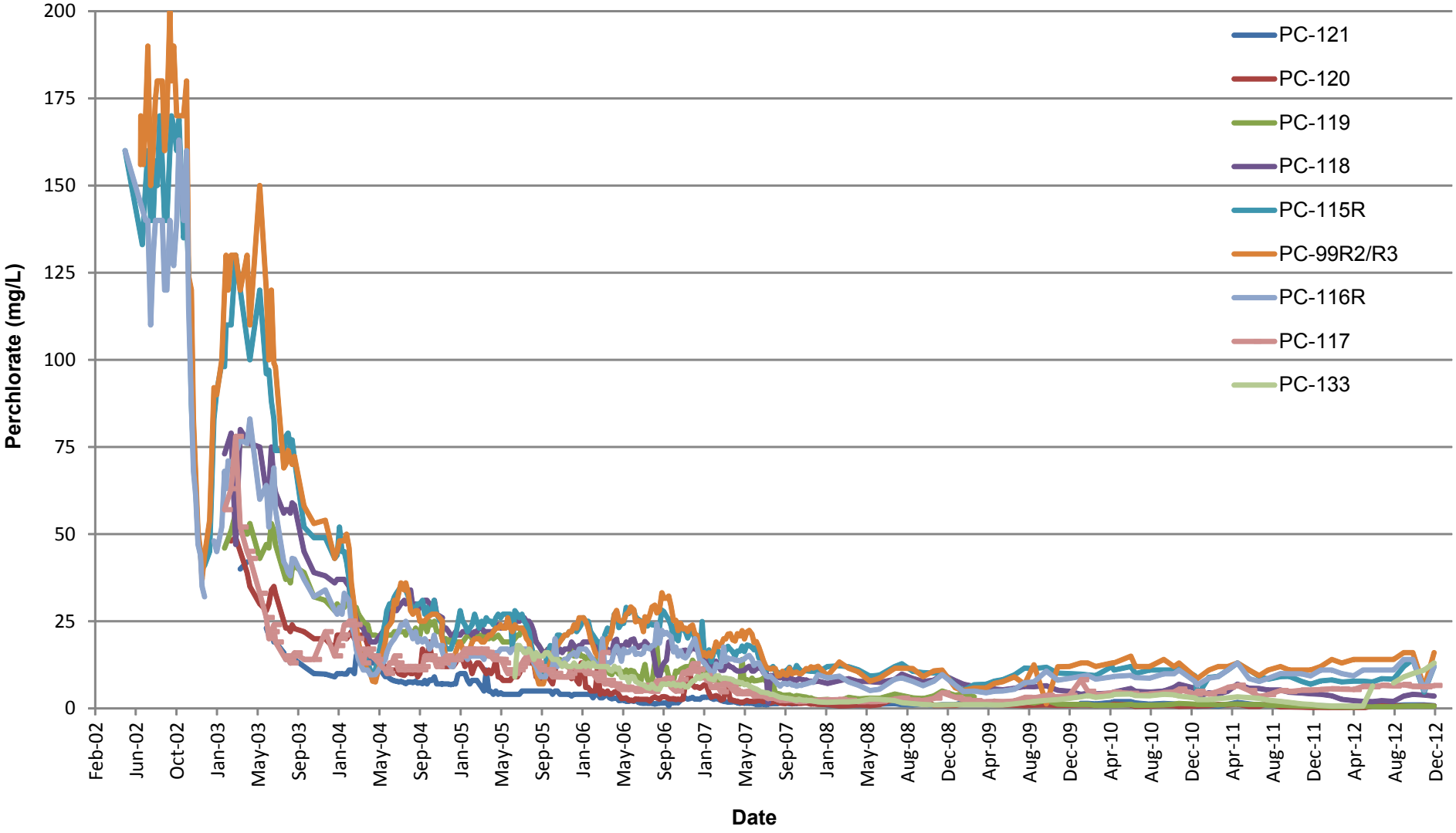
ENVIRON

Seep Well Field Transect Perchlorate Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
25

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG26.mxd



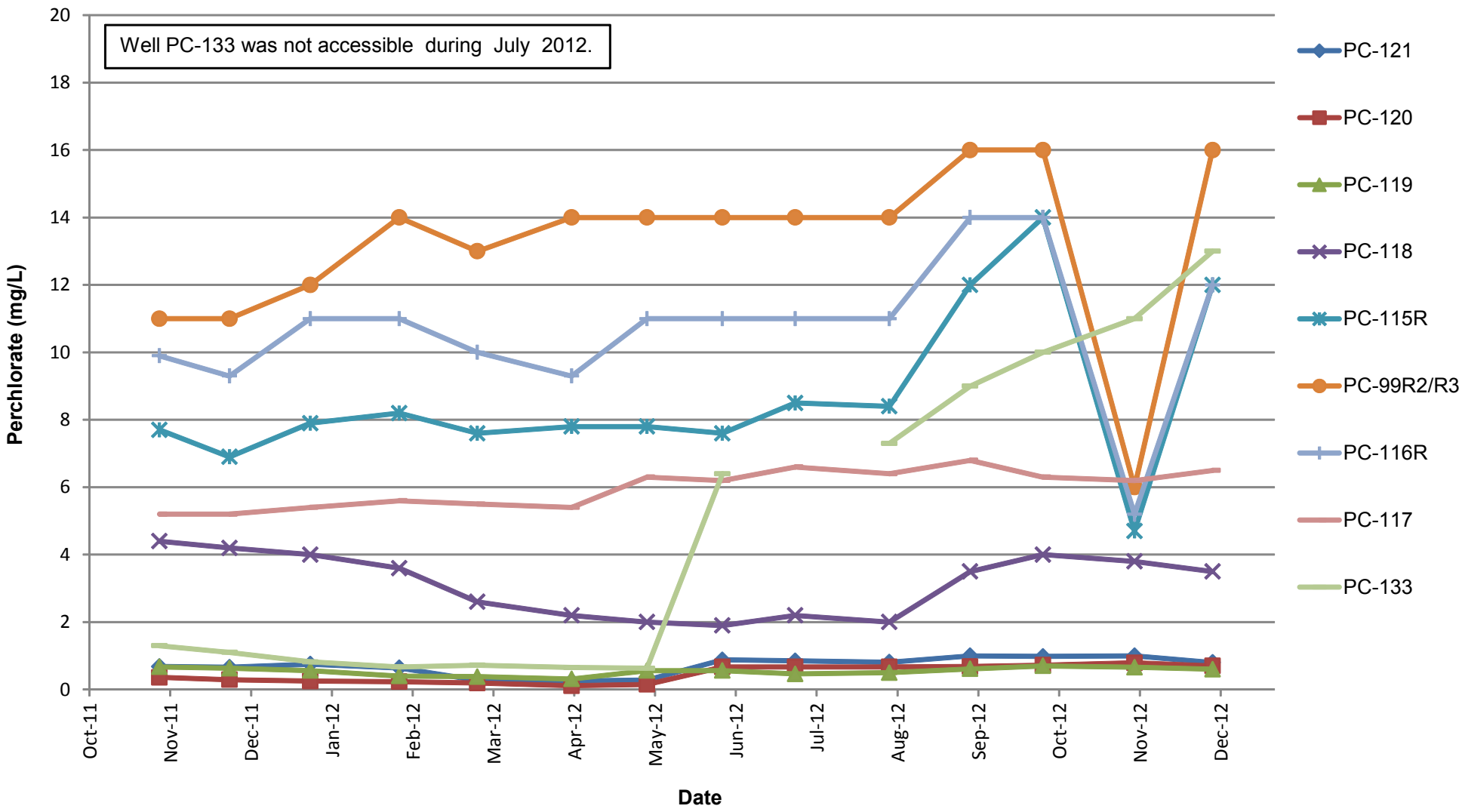
ENVIRON

Seep Well Field Perchlorate Concentration Trends
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
26

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG26A.mxd



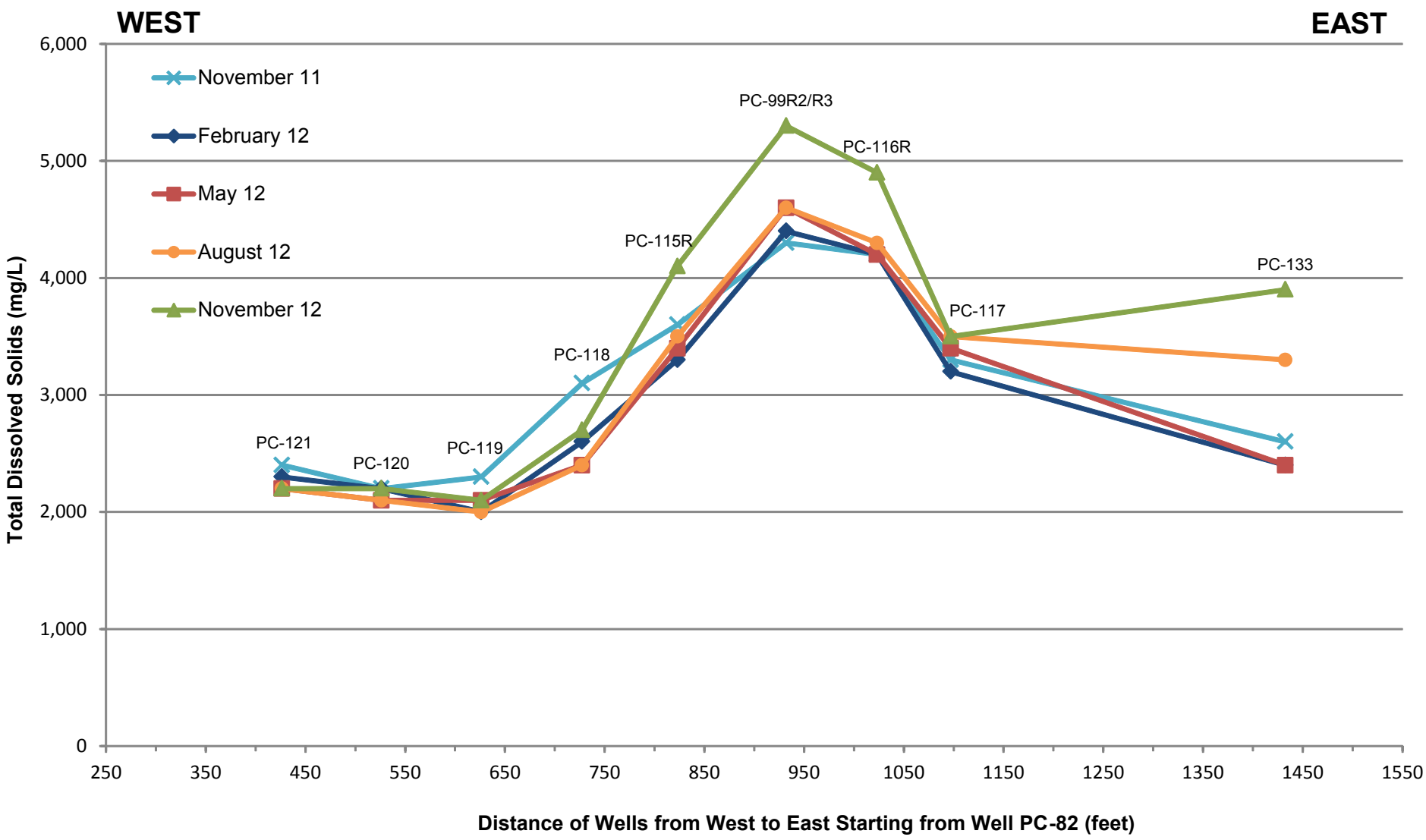
ENVIRON

Seep Well Field Perchlorate Concentration Trends, November 2011 - December 2012
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
26a

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG27.mxd



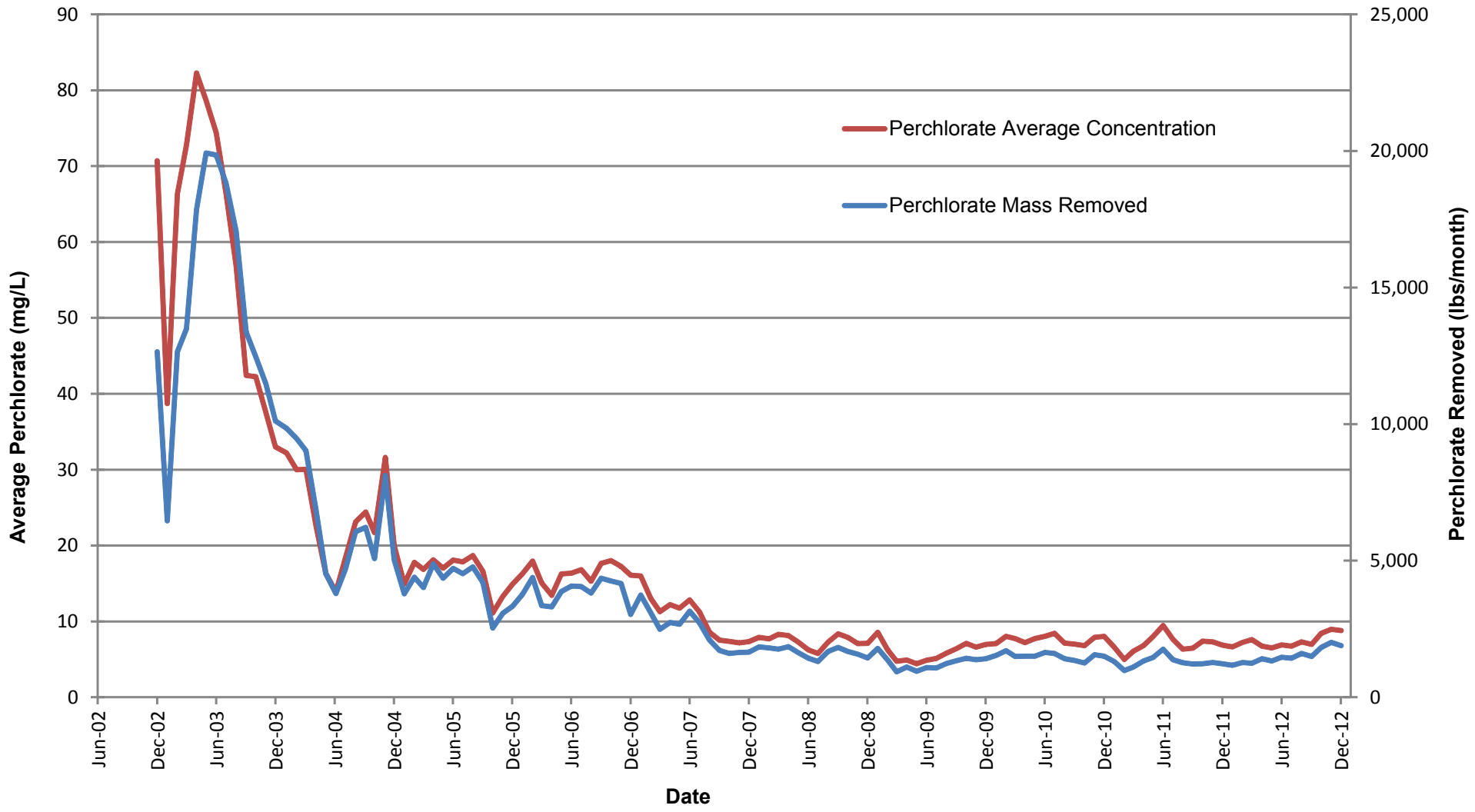
ENVIRON

Seep Well Field Transect Total Dissolved Solids Concentrations
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
27

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Figures\GIS Files\FIG28.mxd



ENVIRON

Seep Well Field Average Perchlorate Concentration and Mass Removed
Nevada Environmental Response Trust (NERT) Site
Henderson, Nevada

Figure
28

Drafter: RS | Date: 2/28/13 | Contract Number: 21-32100H | Approved: | Revised:

Plate

ALL WELL LOCATION MAP

Semi-Annual Remedial Performance Report
Nevada Environmental Response Trust (NERT)
Henderson, Nevada

Plate 1

PROJECT: 21-32100H

DESIGNED BY:	REVISIONS			
EJK	NO.	DESCRIPTION:	DATE:	BY:
DRAWN BY:	0	GENERATE APPROVED MAP	2/20/13	RS
RS				
CHECKED BY:				
CJK				
APPROVED BY:				
CJR/EJK				

ENVIRON

Path: H:\LePetomane\NERT\GWM\Annual Performance Reports\2012 semi-Annual\Plate\Plate 1_3-1-13.mxd

Las Vegas Wash

City of Henderson Bird Viewing Preserve

City of Henderson Water Reclamation Facility

City of Henderson Northern Rapid Infiltration Basins (RIBs)

BMI Common Areas (Eastside)

Former TIMET

Parcel 4B

Former COH Southern RIBs

Parcel 4A

PARCEL OWNED BY MULTIPLE ENTITIES

NERT

BMI (CAMU)

TIMET

Olin

WAPA

TIMET

Lhoist

C

C' (PLATE 5)

A

B

E RUSSELL RD

W SUNSET RD

E SUNSET RD

BOULDER HWY

PABCO

E LAKE MEAD DR

W LAKE MEAD DR

SAVAGE

THATCHER

S BOULDER HWY

N BOULDER HWY

STADIUM WAY

LEGEND

- Groundwater Wells (Current and Former)
- Seep Surface - Flow Capture Sump (no longer operating)
- Nevada Environmental Response Trust Property Boundary

Land Ownership

- City of Henderson
- Timet
- BMI
- Lhoist
- Former Pepcon
- Parcel Owned by Multiple Entities
- Olin

N

1 : 8,400
1 inch = 700 ft

0 700 1,400
Feet

Appendix A

Groundwater Elevations and Analytical Data

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
AA-01	5/9/2012	1708.42					2.5	4,200
AA-11	5/8/2012	Dry						
ARP-1	10/11/2011	1589.58					12	6,000
	11/7/2011	1589.53		0.001 J			13	5,900
	12/13/2011	1589.47					13	5,900
	1/11/2012						14	5,900
	2/16/2012	1589.13		0.0095 J			14	6,000
	3/12/2012	1588.66					15	5,800
	4/12/2012	1588.49					18	5,800
	5/22/2012	1588.55		0.00096 J			19	5,600
	6/21/2012	1588.56					17	5,700
	7/11/2012	1588.53					18	5,700
	8/14/2012	1588.94		0.0018 J			20	5,800
	9/11/2012	1589.42					18	5,600
	10/9/2012						21	5,700
	10/10/2012	1589.79						
	11/14/2012	1589.97		0.0018 J			22	5,600
	12/5/2012	1592.7					24	5,800
ARP-2A	10/10/2011	1588.87					6.1	6,300
	11/8/2011	1588.82		0.013 J			6.4	6,200
	12/13/2011	1588.77					5.9	6,200
	1/12/2012	1588.51					5.9	6,300
	2/16/2012	1588.69		0.013 J			5.4	6,500
	3/13/2012	1588.2					6.4	6,200
	4/12/2012	1587.78					6.2	6,200
	5/23/2012	1587.83		0.012 J			6.5	6,300
	6/21/2012	1587.87					7.1	6,300
	7/10/2012	1587.94					7.2	6,300
	8/14/2012	1588.11		0.012 J			8.0	6,300
	9/11/2012	1588.75					9.0	5,900
	10/10/2012	1589.11					13	5,800
	11/14/2012	1589.28		0.013 J			15	5,700
	12/6/2012	1588.99					15	5,700
ARP-3A	10/10/2011	1587.93					3.6	8,100
	11/8/2011	1587.89		0.0043 J			3.5	8,300
	12/13/2011	1587.8					3.5	8,400
	1/12/2012	1587.56					3.7	8,000
	2/16/2012	1587.46		0.016 J			4.2	8,400
	3/13/2012	1587.26					4.3	8,000
	4/12/2012	1586.91					3.8	7,600
	5/23/2012	1586.92		0.0035 J			3.7	8,000
	6/21/2012	1586.93					3.5	8,000
	7/10/2012	1586.88					3.8	8,100
	8/14/2012	1587.17		0.0061 J			4.1	8,200
	9/11/2012	1587.82					4.0	7,800

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ARP-3A	10/10/2012	1588.18					5.0	7,800
	11/14/2012	1588.31		0.012 J			3.7	7,700
	12/6/2012	1588.07					3.8	8,000
ARP-4A	10/10/2011	1586.69					26	4,600
	11/8/2011	1586.66		0.0056 J			24	4,600
	12/13/2011	1586.59					25	4,600
	1/12/2012	1586.36					26	4,600
	2/16/2012	1586.15		0.0071 J			28	4,900
	3/13/2012	1585.97					26	4,700
	4/12/2012	1585.2					26	4,300
	5/23/2012	1585.61		0.0044 J			30	4,800
	6/21/2012	1585.74					31	4,800
	7/10/2012	1585.75					28	4,600
	8/14/2012	1585.98		0.0041 J			28	4,900
	9/11/2012	1586.74					30	4,800
	10/10/2012	1586.99					38	5,200
	11/14/2012	1587.12		0.012 J			26	5,200
	12/6/2012	1586.97					26	5,400
ARP-5A	10/10/2011	1583.88					18	6,000
	11/8/2011	1583.79		0.06			14	5,600
	12/13/2011	1583.66					15	5,800
	1/12/2012	1583.39					16	5,800
	2/16/2012	1583.09		0.039			18	5,900
	3/13/2012	1583.45					19	6,000
	4/12/2012	1582.9					17	5,000
	5/23/2012	1582.78		0.042			18	5,900
	6/21/2012	1582.79					19	5,900
	7/10/2012	1582.79					17	5,800
	8/14/2012	1582.92		0.031			15	5,600
	9/11/2012	1583.58					11	4,900
	10/10/2012	1584					13	5,300
	11/14/2012	1584.25		0.046			11	5,100
	12/6/2012	1584.08					12	5,200
ARP-6B	10/10/2011	1583.78					23	8,700
	11/8/2011	1583.78		0.16			21	9,200
	12/13/2011	1583.63					21	8,400
	1/12/2012	1581.9					25	8,400
	2/16/2012	1583.59		0.2			31	9,100
	3/13/2012	1582.47					35	8,700
	4/12/2012	1581.51					37	8,300
	5/23/2012	1582.72		0.27			52	9,800
	6/21/2012	1581.97					46	9,300
	7/10/2012	1584.49					53	9,400
	8/14/2012	1582.76		0.34			56	9,600
	9/11/2012	1583.44					46	9,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ARP-6B	10/10/2012	1583.95					38	9,100
	11/14/2012	1584.16		0.22			32	9,500
	12/6/2012	1584.01					22	8,800
ARP-7	10/10/2011	1583.43					4.6	6,100
	11/8/2011	1583.42		0.036			4.6	6,100
	12/13/2011	1583.28					4.3	5,800
	1/12/2012	1583.02					4.8	6,100
	2/16/2012	1582.66		0.043			4.6	6,200
	3/13/2012	1582.67					2.2	5,500
	4/12/2012	1581.5					4.4	5,800
	5/23/2012	1582.28		0.036			5.1	5,900
	6/21/2012	1582.24					4.7	5,900
	7/10/2012	1582.4					4.2	5,700
	8/14/2012	1582.44		0.031			4.6	5,900
	9/11/2012	1582.89					4.7	5,800
	10/10/2012	1583.55					4.8	5,900
	11/14/2012	1583.8		0.037			6.6	6,100
	12/6/2012	1583.65					4.3	6,000
ART-1	10/3/2011	1589.3					3.6	6,300
	10/31/2011	1589.35		0.0039 J			3.7	6,200
	11/9/2011	1589.35						
	12/5/2011	1589.48					3.5	6,300
	1/4/2012	1589.32		0.0021 J			4.0	6,300
	2/6/2012	1588.15		0.0022 J			66	6,000
	3/6/2012						4.8	6,300
	3/7/2012	1587.35						
	4/10/2012	1588.87					4.3	6,200
	5/8/2012	1588.99		0.00096 J			4.8	6,400
	6/5/2012	1584.01					4.9	6,300
	7/2/2012	1584.64					5.0	6,300
	8/6/2012	1583.75		0.0016 J			5.5	6,200
	9/5/2012	1583.93					5.9	6,200
	10/2/2012						6.2	6,300
	10/10/2012	1583.97						
	11/5/2012	1583.24		0.0029 J			5.1	6,200
	12/4/2012						5.8	6,200
	12/10/2012	1583.37						
ART-1A	10/3/2011	1590.67						
	11/9/2011	1590.72						
	12/5/2011	1590.71						
	1/4/2012	1590.52						
	2/6/2012	1587.37						
	3/7/2012	1590.05						
	4/10/2012	1590.5						
	5/8/2012	1590.42						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-1A	6/5/2012	1589.76						
	7/2/2012	1589.96						
	8/6/2012	1589.79						
	9/5/2012	1589.48						
	10/10/2012	1589.37						
	11/5/2012	1591						
	12/10/2012	1590.95						
ART-2	10/3/2011	1589.64					53	9,600
	10/31/2011	1589.82		0.026			52	9,200
	11/9/2011	1589.82						
	12/5/2011	1589.56					54	9,300
	1/4/2012	1589.39		0.029			59	9,300
	2/6/2012	1588.24		0.029			67	8,900
	3/6/2012						54	9,400
	3/7/2012	1588.78						
	4/10/2012	1589.33					54	9,400
	5/8/2012	1589.09		0.026			64	9,700
	6/5/2012	1588.66					58	9,500
	7/2/2012	1589.07					60	9,500
	8/6/2012	1588.7		0.029			57	9,400
	9/5/2012	1588.58					61	9,400
	10/2/2012						61	9,700
	10/10/2012	1588.5						
	11/5/2012	1590.06		0.036			55	9,500
	12/4/2012						63	9,400
	12/10/2012	1589.59						
ART-2A	10/3/2011	1590.35						
	11/9/2011	1590.39						
	12/5/2011	1590.36						
	1/4/2012	1590.18						
	2/6/2012	1588.87						
	3/7/2012	1589.59						
	4/10/2012	1590.1						
	5/8/2012	1590.02						
	6/5/2012	1589.39						
	7/2/2012	1589.86						
	8/6/2012	1589.45						
	9/5/2012	1589.71						
	10/10/2012	1589.6						
	11/5/2012	1590.76						
	12/10/2012	1590.91						
ART-3	10/3/2011	1587.33					280	8,600
	10/31/2011			0.35			270	8,400
	11/9/2011	1587.55						
	12/5/2011	1587.53					270	8,500

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-3	1/4/2012	1587.32		0.36			280	8,600
	2/6/2012	1587.17		0.38			320	8,100
	3/6/2012						300	8,700
	3/7/2012	1586.82						
	4/10/2012	1587.39					300	8,600
	5/8/2012	1587.47		0.37			300	8,900
	6/5/2012	1586.54					320	8,700
	7/2/2012	1586.66					300	8,900
	8/6/2012	1586.45		0.39			280	8,900
	9/5/2012	1586.63					300	8,700
	10/2/2012						300	8,600
	10/10/2012	1586.66						
	11/5/2012	1587.77		0.4			260	8,800
	12/4/2012						300	8,500
	12/10/2012	1587.57						
ART-3A	10/3/2011	1575.93						
	10/31/2011	1580.14						
	11/9/2011	1580.14						
	12/5/2011	1580.08						
	1/4/2012	1579.65						
	2/6/2012	1579.3						
	3/7/2012	1579.05						
	4/10/2012	1579.59						
	5/8/2012	1579.39						
	6/5/2012	1577.93						
	7/2/2012	1578						
	8/6/2012	1578.47						
	9/5/2012	1578.43						
	10/10/2012	1578.38						
	11/5/2012	1580.51						
	12/10/2012	1580.45						
ART-4	10/3/2011	1588.85					360	6,800
	10/31/2011			0.52			350	6,600
	11/9/2011	1588.86						
	12/5/2011	1588.95					330	6,800
	1/4/2012	1588.69		0.52			360	6,600
	2/6/2012	1588.54		0.55			420	6,300
	3/6/2012						380	7,000
	3/7/2012	1588.17						
	4/10/2012	1588.66					400	6,800
	5/8/2012	1588.86		0.57			410	7,100
	6/5/2012	1587.88					390	7,000
	7/2/2012	1587.37					380	7,200
	8/6/2012	1587.98		0.56			380	6,600
	9/5/2012	1587.98					370	6,900

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-4	10/2/2012						390	7,100
	10/10/2012	1587.89						
	11/5/2012	1589.29		0.6			360	7,000
	12/4/2012						370	6,900
	12/10/2012	1588.92						
ART-4A	10/3/2011	1575.22						
	10/31/2011	1574.43						
	11/9/2011	1574.43						
	12/5/2011	1575.05						
	1/4/2012	1574.42						
	2/6/2012	1574.36						
	3/7/2012	1574.81						
	4/10/2012	1574.37						
	5/8/2012	1574.25						
	6/5/2012	1573.95						
	7/2/2012	1574.29						
	8/6/2012	1575.2						
	9/5/2012	1575.16						
	10/10/2012	1575.36						
	11/5/2012	1574.44						
	12/10/2012	1574.5						
ART-6	10/3/2011	1585.52						
	10/4/2011						290	7,400
	10/31/2011			1.4			280	7,200
	11/9/2011	1584.9						
	12/5/2011	1585.56					92	7,300
	1/4/2012	1585.14		1.4			280	7,200
	2/6/2012	1585.05		1.2			260	6,800
	3/6/2012						120	7,000
	3/7/2012	1585.08						
	4/10/2012	1584.97					76	6,800
	5/8/2012	1585.17		1.2			300	6,900
	6/5/2012	1584.74					57	6,600
	7/2/2012	1584.78					54	6,700
	8/6/2012	1583.24		0.24			54	6,400
	9/5/2012	1584.29					52	6,800
	10/2/2012						280	7,100
	10/10/2012	1584.22						
	11/5/2012	1580.71		1.4			260	7,200
	12/4/2012						300	7,100
	12/10/2012	1580.42						
ART-7	10/3/2011	1584.52					120	8,800
	10/31/2011	1584.68		0.66			120	8,400
	11/9/2011	1584.68						
	12/5/2011	1585.41					100	8,400

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-7	1/4/2012	1584.42		0.64			120	8,500
	2/6/2012	1584.15		0.71			130	7,600
	3/6/2012						140	8,600
	3/7/2012	1583.95						
	4/10/2012	1583.92					150	7,700
	5/8/2012	1583.99		0.74			160	8,800
	6/5/2012	1583.64					150	8,500
	7/2/2012	1583.78					150	8,800
	8/6/2012	1583.83		0.76			150	8,600
	9/5/2012	1583.88					140	9,100
	10/2/2012						140	8,800
	10/10/2012	1583.86						
	11/5/2012	1582.04		0.73			130	8,700
	12/4/2012						130	8,500
	12/10/2012	1581.77						
ART-7A	10/3/2011	1582.1						
	11/9/2011	1582.28						
	12/5/2011	1579.5						
	1/4/2012	1582.59						
	2/6/2012	1582.33						
	3/7/2012	1582.94						
	4/10/2012	1583.26						
	5/8/2012	1583.54						
	6/5/2012	1581.53						
	7/2/2012	1583.47						
	8/6/2012	1582.02						
	9/5/2012	1583.23						
	10/10/2012	1583.46						
	11/5/2012	1579.38						
	12/10/2012	1578.88						
ART-7B	10/3/2011	1584.32						
	11/9/2011	1584.74						
	11/14/2011	1584.74		1.1			230	7,600
	12/13/2011	1584.58					190	7,900
	1/12/2012	1584.33					230	7,900
	2/16/2012	1584.01		1.5			250	8,200
	3/22/2012	1583.77						
	4/10/2012	1583.91						
	5/23/2012	1583.74		1.2			270	7,700
	6/5/2012	1583.72						
	7/2/2012	1583.81						
	8/13/2012	1584.62		1.1			230	8,100
	9/5/2012	1584.22						
	9/11/2012			1.1			250	8,000
	10/10/2012	1584.42						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-7B	11/14/2012	1584.92		0.56			230	8,000
	12/10/2012	1585.53						
ART-8	10/3/2011	1585.53					190	9,500
	10/31/2011	1587.15		0.19			190	9,300
	11/9/2011	1587.15						
	12/5/2011	1585.86					190	9,400
	1/4/2012	1585.61		0.2			210	9,500
	2/6/2012	1584.14		0.21			210	8,900
	3/6/2012						200	9,600
	3/7/2012	1584.12						
	4/10/2012	1585.58					210	9,500
	5/8/2012	1585.48		0.2			220	9,700
	6/5/2012	1584.1					210	9,500
	7/2/2012	1584.16					200	9,800
	8/6/2012	1584.38		0.2			200	9,700
	9/5/2012	1584.35					210	9,600
	10/2/2012						210	10,000
	10/10/2012	1584.32						
	11/5/2012	1585.87		0.22			190	9,700
	12/4/2012						190	9,500
	12/10/2012	1586.4						
ART-8A	10/3/2011	1589.58						
	11/9/2011	1589.67						
	12/5/2011	1589.61						
	1/4/2012	1589.45						
	2/6/2012	1588.1						
	3/7/2012	1588.8						
	4/10/2012	1588.51						
	5/8/2012	1588.62						
	6/5/2012	1588.57						
	7/2/2012	1588.69						
	8/6/2012	1588.6						
	9/5/2012	1588.97						
	10/10/2012	1588.81						
	11/5/2012	1589.99						
	12/10/2012	1590.11						
ART-9	10/3/2011	1579.71					280	7,400
	10/31/2011	1581.26		1.4			280	7,000
	11/9/2011	1581.23						
	12/5/2011	1580.53					280	7,200
	1/4/2012	1581.45		1.3			310	7,000
	2/6/2012	1574.32		1.4			320	6,800
	3/6/2012						300	6,900
	3/7/2012	1580.69						
	4/10/2012	1581.4					250	7,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
ART-9	5/8/2012	1581.29		1.2			330	6,900
	6/5/2012	1574.17					290	7,000
	7/2/2012	1574.2					300	7,200
	8/6/2012	1573.81		1.2			280	7,000
	9/5/2012	1574.28					290	7,300
	10/2/2012						260	7,200
	10/10/2012	1574.43						
	11/5/2012	1574.03		1.2			270	7,000
	12/4/2012						260	7,000
	12/10/2012	1574.39						
CLD-1R	5/23/2012	1712.98						
DM-4	5/8/2012	Dry						
DM-5	5/8/2012	Dry						
H-11	5/21/2012	1795.78		0.19			0.042	1,100
H-28A	5/16/2012	1692.31		0.053			<0.25	8,800
	8/7/2012	1692.39						
	8/8/2012			0.046			<0.025	9,600
H-48	5/9/2012	1655.38		0.036 J			10	14,000
H-58A	5/9/2012	1666.92		0.0029 J			0.18	12,000
HM-2	5/17/2012	1559.79					4.1	5,000
HMW-13	5/24/2012	1578.47					0.045	1,400
HMW-14	5/24/2012	1580.8					1.5	2,000
HMW-15	5/24/2012	1599.47					0.038	2,800
HMW-16	5/17/2012	1612.63					26	5,700
I-AA	10/13/2011	1721.3						
	10/31/2011	1721.24						
	12/14/2011	1721.22						
	1/18/2012	1721.19						
	2/6/2012	1721.82						
	3/20/2012	1721.13						
	4/17/2012	1721.19						
	5/10/2012	1721.15						
	6/20/2012	1721.45						
	7/12/2012	1721.42						
	8/7/2012	1721.6						
	9/18/2012	1721.53						
	10/11/2012	1721.53						
	11/5/2012	1722.71						
	12/13/2012	1721.48						
I-AB	10/12/2011	1721.33						
	10/31/2011	1720.83						
	12/14/2011	1720.52						
	1/18/2012	1720.77						
	2/6/2012	1720.67						
	3/20/2012	1721.47						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-AB	4/17/2012	1721.51						
	5/10/2012	1720.72						
	6/20/2012	1720.58						
	7/12/2012	1721.49						
	8/7/2012	1720.52						
	9/18/2012	1720.59						
	10/11/2012	1720.48						
	11/5/2012	1723.38						
	12/13/2012	1720.53						
I-AC	10/13/2011	1722.51						
	11/2/2011	1722.94						
	12/14/2011	1722.22						
	1/18/2012	1722.35						
	2/8/2012	1722.32						
	3/20/2012	1722.26						
	4/17/2012	1722.31						
	5/13/2012	1722.31						
	6/20/2012	1722.25						
	7/12/2012	1722.26						
	8/8/2012	1722.2						
	9/18/2012	1722.16						
	10/11/2012	1721.75						
	11/7/2012	1723.62						
	12/13/2012	1722.22						
I-AD	10/13/2011	1724.91						
	11/2/2011	1725.18						
	12/14/2011	1724.65						
	1/18/2012	1725.27						
	2/8/2012	1724.71						
	3/20/2012	1725.07						
	4/17/2012	1724.59						
	5/13/2012	1724.67						
	6/20/2012	1724.6						
	7/12/2012	1725.17						
	8/8/2012	1724.6						
	9/18/2012	1724.57						
	10/11/2012	1724.52						
	11/7/2012	1725.84						
	12/13/2012	1724.29						
I-AR	10/12/2011	1714.93						
	10/31/2011	1714.88		0.63			2,200	5,300
	12/14/2011	1714.86						
	1/17/2012	1714.91						
	2/6/2012	1714.8						
	2/7/2012			0.82			2,100	5,200

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-AR	3/20/2012	1714.94						
	4/17/2012	1715.05						
	5/10/2012	1714.82		1.4			2,200	5,100
	6/20/2012	1715.04						
	7/12/2012	1714.86						
	8/6/2012	1716.01		0.61			2,000	5,700
	9/18/2012	1721.1						
	10/11/2012	1720.95						
	11/5/2012	1729.47		0.11			1,400	6,300
	12/13/2012	1721.23						
I-B	10/12/2011	1710.14						
	10/31/2011	1709.67		0.19			520	4,200
	12/14/2011	1709.82						
	1/17/2012	1709.66						
	2/6/2012	1710.05						
	2/7/2012			0.16			500	4,100
	3/20/2012	1712.1						
	4/17/2012	1711.57						
	5/10/2012	1709.9		0.97			480	4,200
	6/20/2012	1709.58						
	7/12/2012	1712.66						
	8/6/2012	1709.94		0.16			440	4,100
	9/18/2012	1709.87						
	10/11/2012	1710.03						
	11/5/2012	1716.47		0.36			730	7,800
	12/13/2012	1710.06						
I-C	10/12/2011	1708.29						
	10/31/2011	1708.43		3.6			900	6,400
	12/14/2011	1708.18						
	1/17/2012	1708.19						
	2/6/2012	1709.39						
	2/7/2012			3.4			860	6,200
	3/20/2012	1709						
	4/17/2012	1709.65						
	5/10/2012	1709.5		3.1			860	6,300
	6/20/2012	1710.13						
	7/12/2012	1710.77						
	8/6/2012	1710.26		3.1			790	6,300
	9/18/2012	1710.64						
	10/11/2012	1711.55						
	11/5/2012	1724.27		2.7			750	6,600
	12/13/2012	1710.57						
I-D	10/12/2011	1706.04						
	10/31/2011	1706.27		7.7			710	7,500
	12/14/2011	1706.12						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-D	1/17/2012	1706.59						
	2/6/2012	1706.7						
	2/7/2012			7.5			720	7,400
	3/20/2012	1706.92						
	4/17/2012	1707.51						
	5/10/2012	1706.7		7.4			730	7,400
	6/20/2012	1706.98						
	7/12/2012	1707.14						
	8/6/2012	1707.17		6.7			630	7,300
	9/18/2012	1707.17						
	10/11/2012	1707.22						
	11/5/2012	1723.68		6.4			640	7,500
	12/13/2012	1707.22						
I-E	10/12/2011	1708.11						
	10/31/2011	1708.14		10			690	8,500
	12/14/2011	1707.89						
	1/17/2012	1708.19						
	2/6/2012	1707.99						
	2/7/2012			10			720	8,500
	3/20/2012	1707.65						
	4/17/2012	1708.54						
	5/10/2012	1707.74		10			710	8,600
	6/20/2012	1708.07						
	7/12/2012	1708.16						
	8/6/2012	1708.13		10			650	8,800
	9/18/2012	1709.15						
	10/11/2012	1709.11						
	11/5/2012	1708.36		9.5			1,800	11,000
	12/13/2012	1709.09						
I-F	10/12/2011	1709.18						
	10/31/2011	1715.91		21			1,200	12,000
	12/14/2011	1709.27						
	1/17/2012	1711.79						
	2/6/2012	1716.49						
	2/7/2012			21			1,200	12,000
	3/20/2012	1716.09						
	4/17/2012	1716						
	5/10/2012	1716.97		19			1,200	12,000
	6/20/2012	1708.93						
	7/12/2012	1716.25						
	8/6/2012	1709.97		22			940	13,000
	9/18/2012	1712.41						
	10/11/2012	1712.37						
	11/5/2012	1722.58		21			1,800	15,000
	12/13/2012	1712.6						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-G	10/12/2011	1710.86						
	10/31/2011	1712.35		28			1,600	17,000
	12/14/2011	1710.84						
	1/17/2012	1711.53						
	2/6/2012	1710.74						
	2/7/2012			29			1,600	15,000
	3/20/2012	1711.58						
	4/17/2012	1712.52						
	5/10/2012	1712.7		27			1,600	15,000
	6/19/2012	1711.61						
	7/12/2012	1712.2						
	8/6/2012	1711.57		30			1,600	15,000
	9/18/2012	1711.99						
	10/11/2012	1712.21						
	11/5/2012	1714.08		30			1,000	17,000
	12/13/2012	1712.32						
I-H	10/12/2011	1709.25						
	10/31/2011	1709.22		28			1,500	16,000
	12/14/2011	1709.23						
	1/17/2012	1709.21						
	2/6/2012	1709.11						
	2/7/2012			29			1,800	14,000
	3/20/2012	1709.93						
	4/17/2012	1710.21						
	5/10/2012	1709.09		26			1,600	15,000
	6/19/2012	1709.21						
	7/12/2012	1709.94						
	8/6/2012	1709.33		28			1,400	15,000
	9/18/2012	1710.21						
	10/11/2012	1710.15						
	11/5/2012	1720.16		27			1,400	16,000
	12/13/2012	1710.15						
I-I	10/12/2011	1720.86						
	11/1/2011	1720.82		14			610	9,000
	12/14/2011	1720.65						
	1/17/2012	1720.51						
	2/8/2012	1720.36		14			710	8,300
	3/20/2012	1720.6						
	4/17/2012	1720.28						
	5/14/2012	1720.38		13			720	9,000
	6/20/2012	1720.32						
	7/12/2012	1719.79						
	8/8/2012	1720.6		14			710	8,900
	9/18/2012	1719.67						
	10/11/2012	1719.6						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-I	11/7/2012	1722.35		14			940	9,800
	12/13/2012	1719.9						
I-J	10/12/2011	1717.95						
	11/1/2011	1707.87		2.5			210	6,400
	12/14/2011	1717.6						
	1/17/2012	1708.45						
	2/8/2012	1706.37		2.7			250	5,900
	3/20/2012	1706.48						
	4/17/2012	1707.13						
	5/14/2012	1708.02		2.9			250	6,200
	6/20/2012	1707.81						
	7/12/2012	1707.19						
	8/8/2012	1713.14		3.3			260	6,200
	9/18/2012	1709.67						
	10/11/2012	1709.58						
	11/7/2012	1719.84		3.4			260	6,400
	12/13/2012	1709.62						
I-K	10/12/2011	1712.9						
	11/1/2011	1710.61		1.3			96	5,700
	12/14/2011	1710.99						
	1/17/2012	1711.28						
	2/8/2012	1710.81		1.3			110	5,500
	3/20/2012	1710.64						
	4/17/2012	1711.23						
	5/14/2012	1711.86		1.3			120	5,700
	6/20/2012	1710.62						
	7/12/2012	1710.62						
	8/8/2012	1714.22		1.5			140	5,800
	9/18/2012	1712.33						
	10/11/2012	1712.14						
	11/7/2012	1720.21		1.6			160	6,000
	12/13/2012	1712.83						
I-L	10/12/2011	1712.6						
	10/31/2011	1713.05		0.65			1,300	5,700
	12/14/2011	1711.73						
	1/17/2012	1711.79						
	2/6/2012	1719.22						
	2/7/2012			0.58			1,400	5,700
	3/20/2012	1720.52						
	4/17/2012	1719.68						
	5/10/2012	1712.87		0.67			1,600	5,700
	6/20/2012	1711.38						
	7/12/2012	1712.13						
	8/6/2012	1718.1		0.79			1,300	6,200
	9/18/2012	1712.3						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-L	10/11/2012	1717.35						
	11/5/2012	1725.55		0.45			2,000 J-	10,000
	12/13/2012	1711.89						
I-M	10/12/2011	1711.92						
	10/31/2011	1711.56		9.5			730	8,500
	12/14/2011	1711.16						
	1/17/2012	1711.27						
	2/6/2012	1711.57						
	2/7/2012			9.9			780	7,900
	3/20/2012	1711.18						
	4/17/2012	1711.15						
	5/10/2012	1721.5		9.2			770	8,500
	6/20/2012	1711.36						
	7/12/2012	1711.68						
	8/6/2012	1711.49		9.5			760	8,700
	9/18/2012	1711.59						
	10/11/2012	1711.55						
	11/5/2012	1714.79		8.7			1,600	10,000
	12/13/2012	1711.7						
I-N	10/12/2011	1715.18						
	10/31/2011	1714.73		12			960	9,200
	12/14/2011	1714.36						
	1/17/2012	1714.27						
	2/6/2012	1716.29						
	2/7/2012			12			1,000	8,700
	3/20/2012	1716.12						
	4/17/2012	1716.76						
	5/14/2012	1719.78		11			970	9,300
	6/19/2012	1716.63						
	7/12/2012	1715.64						
	8/6/2012	1713.95		12			1,000	9,200
	9/18/2012	1711.83						
	10/11/2012	1711.75						
	11/5/2012	1721.78		9.6			5,600	19,000
	12/13/2012	1711.73						
I-O	10/12/2011	1718.66						
	10/31/2011	1714.55		21			1,500	12,000
	12/14/2011	1718.43						
	1/17/2012	1715.37						
	2/6/2012	1714.54						
	2/7/2012			23			1,500	12,000
	3/20/2012	1715.3						
	4/17/2012	1715.96						
	5/9/2012	1714.72		22			1,600	12,000
	6/19/2012	1719.62						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-O	7/12/2012	1715.27						
	8/6/2012	1715.87		25			1,400	14,000
	9/18/2012	1715.67						
	10/11/2012	1715.52						
	11/5/2012	1721.68		24			1,600	14,000
	12/13/2012	1715.19						
I-P	10/12/2011	1710.57						
	10/31/2011	1710.43		22			1,500	13,000
	12/14/2011	1711.62						
	1/17/2012	1710.14						
	2/6/2012	1711.05						
	2/7/2012			25			1,400	9,200
	3/20/2012	1711.19						
	4/17/2012	1711.09						
	5/9/2012	1710.4		13			1,600	12,000
	6/19/2012	1712.59						
	7/12/2012	1711.36						
	8/6/2012	1712.64		25			1,400	14,000
	9/18/2012	1712.14						
	10/11/2012	1712.08						
	11/5/2012	1712.04		24			1,500	15,000
	12/13/2012	1712.56						
I-Q	10/12/2011	1714.27						
	10/31/2011	1715.16		28			1,400	17,000
	12/14/2011	1715.78						
	1/17/2012	1717.14						
	2/6/2012	1716.35						
	2/7/2012			30			1,600	14,000
	3/20/2012	1715.01						
	4/17/2012	1714.48						
	5/10/2012	1719.15		29			1,500	14,000
	6/19/2012	1718.81						
	7/12/2012	1714.99						
	8/6/2012	1718.83		30			1,300	17,000
	9/18/2012	1715.99						
	10/11/2012	1715.96						
	11/5/2012	1723.19		29			1,300	16,000
	12/13/2012	1715.11						
I-R	10/12/2011	1710.93						
	10/31/2011	1709.9		0.4			1,600	6,200
	12/14/2011	1710.7						
	1/17/2012	1709.84						
	2/6/2012	1710.12						
	2/7/2012			0.34			1,600	5,800
	3/20/2012	1710.12						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-R	4/17/2012	1710.05						
	5/10/2012	1710.35		0.35			1,600	6,200
	6/20/2012	1712.33						
	7/12/2012	1711.44						
	8/6/2012	1709.65		0.4			1,500	6,100
	9/18/2012	1710.17						
	10/11/2012	1710.09						
	11/5/2012	1710.39		0.39			1,900	7,700
	12/13/2012	1710.02						
I-S	10/12/2011	1705.77						
	10/31/2011	1707.43		1.4			810	5,500
	12/14/2011	1705.8						
	1/17/2012	1705.78						
	2/6/2012	1705.68						
	2/7/2012			1.4			910	5,400
	3/20/2012	1705.58						
	4/17/2012	1705.92						
	5/10/2012	1705.63		1.4			870	5,600
	6/20/2012	1705.67						
	7/12/2012	1705.67						
	8/6/2012	1705.92		1.8			850	5,800
	9/18/2012	1706.07						
	10/11/2012	1706.19						
	11/5/2012	1725.38		0.93			1,800	10,000
	12/13/2012	1705.94						
I-T	10/12/2011	1708.29						
	10/31/2011	1708.8		31			1,600	17,000
	12/14/2011	1708.29						
	1/17/2012	1708.35						
	2/6/2012	1713.08						
	2/7/2012			31			1,700	15,000
	3/20/2012	1708.86						
	4/17/2012	1709.79						
	5/10/2012	1709.48		29			1,600	15,000
	6/19/2012	1709.89						
	7/12/2012	1708.86						
	8/6/2012	1713.07		32			1,500	18,000
	9/18/2012	1712						
	10/11/2012	1712.46						
	11/5/2012	1714.16		14			1,500	10,000
	12/13/2012	1712.4						
I-U	10/12/2011	1707.64						
	10/31/2011	1707.73		29			1,600	17,000
	12/14/2011	1707.66						
	1/17/2012	1707.39						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-U	2/6/2012	1707						
	2/7/2012			30			1,900	14,000
	3/20/2012	1710.47						
	4/17/2012	1712.38						
	5/10/2012	1711.85		27			1,600	16,000
	6/19/2012	1719.96						
	7/12/2012	1707.47						
	8/6/2012	1714.49		30			1,600	17,000
	9/18/2012	1714.05						
	10/11/2012	1714.07						
	11/5/2012	1708.59		13			1,600	15,000
	12/13/2012	1713.97						
I-V	10/12/2011	1718.6						
	11/1/2011	1718.49		16			1,300	11,000
	12/14/2011	1718.05						
	1/17/2012	1717.74						
	2/8/2012	1717.38		18			1,400	11,000
	3/20/2012	1717.13						
	4/17/2012	1716.82						
	5/14/2012	1717.16		17			1,400	11,000
	6/20/2012	1716.39						
	7/12/2012	1717.13						
	8/8/2012	1717.04		18			1,300	11,000
	9/18/2012	1717.08						
	10/11/2012	1717.06						
	11/7/2012	1720.48		16			2,400	14,000
	12/13/2012	1716.98						
I-W	10/12/2011	1720.67						
	10/31/2011	1720.62						
	12/14/2011	1720.54						
	1/18/2012	1720.48						
	2/6/2012	1720.77						
	3/20/2012	1720.86						
	4/17/2012	1720.95						
	5/10/2012	1720.47						
	6/19/2012	1720.49						
	7/12/2012	1720.9						
	8/7/2012	1720.51						
	9/18/2012	1721.37						
	10/11/2012	1721.08						
	11/5/2012	1722.19						
	12/13/2012	1721.48						
I-X	10/12/2011	1718.04						
	10/31/2011	1717.97						
	12/14/2011	1717.92						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
I-X	1/18/2012	1717.98						
	2/6/2012	1717.89						
	3/20/2012	1718.21						
	4/17/2012	1717.63						
	5/10/2012	1719						
	6/19/2012	1718.38						
	7/12/2012	1718.33						
	8/7/2012	1717.99						
	9/18/2012	1718.2						
	10/11/2012	1718.1						
	11/5/2012	1723.09						
	12/13/2012	1717.79						
I-Y	10/12/2011	1721.1						
	10/31/2011	1721.11						
	12/14/2011	1720.96						
	1/18/2012	1721.29						
	2/6/2012	1721.35						
	3/20/2012	1721.05						
	4/17/2012	1720.93						
	5/10/2012	1721.3						
	6/20/2012	1720.61						
	7/12/2012	1721.25						
	8/7/2012	1721.31						
	9/18/2012	1721.18						
	10/11/2012	1721.1						
	11/5/2012	1724.48						
	12/13/2012	1721.11						
I-Z	10/12/2011	1710.01						
	11/1/2011	1710.89		7.7			320	6,700
	12/14/2011	1710.51						
	1/18/2012	1710.39						
	2/8/2012	1710.77		8.3			340	6,400
	3/20/2012	1710.63						
	4/17/2012	1710.56						
	5/14/2012	1711.48		8.1			310	6,500
	6/20/2012	1710.8						
	7/12/2012	1710.58						
	8/8/2012	1711.89		8.5			310	6,500
	9/18/2012	1711.68						
	10/11/2012	1711.47						
	11/7/2012	1709.45		9.3			340	7,200
	12/13/2012	1706.03						
M-2A	5/15/2012	1739.08		14			450	8,900
M-5A	5/15/2012	1713.67		0.0018 J			<0.25	13,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-5A	8/7/2012	1713.67						
	8/8/2012			0.0050 J			0.98 J	13,000
M-6A	5/16/2012	1694.08		0.0084			12	1,300
	8/7/2012	1694.11						
	8/8/2012			0.018 J			10	6,900
M-7B	5/15/2012	1696.34		0.013 J			38	7,300
	8/7/2012	1696.44						
	8/8/2012			0.0055 J			32	7,900
M-10	10/13/2011	1787.7						
	11/3/2011	1788.93		0.56	0.030 J-	2	15	2,900
	12/14/2011	1789.1						
	1/10/2012	1789.12						
	2/9/2012	1788.76		0.52	0.021	1.6	12	2,800
	3/20/2012	1788.68						
	4/17/2012	1788.61						
	5/21/2012	1788.19	120	0.54	0.032	1.8	13	2,800
	(FD)		110	0.58	0.035	1.8	14	2,800
	6/20/2012	1788.75						
	7/16/2012	1788.67						
	8/8/2012	1789		0.51	0.015 J-	1.8	13	2,900
	9/18/2012	1789.09						
	10/16/2012	1788.36						
	11/8/2012	1789.52		0.62	0.065 J-	1.7	12	2,900
	12/12/2012	1789.09						
M-11	10/13/2011	1772.78						
	11/3/2011	1772.54		2.2	2.2 J-		28	2,800
	(FD)			2.3	2.0 J-		27	2,700
	12/15/2011	1772.58						
	1/10/2012	1772.62						
	2/9/2012	1772.13		2.4	2.4		29	2,800
	3/20/2012	1772.53						
	4/17/2012	1772.65						
	5/21/2012	1772.72	380	2.3	2	2.7	29	2,700
	6/20/2012	1772.62						
	7/16/2012	1772.62						
	8/8/2012	1772.85		1.9	2.5 J-		22	2,600
	9/18/2012	1772.99						
	10/16/2012	1773.25						
	11/8/2012	1773.31		1.6	1.7 J-		22	2,600
	12/12/2012	1772.99						
M-12A	11/3/2011	1772.18		11	11 J-		210	6,900
	2/13/2012	1772.15		10	11 J-		210	6,500
	(FD)			10	10 J-		220	6,500
	5/16/2012	1771.79	1,900	8.5	9.4	11	200	5,800
	(FD)		1,900	9	9.1	10	190	6,100

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-12A	8/8/2012	1772.23		8.6	8.9 J-		170	6,400
	(FD)			8.7	8.9 J-		180	6,500
	11/8/2012	1772.95		7.8	8.5 J-		170	6,200
	(FD)			7.9	8.2 J-		170	6,100
M-13	5/21/2012	1768.51	240	0.7		4.7	21	3,200
	(FD)		230	0.7		5	20	3,200
M-14A	10/13/2011	1728.95						
	11/2/2011	1728.67		0.047			27	3,100
	12/14/2011	1728.79						
	1/10/2012	1730.75						
	2/9/2012	1728.57		0.32			28	3,100
	(FD)			0.13			28	3,100
	3/20/2012	1729.51						
	4/17/2012	1729.47						
	5/15/2012	1728.39		0.06			33	3,300
	6/20/2012	1728.09						
	7/12/2012	1729.79						
	8/9/2012	1728.13		0.063			34	3,300
	9/18/2012	1728.17						
	10/17/2012	1730.25						
	11/8/2012	1730.23		0.059			38	3,500
	12/12/2012	1728.17						
M-19	10/13/2011	1731.41						
	11/2/2011	1731.36		0.45			3.4	5,300
	12/15/2011	1731.26						
	1/10/2012	1731.26						
	2/8/2012	1731.18		0.47			6.6	5,400
	3/20/2012	1730.66						
	4/17/2012	1730.5						
	5/15/2012	1731.02		0.45			8.7	5,300
	6/20/2012	1731.16						
	7/12/2012	1730.62						
	8/9/2012	1731.29		0.45			10	5,200
	9/18/2012	1730.74						
	10/17/2012	1732.5						
	11/7/2012	1732.47		0.39			11	5,100
	12/12/2012	1730.33						
M-21	5/16/2012			0.7			18	3,400
M-22A	10/13/2011	1728.78						
	11/3/2011	1728.68		22			1,400	12,000
	12/15/2011	1728.59						
	2/13/2012	1728.27		23			1,500	12,000
	3/20/2012	1728.36						
	4/17/2012	1728.22						
	5/15/2012	1728.28		23			1,600	12,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-22A	(FD)			22			1,600	12,000
	7/12/2012	1728.17						
	8/9/2012	1728.33		24			1,400	12,000
	9/18/2012	1730.04						
	10/17/2012	1730.26						
	11/7/2012	1730.26		24			1,300	14,000
	12/12/2012	1730.16						
M-23	10/12/2011	1688.47						
	11/1/2011	1688.31		0.64			380	4,300
	12/14/2011	1687.97						
	1/10/2012	1687.46						
	2/6/2012	1687.49		0.59			410	4,500
	3/15/2012	1687.2						
	4/17/2012	1687.29						
	5/16/2012	1686.92	240	0.56		71	340	4,300
	6/20/2012	1685.74						
	7/12/2012	1687.14						
	8/6/2012	1686.55		0.5			310	4,400
	(FD)			0.54			310	4,500
	9/13/2012	1686.44						
	10/16/2012	1686.24						
	11/6/2012	1687.22		0.53			300	4,500
	12/11/2012	1686.45						
M-25	10/12/2011	1709.3						
	11/1/2011	1726.45		9.1			440	7,900
	12/14/2011	1708.71						
	1/10/2012	1726.39						
	2/7/2012	1726.25		9.2			440	7,700
	3/15/2012	1726.19						
	4/17/2012	1726.33						
	5/15/2012	1726.19	2,400	8.6		33	440	7,800
	6/20/2012	1726.12						
	7/12/2012	1726.05						
	8/8/2012	1726.24		8.6			400	7,800
	9/13/2012	1727.3						
	10/17/2012	1728.95						
	11/6/2012	1729.11		8.1			820	8,000
	12/12/2012	1728.13						
M-31A	10/13/2011	1750.69						
	11/2/2011	1750.76		7.3			910	6,800
	12/15/2011	1750.71						
	1/10/2012	1750.7						
	2/13/2012	1750.65		7.4			950	7,300
	3/20/2012	1750.57						
	4/17/2012	1750.34						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-31A	5/16/2012	1750.64		7.4			1,100	6,000
	6/20/2012	1751.7						
	7/16/2012	1750.73						
	8/8/2012	1750.92		7.1			910	7,100
	9/18/2012	1750.76						
	10/16/2012	1751.97						
	11/8/2012	1752.02		6.6			880	7,100
	12/12/2012	1750.97						
M-35	10/13/2011	1743.36						
	11/2/2011	1740.16		4.5			180	4,400
	12/15/2011	1743.26						
	1/10/2012	1740.09						
	2/8/2012	1739.97		4.8			190	4,500
	3/20/2012	1740.3						
	4/17/2012	1740.57						
	5/15/2012	1739.99		4.6			210	4,500
	(FD)			4.8			210	4,700
	6/20/2012	1740.16						
	7/12/2012	1740.38						
	8/8/2012	1740.26		4.6			180	4,600
	(FD)			4.7			190	4,500
	9/18/2012	1740.28						
	10/17/2012	1741.93						
	11/7/2012	1741.96		4.3			150	4,300
	12/12/2012	1740.38						
M-36	10/13/2011	1727.24						
	11/3/2011	1727.24		28	31 J-		1,500	15,000
	12/15/2011	1727.11						
	1/10/2012	1727.1						
	2/13/2012	1727.1		29	29 J-		1,500	14,000
	3/20/2012	1727.11						
	4/17/2012	1727.17						
	5/15/2012	1726.94	6,400	28	28 J-	49	1,700	14,000
	6/20/2012	1726.94						
	7/12/2012	1726.97						
	8/9/2012	1727.06		30	28 J-		1,500	14,000
	9/18/2012	1728.18						
	10/17/2012	1729.37						
	11/8/2012	1729.21		26	28 J-		1,700	15,000
	12/12/2012	1728.22						
M-37	10/12/2011	1729.37						
	11/1/2011	1729.29		0.023	0.014 J		1,200	4,200
	(FD)			0.028	0.0080 J		1,200	4,300
	12/14/2011	1729.24						
	1/10/2012	1729.21						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-37	2/7/2012	1729.11		0.022	0.025 J		1,200	3,700
	(FD)			0.024	0.037 J		1,200	3,700
	3/15/2012	1729.02						
	4/17/2012	1729.11						
	5/15/2012	1728.97	14	0.028			1,200	3,800
	6/20/2012	1728.78						
	7/12/2012	1728.74						
	8/8/2012	1728.89		0.021	0.011 J-		1,100	3,700
	9/13/2012	1729.21						
	10/16/2012	1729.05						
	11/6/2012	1731.37		0.072	0.072 J-		1,300	5,300
	12/12/2012	1729.26						
M-38	10/13/2011	1728.48						
	11/3/2011	1728.44		24			850	13,000
	12/15/2011	1728.36						
	1/10/2012	1728.34						
	2/13/2012	1728.28		23			940	12,000
	3/20/2012	1728.81						
	4/17/2012	1728.73						
	5/15/2012	1728.2		23			990	12,000
	6/20/2012	1727.77						
	7/12/2012	1728.61						
	8/9/2012	1728.25		24			860	12,000
	9/18/2012	1729.64						
	10/17/2012	1730.18						
	11/8/2012	1730.18		14			4,800	18,000
	12/12/2012	1729.56						
M-44	10/12/2011	1676.85						
	10/31/2011	1676.72		0.8	0.75 J-		610	7,800
	12/14/2011	1676.5						
	1/10/2012	1676.35						
	2/6/2012	1676.1		0.71	0.79 J-		820	7,800
	3/15/2012	1675.93						
	4/17/2012	1675.91						
	5/8/2012	1675.59		0.83	0.84 J-		700	8,400
	6/20/2012	1675.36						
	7/12/2012	1675.91						
	8/6/2012	1675.28		0.97	0.94 J-		750 J	8,400
	(FD)			0.93	0.96 J-		460 J	8,400
	9/13/2012	1675.16						
	10/16/2012	1675.21						
	11/5/2012	1675.43		0.91			750	8,500
	(FD)			0.9	0.92 J-		720	8,400
	11/20/2012				0.93			
	12/11/2012	1675.11						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-48A	10/12/2011	1689.95						
	10/31/2011	1689.79		2			250	4,100
	12/14/2011	1689.57						
	1/10/2012	1689.35						
	2/6/2012	1698.1		2.1			300	4,200
	3/15/2012	1687.81						
	4/17/2012	1687.62						
	5/8/2012	1688.61	650	2		40	280	4,300
	6/20/2012	1688.41						
	7/12/2012	1687.86						
	8/6/2012	1688.32		2.2			200	5,000
	9/13/2012	1688.68						
	10/16/2012	1688.55						
	11/5/2012	1689.97		0.86			86	3,000
	12/11/2012	1688.81						
M-52	11/2/2011	1761.37		3.3			520	5,500
	2/13/2012	1761.21		3			480	5,100
	5/16/2012	1761.28		2.8			570	5,000
	11/8/2012	1762.26		2.6			540	5,500
M-55	10/12/2011	1720.67						
	11/1/2011	1720.69						
	12/14/2011	1720.67						
	1/10/2012	1720.66						
	2/21/2012	1720.5						
	3/15/2012	1720.39						
	4/17/2012	1720.34						
	5/10/2012	1720.7						
	6/20/2012	1720.37						
	7/12/2012	1720.7						
	8/6/2012	1719.88						
	9/13/2012	1719.76						
	10/16/2012	1719.15						
	11/5/2012	1723.79						
	12/11/2012	1719.71						
M-56	10/12/2011	1719						
	11/1/2011	1719.11						
	12/14/2011	1718.95						
	1/10/2012	1718.99						
	2/21/2012	1719.44						
	3/15/2012	1719.29						
	4/17/2012	1719.43						
	5/10/2012	1719.43						
	6/19/2012	1719.65						
	7/12/2012	1719.21						
	8/6/2012	1719.21						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-56	9/13/2012	1719.68						
	10/16/2012	1719.01						
	11/5/2012	1722.42						
	12/11/2012	1719.61						
M-57A	10/12/2011	1724.11						
	11/1/2011	1723.99		0.057			21	3,000
	12/14/2011	1724.03						
	1/10/2012	1724.03						
	2/7/2012	1723.91		0.062			20	3,000
	3/15/2012	1723.81						
	4/17/2012	1723.33						
	5/10/2012	1723.81		0.061			19	3,000
	6/20/2012	1723.58						
	7/12/2012	1723.84						
	8/8/2012	1723.61		0.12			20	3,100
	9/13/2012	1723.84						
	10/16/2012	1723.79						
	11/6/2012	1725.18		0.061			20	3,100
	12/11/2012	1723.78						
M-58	10/12/2011	1720.87						
	11/1/2011	1720.91						
	12/14/2011	1720.81						
	1/10/2012	1720.8						
	2/21/2012	1720.73						
	3/15/2012	1720.7						
	4/17/2012	1720.55						
	5/10/2012	1720.64						
	6/19/2012	1720.34						
	7/12/2012	1720.65						
	8/7/2012	1720.56						
	9/13/2012	1720.25						
	10/16/2012	1719.54						
	11/5/2012	1721.9						
	12/11/2012	1720.13						
M-60	10/12/2011	1718.3						
	11/1/2011	1718.62						
	12/14/2011	1718.13						
	1/10/2012	1718.15						
	2/21/2012	1718.09						
	3/15/2012	1718.04						
	4/17/2012	1717.94						
	5/10/2012	1718.78						
	6/19/2012	1718.41						
	7/12/2012	1719.54						
	8/7/2012	1718.22						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-60	9/13/2012	1718.43						
	10/16/2012	1718.29						
	11/5/2012	1720.03						
	12/11/2012	1718.45						
M-64	10/12/2011	1720.13						
	11/1/2011	1720.13		7.8			620	6,600
	12/14/2011	1720.11						
	1/10/2012	1720.12						
	2/8/2012	1719.98		7.4			660	7,200
	3/15/2012	1719.94						
	4/17/2012	1719.74						
	5/14/2012	1719.97		7.2			640	7,400
	6/20/2012	1719.8						
	7/12/2012	1720.12						
	8/7/2012	1719.99						
	8/8/2012			6.4			550	6,600
	9/13/2012	1720.62						
	10/16/2012	1720.56						
	11/6/2012	1723.21		6.6			780	7,400
	12/11/2012	1720.46						
M-65	10/12/2011	1720.32						
	11/1/2011	1720.31		27			1,200	17,000
	12/14/2011	1720.79						
	1/10/2012	1720.8						
	2/7/2012	1720.72		29			1,200	14,000
	3/15/2012	1720.72						
	4/17/2012	1720.7						
	5/10/2012	1720.99		28			1,200	14,000
	6/19/2012	1721.64						
	7/12/2012	1720.69						
	8/7/2012	1720.76						
	8/8/2012			28			840	14,000
	9/13/2012	1721.06						
	10/16/2012	1720.91						
	11/6/2012	1724.38		27			1,100	15,000
	12/11/2012	1721.01						
M-66	10/12/2011	1722.61						
	11/1/2011	1722.6		29			1,500	16,000
	12/14/2011	1722.49						
	1/10/2012	1722.41						
	2/7/2012	1722.31		30			1,500	14,000
	3/15/2012	1722.24						
	4/17/2012	1721.02						
	5/10/2012	1722.29		28			1,600	15,000
	6/19/2012	1722.29						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-66	7/12/2012	1723.24						
	8/7/2012	1722.39						
	8/8/2012			28			1,500	15,000
	9/13/2012	1723.07						
	10/16/2012	1722.84						
	11/6/2012	1724.06		28			1,300	15,000
	12/11/2012	1723.1						
M-67	10/12/2011	1723.55						
	11/1/2011	1723.46						
	11/2/2011	1723.46		5.4			310	6,300
	12/14/2011	1723.38						
	1/10/2012	1723.3						
	2/8/2012	1723.25		5.8			300	5,500
	3/20/2012	1723.77						
	4/17/2012	1723.71						
	5/15/2012	1723.14		6			290	5,800
	6/20/2012	1723.13						
	7/12/2012	1723.76						
	8/9/2012	1723.31		6.8			260	5,500
	9/18/2012	1723.71						
	10/17/2012	1724.29						
	11/7/2012	1724.49		6.7			260	5,800
	12/11/2012	1723.69						
M-68	10/12/2011	1722.93						
	11/2/2011	1723.11		1.1			77	6,200
	12/14/2011	1723.11						
	1/10/2012	1723.07						
	2/8/2012	1727.99		1.2			87	5,900
	3/20/2012	1723.28						
	4/17/2012	1723.18						
	5/14/2012	1722.91		1.3			99	6,800
	6/20/2012	1722.86						
	7/12/2012	1723.23						
	8/8/2012	1723.01		1.3			130	6,100
	9/18/2012	1723.91						
	10/17/2012	1724.11						
	11/7/2012	1724.32		1.2			120	6,000
	(FD)			1.2			120	5,900
	12/11/2012	1723.83						
M-69	10/12/2011	1716.38						
	11/1/2011	1716.32		0.076			210	3,500
	12/14/2011	1716.32						
	1/10/2012	1716.29						
	2/7/2012	1716.19		0.075			220	3,500
	3/15/2012	1715.81						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-69	4/17/2012	1715.75						
	5/10/2012	1716.01		0.061			160	3,700
	6/20/2012	1715.87						
	7/12/2012	1715.97						
	8/8/2012	1716.04		0.067			150	3,600
	9/13/2012	1717.63						
	10/16/2012	1717.13						
	11/6/2012	1717.9		0.058			150	3,700
	12/11/2012	1717.58						
M-70	10/12/2011	1712.77						
	11/3/2011	1712.78		4.9			510	5,600
	12/14/2011	1712.69						
	1/10/2012	1712.68						
	2/9/2012	1712.56		4.4			550	5,300
	3/20/2012	1712.55						
	4/17/2012	1712.49						
	5/14/2012	1712.53		4.4			610	5,500
	6/20/2012	1712.48						
	7/12/2012	1712.56						
	8/9/2012	1712.74		4.2			530	5,500
	9/18/2012	1714.23						
	10/17/2012	1714.31						
	11/7/2012	1714.23		3			380	4,900
	12/11/2012	1714.1						
M-71	10/12/2011	1711.61						
	11/3/2011	1711.76		3.7			470	5,800
	12/14/2011	1711.47						
	1/10/2012	1711.51						
	2/9/2012	1711.34		3.6			470	5,300
	3/20/2012	1711.39						
	4/17/2012	1711.94						
	5/14/2012	1711.45		3.7			510	5,300
	6/20/2012	1711.35						
	7/12/2012	1711.43						
	8/9/2012	1711.46		3.6			510	5,400
	9/18/2012	1713.62						
	10/17/2012	1713.09						
	11/7/2012	1712.68		6			690	7,500
	12/12/2012	1713.54						
M-72	10/12/2011	1714.54						
	11/3/2011	1714.41		5.7			1,100	10,000
	12/14/2011	1714.31						
	1/10/2012	1714.36						
	2/9/2012	1714.17		5.1			1,000	8,600
	3/20/2012	1713.94						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-72	4/17/2012	1714.13						
	5/14/2012	1714.2		5.6			1,300	9,700
	6/20/2012	1714.26						
	7/12/2012	1714.17						
	8/9/2012	1714.37		5.5			1,200	8,600
	9/18/2012	1715.34						
	10/17/2012	1715.49						
	11/7/2012	1715.3		6.6			1,200	11,000
	12/12/2012	1715.29						
M-73	10/12/2011	1712.01						
	11/2/2011	1711.91		8.9			440	7,300
	12/14/2011	1711.91						
	1/10/2012	1711.93						
	2/8/2012	1712.01		7.9			470	6,100
	3/20/2012	1711.72						
	4/17/2012	1711.58						
	5/14/2012	1711.78		8.4			480	7,300
	6/20/2012	1711.83						
	7/12/2012	1711.54						
	8/9/2012	1711.9		9			480	7,200
	9/18/2012	1711.13						
	10/17/2012	1713.04						
	11/7/2012	1712.96		10			480	9,200
	12/12/2012	1710.99						
M-74	10/12/2011	1714.82						
	11/2/2011	1714.63		0.98			71	6,000
	12/14/2011	1714.44						
	1/10/2012	1714.37						
	2/8/2012	1714.31		0.99			76	5,700
	3/20/2012	1714.28						
	4/17/2012	1714.23						
	5/14/2012	1713.59		0.96			78	5,900
	6/20/2012	1714.01						
	7/12/2012	1714.26						
	8/9/2012	1714.04		1			75	5,700
	9/18/2012	1713.9						
	10/17/2012	1715.88						
	11/7/2012	1716.07		1			78	6,100
	12/12/2012	1713.89						
M-75	10/13/2011	1741.92						
	11/9/2011	1741.89						
	12/15/2011	1741.86						
	1/10/2012	1742.08						
	2/21/2012	1741.78						
	3/20/2012	1741.84						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-75	4/17/2012	1741.65						
	5/15/2012	1741.7		2.5			59	3,900
	6/20/2012	1741.7						
	7/12/2012	1742.28						
	8/16/2012	1741.73						
	9/18/2012	1742.47						
	10/17/2012	1743.81						
	11/7/2012	1743.77						
	12/12/2012	1742.47						
M-76	10/13/2011	1746.28						
	11/9/2011	1746.22						
	12/15/2011	1746.24						
	1/10/2012	1746.2						
	2/21/2012	1746						
	3/20/2012	1745.65						
	4/17/2012	1745.38						
	5/15/2012	1745.89		2.8			130	4,500
	6/20/2012	1745.85						
	7/12/2012	1745.62						
	8/16/2012	1745.82						
	9/18/2012	1747.34						
	10/17/2012	1747.77						
	11/7/2012	1747.57						
	12/12/2012	1753.26						
M-77	10/13/2011	1763.23						
	11/9/2011	1763.11						
	12/15/2011	1763.06						
	1/10/2012	1762.53						
	2/21/2012	1762.43						
	3/20/2012	1762.61						
	4/17/2012	1763.05						
	5/16/2012	1763.33		0.6			350	3,100
	6/20/2012	1763.3						
	7/16/2012	1762.47						
	8/16/2012	1763.26						
	9/18/2012	1762.66						
	10/16/2012	1763.66						
	11/8/2012	1763.68						
	12/12/2012	1762.61						
M-78	10/12/2011	1716.94						
	11/9/2011	1718.63						
	12/14/2011	1718.63						
	1/10/2012	1718.68						
	2/21/2012	1718.56						
	3/15/2012	1718.63						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-78	4/17/2012	1718.38						
	5/22/2012	1718.52						
	6/20/2012	1718.47						
	7/12/2012	1718.32						
	8/16/2012	1716.93						
	9/13/2012	1717.53						
	10/16/2012	1717.28						
	11/5/2012	1721.4						
	12/12/2012	1717.5						
M-79	10/12/2011	1711.01						
	11/1/2011	1711		1			620	4,500
	12/14/2011	1711.01						
	1/10/2012	1711.01						
	2/7/2012	1710.88		0.84			550	4,400
	3/15/2012	1710.77						
	4/17/2012	1711.03						
	5/10/2012	1710.78		0.63			480	4,400
	6/20/2012	1710.74						
	7/12/2012	1710.74						
	8/8/2012	1710.89		0.51			480	4,300
	9/13/2012	1711.03						
	10/16/2012	1710.6						
	11/6/2012	1712.26		0.46			440	4,300
	11/8/2012			0.45			450	4,300
	12/11/2012	1711.23						
M-80	10/12/2011	1710.09						
	11/2/2011	1709.97						
	12/14/2011	1709.92						
	1/10/2012	1709.92						
	2/14/2012	1709.82		0.1			43	1,200
	3/20/2012	1709.64						
	4/17/2012	1708.04						
	5/14/2012	1709.82		0.098			50	1,300
	6/20/2012	1709.75						
	7/12/2012	1708.94						
	8/9/2012	1709.88		0.24			65	1,500
	9/18/2012	1711.29						
	10/17/2012	1710.24						
	11/7/2012	1711.2		0.46			83	1,800
	12/11/2012	1711.53						
M-81A	10/12/2011	1709.29						
	11/2/2011	1708.8						
	12/14/2011	1708.51						
	1/10/2012	1708.49						
	2/9/2012	1708.37		3.7			830	5,500

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-81A	3/20/2012	1708.86						
	4/17/2012	1709.01						
	5/14/2012	1708.08		3.2			910	5,500
	(FD)			3.2			880	5,800
	6/20/2012	1708.24						
	7/12/2012	1708.18						
	8/9/2012	1708.47		3.1			790	5,600
	9/18/2012	1710.56						
	10/17/2012	1711.68						
	11/7/2012	1710.66		3.3			750	6,000
	12/11/2012	1710.47						
M-83	10/11/2011	1708.96					48	1,600
	11/2/2011	1709.66		0.29			51	1,500
	11/8/2011	1709.25		0.3			55	1,600
	12/14/2011	1709.19					58	1,600
	1/12/2012	1709.6					65	1,600
	2/9/2012	1709.48		0.4			73	1,700
	3/14/2012	1709.32					87	1,700
	3/20/2012	1709.2						
	4/12/2012	1709.39					80	1,700
	5/15/2012	1709.37		0.48			110	1,900
	6/21/2012	1709.35					100	1,800
	7/11/2012	1709.26					120	1,900
	8/9/2012	1709.58		0.64			150	2,000
	9/12/2012	1709.12					170	2,500
	10/10/2012	1711.49					210	2,500
	11/7/2012	1710.87		0.91			200	2,500
	12/6/2012	1710.62					270	2,500
M-92	10/12/2011	1764.25						
	11/9/2011	1764.25						
	12/14/2011	1764.25						
	1/10/2012	1764.27						
	2/21/2012	1764.05						
	3/20/2012	1769.23						
	4/17/2012	1769.28						
	5/15/2012	1764.07		0.02 J			1.3	2,000
	6/20/2012	1763.85						
	7/12/2012	1764.26						
	8/16/2012	1763.76						
	9/18/2012	1764.56						
	10/17/2012	1764.96						
	11/6/2012	1765.2						
	12/12/2012	1764.69						
M-93	10/13/2011	1762						
	11/9/2011	1761.97						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-93	12/14/2011	1761.96						
	1/10/2012	1761.98						
	2/21/2012	1761.86						
	3/20/2012	1762.26						
	4/17/2012	1762.62						
	5/15/2012	1761.75						
	6/20/2012	1761.59						
	7/12/2012	1762.24						
	8/16/2012	1761.47						
	9/18/2012	1762.49						
	10/17/2012	1761.87						
	11/6/2012	1763.05						
	12/12/2012	1762.41						
M-95	10/12/2011	1680.2						
	11/9/2011	1680.08						
	12/14/2011	1680.06						
	1/10/2012	1679.52						
	2/21/2012	1679.46						
	3/15/2012	1678.99						
	4/17/2012	1678.97						
	5/8/2012	1678.64		0.74	0.66 J-		440	6,000
	6/20/2012	1679.46						
	7/12/2012	1678.94						
	8/16/2012	1678.28						
	9/13/2012	1678.72						
	10/16/2012	1678.69						
	11/5/2012	1677.69		0.71	0.73 J-		370	6,300
	12/12/2012	1678.48						
M-96	10/12/2011	1679.64						
	10/31/2011	1679.48		0.62			250	5,700
	12/14/2011	1679.41						
	1/10/2012	1678.93						
	2/6/2012	1678.68		0.58			260	5,600
	3/15/2012	1678.44						
	4/17/2012	1678.44						
	5/17/2012	1678.14		0.58			250	5,500
	6/20/2012	1677.94						
	7/12/2012	1678.28						
	8/6/2012	1677.76		0.6			160	5,600
	9/13/2012	1677.77						
	10/16/2012	1677.65						
	11/5/2012	1677.72		0.56			140	5,800
	12/12/2012	1677.69						
M-97	10/12/2011	1760.94						
	11/9/2011	1760.96						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-97	12/14/2011	1760.97						
	1/10/2012	1760.99						
	2/8/2012	1760.88		0.06			63	3,800
	3/20/2012	1760.77						
	4/17/2012	1760.74						
	5/15/2012	1760.72		0.056			72	3,900
	6/20/2012	1760.59						
	7/12/2012	1760.75						
	8/16/2012	1762.82						
	9/18/2012	1761.23						
	10/17/2012	1761.76						
	11/6/2012	1761.95		0.063			70	4,100
	12/12/2012	1761.05						
M-98	2/2/2012	Dry						
	5/16/2012	Dry						
	6/20/2012	Dry, no access						
	8/7/2012	Dry						
	9/13/2012	Dry						
	10/16/2012	Dry						
	11/6/2012	Dry						
	12/11/2012	Dry						
M-99	10/12/2011	Dry						
	11/1/2011	1695.96						
	12/14/2011	1696.11						
	1/10/2012	1696.16						
	2/7/2012	Dry						
	3/15/2012	1697.04						
	4/17/2012	Dry						
	5/15/2012	Dry						
	6/20/2012	Dry						
	7/12/2012	Dry						
	8/8/2012	Dry						
	9/13/2012	Dry						
	10/16/2012	Dry						
	11/6/2012	Dry						
	12/11/2012	Dry						
M-100	10/12/2011	Dry						
	11/1/2011	Dry						
	12/14/2011	Dry						
	1/10/2012	Dry						
	2/9/2012	Dry						
	3/21/2012	Dry						
	4/17/2012	Dry						
	5/15/2012	Dry						
	6/20/2012	Dry						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-100	7/12/2012	Dry						
	8/8/2012	Dry						
	9/13/2012	Dry						
	10/16/2012	Dry						
	11/6/2012	Dry						
	12/11/2012	Dry						
M-101	10/12/2011	Dry						
	11/1/2011	Dry						
	12/14/2011	Dry						
	1/10/2012	Dry						
	2/9/2012	Dry						
	3/21/2012	Dry						
	4/17/2012	Dry						
	5/15/2012	Dry						
	6/20/2012	Dry						
	7/12/2012	Dry						
	8/8/2012	Dry						
	9/13/2012	Dry						
	10/16/2012	Dry						
	11/6/2012	Dry						
	12/11/2012	Dry						
M-103	5/21/2012	1796.59		0.01 J			0.22	1,900
M-115	10/13/2011	1746.22						
	11/9/2011	1746.16						
	12/15/2011	1746.24						
	1/10/2012	1750.39						
	2/21/2012	1750.21						
	3/20/2012	1751.16						
	4/17/2012	1751.13						
	5/15/2012	1749.92		0.042			18	2,500
	6/20/2012	1749.65						
	7/12/2012	1751.06						
	8/21/2012	1749.66						
	9/18/2012	1751.91						
	10/17/2012	1751.82						
	11/7/2012	1751.71		0.046			16	2,600
	12/11/2012	1752.54						
M-117	5/21/2012	1808.41		0.016 J			<0.00025	740
M-118	5/21/2012	1809.69		0.023			<0.00025	760
M-120	5/21/2012	1800.27		0.0056 J			0.061	1,900
M-121	5/21/2012	1799.47		0.11			2.6	2,800
M-123	5/16/2012	1743.93					0.11	11,000
M-124	5/16/2012	1750.85		0.042			1.9	2,500
M-125	5/16/2012	1733.39					0.85	13,000
M-126	5/14/2012	1724.18		0.0088 J			0.98	13,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-128	5/16/2012	1746.97					7.0	2,500
M-129	5/23/2012	1714.91		0.76			47	5,800
M-130	5/23/2012	1720.77		0.81			60	5,700
M-131	11/1/2011	1721.49		0.088			43	3,000
	(FD)			0.088			43	3,000
	2/7/2012	1721.32		0.078			40	3,100
	5/10/2012	1721.29		0.074			43	3,200
	8/8/2012	1721.23		0.083			37	3,200
	11/6/2012	1722.96		0.084			36	3,200
M-133	5/14/2012	1714.65		0.76			28	4,500
M-134	5/14/2012	1717.67		0.15			100	2,700
M-135	11/1/2011	1717.54		0.077			39	3,200
	2/7/2012	1717.38		0.079			38	3,300
	5/14/2012	1717.31		0.078			35	3,400
	8/8/2012	1717.24		0.071			36	3,200
	11/6/2012	1719.05		0.078			36	3,400
M-136	5/14/2012	1722.54		0.073			92	1,200
M-137	5/16/2012	1791.7		0.09			1.5	1,900
M-138	5/16/2012	1791.91		0.058			1.7	2,600
M-139	5/16/2012	1778.65		0.1			2.5	2,800
M-141	5/16/2012	1754.74		9			630	7,200
M-142	5/16/2012	1742.76		0.044			12	2,400
	(FD)			0.041			11	2,400
M-144	5/16/2012	1775.43		0.055			2.9	3,000
M-145	5/16/2012	1775.53		0.3			0.6	2,300
M-146	5/16/2012	1777.91		0.095			3.8	4,300
M-147	5/24/2012	1741.32		0.19			13	4,400
M-148A	5/16/2012	1754.71		0.12			3.5	5,300
M-149	5/24/2012	1750.59		2.1			270	2,200
M-150	5/22/2012	1732.02		0.038			0.17	540
M-151	5/24/2012	1709.88		0.03			<0.000254	490
M-152	5/24/2012	1670.63		0.038			0.62	630
M-153	5/24/2012	1765.47		0.021			0.019	540
M-154	5/22/2012	1750.16		0.036			<0.000254	560
M-155	5/24/2012			0.018 J			<0.000254	540
	(FD)			0.016 J			<0.000254	530
M-156	5/24/2012	1679.86		0.011 J			<0.000254	540
	(FD)			0.0086 J			<0.000254	530
M-161	5/21/2012	1729.17		0.024			0.023	570
M-162	5/23/2012	1722.92		0.023			3.0	550
M-163	5/23/2012	1718.08		0.028			0.033	560
M-164	5/24/2012	1711.77		2.6			420	3,400
M-165	5/23/2012	1719.44		0.03			0.24	530
	(FD)			0.024			0.21	530

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-166	10/31/2011	1721.63						
	2/14/2012	1721.48						
	5/13/2012	1721.42						
	8/6/2012	1721.31						
	11/5/2012	1723.53						
M-167	10/31/2011	1721.62						
	2/14/2012	1721.49						
	5/13/2012	1721.43						
	8/6/2012	1721.51						
	11/5/2012	1724.95						
M-168	10/31/2011	1721.95						
	2/14/2012	1721.78						
	5/13/2012	1721.75						
	8/6/2012	1721.75						
	11/5/2012	1725.85						
M-169	10/31/2011	1721.04						
	2/14/2012	1720.61						
	5/13/2012	1720.94						
	8/6/2012	1720.92						
	11/5/2012	1725.32						
M-170	10/31/2011	1720.7						
	2/14/2012	1720.54						
	5/13/2012	1720.6						
	8/6/2012	1721.15						
	11/5/2012	1724.18						
M-172	10/31/2011	1717.15						
	2/14/2012	1717						
	5/14/2012	1717.24						
	8/6/2012	1717.13						
	11/5/2012	1722.4						
M-173	10/31/2011	1720.41						
	2/14/2012	1720.15						
	5/13/2012	1720.18						
	8/6/2012	1720.3						
	11/5/2012	1721.6						
M-174	10/31/2011	1721.51						
	2/14/2012	1721.57						
	5/13/2012	1721.29						
	8/7/2012	1721.27						
	11/5/2012	1723.82						
M-175	10/31/2011	1721.2						
	2/14/2012	1720.99						
	5/13/2012	1720.96						
	8/7/2012	1721.03						
	11/5/2012	1722.09						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
M-176	10/31/2011	1721.04						
	2/14/2012	1720.86						
	5/13/2012	1720.83						
	8/7/2012	1720.83						
	11/5/2012	1722.12						
M-177	10/31/2011	1721.1						
	2/14/2012	1720.89						
	5/14/2012	1720.77						
	8/7/2012	1720.92						
	11/6/2012	1722.39						
M-181	5/23/2012	1730.89		0.042			<0.000254	510
M-182	5/23/2012	1726.9		1.3			8.1	12,000
M-186	5/24/2012	1755.12		1.8			92	4,100
MC-3	5/9/2012	1691.36					9.8	15,000
MC-6	5/9/2012	1683.62					0.65	14,000
MC-7	5/9/2012	1691.24					15	4,800
MC-29	5/9/2012	1686.33					1.2	20,000
MC-45	5/9/2012	1682.27					0.72	14,000
MC-50	5/10/2012	1683.42					0.22	15,000
MC-51	5/10/2012	1684.48					0.049	15,000
MC-53	5/10/2012	1683.28		0.0026 J			0.42	14,000
MC-65	5/10/2012	1671.71		0.12			67	9,700
MC-69	5/10/2012	1686.67					0.84	14,000
MC-93	5/10/2012	1685.56					9.7	8,200
MC-97	5/10/2012	1687.15					1.3	13,000
MW-16	5/14/2012	1718.23		0.0019 J			0.84	9,200
MW-K4	10/10/2011	1587.43					200	7,200
	11/8/2011	1587.35		0.22			190	7,100
	12/13/2011	1587.3					150	5,200
	1/12/2012	1587.09					230	6,500
	2/16/2012	1586.93		0.3			260	6,900
	3/12/2012	1586.69						
	3/13/2012						260	6,400
	4/12/2012	1586.45					260	6,400
	5/24/2012	1586.45		0.34			300	6,300
	6/21/2012	1586.44					300	6,400
	7/10/2012	1586.25					290	6,400
	8/14/2012	1586.68		0.37			300	6,500
	9/11/2012	1587.42					300	6,400
	10/10/2012	1587.66					270	6,600
	11/14/2012	1587.78		0.28			220	6,400
	12/6/2012	1587.59					210	6,700
MW-K5	10/10/2011	1568.92					16	6,900
	11/8/2011	1568.63		0.024			17	7,000
	12/13/2011	1570.62					18	6,500

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
MW-K5	1/12/2012	1567.86					20	6,800
	2/16/2012	1566.82		0.061			20	7,000
	3/13/2012	1567.29					21	6,600
	4/12/2012	1567.01					19	6,300
	5/23/2012	1566.53	78	0.053		13	23	7,000
	6/21/2012	1567.7					23	7,000
	7/10/2012	1566.6					22	6,700
	8/13/2012	1567.72		0.046			20	6,600
	9/11/2012	1567.43					23	6,600
	10/10/2012	1569.84					21	6,500
	11/14/2012	1569.44		0.024			17	6,600
	12/6/2012	1568.92					20	6,700
PC-1	5/17/2012	Dry						
PC-2	5/17/2012	1568.59	24	0.077		14	4.4	5,500
PC-4	5/17/2012	1564.25	88	0.081		20	8.4	7,100
PC-18	10/3/2011	1589.88						
	10/11/2011						180	9,500
	11/7/2011	1590.33		0.15			170	9,800
	12/13/2011	1590.32					160	8,900
	1/11/2012	1590.16					170	9,700
	2/16/2012	1590.07		0.15			170	10,000
	3/12/2012	1589.65					180	9,200
	4/11/2012	1590.07					160	9,400
	5/24/2012	1589.44		0.15			170	9,900
	6/21/2012	1589.43					170	9,800
	7/11/2012	1589.36					170	9,900
	8/15/2012	1589.5		0.16			170	10,000
	9/10/2012	1590.1					190	9,600
	10/9/2012	1590.44					190	9,600
	11/14/2012	1590.62		0.087			170	9,600
	12/5/2012	1590.46					160	9,600
PC-21A	5/8/2012	1692.65	350	0.34		22	3.2	10,000
PC-24	5/7/2012	1612.27		0.26			39	11,000
PC-28	5/9/2012	1638.86		1.1			420	6,600
PC-31	5/10/2012	1647.54		0.0014 J			16	5,400
PC-37	10/12/2011	1680.14						
	11/1/2011	1680.04		0.21			360	7,200
	12/14/2011	1679.85						
	1/10/2012	1679.74						
	2/6/2012	1679.52		0.25			400	7,300
	3/15/2012	1679.2						
	4/17/2012	1679.25						
	5/8/2012	1679.01		0.24			430	7,300
	6/20/2012	1679.5						
	7/12/2012	1679.18						

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-37	8/6/2012	1678.69		0.24			380	7,200
	9/13/2012	1678.21						
	10/17/2012	1677.95						
	11/5/2012	1678.67		0.23			420	7,200
	12/11/2012	1677.89						
PC-40	5/8/2012	1657.43		0.0022 J			1.1	13,000
PC-50	5/7/2012	1620.87		0.069			160	9,600
PC-53	10/10/2011	1567.44					3.2	4,900
	11/8/2011	1567.72		0.046			3.2	4,800
	12/13/2011	1570.09					3.0	4,800
	1/12/2012	1567.31					3.6	5,000
	2/16/2012	1565.53		0.054			3.5	5,100
	3/13/2012	1566.25					3.3	4,800
	4/12/2012	1565.89					3.2	4,900
	5/23/2012	1565.41		0.051			3.6	5,100
	6/21/2012	1567.25					3.5	5,300
	7/10/2012	1567.19					3.7	5,100
	8/13/2012	1566.09		0.05			3.2	5,100
	9/11/2012	1568.71					1.0	4,200
	10/10/2012	1569.09					2.0	4,800
	11/14/2012	1568.69		0.039			2.8	4,900
	12/6/2012	1568.2					2.9	4,800
PC-54	10/12/2011	1683.88						
	10/31/2011	1683.74		1.5			220	5,600
	(FD)			1.6			220	5,600
	12/14/2011	1683.41						
	1/10/2012	1683.24						
	2/6/2012	1683.15		1.6			260	5,500
	3/15/2012	1682.68						
	4/17/2012	1682.73						
	5/8/2012	1682.42		1.5			240	5,300
	6/20/2012	1682.12						
	7/12/2012	1682.73						
	8/6/2012	1681.89		1.6			220	5,300
	9/13/2012	1681.42						
	10/16/2012	1681.31						
	11/5/2012	1681.83		1.5			200	5,400
	12/11/2012	1681.2						
PC-55	10/11/2011	1589.72					0.83	7,700
	11/8/2011	1591.33		0.0018 J			0.76	7,500
	12/13/2011	1590.05					0.76	7,200
	1/11/2012	1591.13					0.92	7,600
	2/14/2012	1590.94						
	2/20/2012			0.0014 J			1.0	7,500
	3/13/2012	1590.63					1.1	7,500

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-55	4/11/2012	1590.41					1.1	7,700
	5/23/2012	1590.41		0.0028 J			1.5	7,400
	6/21/2012	1590.44					1.2	7,400
	7/10/2012	1590.39						
	7/11/2012						1.4	7,600
	8/14/2012	1590.66		0.0048 J			1.5	7,400
	9/10/2012	1591.11					1.5	7,100
	10/9/2012	1591.56					1.8	7,300
	11/14/2012	1591.66		<0.00088			1.0	7,300
	12/5/2012	1590.06					1.4	7,200
PC-56	10/11/2011	1555.11					15	5,200
	11/7/2011	1554.86		0.0043 J			15	4,900
	12/12/2011	1555.1					14	4,700
	1/11/2012	1554.79					15	5,000
	2/15/2012	1554.04		0.0042 J			14	4,900
	3/12/2012	1554.08					14	4,800
	4/11/2012	1553.55					14	4,900
	5/22/2012	1553.02		0.0051 J			18	5,000
	6/11/2012	1552.76					18	5,100
	7/10/2012	1552.85					17	5,100
	8/15/2012	1552.83		0.0059 J			18	5,300
	9/10/2012	1552.71					23	6,400
	10/9/2012	1555.81					18	5,600
	11/13/2012	1555.5		0.0034 J			16	5,100
PC-58	10/11/2011	1554.53					2.2	3,300
	11/7/2011	1554.27		0.02			2.0	3,000
	12/12/2011	1554.5					1.9	2,900
	1/11/2012	1554.07					1.9	3,000
	2/15/2012	1553.6		0.019 J			2.1	3,300
	3/12/2012	1553.64					2.0	2,900
	4/11/2012	1553.06					2.0	3,100
	5/22/2012	1552.53		0.03			2.5	3,500
	6/11/2012	1552.3					2.9	3,600
	7/10/2012	1552.51					2.2	3,500
	8/15/2012	1551.36		0.027			2.4	3,800
	9/10/2012	1551.81					1.9	8,600
	10/9/2012	1554.34					2.5	6,400
	11/13/2012	1553.96		0.041			2.7	7,300
PC-59	10/11/2011	1555.33					5.2	3,600
	11/7/2011	1555.49		<0.00088			5.1	3,400
	12/12/2011	1555.57					4.9	3,500
	1/11/2012	1555.16					5.1	3,500
	2/15/2012	1554.78		0.001 J			5.0	3,500
	3/12/2012	1555					4.8	3,300
	4/11/2012	1554.41					4.4	3,300

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-59	5/22/2012	1554.06		0.0022 J			4.4	3,100
	6/11/2012	1553.74					3.9	3,200
	7/10/2012	1553.63					4.1	3,200
	8/15/2012	1553.74		0.0017 J			3.8	3,100
	9/10/2012	1553.62					3.8	3,000
	10/9/2012	1556.42					3.6	3,100
	11/13/2012	1556.12		<0.00088			3.4	2,900
PC-60	10/11/2011	1555.45					4.9	3,100
	11/7/2011	1555.19		0.00074 J			4.6	3,000
	12/12/2011	1555.42					3.5	2,800
	1/11/2012	1554.91					2.9	2,600
	2/15/2012	1554.35		0.0013 J			3.3	2,600
	3/12/2012	1554.48					2.8	2,500
	4/11/2012	1553.86					3.6	2,800
	5/22/2012	1553.32		<0.00088			4.6	2,800
	6/11/2012	1553.11					4.5	2,900
	7/10/2012	1553.05					4.0	2,800
	8/15/2012	1553.16		0.00063 J			4.0	2,800
	9/10/2012	1553.07					3.4	2,500
	10/9/2012	1556.17					3.2	2,500
	11/13/2012	1555.83		<0.00088			2.9	2,600
PC-62	10/11/2011	1556.25					0.3	2,200
	11/7/2011	1556		0.0011 J			0.36	2,100
	12/12/2011	1555.96					0.25	2,000
	1/11/2012	1555.65					0.19	2,000
	2/15/2012	1555.45		0.0016 J			0.18	2,000
	3/12/2012	1555.6					0.2	2,000
	4/11/2012	1555.1					0.76	2,200
	5/23/2012	1554.94		0.0022 J			0.081	1,900
	6/11/2012	1554.48					0.099	1,900
	7/10/2012	1554.55					0.15	2,000
	8/15/2012	1554.53		0.0011 J			0.16	1,800
	9/10/2012	1554.42					0.65	2,400
	10/9/2012	1556.91					2.4	3,000
	11/13/2012	1556.58		0.0011 J			1.9	2,600
PC-64	5/9/2012	1665.71		1.3			400	7,100
PC-65	5/9/2012	1665.93		0.76			210	5,900
PC-66	5/9/2012	1660.87		1.6			230	6,900
PC-67	5/9/2012	1660.79		0.65			57	12,000
PC-68	10/11/2011	1556.69					<0.00025	2,000
	11/7/2011	1556.35		0.0029 J			<0.00025	1,900
	12/12/2011	1556.36					<0.00025	1,900
	1/11/2012	1556.12					0.0021 J	1,800
	2/15/2012	1556.53		<0.00088			<0.00025	1,900
	3/12/2012	1556.05					<0.00025	1,900

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-68	4/11/2012	1555.94					<0.00025	1,900
	5/23/2012	1555.32		<0.00088			<0.00025	2,000
	6/11/2012	1555.02					0.0048	1,900
	7/10/2012	1554.8					<0.00025	1,900
	8/15/2012	1555.14		0.0013 J			<0.00025	1,800
	9/10/2012	1555					0.037	2,200
	10/9/2012	1557.42					0.032	2,100
	11/13/2012	1557.09		<0.00088			0.003 J	1,900
	12/5/2012	1554.7					0.057	1,900
PC-71	10/10/2011	1674.09						
	10/31/2011	1674.04		0.28			320	7,000
	12/14/2011	1673.92						
	1/10/2012	1674.12						
	2/6/2012	1673.55		0.39			340	7,100
	3/15/2012	1673.38						
	4/17/2012	1673.33						
	5/8/2012	1673.06		0.29			420	7,400
	6/20/2012	1673.55						
	7/12/2012	1673.43						
	8/6/2012	1672.7		0.32			310	6,900
	9/13/2012	1672.91						
	10/16/2012	1672.68						
	11/5/2012	1673.1		0.34			480	7,300
	12/11/2012	1672.83						
PC-72	10/12/2011	1671.2						
	11/1/2011	1671.25		0.19			230	6,500
	12/14/2011	1671.18						
	1/10/2012	1671.16						
	2/6/2012	1670.94		0.2			260	6,800
	3/15/2012	1670.88						
	4/17/2012	1671.47						
	5/8/2012	1670.57		0.18			210	6,900
	6/20/2012	1670.49						
	7/12/2012	1670.83						
	8/6/2012	1670.33		0.34			490	8,200
	9/13/2012	1670.2						
	10/16/2012	1670.03						
	11/5/2012	1671.32		0.19			230	6,700
	(FD)			0.2			240	6,800
	12/11/2012	1668.61						
PC-73	10/12/2011	1669.2						
	11/1/2011	1669.57		0.36			300	6,500
	12/14/2011	1669.49						
	1/10/2012	1669.52						
	2/6/2012	1669.37		0.35			350	6,600

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-73	3/15/2012	1669.24						
	4/17/2012	1669.39						
	5/8/2012	1669.08		0.38			390	6,900
	6/20/2012	1668.94						
	7/12/2012	1669.59						
	8/6/2012	1668.89		0.37			330	7,000
	9/13/2012	1669.63						
	10/16/2012	1669.57						
	11/5/2012	1670.42		0.34			350	6,900
	12/11/2012	1670.18						
PC-74	5/8/2012	1552.65					0.56	4,700
PC-76	5/8/2012	1552.24						
PC-77	5/8/2012	1558.6					3.6	4,300
PC-78	5/8/2012	1559.37						
PC-79	5/7/2012	1554.26		<0.00088			3.8	2,700
PC-80	5/7/2012	1554.3						
PC-81	5/7/2012	1554.13						
PC-82	5/7/2012	1550.54	0.2			0.56	1.4	3,100
PC-83	5/7/2012	1551.31						
PC-86	10/10/2011	1548.72					0.47	2,300
	11/7/2011	1548.5		0.0014 J			0.35	2,300
	12/12/2011	1548.49					0.3	2,200
	1/11/2012	1548.3					0.25	2,200
	2/15/2012	1548.12		<0.00088			0.37	2,100
	3/12/2012	1547.89					0.37	2,200
	4/11/2012	1547.48					0.58	2,200
	5/22/2012	1547.01	0.0052	<0.00088		0.39	0.92	2,100
	6/11/2012	1546.62					0.98	2,200
	7/9/2012	1546.95					1.0	2,200
	8/13/2012	1546.72		<0.00088			0.96	2,200
	9/10/2012	1548.81					1.0	2,100
	10/9/2012	1549.02					1.3	2,200
	11/13/2012	1548.7		<0.00088			1.1	2,200
	12/5/2012	1547.55					0.86	2,200
PC-87	5/7/2012	1547.07						
PC-88	5/7/2012	1543.14						
PC-90	10/10/2011	1544.28					8.9	3,800
	11/7/2011	1544.07		0.0018 J			8.9	3,800
	12/12/2011	1544.15					9.2	3,800
	1/11/2012	1544.03					7.6	3,700
	2/15/2012	1543.89		0.0011 J			7.2	3,700
	3/12/2012	1543.03					11	3,800
	4/11/2012	1542.75					9.2	3,900
	5/22/2012	1542.71	8.7	0.002 J		5.7	8.0	3,500
	6/11/2012	1542.32					8.0	3,600

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-90	7/9/2012	1542					13	4,200
	8/13/2012	1542.41		0.0030 J			13	4,400
	9/10/2012	1544.28					15	5,100
	10/9/2012	1544.41					16	5,400
	11/13/2012	1544.21		<0.00088			18	4,900
	12/5/2012	1544.11					16	4,600
PC-91	10/10/2011	1540.39					5.0	3,200
	11/7/2011	1540.35		<0.00088			4.8	3,200
	12/12/2011	1540.44					4.7	3,200
	1/11/2012	1540.3					5.1	3,200
	2/15/2012	1540.05		<0.00088			5.0	3,200
	3/12/2012	1539.77					5.1	3,200
	4/11/2012	1539.42					4.9	3,200
	5/22/2012	1539.01	2.5	0.0025 J		0.73	4.1	3,000
	6/11/2012	1538.74					3.6	3,000
	7/9/2012	1539.44					3.0	2,800
	8/13/2012	1539.03		0.0011 J			2.6	2,800
	9/10/2012	1539.21					3.2	3,000
	10/9/2012	1540.84					4.4	3,300
	11/13/2012	1540.8		0.0012 J			5.4	3,700
	12/5/2012	1540.65					5.0	3,700
PC-92	5/22/2012	1539.18		0.0012 J			2.0	2,700
	11/13/2012			<0.00088			4.0	3,100
PC-94	11/14/2011	1536.32		0.033			7.7	4,400
	2/15/2012	1536.32		0.036			7.4	4,500
	5/22/2012	1535.14		0.031			9.0	4,500
	8/15/2012	1534.8		0.028			9.1	4,800
	11/13/2012	1537.6		0.011 J			12	5,000
PC-96	5/8/2012	1544.75					3.8	3,000
PC-97	10/10/2011	1543.79					1.8	2,900
	11/7/2011	1543.66		0.0016 J			1.3	2,700
	12/12/2011	1543.59					0.89	2,600
	1/11/2012	1543.45					0.75	2,600
	2/15/2012	1543.41		0.0031 J			0.63	2,500
	3/12/2012	1542.72					0.73	2,400
	4/11/2012	1542.43					1.0	2,500
	5/22/2012	1542.2		0.0018 J			2.1	2,600
	6/11/2012	1541.8					2.5	2,700
	7/9/2012	1541.67						
	7/10/2012						2.9	2,800
	8/13/2012	1541.68		<0.00088			3.3	3,000
	9/10/2012	1543.88					3.6	3,000
	10/9/2012	1543.97					4.0	2,900
	11/13/2012	1543.75		<0.00088			3.7	2,900
	12/5/2012	1543.6					3.8	2,900

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-98R	10/11/2011	1570.67					24	6,400
	11/8/2011	1570.37		0.015 J			21	6,300
	12/13/2011	1571.51					16	6,700
	1/12/2012	1569.38					19	6,800
	2/16/2012	1568.31		0.032			20	7,000
	3/14/2012	1568.78					22	6,700
	4/12/2012	1569.05					20	6,800
	5/24/2012	1568.34		0.015			24	6,400
	6/21/2012	1569.08					22	6,400
	7/11/2012	1568.73					22	6,600
	8/14/2012	1568.76		0.012			21	6,400
	9/11/2012	1569.35					23	6,400
	10/10/2012	1571.45					26	6,000
	11/14/2012	1571.05		0.013 J			22	6,000
	12/6/2012	1570.5					21	6,400
PC-99R2/R3	10/3/2011	1536.02					11	4,300
	10/31/2011	1535.75		0.0035 J			11	4,300
	11/9/2011	1535.75						
	12/5/2011	1535.74					11	4,300
	1/4/2012	1538.41		0.0052 J			12	4,400
	2/6/2012	1524.12		0.0022 J			14	4,400
	3/6/2012						13	4,600
	3/7/2012	1537.44						
	4/10/2012	1538.35					14	4,600
	5/8/2012	1537.88		0.0018 J			14	4,600
	6/5/2012	1521.96					14	4,600
	7/2/2012	1537.35					14	4,800
	8/6/2012	1511.82		0.0019 J			14	4,600
	9/5/2012	1523.3					16	5,100
	10/2/2012						16	5,500
	10/9/2012	1523.16						
	11/5/2012	1515.85		0.0027 J			6	5,300
	12/4/2012						16	5,100
	12/10/2012	1515.97						
PC-101R	10/13/2011	1588.82					150	10,000
	11/7/2011	1588.56		0.094			150	10,000
	12/12/2011	1589.09					160	10,000
	1/12/2012	1588.86					160	10,000
	2/16/2012	1588.74		0.096			160	10,000
	3/13/2012	1588.47					160	9,500
	4/12/2012	1588.77					140	10,000
	5/24/2012	1588.2		0.092			160	9,900
	6/21/2012	1588.46					150	10,000
	7/10/2012	1588.04					150	10,000
	8/14/2012	1588.3		0.094			150	10,000

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-101R	9/11/2012	1588.93					160	9,500
	10/10/2012	1589.29					170	9,800
	11/14/2012	1589.39		0.06			150	10,000
	12/6/2012	1589.21					150	10,000
PC-103	10/11/2011	1576.19					13	4,500
	11/8/2011	1576.08		0.0034 J			14	4,400
	12/13/2011	1575.91					13	4,400
	1/12/2012	1575.21					15	5,100
	2/16/2012	1574.96		0.0024 J			16	5,300
	3/14/2012	1575.18					17	5,200
	4/12/2012	1574.93					17	5,200
	5/24/2012	1575.31	1.9	0.0022 J		4.9	18	5,700
	6/21/2012	1575.48					17	5,200
	7/11/2012	1575.26					15	5,500
	8/15/2012	1576.21		0.0027 J			16	5,000
	9/11/2012	1575.59					15	4,400
	10/10/2012	1577.31					14	4,200
	11/14/2012	1576.79		0.00096 J			15	4,500
	12/6/2012	1576.16					15	4,400
PC-107	5/9/2012	1607.09					63	4,400
PC-108	5/8/2012	1571.95					0.036	2,400
PC-110	5/8/2012	1579.55					2.0	4,500
PC-115R	10/3/2011	1543.14					9.2	3,700
	10/31/2011	1543.09		0.0011 J			7.7	3,600
	11/9/2011	1543.09						
	12/5/2011	1543.27					6.9	3,500
	1/4/2012	1546.06		0.0013 J			7.9	3,500
	2/6/2012	1545.86		0.0015 J			8.2	3,300
	3/6/2012						7.6	3,500
	3/7/2012	1545.22						
	4/10/2012	1546.1					7.8	3,400
	5/8/2012	1545.94		<0.00088			7.8	3,400
	6/5/2012	1540.47					7.6	3,300
	7/2/2012	1540.26					8.5	3,500
	8/6/2012	1540.19		0.0025 J			8.4	3,500
	9/5/2012	1540.21					12	4,000
	10/2/2012						14	4,400
	10/9/2012	1540.04						
	11/5/2012	1546.41		<0.00088			4.7	4,100
	12/4/2012						12	4,700
	12/10/2012	1545.92						
PC-116R	10/3/2011	1537.69					9.9	4,400
	10/31/2011	1537.57		0.0015 J			9.9	4,200
	11/9/2011	1537.57						
	12/5/2011	1537.79					9.3	4,300

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-116R	1/4/2012	1537.47		0.0021 J			11	4,400
	2/6/2012	1537.38		0.0012 J			11	4,200
	3/6/2012						10	4,300
	3/7/2012	1537.59						
	4/10/2012	1537.59					9.3	4,200
	5/8/2012	1537.19		<0.00088			11	4,200
	6/5/2012	1535.19					11	4,200
	7/2/2012	1537.02					11	4,400
	8/6/2012	1535		0.0018 J			11	4,300
	9/5/2012	1534.93					14	4,800
	10/2/2012						14	5,100
	10/9/2012	1535.12						
	11/5/2012	1537.61		0.0016 J			5.2	4,900
	12/4/2012						12	4,800
	12/10/2012	1537.56						
PC-117	10/3/2011	1542.62						
	10/4/2011						4.8	3,300
	10/31/2011	1541.6		0.0022 J			5.2	3,300
	11/9/2011	1541.6						
	12/5/2011	1541.83					5.2	3,400
	1/4/2012	1541.91		0.0015 J			5.4	3,400
	2/6/2012	1541.83		0.0035 J			5.6	3,200
	3/6/2012						5.5	3,400
	3/7/2012	1541.55						
	4/10/2012	1541.95					5.4	3,500
	5/8/2012	1542.02		0.00093 J			6.3	3,400
	6/5/2012	1536.86					6.2	3,500
	7/2/2012	1536.63					6.6	3,600
	8/6/2012	1536.65		0.0013 J			6.4	3,500
	9/5/2012	1536.56					6.8	3,500
	10/2/2012						6.3	3,500
	10/9/2012	1536.65						
	11/5/2012	1539.13		0.0015 J			6.2	3,500
	12/4/2012						6.5	3,500
	12/10/2012	1539.06						
PC-118	10/3/2011	1546.23					4.6	3,100
	10/31/2011	1546.27		0.0015 J			4.4	3,000
	11/9/2011	1546.27						
	12/5/2011	1546.38					4.2	3,000
	1/4/2012	1546.54		0.00088 J			4.0	3,000
	2/6/2012	1546.3		<0.00088			3.6	2,600
	3/6/2012						2.6	2,700
	3/7/2012	1546.22						
	4/10/2012	1546.53					2.2	2,600
	5/8/2012	1546.55		<0.00088			2.0	2,400

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-118	6/5/2012	1543.48					1.9	2,400
	7/2/2012	1546.09					2.2	2,400
	8/6/2012	1543.06		0.0076 J			2.0	2,400
	9/5/2012	1543.23					3.5	2,600
	10/2/2012						4.0	2,700
	10/9/2012	1543.17						
	11/5/2012	1545.97		0.00090 J			3.8	2,700
	12/4/2012						3.5	2,700
	12/10/2012	1545.93						
PC-119	10/3/2011						0.81	2,300
	10/31/2011	1548.08		0.0019 J			0.67	2,300
	11/9/2011	1547.95						
	12/5/2011	1548.08					0.63	2,200
	1/4/2012	1547.96		0.00097 J			0.56	2,200
	2/6/2012	1547.73		0.0023 J			0.40	2,000
	3/6/2012						0.38	2,100
	3/7/2012	1547.81						
	4/10/2012	1547.93					0.31	2,100
	5/8/2012	1547.75		0.002 J			0.56	2,100
	6/5/2012	1545.96					0.56	2,100
	7/2/2012	1548.5					0.46	2,100
	8/6/2012	1545.49		0.0010 J			0.50	2,000
	9/5/2012	1545.44					0.61	2,000
	10/2/2012						0.70	2,100
	10/9/2012	1545.59						
	11/5/2012	1548.09		<0.00088			0.66	2,100
	12/4/2012						0.60	2,100
	12/10/2012	1547.98						
PC-120	10/3/2011	1549.12					0.38	2,300
	10/31/2011	1549.63		0.0015 J			0.36	2,200
	11/9/2011	1549.63						
	12/5/2011	1549.79					0.29	2,200
	1/4/2012	1549.7		0.0011 J			0.25	2,300
	2/6/2012	1549.43		0.0019 J			0.23	2,200
	3/6/2012						0.19	2,200
	3/7/2012	1549.61						
	4/10/2012	1549.62					0.11	2,100
	5/8/2012	1549.65		0.0018 J			0.15	2,100
	6/5/2012	1547.86					0.67	2,200
	7/2/2012	1549.6					0.67	2,200
	8/6/2012	1547.63		<0.00088			0.67	2,100
	9/5/2012	1547.64					0.68	2,100
	10/2/2012						0.72	2,100
	10/9/2012	1547.79						
	11/5/2012	1550.1		0.00068 J			0.79	2,200

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-120	12/4/2012						0.7	2,100
	12/10/2012	1550.33						
PC-121	10/3/2011	1549.43					0.60	2,500
	10/31/2011	1549.12		0.0019 J			0.68	2,400
	11/9/2011	1549.12						
	12/5/2011	1549.23					0.66	2,400
	1/4/2012	1549.12		0.0009 J			0.75	2,400
	2/6/2012	1548.88		<0.00088			0.64	2,300
	3/6/2012						0.27	2,200
	3/7/2012	1549.24						
	4/10/2012	1549.1					0.25	2,100
	5/8/2012	1549.04		0.001 J			0.28	2,200
	6/5/2012	1547.44					0.88	2,200
	7/2/2012	1547.22					0.85	2,200
	8/6/2012	1547.18		0.0013 J			0.81	2,200
	9/5/2012	1547.19					1.0	2,200
	10/2/2012						0.98	2,200
	10/9/2012	1547.67						
	11/5/2012	1549.57		<0.00044			1.0	2,200
	12/4/2012						0.80	2,200
	12/10/2012	1549.45						
PC-122	10/10/2011	1584.78					16	9,000
	11/8/2011	1585.66		0.13			15	9,400
	12/13/2011	1584.72					15	9,000
	1/12/2012	1585.11					16	8,400
	2/16/2012	1584.92		0.16			19	9,600
	3/13/2012	1584.82					20	8,700
	4/12/2012	1584.74					20	9,600
	5/23/2012	1584.58		0.18			23	9,700
	6/12/2012	1584.56						
	6/21/2012						22	10,000
	7/10/2012	1584.72					20	7,600
	8/13/2012	1584.61		0.18			22	10,000
	9/11/2012	1585.07					18	7,700
	10/10/2012	1585.52					24	9,600
	11/14/2012	1585.75		0.16			21	9,500
	12/6/2012	1585.7					21	9,000
PC-123	10/11/2011	1596.27						
	10/31/2011	1603.77		1.5			330	7,000
	2/6/2012	1603.52		1.3			340	6,800
	(FD)			1.3			350	6,900
	5/7/2012	1603.26		1.3			350	6,900
	8/6/2012	1603.51		1.3			310	6,900
	11/5/2012	1602.64		1.3			290	6,800

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-124	10/31/2011	1610.79		0.096			7.3	7,500
	2/6/2012	1610.41		0.068			7.9	7,800
	5/7/2012	1610.23	150	0.066		24	8.0	7,500
	8/6/2012	1610.38		0.081			7.3	8,100
	11/5/2012	1610.45		0.077			7.8	8,300
PC-125	10/31/2011	1612.51		0.0026 J			0.27	1,900
	2/6/2012	1611.66		0.011 J			2.1	3,000
	5/7/2012	1611.34		0.046			7.1	7,400
	8/6/2012	1611.58		0.14			7.3	8,000
	11/5/2012	1612.15		0.069			8.6	8,000
PC-126	10/31/2011	1612.62		0.13			15	8,800
	2/6/2012	1611.97		0.19			24	9,400
	5/7/2012	1611.74	270	0.17		38	29	9,600
	8/6/2012	1611.87		0.2			23	9,900
	11/5/2012	1612.42		0.22			26	10,000
PC-127	10/31/2011	1613.86		1.4			310	6,800
	2/6/2012	1613.46		1.3			320	6,800
	5/7/2012	1613.2		1.2			350	6,700
	8/6/2012	1613.32		1.3			320	7,000
	11/5/2012	1613.91		1.2			320	6,700
PC-128	10/31/2011	1615.1		0.25			240	5,600
	2/6/2012	1614.78		0.28			280	5,700
	5/8/2012	1614.48	370	0.31		22	300	5,700
	8/6/2012	1614.94		0.35			260	5,800
	11/5/2012	1615.18		0.36			270	5,800
PC-129	10/31/2011	1615.73		0.91			450	6,800
	2/6/2012	1615.37		0.96			490	6,700
	5/7/2012	1615.18		0.98			510	6,900
	8/6/2012	1615.51		1			460	7,400
	11/5/2012	1615.68		1			450	7,100
PC-130	10/31/2011	1614.22		0.97			490	7,400
	2/6/2012	1614.02		0.95			520	7,500
	5/7/2012	1613.7	780	0.98		38	560	7,600
	8/6/2012	1614		1			480	7,600
	11/5/2012	1614.06		0.98			470	7,400
PC-131	10/31/2011	1622.64		0.0029 J			4.1	9,200
	2/6/2012	1620.59		0.0046 J			4.5	8,800
	5/7/2012	1622.37		0.0012 J			4.1	8,700
	8/6/2012	1622.45		<0.00088			3.2	9,000
	11/5/2012	1623.03		0.0014 J			3.6	8,700
PC-132	10/31/2011	1625.19		0.0035 J			1.6	8,600
	2/6/2012	1625.17		0.0032 J			1.5	8,400
	5/7/2012	1624.95	0.72	<0.00088		0.27	1.4	8,500
	8/6/2012	1625.18		0.0024 J			1.1	8,700
	11/5/2012	1625.33		0.0029 J			2.4	8,800

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID Units	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-133	10/3/2011						1.7	2,800
	10/31/2011			0.0016 J			1.3	2,600
	12/5/2011						1.1	2,500
	1/4/2012			0.00098 J			0.82	2,500
	2/6/2012			0.001 J			0.67	2,400
	3/6/2012						0.72	2,400
	4/10/2012						0.65	2,400
	5/8/2012			<0.00088			0.63	2,400
	6/5/2012						6.4	3,200
	8/6/2012			0.0019 J			7.3	3,300
	9/5/2012						9.0	3,400
	10/2/2012						10	3,900
	11/5/2012			0.0014 J			11	3,900
	12/4/2012						13	4,100
PC-134A	5/17/2012	1588.97		0.021			32	7,700
PC-135A	11/1/2011	1589.47		0.0073 J			7.7	8,200
	2/7/2012	1589.09		0.014 J			25	8,700
	5/17/2012	1588.6		0.017 J			33	8,500
	8/7/2012	1588.67						
	8/8/2012			0.0066 J			19	8,800
	11/6/2012	1589.87		0.0093 J			18	8,800
PC-136	11/1/2011	1584.55		2.1			91	6,800
	2/7/2012	1583.99		3.4			120	6,500
	5/17/2012	1583.68		4.6			120	6,600
	8/7/2012	1583.73						
	8/8/2012			4.3			130	6,700
	11/6/2012	1584.82		1.7			100	6,800
PC-137	11/1/2011	1586.97		0.005 J			0.21 J+	2,800
	5/17/2012	1586.06		0.0018 J			0.27	2,800
PC-142	5/24/2012	1591.35		0.0019 J			14	5,700
PC-143	5/22/2012	1588.66		0.0019 J			2.0	7,500
PC-144	10/11/2011	1588.46						
	11/1/2011	1588.44		0.48			310	6,100
	12/12/2011	1588.36						
	2/7/2012	1588		0.52			330	6,200
	(FD)			0.51			310	6,200
	5/24/2012	1587.48		0.56			350	6,300
	7/10/2012	1587.29						
	8/7/2012	1587.72						
	8/8/2012			0.51			320	6,400
	9/11/2012	1588.38						
	10/9/2012	1588.68						
	11/6/2012	1588.88		0.6			330	6,300
	12/6/2012	1587.33						
PC-145	5/23/2012	1583.34		0.6			120	8,600

TABLE A-1: Groundwater Elevation and Analytical Data for Five Quarters
October 2011 - December 2012
Nevada Environmental Response Trust Site
Henderson, Nevada

Well ID	Collection Date	GW Elevation (ft amsl)	Chlorate (mg/L)	Chromium (mg/L)	Chromium VI (mg/L)	Nitrate (mg/L)	Perchlorate (mg/L)	TDS (mg/L)
PC-147	5/17/2012	1585.69						
PC-148	11/1/2011	1589.78						
	11/2/2011			0.026			31	7,500
	2/8/2012	1589.5		0.13			31	7,200
	5/17/2012	1588.77		0.027			32	7,500
	8/7/2012	1588.78						
	8/8/2012			0.023			30	7,400
	11/6/2012	1589.93		0.025			32	7,400
PC-149	11/1/2011	1589.7						
	11/2/2011			0.011 J			17	4,000
	2/8/2012	1589.18		0.015 J			20	4,000
	5/17/2012	1588.73		0.0061 J			22	4,100
	8/7/2012	1588.88						
	8/8/2012			0.0073 J			17	4,100
	11/6/2012	1590.1		0.012 J			22	4,400
PC-150	11/1/2011	1589.46		0.2			220	5,800
	2/7/2012	1589.01		0.25			230	5,800
	5/17/2012	1588.73		0.25			250	5,800
	8/7/2012	1588.69						
	8/8/2012			0.24			200	6,000
	11/6/2012	1589.88		0.25			210	5,800
TR-1	5/22/2012			0.017 J			<0.000254	740
TR-2	5/22/2012	1725.61		0.021			<0.000254	580
TR-3	5/22/2012	1790.14		0.016 J			<0.000254	670
TR-4	5/22/2012	1736.41		0.025			0.0013 J	740
TR-5	5/22/2012			0.016 J			<0.000254	750
TR-6	5/22/2012	1762.68		0.026			0.34	28,000
TR-7	5/22/2012	1817.27		0.013 J			<0.000254	830
	(FD)			0.013 J			<0.000254	820
TR-8	5/22/2012	1778.78		0.015 J			0.096	1,200
TR-9	5/21/2012	1816.69		0.013 J			<0.000254	780
TR-10	5/21/2012	1793.94		0.13			2.8	2,000
TR-11	5/24/2012	1725.25		0.015			<0.000254	720
TR-12	5/24/2012	1694.33		0.048			<0.000254	530

Appendix B

Groundwater Field Records

VEOLIA
WATER

Fourth Quarter Well Monitoring

Nevada Environmental Response Trust Henderson, Nevada

November 5, 2012 thru November 15, 2012

CONTENTS

Field Data Letter Report

Section

VEOLIA
WATER

Letter of Transmittal

Attention: John Pekala
Senior Manager
Environ International Corp.
510 Fourth St.
Henderson, NV 89015

Date: Jan 10, 2013

Project:

2012 4th Quarter Groundwater Monitoring

Enclosed:

1 copy of Field Data Letter Report

Remarks:
John,
The enclosed Quarterly Groundwater Monitoring Report with supporting documents is provided for your records.

Signature:

Steve Kubacki
Veolia Water NA

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-6001 / Fax 702-566-9030
www.Veoliawaterna.com

VEOLIA
WATER

Field Data Letter Report

1 INTRODUCTION

Nevada Environmental Response Trust (NERT) contracts with Veolia Water North America West LLC. (VWNA) to conduct groundwater sampling and analysis at their Chemical facility, located at 510 Fourth Street, in Henderson, Nevada. The work described herein represents the fourth quarter groundwater sampling event for 2012. The work was conducted in accordance with the Sampling and Analysis Work plan, submitted to Tronox January 9, 2004.

VWNA has 4 staff members trained to assist the quarterly well monitoring events. VWNA monitoring team meets twice prior to the sampling event to discuss all issues associated with this project and to review the status of action items noted in the first meeting. Sampling and laboratory equipment needs, time tables and well site schedules are reviewed. Samples and coolers are checked to ensure that there are no missing bottles.

1.1 SCOPE OF SAMPLING EVENT

This sampling effort included the following tasks:

- Measurement of the pumping water levels in 23 interceptor wells.
- Measurement of the water levels in 7 interceptor wells
- Collection of groundwater samples from 23 interceptor wells.
- Measurement of water levels in 108 monitoring wells.
- Collection of groundwater samples from 87 monitoring wells.
- Collection of groundwater samples from 16 pumping wells.
- Collection of water levels in 7 buddy wells.
- Collection of groundwater sample from 1 Art well not online (ART-6)
- Visitation to 4 dry wells.

Analysis of samples collected from the interceptor and monitoring wells, range from Perchlorate (CLO4), Total Chromium (Cr), Hexavalent Chromium (Cr+6), pH, Specific Conductance (EC), Total Dissolved Solids (TDS) and NPDES list for well M-10, (Up Well). (CR-MS, MN-MS, CU-MS, MO-MS, FE, B, CL, F, TDS, NO3, NO2-N, N-INOR, NH3, NH3-DIST)

Groundwater samples were shipped daily to Eurofins Eaton Analytical for analysis, in Monrovia, California. Eaton Analytical is certified by the State of Nevada.
The scope of this assignment also included compiling the water level and analytical data presented in this report. Data are presented in tabular form.

2 FIELD ACTIVITIES

VWNA conducted the field activities associated with this quarterly sampling event between Monday Nov. 5th and Thursday, Nov. 15th, 2012. Activities included the sounding of "pumping water" levels in the interceptor wells, sounding the "static water" level in the monitoring wells and sampling of both the interceptor and monitoring wells. Prior to each quarter, an inventory list was issued to Environ and their consultants for review and comment. Sampling was conducted according to their specifications.

Eric Crawford and Keinan Pate were responsible for sample collection and recording all pertinent data on sample bottles. Michele Brown supervised the groundwater sampling activities. She is responsible for executing all work elements related to the groundwater sampling program, including laboratory equipment maintenances and calibration, fieldwork, documenting field activities, maintaining field notes and photographs (when applicable), maintaining a record of onsite personnel and visitors, and providing the Operations Manager with information concerning implementation of the sampling plan.

VWNA maintained records of daily events and pertinent sampling data of each well on a field log sheet and addendum data in a bound log book. Log sheet entries included personnel onsite,

weather conditions, water levels, activities conducted, sampling times, pH, EC, temperature and other significant field information.

2.1 Water Level Measurements

VWNA measured the pumping water levels in 23 interceptor wells. The static water readings were taken in Interceptor wells I-AA, I-AB, I-AD, I-AC, I-W, I-X and I-Y. In addition to the interceptor wells, static water levels in 114 monitoring wells were taken. There were twenty-seven (27) wells where only static water levels were required. The following are the 27 wells:

M-166	M-167	M-168	M-169	M-170	M-172	M-173	M-174	M-175	M-176	M-177
ART-1A	ART-2A	ART-3	ART-4	ART-7	ART-8A	M-55	M-56	M-58	M-60	M-75
M-76	M-77	M-78	M-93	M-92						

The water levels were measured to the nearest 0.01 foot using an electronic well sounder.

2.2 Equipment Cleaning Procedures

During the measurement of water levels, the equipment was rinsed with 3 to 4 gallons of de-ionized water after use at each well. The rinse water was collected in a polyethylene container and transported to GW-11 for treatment.

3.0 GROUNDWATER SAMPLING

3.1 Sampling Locations

The following presents the identification of wells sampled.

3.1.1 Interceptor Wells

I-AR	I-B	I-C	I-D	I-E	I-F	I-G	I-H	I-I	I-J	I-K
I-L	I-M	I-N	I-O	I-P	I-Q	I-R	I-S	I-T	I-U	I-V
I-Z										

3.1.2 Monitoring Wells

ARP-1	ARP-2A	ARP-3A	ARP-4A	ARP-5A	ARP-6B	ARP-7	ART-7B	M-10	M-11
M-12A	M-14A	M-19	M-22A	M-23	M-25	M-31A	M-35	M-36	M-37
M-38	M-44	M-48A	M-56	M-77A	M-64	M-65	M-66	M-67	M-68
M-69	M-70	M-71	M-72	M-73	M-74	M-79	M-80	M-81A	M-83

M-95	M-96	M-97	M-115	M-131	M-135	MW-K4	MW-K5	PC-18	PC-53
PC-55	PC-56	PC-58	PC-59	PC-60	PC-62	PC-68	PC-86	PC-90	PC-91
PC-94	PC-97	PC-98R	PC-101R	PC-103	PC-122	PC-123	PC-124	PC-125	PC-126
PC-127	PC-128	PC-129	PC-130	PC-131	PC-132	PC-135A	PC-136	PC-144	PC-148
PC-149	PC-150	PC-37	PC-71	PC-72	PC-73				

3.1.3 Sampling Ports

ART-1	ART-2	ART-3A	ART-4A	ART-6	ART-7A
ART-8	ART-9	PC-99R2/R3	PC-115R	PC-116R	PC-117
PC-118	PC-119	PC-120	PC-121	PC-133	

4.0 SAMPLING TECHNIQUES

4.1 Interceptor Wells

All interceptor wells were sampled using dedicated sampling ports. At the beginning of sampling each well or line, personnel wore a new pair of clean nitrile or latex gloves.

The sampling port was opened to drain any stagnant water from piping and valves. This water is captured and containerized. All captured water is off-loaded at GW-11 for onsite treatment. Following the purging of the sample port, a "water quality" sample was collected for analysis of Perchlorate, Total Chromium, pH, and TDS. VWNA also recorded the "*field*" temperature, pH, and conductivity as well as the pumping water level. The "*field*" parameters are provided in Table 1.

4.2 Monitoring Wells

Monitoring wells were purged before sampling to assure that each sample was collected from fresh formation water.

Eighty-three (83) wells were purged and sampled, using the 12 volt submersible pump. Two wells (2), M-10 and M-11, were purged with the "Ready Flo 2" with variable pump flow control. Two (2) wells, M-36 and M-38 were purged with a dedicated bailer. One well was sampled using a non dedicated/disposable bailer, ART-6. Four wells (4), M-98, M-99, M-100 and M-101, were found to be dry. Hand bailing was done as a result of only needing to purge less than 3

gallons of water, if there was an insufficient amount of water in the well casing to use a pump or due to the location of the well.

Samples for both the interceptor and monitoring wells were collected in appropriate containers supplied by Eurofins Eaton analytical Laboratories and analyzed for the specific required analysis of the well. The bottles were filled with minimal aeration, using laminar flow.

The samples were labeled, packaged, stored, and transported using the procedures outlined in the work plan for well samples. Clear tape may have been used on some bottles to maintain the information integrity of the labels. Where leaking acid` removed the pre labeled information, it was hand restored.

4.3 Problems Encountered

No problems were encountered this quarter.

4.4 Equipment Cleaning Procedures

In addition to using much more water to flush and decontaminate the deionized is changed each morning so the rinsing water is fresh. Non-dedicated sampling equipment was cleaned and decontaminated before use at each new sampling location. Conductivity meter probes, pH electrodes, were thoroughly rinsed with de-ionized water after each well was sampled. The rinsate is captured in a special use bucket for decontamination.

5.0 QUALITY CONTROL

Quality control (QC) procedures include collection and analysis of QC duplicate samples, equipment and field blanks. The analytical laboratory is also required to meet specific QA/QC requirements for surrogate recovery, MS/MSD recovery and RPDs, and LCS recoveries. Duplicate SC readings were conducted at one well each day to insure the accuracy of the Hanna field probe.

5.1 QC Duplicate Samples

QC duplicate samples were collected during the sampling event to evaluate the precision and accuracy of analytical data. The QC duplicates were collected, packaged, and transported in the same manner as the primary sample, but assigned a different identification number.

Four (4) duplicates were collected from the wells, representing at least 5 percent of the samples collected. The duplicate samples were collected from wells M-68, PC-72, M-44 and M-12A. They were analyzed for the same parameters as the primary samples. Eurofins Eaton Analytical was not informed of the identity of these "blind" samples.

Duplicate "field" EC monitoring was conducted on one well visited for that day.

5.2 Equipment Blanks

Two equipment blanks were taken this quarter. The equipment blanks were collected on November 6th and November 7th, 2012. One set of six bottles for each day for a total of twelve bottles. This was done to evaluate the adequacy of cleaning procedures used by field personnel during this sampling event.

5.3 Field Blanks

One field blank sample was collected on November 5, 2012. One set of six bottles was sent to the laboratory for analysis to evaluate the integrity of the de-ionized water used to clean and purge the sampling equipment.

6.0 ANALYTICAL PROCEDURES

The following designates the parameter, analytical method and method reporting limits for groundwater. Some of the following analysis may not have been performed for this reporting period. VWNA lists all appropriate information to include analysis conducted throughout the entire year:

PARAMETER	ANALYTICAL METHOD	MRL
CLO4	EPA Method 314	4.0 µg/L
Total Chromium	EPA Method 200.7	0.01 mg/L

Hexavalent Chromium (Cr+6)	EPA Method 4500 CR-D	0.005 mg/L,
pH	EPA Method 150	.01 units
EC	EPA Method 2510	2 µohms/cm
TDS	EPA Method 2540C.	10 mg/L

Eurofins Eaton Analytical Laboratory QC analytical method and method reporting limits information, was taken from the Eurofins Eaton Analytical Laboratory Data Report.

PARAMETER	ANALYTICAL METHOD	MRL
Chloride	EPA Method 300	80.0 mg/L
Iron (ICAP)	EPA Method 200.7	0.005 mg/L
Manganese (ICAP/MS)	EPA Method 200.8	100 µg/L
Sodium (ICAP)	EPA Method 200.7	5 mg/L
Phenolic Compounds	EPA Method 420.1, 420.2	.010 mg/L
Sulfate	EPA Method 300	80 mg/L
Total Organic Carbon, TOC	EPA Method (ML/SM 5310C)	unknown
Total Organic Halogen, TOX	EPA Method (ML/9020 / SM5320)	unknown
Boron	EPA 200.7	.10 mg/L
Fluoride	SM4500F-C	.050 mg/L
Molybdenum	EPA 200.8	2.0 ug/L
Total Organic Nitrogen	EPA Method 300	0.200 mg/L
Ammonia Nitrogen	EPA Method 350	0.050 mg/L
Nitrate Nitrogen	EPA Method 300	2.0 mg/L
Copper	EPA Method 200.8	2.0 ug/L

6.1 Field Equipment Calibration

Prior to the start of each day's events, field laboratory equipment was calibrated. A Hanna HI 98130 water proof pH, EC/TDS and temperature field probe was calibrated and measurements recorded on daily laboratory calibration maintenance forms, which have been provided.

7.0 SUMMARY RESULTS

7.1 Water Level Measurements

A summary of water level measurements collected for the interceptor and monitoring wells are presented in Table 1.

Pumping water level in interceptors wells. (Measured in feet from below the top of casing.)

LOW	HIGH
44.00 (I-E)	23.15 (I-I)

Static water level monitoring wells. (Measured in feet from below the top of casing.)

LOW	HIGH
46.69 (M-10)	4.78 (PC-97)

7.2 Summary of Field Activities

7.2.1 Interceptor Wells

CLO4, Cr, TDS, pH	23 interceptor wells

7.2.2 Monitoring Wells

CLO4, Cr, Cr+6, pH, and TDS	4 monitoring wells
CLO4, Cr, pH and TDS	83 monitoring wells

7.2.3 QC Duplicate Samples (Measured for the same analyses as the primary samples.)

M-44 and M-12A (Measured for CLO4, Total Cr., Hex Cr., pH and TDS)

PC-72 and M-68 (Measured for Total Cr., pH, CLO4 and TDS)

7.2.4 Equipment Blanks

Two equipment blanks were analyzed for CLO4, Total Cr., Hex Cr., pH, and TDS.

7.2.5 Field Blank

One field blank was analyzed for CLO4, Total Cr., Hex Cr., pH and TDS.

Weather	cool/cloudy
Total # of wells sampled	127
Total water samples collected	134
Total Wells measured DTW only	27
Total Duplicate Samples (5%)	4
Total Equipment Blanks	2
Total Field Blanks	1
Total Wells hand bailed	3
Total Wells considered DRY	4
Total Wells not accessible	0

VEOLIA
WATER

Table of Well Gauging Data

This Section Contains:

- Field Sign - In Log
- Daily Maintenance & Calibration Log
- Table 1 Well Inventory
- Chain-of-Custody & Bottle Order Forms

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-3521 / Fax 702-566-9030
www.Veoliawaterna.com

VEOLIA SAMPLING SIGN IN SHEET

DATE	NAME	COMPANY	SIGNATURE	
11-5-12	Michele Brown	VWNA	Michele Brown	350A
11-5-12	Eric J. Crawford	VWNA		350A
11-5-12	Keiran Ash	VWNA		1:55A
11-6-12	Michele Brown	VWNA	Michele Brown	430A
11-6-12	Eric J. Crawford	VWNA		1130A
11-6-12	Keiran Ash	VWNA		4:45A
11-7-12	Michele Brown	VWNA	Michele Brown	430A
11-7-12	Eric J. Crawford	VWNA		1145A
11-7-12	Keiran Ash	VWNA		450A
11-8-12	Michele Brown	VWNA	Michele Brown	445A
11-8-12	Eric Crawford	VWNA		1140A
11-8-12	Keiran Ash	VWNA		500A

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD
DATE 11-5-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 6.99	2) 7.98	350A /MB
Buffer Temperature	3) 22.4	3) 23.0	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1239	345A/MB
Calibration Value	1) 1292	
Standard Temp	1) 22.7	
	changed standards yes X please check	

Duplicate EC reading Well # I-AR

1st Reading

EC 8.22 mS/cm TEMP 26.5°C

2nd Reading

EC 8.14 mS/cm TEMP 26.6°C

All equipment was rinsed and purged with Deionized water after each well.

Date 11-5-12 Verified MB

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD
DATE 11-6-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 7.01	2) 8.02	435A / MB
Buffer Temperature	3) 23.1	3) 22.9	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1264	430A / MB
Calibration Value	1) 1292	
Standard Temp	1) 23.8	
	changed standards yes X please check	

Duplicate EC reading Well # M-97

1st Reading

EC 5.30 mS/cm TEMP 25.1°C

2nd Reading

EC 5.36 mS/cm TEMP 25.2°C

All equipment was rinsed and purged with Deionized water after each well.

Date 11-6-12 Verified MB

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD
DATE 11-7-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 6.99	2) 7.98	435A/MD
Buffer Temperature	3) 23.0	3) 22.9	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1239	430A/MD
Calibration Value	1) 1288	
Standard Temp	1) 23.1°C	
	changed standards yes X please check	

Duplicate EC reading Well # M-72

1st Reading

EC 7.40 mS/cm TEMP 24.9°C

2nd Reading

EC 7.49 mS/cm TEMP 25.1°C

All equipment was rinsed and purged with Deionized water after each well.

Date 11-7-12 Verified MD

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD
DATE 11-8-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 7.0	2) 7.98	445A/MB
Buffer Temperature	3) 22.9	3) 22.8°C	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 12164	448A/MB
Calibration Value	1) 1287	
Standard Temp	1) 23.5°C	
	changed standards yes X please check	

Duplicate EC reading Well # M-11

1st Reading

EC 3.42 mS/cm TEMP 24.8

2nd Reading

EC 3.44 mS/cm TEMP 25.0°C

All equipment was rinsed and purged with Deionized water after each well.

Date 11-8-12 Verified MB

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
ARP-1	44.2	1613.32	23.35		1589.97			11/14/2012	2:25p		pH, TDS, Cr, ClO_4
ARP-2A	54	1614.18	24.90		1589.28			11/14/2012	11:19a		pH, TDS, Cr, ClO_4
ARP-3A	41	1614.67	26.36		1588.31			11/14/2012	11:05a		pH, TDS, Cr, ClO_4
ARP-4A	33	1615.47	28.35		1587.12			11/14/2012	10:42a		pH, TDS, Cr, ClO_4
ARP-5A	38	1616.10	31.85		1584.25			11/14/2012	10:30a		pH, TDS, Cr, ClO_4
ARP-6B	43	1615.56	31.40		1584.16			11/14/2012	10:14a		pH, TDS, Cr, ClO_4
ARP-7	39.2	1613.20	29.40		1583.80			11/14/2012	9:56a		pH, TDS, Cr, ClO_4
ART-1	56	1614.47	31.23		1583.24			11/5/2012	2:59p	Pumping	pH, TDS, Cr, ClO_4
ART-1A	56	1614.40	23.40		1591.00			11/5/2012	3:00p		DTW Only
ART-2	56	1617.10	27.04		1590.06			11/5/2012	3:02p	Pumping	pH, TDS, Cr, ClO_4
ART-2A	58	1616.81	26.05		1590.76			11/5/2012	3:03p		DTW Only
ART-3	47	1617.93	30.16		1587.77			11/5/2012	3:09p		DTW Only
ART-3A	55	1617.60	37.09		1580.51			11/5/2012	3:10p	Pumping	pH, TDS, Cr, ClO_4
ART-4	46	1617.39	28.10		1589.29			11/5/2012	3:13p		DTW Only
ART-4A	46	1617.46	43.02		1574.44			11/5/2012	3:14p	Pumping	pH, TDS, Cr, ClO_4
ART-6	36	1615.19	34.48		1580.71			11/5/2012	11:43a		pH, TDS, Cr, ClO_4
ART-7	38.9	1615.37	33.34		1582.03			11/5/2012	11:48a		DTW Only
ART-7A	40	1614.78	35.40		1579.38			11/5/2012	11:50a	Pumping	pH, TDS, Cr, ClO_4
ART-7B	50	1619.62	34.70		1584.92			11/14/2012	8:40a		pH, TDS, Cr, ClO_6

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
ART-8	50.5	1617.66	31.79		1585.87			11/5/2012	3:05p	Pumping	pH, TDS, Cr, ClO_4
ART-8A	54	1617.10	27.11		1589.99			11/5/2012	3:06p		DTW Only
ART-9	43	1614.90	40.87		1574.03			11/5/2012	11:52a	Pumping	pH, TDS, Cr, ClO_4
M-2A	47.57	1781.16				Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-5A	50.00	1751.80				Sampled in 2nd and 3rd quarters only					(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-6A	46.00	1733.19				Sampled in 2nd and 3rd quarters only					(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-7B	55.00	1732.83				Sampled in 2nd and 3rd quarters only					(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-10	69.45	1836.21	46.69		1789.52	6.96	3.38	11/8/2012	9:33a		pH / CR6 / Cr / ClO_4 /TDS /+NPDES list
M-11	58.00	1815.53	42.22		1773.31	7.83	3.42	11/8/2012	8:20a		pH / TDS / Cr / Cr6 / Cl04
M-12A	50.00	1812.76	39.81		1772.95	7.79	7.67	11/8/2012	7:57a		pH / TDS / Cr / Cr6 / Cl04
M-13	54.76	1814.89				Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-14A	42.40	1760.93	30.70		1730.23	7.13	4.67	11/8/2012	5:45a		pH, TDS, Cr, ClO_4
M-19	41.20	1766.77	34.30		1732.47	7.24	5.76	11/7/2012	5:41a		pH, TDS, Cr, ClO_4
M-21	44.74	1792.07				Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-22A	36.92	1759.46	29.20		1730.26	7.10	11.25	11/7/2012	10:05a		pH, TDS, Cr, ClO_4
M-23	44.47	1720.35	33.13		1687.22	7.16	5.89	11/6/2012	9:23a		pH, TDS, Cr, ClO_4
M-25	41.47	1759.93	30.82		1729.11	7.08	9.57	11/6/2012	7:53a		pH, TDS, Cr, ClO_4
M-31A	55.00	1796.87	44.85		1752.02	7.22	7.35	11/8/2012	7:18a		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
M-33	46.78	1800.29				Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-35	39.70	1772.78	30.82		1741.96	7.21	4.29	11/7/2012	5:21a		pH, TDS, Cr, ClO_4
M-36	37.85	1759.82	30.61		1729.21	6.92	14.78	11/8/2012	6:09a		pH / Cr / Cr^6 / ClO_4 / TDS
M-37	37.18	1761.06	29.69		1731.37	6.90	8.19	11/6/2012	7:38a		pH / Cr / Cr^6 / ClO_4 / TDS
M-38	36.82	1759.73	29.55		1730.18	7.01	17.18	11/8/2012	6:10a		pH, TDS, Cr, ClO_4
M-44	37.65	1698.31	22.88		1675.43	7.22	9.98	11/5/2012	10:05a		pH / TDS / Cr / Cr6 / Cl04
M-48A	40	1718.36	28.39		1689.97	7.18	3.83	11/5/2012	9:32a		pH, TDS, Cr, ClO_4
M-52	47.38	1801.92	39.66		1762.26	7.32	6.43	11/8/2012	7:37a		pH, TDS, Cr, ClO_4
M-55	45.00	1750.88	27.09		1723.79			11/5/2012	1:37p		DTW Only
M-56	40.00	1750.83	28.41		1722.42			11/5/2012	1:14p		DTW Only
M-57A	42.40	1753.44	28.26		1725.18	7.42	4.18	11/6/2012	7:22a		pH, TDS, Cr, ClO_4
M-58	45.00	1751.25	29.35		1721.90			11/5/2012	12:35p		DTW Only
M-60	43.00	1750.94	30.91		1720.03			11/5/2012	12:57p		DTW Only
M-64	38.00	1749.76	26.55		1723.21	7.21	8.94	11/6/2012	5:41a		pH, TDS, Cr, ClO_4
M-65	40.00	1753.91	29.53		1724.38	6.94	14.16	11/6/2012	6:10a		pH, TDS, Cr, ClO_4
M-66	43.00	1754.24	30.18		1724.06	6.83	14.24	11/6/2012	6:25a		pH, TDS, Cr, ClO_4
M-67	38.00	1745.91	21.42		1724.49	7.08	5.6	11/7/2012	6:54a		pH, TDS, Cr, ClO_4
M-68	41.00	1750.23	25.91		1724.32	7.14	5.85	11/7/2012	5:59a		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
M-69	40.00	1749.75	31.85		1717.90	7.22	5.08	11/6/2012	6:40a		pH, TDS, Cr, ClO_4
M-70	41.00	1748.25	34.02		1714.23	7.34	4.97	11/7/2012	9:10a		pH, TDS, Cr, ClO_4
M-71	43.00	1747.04	34.36		1712.68	9.92	7.40	11/7/2012	9:25a		pH, TDS, Cr, ClO_4
M-72	36.00	1746.49	31.19		1715.30	7.21	9.92	11/7/2012	9:40a		pH, TDS, Cr, ClO_4
M-73	36.00	1741.14	28.18		1712.96	7.21	7.48	11/7/2012	7:34a		pH, TDS, Cr, ClO_4
M-74	39.00	1744.38	28.31		1716.07	7.20	6.25	11/7/2012	7:11a		pH, TDS, Cr, ClO_4
M-75	53.90	1784.21	40.44		1743.77			11/7/2012	10:18a		DTW ONLY
M-76	54.60	1785.22	37.65		1747.57			11/7/2012	10:22a		DTW ONLY
M-77	47.20	1799.61	35.93		1763.68			11/8/2012	7:15a		DTW ONLY
M-78	43.60	1751.50	30.10		1721.40			11/5/2012	1:30p		DTW ONLY
M-79	37.60	1742.53	30.27		1712.26	7.23	5.79	11/6/2012	8:09a		pH / TDS / Cr / ClO_4
M-80	43.70	1746.04	34.84		1711.20	7.65	2.05	11/7/2012	8:22a		TDS / Cr / ClO_4
M-81A	41.60	1744.16	33.50		1710.66	7.20	6.07	11/7/2012	7:57a		TDS / Cr / ClO_4
M-83	42.50	1742.77	31.90		1710.87	7.36	2.78	11/7/2012	8:56a		pH, TDS, Cr, ClO_4
M-92	48.50	1800.76	35.56		1765.20			11/6/2012	1:15p		DTW ONLY
M-93	49.00	1797.54	34.49		1763.05			11/6/2012	1:25p		DTW ONLY
M-95	30.00	1694.09	16.40		1677.69	7.30	7.19	11/5/2012	8:52a		pH, TDS, Cr, ClO_4
M-96	16.90	1693.52	15.80		1677.72	7.15	6.48	11/5/2012	8:21a		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
M-97	52.50	1800.85	38.90		1761.95	7.33	5.30	11/6/2012	1:18p		pH, TDS, Cr, ClO_4
M-98	33.40	1731.90			1731.90			11/6/2012	9:40a	DRY	pH, TDS, Cr, ClO_4
M-99	35.59	1730.74			1730.74			11/6/2012	8:42a	DRY	pH, TDS, Cr, ClO_4
M-100	33.81	1730.93			1730.93			11/6/2012	8:47a	DRY	pH / TDS / Cr / Cr6 / Cl04
M-101	32.15	1730.81			1730.81			11/6/2012	8:51a	DRY	pH, TDS, Cr, ClO_4
M-115	47.50	1787.64	35.93		1751.71	7.52	2.81	11/7/2012	10:26a		DTW ONLY
M-131	39.00	1754.13	31.17		1722.96	7.43	4.35	11/6/2012	7:09a		pH, TDS, Cr, ClO_4
M-135	39.00	1751.85	32.80		1719.05	7.37	4.63	11/6/2012	6:53a		pH, TDS, Cr, ClO_4
M-166	32.00	1751.09	27.56		1723.53			11/5/2012	2:11p		DTW Only
M-167	30.00	1749.95	25.00		1724.95			11/5/2012	2:03p		DTW Only
M-168	35.00	1748.46	22.61		1725.85			11/5/2012	1:53p		DTW Only
M-169	35.00	1750.22	24.90		1725.32			11/5/2012	1:50p		DTW Only
M-170	35.00	1750.66	26.48		1724.18			11/5/2012	1:43p		DTW Only
M-172	37.00	1750.58	28.18		1722.40			11/5/2012	1:18p		DTW Only
M-173	40.00	1749.88	28.28		1721.60			11/5/2012	12:49p		DTW Only
M-174	28.00	1742.29	18.47		1723.82			11/5/2012	12:32p		DTW Only
M-175	29.00	1742.74	20.65		1722.09			11/5/2012	12:28p		DTW Only
M-176	30.00	1745.35	23.23		1722.12			11/5/2012	12:25p		DTW Only

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
M-177	30.00	1743.23	20.84		1722.39			11/6/2012	6:11a		DTW Only
MW-K4	50	1614.96	27.18		1587.78			11/14/2012	10:51a		pH, TDS, Cr, ClO_4
MW-K5	44	1598.87	29.43		1569.44			11/14/2012	9:42a		pH, TDS, Cr, ClO_4
PC-18	52	1618.39	27.77		1590.62			11/14/2012	12:48p		pH, TDS, Cr, ClO_4
PC-53	33	1595.17	26.48		1568.69			11/14/2012	9:30a		pH, TDS, Cr, ClO_4
PC-55	54.9	1618.46	26.80		1591.66			11/14/2012	1:07p		pH, TDS, Cr, ClO_4
PC-56	55	1568.25	12.75		1555.50			11/13/2012	1:40p		pH, TDS, Cr, ClO_4
PC-58	33	1,567.01	13.05		1553.96			11/13/2012	1:02p		pH, TDS, Cr, ClO_4
PC-59	35	1567.92	11.80		1556.12			11/13/2012	2:00p		pH, TDS, Cr, ClO_4
PC-60	40.0	1568.38	12.55		1555.83			11/13/2012	1:40p		pH, TDS, Cr, ClO_4
PC-62	38.0	1567.83	11.25		1556.58			11/13/2012	2:19p		pH, TDS, Cr, ClO_4
PC-68	55.3	1566.97	9.88		1557.09			11/13/2012	2:35p		pH, TDS, Cr, ClO_4
PC-86	28.0	1553.85	5.15		1548.70			11/13/2012	11:54a		pH, TDS, Cr, ClO_4
PC-90	15.0	1550.46	6.25		1544.21			11/13/2012	11:35a		pH, TDS, Cr, ClO_4
PC-91	37.0	1552.33	11.53		1540.80			11/13/2012	12:15p		pH, TDS, Cr, ClO_4
PC-92	22.0	1552.05				Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
PC-94	20.0	1548.95	11.35		1537.60			11/13/2012	12:36p		pH, TDS, Cr, ClO_4
PC-97	33.5	1548.53	4.78		1543.75			11/13/2012	11:12a		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
PC-98R	40.5	1593.35	22.30		1571.05			11/14/2012	11:51a		pH, TDS, Cr, ClO_4
PC-99R2/R3	55.3	1552.48	36.63		1515.85			11/5/2012	2:42p	Pumping	pH, TDS, Cr, ClO_4
PC-101R	50.5	1618.04	28.65		1589.39			11/14/2012	12:27p		pH, TDS, Cr, ClO_4
PC-103	29.5	1599.49	22.70		1576.79			11/14/2012	11"37a		pH, TDS, Cr, ClO_4
PC-115R	55.5	1554.71	8.30		1546.41			11/5/2012	2:37p	Pumping	pH, TDS, Cr, ClO_4
PC-116R	55.5	1552.10	14.49		1537.61			11/5/2012	2:45p	Pumping	pH, TDS, Cr, ClO_4
PC-117	53.0	1552.26	13.13		1539.13			11/5/2012	2:48p	Pumping	pH, TDS, Cr, ClO_4
PC-118	51.0	1554.53	8.56		1545.97			11/5/2012	2:35p	Pumping	pH, TDS, Cr, ClO_4
PC-119	47.0	1554.66	6.57		1548.09			11/5/2012	2:32p	Pumping	pH, TDS, Cr, ClO_4
PC-120	47.0	1554.64	4.54		1550.10			11/5/2012	2:27p		pH, TDS, Cr, ClO_4
PC-121	38.5	1554.10	4.53		1549.57			11/5/2012	2:23p		pH, TDS, Cr, ClO_4
PC-122	38.0	1618.02	32.27		1585.75			11/14/2012	9:15a		pH, TDS, Cr, ClO_4
PC-123	34.70	1626.44	23.80		1602.64	7.18	8.02	11/5/2012	4:41a		pH, TDS, Cr, ClO_4
PC-124	34.60	1635.73	25.28		1610.45	7.04	10.64	11/5/2012	6:48a		pH, TDS, Cr, ClO_4
PC-125	33.50	1635.06	22.91		1612.15	7.08	9.73	11/5/2012	7:12a		pH, TDS, Cr, ClO_4
PC-126	34.30	1634.33	21.91		1612.42	7.07	13.04	11/5/2012	7:26a		pH, TDS, Cr, ClO_4
PC-127	34.70	1632.42	18.51		1613.91	7.20	7.73	11/5/2012	7:43a		pH, TDS, Cr, ClO_4
PC-128	34.70	1633.36	18.18		1615.18	7.21	7.03	11/5/2012	5:03a		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
PC-129	37.70	1633.99	18.31		1615.68	7.04	8.25	11/5/2012	5:28a		pH, TDS, Cr, ClO_4
PC-130	49.70	1633.21	19.15		1614.06	7.11	8.85	11/5/2012	5:46a		pH, TDS, Cr, ClO_4
PC-131	39.40	1633.58	10.55		1623.03	7.00	13.04	11/5/2012	6:05a		pH, TDS, Cr, ClO_4
PC-132	39.70	1634.84	9.51		1625.33	7.00	12.78	11/5/2012	6:25a		pH, TDS, Cr, ClO_4
PC-133	40.2	1553.00			1553.00			11/5/2012	11:13a		pH, TDS, Cr, ClO_4
PC-135A	29.75	1618.58	28.71		1589.87	7.13	12.26	11/6/2012	10:26a		pH, TDS, Cr, ClO_4
PC-136	40.3	1618.04	33.22		1584.82	7.26	8.13	11/6/2012	9:53a		pH, TDS, Cr, ClO_4
PC-144	39.7	1618.63	29.75		1588.88	7.21	7.93	11/6/2012	10:09a		pH, TDS, Cr, ClO_4
PC-148	50.2	1617.96	28.03		1589.93	7.32	9.63	11/6/2012	11:52a		pH, TDS, Cr, ClO_4
PC-149	50	1618.93	28.83		1590.10	7.33	5.68	11/6/2012	12:28p		pH, TDS, Cr, ClO_4
PC-150	45.7	1619.09	29.21		1589.88	7.37	7.52	11/6/2012	10:51a		pH, TDS, Cr, ClO_4
INTERCEPTOR WELLS											
I-AA	46.00	1753.93	31.22		1722.71			11/5/2012	2:19p		pH, TDS, Cr, ClO_4
I-AB	52..0	1753.89	30.51		1723.38			11/5/2012	2:15p		pH, TDS, Cr, ClO_4
I-AC	50	1752.76	29.14		1723.62			11/7/2012	6:18a		pH, TDS, Cr, ClO_5
I-AD	50	1755.39	29.55		1725.84			11/7/2012	6:21a		pH, TDS, Cr, ClO_6
I-AR	45.00	1758.35	28.88		1729.47	6.94	8.22	11/5/2012	2:27p		pH, TDS, Cr, ClO_4
I-B	45.70	1752.87	36.40		1716.47	6.84	6.99	11/5/2012	2:07p		pH, TDS, Cr, ClO_4
I-C	43.80	1752.77	28.50		1724.27	7.22	8.52	11/5/2012	1:48p		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
I-D	47.70	1752.67	28.99		1723.68	7.46	8.99	11/5/2012	1:41p		pH, TDS, Cr, ClO_4
I-E	46.70	1752.36	44.00		1708.36	6.98	11.61	11/5/2012	1:33p		pH, TDS, Cr, ClO_4
I-F	45.80	1749.70	27.12		1722.58	7.06	14.64	11/5/2012	1:20p		pH, TDS, Cr, ClO_4
I-G	42.60	1752.50	38.42		1714.08	6.90	14.94	11/5/2012	1:11p		pH, TDS, Cr, ClO_4
I-H	46.50	1753.21	33.05		1720.16	6.82	14.48	11/5/2012	12:52p		pH, TDS, Cr, ClO_4
I-I	44.20	1745.50	23.15		1722.35	7.34	8.88	11/7/2012	6:34a		pH, TDS, Cr, ClO_4
I-J	44.50	1750.09	30.25		1719.84	7.32	6.21	11/7/2012	6:26a		pH, TDS, Cr, ClO_4
I-K	40.60	1746.04	25.83		1720.21	7.15	5.86	11/7/2012	6:12a		pH, TDS, Cr, ClO_4
I-L	43.40	1751.69	26.15		1725.54	6.74	11.84	11/5/2012	1:57p		pH, TDS, Cr, ClO_4
I-M	43.70	1752.90	38.11		1714.79	7.37	11.43	11/5/2012	1:39p		pH, TDS, Cr, ClO_4
I-N	41.70	1751.45	29.67		1721.78	7.04	17.22	11/5/2012	1:28p		pH, TDS, Cr, ClO_4
I-O	43.80	1752.79	31.11		1721.68	7.00	13.24	11/5/2012	1:24p		pH, TDS, Cr, ClO_4
I-P	47.80	1751.66	39.62		1712.04	6.80	13.75	11/5/2012	12:47p		pH, TDS, Cr, ClO_4
I-Q	43.80	1753.11	29.92		1723.19	7.11	15.4	11/5/2012	1:16p		pH, TDS, Cr, ClO_4
I-R	45.30	1751.35	40.96		1710.39	6.99	9.49	11/5/2012	1:59p		pH, TDS, Cr, ClO_4
I-S	47.70	1750.03	24.65		1725.38	7.19	11.98	11/5/2012	1:55p		pH, TDS, Cr, ClO_4
I-T	47.80	1751.66	37.50		1714.16	6.69	15.52	11/5/2012	12:59p		pH, TDS, Cr, ClO_4
I-U	47.60	1752.17	43.58		1708.59	6.69	15.13	11/5/2012	12:54p		pH, TDS, Cr, ClO_4

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
I-V	47.70	1752.13	31.65		1720.48	7.21	11.66	11/7/2012	6:36a		pH, TDS, Cr, ClO_4
I-W	50.00	1751.50	29.31		1722.19			11/5/2012	12:44p		DTW ONLY
I-X	50.00	1748.60	25.51		1723.09			11/5/2012	1:25p		DTW ONLY
I-Y	35.00	1751.40	26.92		1724.48			11/5/2012	2:01p		DTW ONLY
I-Z	37.00	1743.78	34.33		1709.45	7.29	6.71	11/7/2012	6:29a		pH, TDS, Cr, ClO_4
OTHER WELLS (OFFSITE)											
PC-37	43.08	1707.72	29.05		1678.67	7.24	9.31	11/5/2012	11:18a		pH, TDS, Cr, ClO_4
PC-54	34.60	1704.43	22.60		1681.83	7.29	5.88	11/5/2012	9:14a		pH, TDS, Cr, ClO_4
PC-71	33.23	1698.73	25.63		1673.10	7.28	8.94	11/5/2012	10:27a		pH, TDS, Cr, ClO_4
PC-72	39.54	1699.43	28.11		1671.32	7.28	8.12	11/5/2012	10:41a		pH, TDS, Cr, ClO_4
PC-73	49.44	1699.50	29.08		1670.42	7.26	8.42	11/5/2012	10:58a		pH, TDS, Cr, ClO_4
PIONEER CHEMICAL WELL											
H-28A	51.00	1731.75				Sampled in 2nd and 3rd quarters only					(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
DUPLICATE SAMPLES											
VD-1	M-44	1698.31	22.88		1675.43	7.22	9.98	11/5/2012	10:05a		pH / TDS / Cr / Cr6 / Cl04
VD-2	M-12A	1812.76	39.81		1772.95	7.79	7.67	11/8/2012	7:57a		pH / TDS / Cr / Cr6 / Cl04
VD-3	PC-72	1699.43	28.11		1671.32	7.28	8.12	11/5/2012	10:41a		pH, TDS, Cr, ClO_4
VD-4	M-68	1750.23	25.91		1724.32	7.14	5.85	11/7/2012	5:59a		pH, TDS, Cr, ClO_4
OTHER SAMPLES COLLECTED											
Equipment Blank Sample:	EB-1							11/6/2012	8:24a		pH / TDS / Cr / Cr6 / Cl04

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 4th Quarter Groundwater Monitoring, Nov. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan/Temp
Equipment Blank Sample:	EB-2							11/7/2012	8:50a		pH / TDS / Cr / Cr6 / Cl04
Field Blank Sample:	FB-1							11/5/2012	10:00a		pH / TDS / Cr / Cr6 / Cl04

NOTES:

1: Non-Aqueous Phase Liquid Qualifiers - 'DNAPL' (Dense non-aqueous phase liquid present); 'LNAPL' (Light non-aqueous phase liquid present); 'NONE' (Non-aqueous phase liquid not present)

2: Monitoring Qualifiers - 'DRY' (well dry); 'OBSTRUCTED' (well obstructed); 'OTHER' (other condition - e.g. pumping - preventing accurate groundwater level measurement)

Number of Field Blanks (1 per Qtr): 1

Number of Equipment Blanks (2 per Qtr): 2

Not Sampled this Quarter

Monthly Sampling

CHAIN OF CUSTODY RECORD

eurofins | Lancaster Laboratories

'50 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ **SAMPLES CHECKED/LOGGED IN BY:** _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

'O BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME
levada Environmental Response Trust

PROJECT JOB # / P.O.#
CWA-RCRA

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

ampler Signature Eric Crawford

ohn Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	CRV1															SAMPLER COMMENTS
2:00pm	11/20/2012		M-44		x		x															RESAMPLE

MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
ELINQUISHED BY:		Eric Crawford	Veolia Water for Nevada Environmental Response Trust	11/20/2012	2:00pm
ECEIVED BY:					
ELINQUISHED BY:					
ECEIVED BY:					

-O-C# _____

eurofins

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA

Sampler Signature: Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	see bottle order	SAMPLER COMMENTS
10:40a	11/8/2012		M-10	RSW	X		X	

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11/8/2012	12:00p
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Calscience

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME: Nevada Environmental Response Trust

PROJECT JOB # / P.O.#: Quarterly Groundwater Sampling

Schedule B CWA-RCRA

Sampler: Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
556A	11-8-12		M-14A	RGW	X		X	X	X	X	X		5 Bottles
626A	11-8-12		M-38	RGW	X		X	X	X	X	X		5 Bottles
623A	11-8-12		M-36	RGW	X		X	X	X	X	X	X	6 Bottles
730A	11-8-12		M-31A	RGW	X		X	X	X	X	X		5 Bottles
747A	11-8-12		M-52	RGW	X		X	X	X	X	X		5 Bottles
808A	11-8-12		M-12A	RGW	X		X	X	X	X	X	X	6 Bottles
905A	11-8-12		M-11	RGW	X		X	X	X	X	X	X	6 Bottles
1040A	11-8-12		M-10	RGW	X		X	X	X	X	X	X	6 Bottles
1105A	11-8-12		M-79	RGW	X		X	X	X	X	X		5 Bottles
—	11-8-12		VD-2	RGW	X		X	X	X	X	X	X	6 Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-8-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Eaton Analytical

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
649A	11-7-12		I-V	RGW	X		X	X	X	X	X		5 Bottles
614A	11-7-12		I-K	RGW	X		X	X	X	X	X		5 Bottles
628A	11-7-12		I-J	RGW	X		X	X	X	X	X		5 Bottles
635A	11-7-12		I-Z	RGW	X		X	X	X	X	X		5 Bottles
643A	11-7-12		I-I	RGW	X		X	X	X	X	X		5 Bottles
539A	11-7-12		M-35	RGW	X		X	X	X	X	X		5 Bottles
550A	11-7-12		M-19	RGW	X		X	X	X	X	X		5 Bottles
609A	11-7-12		M-68	RGW	X		X	X	X	X	X		5 Bottles
703A	11-7-12		M-67	RGW	X		X	X	X	X	X		5 Bottles
725A	11-7-12		M-74	RGW	X		X	X	X	X	X		5 Bottles
750A	11-7-12		M-73	RGW	X		X	X	X	X	X		5 Bottles
845A	11-7-12		M-80	RGW	X		X	X	X	X	X		5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-7-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

CHAIN OF CUSTODY RECORD

eurofins | Test America

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler: Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI										SAMPLER Comments
813A	11-7-12		M-81A	RGW	X		X	X	X	X	X											5 Bottles
905A	11-7-12		M-83	RGW	X		X	X	X	X	X											5 Bottles
917A	11-7-12		M-70	RGW	X		X	X	X	X	X											5 Bottles
933A	11-7-12		M-71	RGW	X		X	X	X	X	X											5 Bottles
956A	11-7-12		M-72	RGW	X		X	X	X	X	X											5 Bottles
—	11-7-12		VD-4	RGW	X		X	X	X	X	X											5 Bottles
850A	11-7-12		EB-2	RGW	X		X	X	X	X	X											6 Bottles
1013A	11-7-12		M-22A	RGW	X		X	X	X	X	X											5 Bottles
1037A	11-7-12		M-115	RGW	X		X	X	X	X	X											5 Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-7-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Eaton Analytical

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME: Nevada Environmental Response Trust

PROJECT JOB # / P.O.#: Quarterly Groundwater Sampling

Schedule B CWA-RCRA

Sampler: Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
931A	11-6-12		M-23	RGW	X		X	X	X	X	X		5 Bottles
559A	11-6-12		M-64	RGW	X		X	X	X	X	X		5 Bottles
618A	11-6-12		M-65	RGW	X		X	X	X	X	X		5 Bottles
633A	11-6-12		M-66	RGW	X		X	X	X	X	X		5 Bottles
818A	11-6-12		M-79	RGW	X		X	X	X	X	X		5 Bottles
648A	11-6-12		M-69	RGW	X		X	X	X	X	X		5 Bottles
702A	11-6-12		M-135	RGW	X		X	X	X	X	X		5 Bottles
716A	11-6-12		M-131	RGW	X		X	X	X	X	X		5 Bottles
730A	11-6-12		M-57A	RGW	X		X	X	X	X	X		5 Bottles
824A	11-6-12		EB-1	RGW	X		X	X	X	X	X	X	6 Bottles
745A	11-6-12		M-37	RGW	X		X	X	X	X	X	X	6 Bottles
800A	11-6-12		M-25	RGW	X		X	X	X	X	X		5 Bottles

* MATRIX TYPES:

Reported by Volume:

CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:

SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Calscience

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
1000A	11-6-12		PC-136	RGW	X		X	X	X	X	X		5 Bottles
1016A	11-6-12		PC-144	RGW	X		X	X	X	X	X		5 Bottles
1039A	11-6-12		PC-135A	RGW	X		X	X	X	X	X		5 Bottles
1220P	11-6-12		PC-148	RGW	X		X	X	X	X	X		5 Bottles
1258P	11-6-12		PC-149	RGW	X		X	X	X	X	X		5 Bottles
1141A	11-6-12		PC-150	RGW	X		X	X	X	X	X		5 Bottles
1288P	11-6-12		~~PC-99~~	RGW	X		X	X	X	X	X		5 Bottles
			M-97 RS	RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Calscience

CHAIN OF CUSTODY RECORD

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME: Nevada Environmental Response Trust

PROJECT JOB # / P.O.#: Quarterly Groundwater Sampling

Schedule B CWA-RCRA

Sampler: Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
1000A	11-6-12		PC-136	RGW	X		X	X	X	X	X		5 Bottles
1016A	11-6-12		PC-144	RGW	X		X	X	X	X	X		5 Bottles
1039A	11-6-12		PC-135A	RGW	X		X	X	X	X	X		5 Bottles
1220P	11-6-12		PC-148	RGW	X		X	X	X	X	X		5 Bottles
1258P	11-6-12		PC-149	RGW	X		X	X	X	X	X		5 Bottles
1141A	11-6-12		PC-150	RGW	X		X	X	X	X	X		5 Bottles
1284P	11-6-12		PC-97	RGW	X		X	X	X	X	X		5 Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

Sampler: Michele Brown — Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI										SAMPLER Comments
1209p	11-5-12		I-O	RGW	X		X	X	X	X	X											5 Bottles
1213p	11-5-12		I-P	RGW	X		X	X	X	X	X											5 Bottles
1218p	11-5-12		I-H	RGW	X		X	X	X	X	X											5 Bottles
1222p	11-5-12		I-U	RGW	X		X	X	X	X	X											5 Bottles
1226p	11-5-12		I-T	RGW	X		X	X	X	X	X											5 Bottles
1232p	11-5-12		I-G	RGW	X		X	X	X	X	X											5 Bottles
1237p	11-5-12		I-Q	RGW	X		X	X	X	X	X											5 Bottles
1248p	11-5-12		I-F	RGW	X		X	X	X	X	X											5 Bottles
1253p	11-5-12		I-N	RGW	X		X	X	X	X	X											5 Bottles
1256p	11-5-12		I-E	RGW	X		X	X	X	X	X											5 Bottles
1020	11-5-12		I-M	RGW	X		X	X	X	X	X											5 Bottles
1070	11-5-12		I-D	RGW	X		X	X	X	X	X											5 Bottles

* **MATRIX TYPES:**

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-5-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler: Michele Brown — Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI									SAMPLER Comments
1120	11-5-17		I-C	RGW	X		X	X	X	X	X										5 Bottles
1160	11-5-17		I-S	RGW	X		X	X	X	X	X										5 Bottles
1190	11-5-17		I-L	RGW	X		X	X	X	X	X										5 Bottles
1250	11-5-17		I-R	RGW	X		X	X	X	X	X										5 Bottles
1290	11-5-17		I-B	RGW	X		X	X	X	X	X										5 Bottles
1410	11-5-17		I-AR	RGW	X		X	X	X	X	X										5 Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-5-17	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler: Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
453A	11-5-12		PC-123	RGW	X		X	X	X	X	X		5 Bottles
527A	11-5-12		PC-128	RGW	X		X	X	X	X	X		5 Bottles
540A	11-5-12		PC-129	RGW	X		X	X	X	X	X		5 Bottles
558A	11-5-12		PC-130	RGW	X		X	X	X	X	X		5 Bottles
620A	11-5-12		PC-131	RGW	X		X	X	X	X	X		5 Bottles
638A	11-5-12		PC-132	RGW	X		X	X	X	X	X		5 Bottles
655A	11-5-12		PC-124	RGW	X		X	X	X	X	X		5 Bottles
719A	11-5-12		PC-125	RGW	X		X	X	X	X	X		5 Bottles
736A	11-5-12		PC-126	RGW	X		X	X	X	X	X		5 Bottles
752A	11-5-12		PC-127	RGW	X		X	X	X	X	X		5 Bottles
842A	11-5-12		M-96	RGW	X		X	X	X	X	X		5 Bottles
923A	11-5-12		PC-54	RGW	X		X	X	X	X	X		5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-5-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler: Michele Brown — Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI										SAMPLER Comments
956A	11-5-12		M-48A	RGW	X		X	X	X	X	X											5 Bottles
1016A	11-5-12		M-44	RGW	X		X	X	X	X	X	X										6 Bottles
1036A	11-5-12		PC-71	RGW	X		X	X	X	X	X											5 Bottles
1051A	11-5-12		PC-72	RGW	X		X	X	X	X	X											5 Bottles
1110A	11-5-12		PC-73	RGW	X		X	X	X	X	X											5 Bottles
1128A	11-5-12		PC-37	RGW	X		X	X	X	X	X											5 Bottles
—	11-5-12		M-23	RGW	X		X	X	X	X	X		NO SAMPLE									5 Bottles
—	11-5-12		VD-1	RGW	X		X	X	X	X	X	X										6 Bottles
—	11-5-12		VD-3	RGW	X		X	X	X	X	X											5 Bottles
1000A	11-5-12		FB-1	RGW	X		X	X	X	X	X	X										6 Bottles
906A	11-5-12		M-95	RGW	X		X	X	X	X	X	X										6 Bottles
				RGW	X		X	X	X	X	X											Bottles

* **MATRIX TYPES:**

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	11-5-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

eurofins | Eaton Analytical
formerly MWH Laboratories

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)
386-1101

Kit Order for Environ International Corp.

Rita S. Sprinkle is your Eurofins Eaton Analytical Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 57629
Created By: AutoGenerated
Order Date: 11/05/2012
Ship By: Bottle Orders
STG:

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: Every 3 months - First\Monday
PO#/JOB#:

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
101	Chromium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
15	CRVI 7196	1 125ml poly acid rinsed no preservative	
101	Perchlorate Sterile Filtered	1 125 ml poly + syringe, filter 125ml STERILE bottle	
101	PH by EPA 9040	1 125ml poly no preservative	
101	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

QUARTERLY SAMPLING - PLEASE PUT LABELS ON BOTTLES; PLEASE PUT IN 4 COOLERS SINCE SAMPLING TAKES 3-4 DAYS NOTIFY LAB AS SOON AS CR-VI COMES IN.- 24HR ht

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

eurofins | Calscience

750 Royal Oaks Dr. Suite 100
Monrovia,CA 91016-3629
(626) 386-1100 (800) 566-5227

CHAIN OF CUSTODY RECORD

MWLABS USE ONLY:

LOGIN COMMENTS: _____ **SAMPLES CHECKED/LOGGED IN BY:** _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Weekly - SO #12373

Sampler: Russell Speckin

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES X (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	SterileCLO4	TDS	CR	SAMPLER COMMENTS
1218	11-5-12		ART-1	RSW	X		X	X	X	
1222	11-5-12		ART-2	RSW	X		X	X	X	
1225	11-5-12		ART-3	RSW	X		X	X	X	
1229	11-5-12		ART-4	RSW	X		X	X	X	
1139	11-5-12		ART-6	RSW	X		X	X	X	
1244	11-5-12		ART-7	RSW	X		X	X	X	
1235	11-5-12		ART-8	RSW	X		X	X	X	
1046	11-5-12		PC-99R2/R3	RSW	X		X	X	X	
1050	11-5-12		PC-115R	RSW	X		X	X	X	
1053	11-5-12		PC-116R	RSW	X		X	X	X	

* **MATRIX TYPES:**

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Russell Speckin	Veolia Water for Nevada Environmental Response Trust	11-5-12	1200pm
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C#

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

750 Royal Oaks Dr. Suite 100
Monrovia,CA 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ **SAMPLES CHECKED/LOGGED IN BY:** _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Monthly - SO #12373

Sampler Russell Speckin

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	sterile filtered ClO4	TDS	CR	SAMPLER COMMENTS
1024	11-5-12		SF-1	RSW	X		X	X	X	
1056	11-5-12		PC-117	RSW	X		X	X	X	
1100	11-5-12		PC-118	RSW	X		X	X	X	
1104	11-5-12		PC-119	RSW	X		X	X	X	
1106	11-5-12		PC-120	RSW	X		X	X	X	
1109	11-5-12		PC-121	RSW	X		X	X	X	
1113	11-5-12		PC-133	RSW	X		X	X	X	
1209	11-5-12		ART-9	RSW	X		X	X	X	Submitted 72 btls by MP

* **MATRIX TYPES:**

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Russell Speckin	Veolia Water for Nevada Environmental Response Trust	11-5-12	12:00 PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

O-C# _____

eurofins | Eaton Analytical
formerly MWH Laboratories

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)
386-1101

Kit Order for Environ International Corp.

Rita S. Sprinkle is your Eurofins Eaton Analytical Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 57404
Created By: AutoGenerated
Order Date: 11/01/2012
Ship By: Bottle Orders
STG:

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: Monthly ART/PC Wells
PO#/JOB#:

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
20	Chromium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
20	Perchlorate Sterile Filtered	1 125 ml poly + syringe, filter 125ml STERILE bottle	
20	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

Monthly ART and PC wells - DO NOT PRELABEL BOTTLES

C	Status	Date Shipped	Via	Trackin	# of Coolers	Prepared By

eurofins | Eaton Analytical
formerly MWH Laboratories

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)
386-1101

Kit Order for Environ International Corp.

Rita S. Sprinkle is your Eurofins Eaton Analytical Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 57629
Created By: AutoGenerated
Order Date: 11/05/2012
Ship By: Bottle Orders
STG:

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: Every 3 months - First\Monday
PO#/JOB#:

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
101	Chromium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
15	CRVI 7196	1 125ml poly acid rinsed no preservative	
101	Perchlorate Sterile Filtered	1 125 ml poly + syringe, filter 125ml STERILE bottle	
101	PH by EPA 9040	1 125ml poly no preservative	
101	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

QUARTERLY SAMPLING - PLEASE PUT LABELS ON BOTTLES; PLEASE PUT IN 4 COOLERS SINCE SAMPLING TAKES 3-4 DAYS NOTIFY LAB AS SOON AS CR-VI COMES IN.- 24HR ht

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

MWH
LABORATORIES
A Division of MWH Americas, Inc.

750 Royal Oaks Dr., Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)

Kit Order for Environ International Corp.

Rita S. Sprinkle is your MWH Laboratories Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 54577
Created By: AutoGenerated
Order Date: 09/03/2012
Ship By: Bottle Orders
STG:

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: M-10 Quarterly
PO#/JOB#:

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
1	Ammonia Nitrogen	1 250ml poly 0.5ml H2SO4 (50%)	UN1830
1	Boron Total ICAP, Chromium Total ICAP, Iron Total ICAP, Manganese Total ICAP	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
1	Chloride, Nitrate as Nitrogen by IC, Nitrite Nitrogen by IC, Total Inorganic Nitrogen-Calc	1 125ml poly no preservative	
1	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

M-10 Quarterly Sampling - No blue ice needed

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

VEOLIA
WATER

Groundwater Field Log

This Section Contains:

- Water Sampling Field Logs

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-3521 / Fax 702-566-9030
www.Veoliawaterna.com

Water Sampling Field Log

Well No.: ARP-1

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: 60°F NICE AND CLEAR

Well Information:

Total Well Depth: 44.2 feet Time: 225p

Depth to Water: - 23.35 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	20.85 feet	X (0.4893)	1.9	4.41	=	10 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
228p		23.70C	CLEAR

Comments:

Sample Collection Time - 236p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-2A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: No WIND AND CLEAR

Well Information:

Total Well Depth: 54.0 feet Time: 1119A

Depth to Water: - 24.90 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	29.1 feet	X (0.4893)	1.9	4.41	=	14 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1121A		23.2°C	CLEAR

Comments:

Sample Collection Time - 1130A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-3A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: No wind

Well Information:

Total Well Depth: 41.0 feet Time: 1105A

Depth to Water: - 26.36 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	14.64 feet	X (0.4893)	1.9	4.41	=	7 gal/s

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1108A		22.9°C	CLEAR

Comments:

Sample Collection Time - 1115A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-4A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14-Nov-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: clear

Well Information:

Total Well Depth: 33.0 feet Time: 1042A

Depth to Water: - 28.35 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	4.65 feet	X (0.4893)	1.9	4.41	=	5 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1044A		23.3°C	clear

Comments:

Sample Collection Time - 1047A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-5A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: NO WIND AND CLEAR

Well Information:

Total Well Depth: 38.0 feet Time: 1050A

Depth to Water: - 31.85 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	6.15 feet	X (0.4893)	1.9	4.41	=	3 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1033A		23.6°C	CLEAR

Comments:

Sample Collection Time - 1038A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-6B

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14-Nov-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: No wind

Well Information:

Total Well Depth: 43.0 feet Time: 1014A

Depth to Water: - 31.40 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	11.6 feet	X (0.4893)	1.9	4.41	=	6 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1016A		14.1°C	CLEAR

Comments:

Sample Collection Time - 1022A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-7

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR AND NO WIND

Well Information:

Total Well Depth: 39.0 feet Time: 956 A

Depth to Water: - 29.4 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		Purge Volume
Water Column (L):	9.6 feet	X (0.4893)	1.9	4.41	=	5 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
959A		24.3°C	CLEAR

Comments:

Sample Collection Time - 1010 A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-1

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 56.0 feet Time: 259p

Depth to Water: - 31.23 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	24.77 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1218p			CLEAR

Comments:

Sample Collection Time - 1218p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: MRT-1A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 56.0 feet Time: 300p

Depth to Water: - 23.40 feet

			Well Diameter (circle one)				
			2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	32.6 feet	X	0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**

Comments:

DTW only

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-2

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer ○

Weather Conditions: NICE AND CLEAR

Well Information:

Total Well Depth: 56.0 feet Time: 302p

Depth to Water: - 27.04 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	28.96 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1222p			CLEAR

Comments:

Sample Collection Time - 1222p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-2A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 58.0 feet Time: 303p

Depth to Water: - 26.05 feet

			Well Diameter (circle one)				
			2-in.	4-in.	6-in		Purge Volume
Water Column (L):	31.95 feet	X	0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments:

DTW Only

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-3

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer O

Weather Conditions: 58°

Well Information:

Total Well Depth: 47.0 feet Time: 309P

Depth to Water: - 30.16 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	16.84 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1225P			CLEAR

Comments:

Sample Collection Time - 1225 P

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-3A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: clear

Well Information:

Total Well Depth: 55.0 feet Time: _____

Depth to Water: - 37.09 feet

			Well Diameter (circle one)				
			2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	17.91 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments:

DTW ONLY

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-4

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 46.0 feet Time: 313p ~~314p~~

Depth to Water: - 28.10 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	17.90 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1229p			CLEAR

Comments:

Sample Collection Time - 1229p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-41A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 46.0 feet Time: 314p

Depth to Water: - 43.02 feet

		Well Diameter (circle one)			Purge Volume
		2-in.	4-in.	6-in	
Water Column (L):	2.98 feet	X 0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments:

DTW ONLY

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-6

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer ○

Weather Conditions: CLEAR 58°F

Well Information:

Total Well Depth: 36.0 feet Time: 1143A

Depth to Water: - 34.48 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	1.52 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1139A			CLEAR

Comments:

Sample Collection Time - 1139A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-7

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer O

Weather Conditions: No Wind

Well Information:

Total Well Depth: 38.9 feet Time: 1148R

Depth to Water: - 33.34 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	5.56 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1214p			CLEAR

Comments:

Sample Collection Time - 1214p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-7A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: No Wind - clear

Well Information:

Total Well Depth: 40.0 feet Time: 1150A

Depth to Water: - 35.40 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	4.60 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments:

DTW only

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-7B

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14-Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: NO WIND AND CLEAR

Well Information:

Total Well Depth: 50 feet Time: 840A

Depth to Water: - 34.70 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	15.3 feet	X	0.4893	1.9	4.41	= 67 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
843A		24.4C	CLEAR

Comments:

Sample Collection Time - 907A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-8

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer ○

Weather Conditions: NICE CLEAR

Well Information:

Total Well Depth: 50.50 feet Time: 305p

Depth to Water: - 31.79 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	18.71 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1235p			CLEAR

Comments:

Sample Collection Time - 1235p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-8A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port O Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 54.0 feet Time: 306p

Depth to Water: - 27.11 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	26.89 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments:

DTW Only

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: A-12T-9

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer ○

Weather Conditions: CLEAR 58°-

Well Information:

Total Well Depth: 43.0 feet Time: 1152A

Depth to Water: - 40.87 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		Purge Volume
Water Column (L):	2.13 feet	X 0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1209p			CLEAR

Comments:

Sample Collection Time - 1209p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: M-10

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" ●

Weather Conditions: breezy, overcast, warm

Well Information:

Total Well Depth: 69.45 feet Time: 933A

Depth to Water: 46.69 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 22.76 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 33.45 gal. * Purge Factor 3 = **Purge Volume** 100 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
935A	---	---	---	---	
956A	33 gal	7.12	3.56 mS/cm	23.7 °C	slight rust color
1013A	66 gal	7.09	3.56 mS/cm	23.2 °C	same
1038A	100 gal	6.96	3.38 mS/cm	23.2 °C	same
	gal				
	gal				
	gal				

Sample Appearance: slight orangish color

Sample Collection - Time Start: 1040A Time Finished: 1040A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments: extra cooler collected here for NDEP 1040A

Water Sampling Field Log

Well No.: M-61

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" @

Weather Conditions: Warm, breezy, cloudy

Well Information:

Total Well Depth: 58.00 feet Time: 820A

Depth to Water: 42.22 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 15.78 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 23.19 gal. * Purge Factor 3 = **Purge Volume** 70 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
825A	----	----	----	----	
837A	23 gal	7.85	3.44 mS/cm	24.9 °C	clear
849A	46 gal	7.76	3.39 mS/cm	24.6 °C	clear
902A	70 gal	7.83	3.42 mS/cm	24.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: 905A Time Finished: 905A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments: DUP EC 3.44 EC 25.0 Temp

Water Sampling Field Log

Well No.: M-12A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: breezy warm cloudy

Well Information:

Total Well Depth: 50.00 feet Time: 757A

Depth to Water: 39.81 feet

Height of Water Column (L):	Well Diameter (circle one) 2-in.	4-in.	6-in	Well Volume (WV)	Purge Factor	Purge Volume
10.19 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.63 gal.	* 3	= 5 gal.

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
758A	----	----	----	----	
801A	2 gal	7.88	6.34 mS/cm	23.6°C	yellow
802A	4 gal	7.81	6.73 mS/cm	24.1°C	yellow
803A	5 gal	7.80	7.11 mS/cm	24.4°C	yellow
804A	6 gal	7.80	7.42 mS/cm	24.4°C	yellow
805A	7 gal	7.79	7.67 mS/cm	24.5°C	yellow
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 805A Time Finished: 805A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments: VD-2 taken here 6 bottles

Water Sampling Field Log

Well No.: M-14A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: breezy cool

Well Information:

Total Well Depth: 42.40 feet Time: 545a

Depth to Water: 30.70 feet

Height of Water Column (L): 11.70 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.87 gal. * Purge Factor 3 = Purge Volume 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
548A	—	—	—	—	
550A	2 gal	6.82	4.47 mS/cm	23.2 °C	clear
552A	4 gal	7.07	4.58 mS/cm	23.6 °C	clear
553A	6 gal	7.13	4.67 mS/cm	24.3 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 556A Time Finished: 556A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-19

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool clear

Well Information:

Total Well Depth: 41.20 feet Time: 541A

Depth to Water: 34.30 feet

Well Diameter (circle one)

	2-in.	4-in.	6-in
	0.16 gal/ft	0.65 gal/ft	1.47 gal/ft

Height of Water Column (L): 6.90 feet * 0.16 gal/ft = 1.10 gal. (Well Volume (WV)) * 3 (Purge Factor) = 3 gal (Purge Volume)

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
543A	----	----	----	----	
546A	1 gal	7.39	5.59 mS/cm	22.2 °C	clear
547A	2 gal	7.27	5.60 mS/cm	22.7 °C	clear
548A	3 gal	7.24	5.76 mS/cm	22.7 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 550A Time Finished: 550A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-22A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm clear

Well Information:

Total Well Depth: 36.92 feet Time: 1005A

Depth to Water: 29.20 feet

Height of Water Column (L): 7.72 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.23 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1006A	----	----	-----	-----	
1008A	2 gal	7.14	11.00 mS/cm	24.1 °C	yellow
1009A	3 gal	7.11	11.29 mS/cm	24.9 °C	yellow
1010A	4 gal	7.10	11.25 mS/cm	25.0 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 1013A Time Finished: 1013A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-23

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 44.47 feet Time: 923A

Depth to Water: 33.13 feet

Height of Water Column (L): 11.34 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 1.81 gal. * Purge Factor: 3 = Purge Volume: 5gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
924A	---	---	---	---	
927A	2 gal	7.19	5.82 mS/cm	24.0 °C	clear
928A	4 gal	7.15	5.78 mS/cm	24.2 °C	clear
929A	5 gal	7.16	5.89 mS/cm	24.3 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 931A Time Finished: 931A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-25

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Cloudy, Warm

Well Information:

Total Well Depth: 41.47 feet Time: 753A

Depth to Water: 30.82 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
10.65 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.70 gal.	* 3	= 5 gal.

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
754A	----	----	----	----	
756A	2 gal	7.07	9.49 mS/cm	23.5 °C	light yellow
757A	4 gal	7.07	9.39 mS/cm	24.0 °C	light yellow
758A	5 gal	7.08	9.57 mS/cm	24.2 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 800A Time Finished: 800A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: MW-31A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool breezy cloudy

Well Information:

Total Well Depth: 55.0 feet Time: 718A

Depth to Water: 44.85 feet

Height of Water Column (L): 10.15 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.62 gal.

Purge Factor: * 3

Purge Volume: = 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
721A	----	----	----	----	
723A	2 gal	7.34	6.38 mS/cm	23.2 °C	light yellow
725A	4 gal	7.27	7.22 mS/cm	23.8 °C	light yellow
727A	5 gal	7.22	7.34 mS/cm	23.7 °C	light yellow
728A	6 gal	7.22	7.35 mS/cm	24.0 °C	light yellow
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 730A Time Finished: 730A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-35

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Cool Clear

Well Information:

Total Well Depth: 39.70 feet Time: 521A

Depth to Water: 30.82 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 8.88 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 1.42 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
525A	----	----	----	----	
527A	2 gal	7.06	3.44 mS/cm	22.2 °C	Clear
528A	3 gal	7.10	3.81 mS/cm	23.1 °C	Clear
529A	4 gal	7.21	4.03 mS/cm	23.5 °C	Clear
530A	5 gal	7.21	4.23 mS/cm	24.1 °C	clear
531A	6 gal	7.21	4.29 mS/cm	24.2 °C	clear
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 534A Time Finished: 534A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-36

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump O Dedicated Bailer ● Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: breezy cool

Well Information:

Total Well Depth: 37.85 feet Time: 1609A

Depth to Water: 30.61 feet

Height of Water Column (L): 7.24 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. * 0.65 gal/ft / 6-in * 1.47 gal/ft = Well Volume (WV): 1.15 gal. * Purge Factor: 3 = **Purge Volume**: 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1610A	----	----	-----	-----	
1614A	1 gal	6.86	15.00 mS/cm	24.4 °C	yellow
1617A	2 gal	6.91	14.22 mS/cm	23.2 °C	yellow
1620A	3 gal	6.92	14.78 mS/cm	23.6	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 1623A Time Finished: 1623A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-37

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: sunny clear

Well Information:

Total Well Depth: 37.18 feet Time: 738A

Depth to Water: 29.69 feet

Height of Water Column (L): 7.49 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft; 4-in. * 0.65 gal/ft; 6-in * 1.47 gal/ft = Well Volume (WV) 1.19 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
739A	----	----	----	----	
741A	2 gal	6.89	7.97 mS/cm	23.2°C	clear
742A	3 gal	6.89	8.20 mS/cm	23.7°C	clear
743A	4 gal	6.90	8.19 mS/cm	23.9°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 745A Time Finished: 745A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-38

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump O Dedicated Bailer Q Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: breezy cool

Well Information:

Total Well Depth: 36.82 feet Time: 1610A

Depth to Water: 29.55 feet

Height of Water Column (L): 6.27 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft; 4-in. 0.65 gal/ft; 6-in * 1.47 gal/ft = Well Volume (WV) 1.00 gal. * Purge Factor 3 = **Purge Volume** 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1611A	----	----	----	----	
1616A	1 gal	6.88	17.30 mS/cm	23.2 °C	light yellow
1619A	2 gal	6.97	16.85 mS/cm	22.9	light yellow
1622A	3 gal	7.01	17.18 mS/cm	22.9 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 1621A Time Finished: 1626A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-44

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 37.65 feet Time: 1005A

Depth to Water: 22.88 feet

Height of Water Column (L): 14.77 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in * 1.47 gal/ft = Well Volume (WV): 2.36 gal. * Purge Factor: 3 = Purge Volume: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1009A	----	----	----	----	
1011A	3 gal	7.28	9.16 mS/cm	24.5 °C	clear
1013A	5 gal	7.25	9.98 mS/cm	24.8 °C	clear
1014A	7 gal	7.22	9.98 mS/cm	24.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1016A Time Finished: 1016A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments: YD-1 taken here 6 bottles needs PVC cap replaced with plug

Water Sampling Field Log

Well No.: M-48A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny Warm

Well Information:

Total Well Depth: 40.0 feet Time: 932A

Depth to Water: 28.39 feet

Height of Water Column (L): 11.61 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.85 gal.

Purge Factor: * 3

Purge Volume: = 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
948A	----	----	----	----	
951A	2 gal	7.36	3.63 mS/cm	25.4 °C	slightly cloudy
953A	4 gal	7.21	3.76 mS/cm	25.8 °C	clear
954A	6 gal	7.18	3.83 mS/cm	26.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 956A Time Finished: 956A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

FD-1 - taken here 6 bottles 1000A

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-52

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warming breezy cloudy

Well Information:

Total Well Depth: 47.38 feet Time: 737A

Depth to Water: 39.66 feet

Height of Water Column (L): 7.72 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.23 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
M38A	----	----	----	----	
M40A	2 gal	7.39	1e54 mS/cm	23.4°C	Slightly yellow
M42A	3 gal	7.36	1e.37 mS/cm	23.9°C	Slightly yellow
M44A	4 gal	7.32	1e43mS/cm	24.0°C	Slightly yellow
	gal				
	gal				
	gal				

Sample Appearance: Slightly yellow

Sample Collection - Time Start: M47A Time Finished: 747A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-55

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 45.0 feet Time: 1371

Depth to Water: 27.09 feet

Height of Water Column (L): 17.91 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft = _____ gal. * Well Volume (WV) 3 Purge Factor = Purge Volume

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-56

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 40.0 feet Time: 1145

Depth to Water: 28.41 feet

Height of Water Column (L): 1159 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-57A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny clear

Well Information:

Total Well Depth: 42.40 feet Time: 722A

Depth to Water: 28.26 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 14.14 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 2.26 gal. * Purge Factor 3 = Purge Volume 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
723A	-----	-----	-----	-----	
725A	3 gal	7.46	4.16 mS/cm	23.0°C	Slightly cloudy
726A	5 gal	7.41	4.09 mS/cm	23.7°C	Very slighty cloudy
728A	7 gal	7.42	4.18 mS/cm	24.2°	Clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 730A Time Finished: 730A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-58

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 45.0 feet Time: 1235p

Depth to Water: 29.35 feet

Height of Water Column (L): 15.65 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = _____ gal. * Purge Factor 3 = **Purge Volume** _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
____	----	----	----	----	
____	____ gal	____	____	____	
____	____ gal	____	____	____	DTW ONLY
____	____ gal	____	____	____	
____	____ gal	____	____	____	
____	____ gal	____	____	____	
____	____ gal	____	____	____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR | NO3 / CLO3

Bottles: 5 Bottles | 6 Bottles | 2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-20

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 43.0 feet Time: 1257p

Depth to Water: 30.91 feet

Height of Water Column (L): 12.09 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-64

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, cool

Well Information:

Total Well Depth: 38.0 feet Time: 541A

Depth to Water: 26.55 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 11.45 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 1.83 gal. * Purge Factor 3 = **Purge Volume** 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
544A	___	___	___	___	
546A	2 gal	6.80	7.95 mS/cm	21.9°C	slightly cloudy yellow
550A	4 gal	7.13	9.02 mS/cm	22.4°C	light yellow
555A	5 gal	7.22	9.07 mS/cm	22.1°C	light yellow
557A	6 gal	7.21	8.94 mS/cm	22.6°C	light yellow
___	___ gal	___	___	___	
___	___ gal	___	___	___	

Sample Appearance: light yellow

Sample Collection - Time Start: 559A Time Finished: 559A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: well purges dry

Water Sampling Field Log

Well No.: M-65

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 40.0 feet Time: 1610A

Depth to Water: 29.53 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 10.47 feet * 0.16 gal/ft (2-in.) / 0.65 gal/ft (4-in.) * 1.47 gal/ft (6-in.) = Well Volume (WV): 1.67 gal. * Purge Factor: 3 = Purge Volume: 5gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1611a	----	----	----	----	
1613a	2 gal	7.02	13.26 mS/cm	22.9°C	yellow
1615a	4 gal	6.94	13.89 mS/cm	23.4°C	yellow
1616a	5 gal	6.94	14.16 mS/cm		yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 1618a Time Finished: 1618a

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-16b

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 43.0 feet Time: 1625a

Depth to Water: 30.18 feet

Height of Water Column (L): 12.82 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 2.05 gal. * Purge Factor: 3 = Purge Volume: 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1621a	----	----	----	----	
1628a	2 gal	6.88	14.11 mS/cm	22.7 °C	yellow
1629a	4 gal	6.84	14.27 mS/cm	23.6 °C	yellow
1631a	6 gal	6.83	14.24 mS/cm	24.0 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 1633a Time Finished: 1633a

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR | NO3 / CLO3

Bottles: 5 Bottles | 6 Bottles | 2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-67

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, sunny

Well Information:

Total Well Depth: 38.0 feet Time: 654A

Depth to Water: 21.42 feet

Height of Water Column (L):	Well Diameter (circle one) 2-in.	4-in.	6-in	Well Volume (WV)	Purge Factor	Purge Volume
16.58 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 2.65 gal.	* 3	= 8 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
656A	----	----	----	----	
658A	3 gal	7.29	5.58 mS/cm	23.8 C	light yellow
700A	6 gal	7.10	5.48 mS/cm	24.0 °C	light yellow
701A	8 gal	7.08	5.60 mS/cm	24.5 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 703A Time Finished: 703A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-18

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 41.0 feet Time: 559A

Depth to Water: 25.91 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)			Well Volume (WV)	Purge Factor	Purge Volume
15.09 feet	* 0.16 gal/ft	* 0.65 gal/ft * 1.47 gal/ft	= 2.41 gal.	* 3	= 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
602A	----	----	----	----	
604A	3 gal	7.23	5.85 mS/cm	22.0 °C	clear
606A	5 gal	7.15	5.87 mS/cm	23.4 °C	clear
606A	7 gal	7.14	5.85 mS/cm	23.6 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection Time Start: 609A Time Finished: 609K

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: VD-4 taken here 5 bottles

Water Sampling Field Log

Well No.: M-69

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, clear, sunny

Well Information:

Total Well Depth: 40.0 feet Time: 640a

Depth to Water: 31.85 feet

Height of Water Column (L): 8.15 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 1.30 gal. * Purge Factor: 3 = Purge Volume: 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
642A	----	----	----	----	
644A	2 gal	7.32	5.10 mS/cm	22.7 °C	clear
645A	3 gal	7.24	4.98 mS/cm	23.5 °C	clear
646A	4 gal	7.22	5.08 mS/cm	24.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 648A Time Finished: 648A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-7D

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 41.0 feet Time: 910A

Depth to Water: 34.02 feet

Height of Water Column (L): 6.98 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.11 gal.

Purge Factor: * 3

Purge Volume: = 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
912A	----	----	----	----	
913A	1 gal	7.39	4.58 mS/cm	23.9 °C	clear
914A	2 gal	7.34	4.98 mS/cm	24.3 °C	clear
915A	3 gal	7.34	4.97 mS/cm	24.6 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 917A Time Finished: 917A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-71

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 43.0 feet Time: 925A

Depth to Water: 34.36 feet

Height of Water Column (L): 8.64 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.38 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
926A	----	-----	-----	------	
928A	2 gal	7.04	7.31 mS/cm	24.6 °C	light yellow
929A	3 gal	6.99	7.54 mS/cm	24.9 °C	Very light yellow
930A	4 gal	6.96	7.40 mS/cm	24.9 °C	Very light yellow
	gal				
	gal				
	gal				

Sample Appearance: Very light yellow

Sample Collection - Time Start: 933A Time Finished: 933A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: Dup EC 7.49 EC 25.1 temp well plug put in place

Water Sampling Field Log

Well No.: M-72

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm Sunny

Well Information:

Total Well Depth: 36.0 feet Time: 940A

Depth to Water: 31.19 feet

Height of Water Column (L): 4.81 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. 0.65 gal/ft | 6-in 1.47 gal/ft

Well Volume (WV) = .76 gal. * Purge Factor 3 = Purge Volume 2 gals

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
941A	----	----	----	----	
944A	1 gal	6.99	9.56 mS/cm	24.8 °C	light yellow
948A	1.5 gal	6.93	9.79 mS/cm	25.1 °C	light yellow
952A	2 gal	7.0	9.92 mS/cm	25.6 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 956A Time Finished: 956A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: well purges dry

Water Sampling Field Log

Well No.: M-73

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny clear

Well Information:

Total Well Depth: 36.0 feet Time: 734A

Depth to Water: 28.18 feet

Height of Water Column (L): 7.82 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 1.25 gal. * Purge Factor: 3 = Purge Volume: 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
736A	----	----	----	----	
739A	2 gal	7.23	7.07 mS/cm	23.1 °C	yellow
742A	3 gal	7.24	6.61 mS/cm	22.7 °C	yellow
746A	4 gal	7.21	7.48 mS/cm	23.3 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 750A Time Finished: 750A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-74

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny Clear

Well Information:

Total Well Depth: 39.0 feet Time: 711A

Depth to Water: 28.31 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor	Purge Volume
10.69 feet	* 0.16 gal/ft / * 0.65 gal/ft / * 1.47 gal/ft	= 1.71 gal.	*	3	= 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
716A	----	----	----	----	
719A	2 gal	7.26	6.26 mS/cm	22.3°C	clear
720A	4 gal	7.20	6.23 mS/cm	23.4°C	clear
722A	5 gal	7.20	6.25 mS/cm	23.8°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection Time Start: 725A Time Finished: 725A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: Well damaged 2" PVC casing broken off metal casing was bent and is sitting at an angle

Water Sampling Field Log

Well No.: M-76

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 53.90 feet Time: 1018A

Depth to Water: 40.44 feet

Height of Water Column (L): 13.46 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 13

Comments:

Water Sampling Field Log

Well No.: M-716

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 54.60 feet Time: 1022A

Depth to Water: 37.65 feet

Height of Water Column (L): 16.95 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= gal.	* 3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR | NO3 / CLO3

Bottles: 5 Bottles | 6 Bottles | 2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-17

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, breezy

Well Information:

Total Well Depth: 47.20 feet Time: 715A

Depth to Water: 35.93 feet

Height of Water Column (L): 11.27 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= gal.	* 3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-78

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 43.60 feet Time: 130 P

Depth to Water: 30.10 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
13.50 feet * 0.16 gal/ft (2-in.) * 0.65 gal/ft (4-in.) * 1.47 gal/ft (6-in) =	gal.	* 3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: M-79

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Clear Sunny

Well Information:

Total Well Depth: 37.60 feet Time: 809A

Depth to Water: 30.27 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
7.33 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.17 gal.	*	3	=	4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
810A	-----	-----	-----	-----	
812A	2 gal	7.28	5.66 mS/cm	22.7 °C	clear
813A	3 gal	7.25	5.76 mS/cm	23.5 °C	clear
815A	4 gal	7.23	5.79 mS/cm	24.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 818A Time Finished: 818A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: EB-1 taken here before moving to next well 6 bottles 8:24A

Water Sampling Field Log

Well No.: M-80

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm - sunny

Well Information:

Total Well Depth: 43.70 feet Time: 822A

Depth to Water: 34.84 feet

Height of Water Column (L): 8.86 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 5.67 gal. * Purge Factor 3 = **Purge Volume** 17 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
823A	----	----	----	----	
828A	5 gal	7.52	201 mS/cm	22.8 °C	clear
836	11 gal	7.53	2.11 mS/cm	22.3 °C	clear
844	17 gal	7.65	205 mS/cm	23.2 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 845A Time Finished: 845A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

Comments: well purges dry EB-2 - 850A taken here before moving to next well 6 BTLS

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: M-81A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 41.60 feet Time: 759A

Depth to Water: 33.50 feet

Well Diameter (circle one): 2-in. / 4-in. / 6-in

Height of Water Column (L): 8.1 feet * 0.16 gal/ft (2-in.) / * 0.65 gal/ft (4-in.) / * 1.47 gal/ft (6-in) = Well Volume (WV): 5.26 gal. * Purge Factor: 3 = Purge Volume: 16 gal.

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
759A	----	----	----	----	
804A	6 gal	7.26	5.84 mS/cm	23.1 °C	slightly yellow
807A	11 gal	7.24	6.07 mS/cm	23.4 °C	slightly yellow
810A	16 gal	7.20	6.07 mS/cm	23.4 °C	slightly yellow
	gal				
	gal				
	gal				

Sample Appearance: slightly yellow

Sample Collection - Time Start: 813A Time Finished: 813A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-83

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 42.50 feet Time: 856A

Depth to Water: 31.90 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		**Purge Volume**
10.6 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.69 gal.	*	3	=	5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
857A	----	----	----	----	
859A	2 gal	7.48	2.53 mS/cm	22.3°C	clear
901A	4 gal	7.39	2.72 mS/cm	22.6°C	clear
902A	5 gal	7.42	2.75 mS/cm	22.7°C	clear
903A	6 gal	7.36	2.78 mS/cm	22.7°C	clear
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 905A Time Finished: 905A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-92

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, clear, sunny

Well Information:

Total Well Depth: 48.50 feet Time: 1150

Depth to Water: 35.56 feet

Height of Water Column (L): 12.94 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= gal.	* 3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-93

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 49.0 feet Time: 1250

Depth to Water: 34.49 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):				Well Volume (WV)	Purge Factor	Purge Volume
14.51 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-95

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny, warm

Well Information:

Total Well Depth: 30.0 feet Time: 852A

Depth to Water: 16.40 feet

Height of Water Column (L): 13.6 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 2.17 gal. * Purge Factor: 3 = Purge Volume: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
857A	---	---	---	---	
900A	3 gal	7.29	7.09 mS/cm	26.3 °C	clear
902A	5 gal	7.30	7.19 mS/cm	26.7 °C	clear
904A	7 gal	7.30	7.19 mS/cm	26.7 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 906A Time Finished: 906A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-96

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: sunny, clear

Well Information:

Total Well Depth: 16.90 feet Time: 821A

Depth to Water: 15.80 feet

Height of Water Column (L): 1.10 feet

Well Diameter (circle one): 2-in. (*0.16 gal/ft) 4-in. (*0.65 gal/ft) 6-in (*1.47 gal/ft)

Well Volume (WV) = _____ gal. * Purge Factor 3 = Purge Volume 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
826A	-----	-----	-----	-----	
830A	1 gal	7.17	5.96 mS/cm	24.6 °C	clear
835A	2 gal	7.12	6.42 mS/cm	26.8 °C	clear
839A	3 gal	7.15	6.48 mS/cm	26.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 842A Time Finished: 842A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: well purge slow

Water Sampling Field Log

Well No.: M-97

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, clear

Well Information:

Total Well Depth: 52.50 feet Time: 118p

Depth to Water: 38.90 feet

Height of Water Column (L): 13.60 feet * (Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. * 0.65 gal/ft / 6-in * 1.47 gal/ft) = Well Volume (WV) 2.17 gal. * Purge Factor 3 = Purge Volume 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
120p	----	----	----	----	
123p	3 gal	7.45	5.27 mS/cm	24.9 °C	clear
124p	5 gal	7.34	5.19 mS/cm	25.1 °C	clear
125p	7 gal	7.33	5.30 mS/cm	25.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection Time Start: 128p Time Finished: 128p

Analyses / Bottles:
- CLO4 / CR / TDS / pH — 5 Bottles
- pH / CLO4 / CR6 / TDS / CR — 6 Bottles
- NO3 / CLO3 — 2 bottles

TOTAL BOTTLES: 5

Comments: Dup EC 5.34 EC 25.2 Temp

Water Sampling Field Log

Well No.: M-98

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 33.40 feet Time: 940A

Depth to Water: _____ feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
_____ feet * 0.16 gal/ft / 0.65 gal/ft * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	----	-----	-----	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	well dry
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: M-99

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm Sunny

Well Information:

Total Well Depth: 35.59 feet Time: 842A

Depth to Water: _____ feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	**Purge Volume**
2-in.	4-in.	6-in			
0.16 gal/ft	0.65 gal/ft	1.47 gal/ft			

Height of Water Column (L): _____ feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	____	____	____	____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	well dry
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-100

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 33.81 feet Time: 847A

Depth to Water: _____ feet

Well Diameter (circle one)

2-in.	4-in.	6-in
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft

Height of Water Column (L): _____ feet * _____ = _____ gal. * 3 = _____

Well Volume (WV)	Purge Factor	Purge Volume

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	Well Dry.
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-101

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 32.15 feet Time: 851 A

Depth to Water: _____ feet

Well Diameter (circle one) 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume
Height of Water Column (L): _____ feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= _____ gal.	* 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	Well dry
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-115

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 47.50 feet Time: 1026A

Depth to Water: 35.93 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 11.57 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV): 1.85 gal. * Purge Factor: 3 = **Purge Volume**: 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1029A	-----	-----	-----	-----	
1031A	2 gal	7.49	2.65 mS/cm	24.4 °C	clear
1032A	4 gal	7.52	2.82 mS/cm	24.3 °C	clear
1034A	6 gal	7.52	2.81 mS/cm	24.5 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1037A Time Finished: 1037A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-131

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Sunny cool clear

Well Information:

Total Well Depth: 39.0 feet Time: 709A

Depth to Water: 31.17 feet

Height of Water Column (L): 7.83 feet * (Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in * 1.47 gal/ft) = Well Volume (WV): 1.25 gal. * Purge Factor: 3 = Purge Volume: 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
710A	---	---	---	---	
712A	2 gal	7.46	4.40 mS/cm	22.9 °C	clear
713A	3 gal	7.43	4.39 mS/cm	23.4 °C	clear
714A	4 gal	7.43	4.35 mS/cm	23.4 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 716A Time Finished: 716A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-135

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear sunny

Well Information:

Total Well Depth: 39.0 feet Time: 653a

Depth to Water: 32.80 feet

Height of Water Column (L): 6.20 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in * 1.47 gal/ft = Well Volume (WV): .99 gal. * Purge Factor: 3 = Purge Volume: 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
654A	-----	-----	-----	-----	
656A	1 gal	7.41	3.88 mS/cm	22.4 °C	clear
657A	2 gal	7.37	4.53 mS/cm	23.6 °C	clear
658A	3 gal	7.37	4.62 mS/cm	23.7 °C	clear
659A	4 gal	7.37	4.63 mS/cm	23.8 °C	clear
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 702A Time Finished: 702A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-1616

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 32.0 feet Time: 2114

Depth to Water: 27.56 feet

Height of Water Column (L): 4.44 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = _____ gal. * Purge Factor 3 = **Purge Volume** _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-1167

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 30.0 feet Time: 2034

Depth to Water: 25.0 feet

Height of Water Column (L): 5.0 feet

Well Diameter (circle one): 2-in. (0.16 gal/ft) 4-in. (0.65 gal/ft) 6-in (1.47 gal/ft)

Well Volume (WV) = _____ gal. * Purge Factor 3 = **Purge Volume** _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	____	____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR | NO3 / CLO3

Bottles: 5 Bottles | 6 Bottles | 2 bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-168

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 35.0 feet Time: 1530

Depth to Water: 22.61 feet

Height of Water Column (L): 12.39 feet * Well Diameter (circle one) 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = _____ gal. * Well Volume (WV) 3 = Purge Factor Purge Volume

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-169

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 35.0 feet Time: 1500

Depth to Water: 24.90 feet

Height of Water Column (L): 10.10 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft = _____ gal. * Purge Factor 3 = Purge Volume _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	----	-----	----	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	
_____	_____ gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-170

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 35.0 feet Time: 1430

Depth to Water: 26.48 feet

Height of Water Column (L): 8.52 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	DTW ONLY
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-172

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 37.0 feet Time: 1185

Depth to Water: 28.18 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

		Well Volume (WV)	Purge Factor	Purge Volume
Height of Water Column (L): 8.82 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft =	gal.	* 3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-173

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 40.0 feet Time: 1249p

Depth to Water: 28.28 feet

Height of Water Column (L): 11.72 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-174

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 28.0 feet Time: 1232 p

Depth to Water: 18.47 feet

Height of Water Column (L): 9.53 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft = _____ gal. * Well Volume (WV) 3 Purge Factor = Purge Volume

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-175

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 29.0 feet Time: 1228p

Depth to Water: 20.65 feet

Height of Water Column (L): 8.35 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = _____ gal. * Purge Factor 3 = Purge Volume _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	____	____	____	____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR | NO3 / CLO3

Bottles: 5 Bottles | 6 Bottles | 2 bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-176

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm) sunny

Well Information:

Total Well Depth: 30.0 feet Time: 1225p

Depth to Water: 23.23 feet

Height of Water Column (L): 6.77 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in * 1.47 gal/ft = _____ gal. * Well Volume (WV) 3 = Purge Factor = Purge Volume

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	-----	----	
	gal				
	gal				DTW ONLY
	gal				
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: M-177

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool clear

Well Information:

Total Well Depth: 30.0 feet Time: 611a

Depth to Water: 20.84 feet

Height of Water Column (L): 9.16 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. * 0.65 gal/ft / 6-in * 1.47 gal/ft = _____ gal. * Well Volume (WV) 3 Purge Factor = **Purge Volume** _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	PTW ONLY
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: Ø

Comments:

Water Sampling Field Log

Well No.: MW-K4

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: 59°F NICE

Well Information:

Total Well Depth: 50.0 feet Time: 1051A

Depth to Water: - 27.18 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		Purge Volume
Water Column (L):	22.82 feet	X (0.4893)	1.9	4.41	=	11 GALS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1054A		24.6°C	CLEAR

Comments:

Sample Collection Time - 1102A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: MW-K5

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: NICE

Well Information:

Total Well Depth: 43.5 feet Time: 942A

Depth to Water: - 29.43 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	14.07 feet	X (0.4893)	1.9	4.41	=	7 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
944A		23.4°C	clear

Comments:

Sample Collection Time - 950A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-18

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: 61°C

Well Information:

Total Well Depth: 52.5 feet Time: 1248p

Depth to Water: - 27.77 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		Purge Volume
Water Column (L):	24.73 feet	X	0.4893	1.9	4.41	= 12 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1252p		24.4	CLEAR

Comments: Took tall out. Put back in after sample.

Sample Collection Time - 101p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-37

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 43.08 feet Time: 1118A

Depth to Water: 29.05 feet

Height of Water Column (L): 14.03 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 2.24 gal. * Purge Factor: 3 = Purge Volume: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1119A	----	----	----	----	
1122A	3 gal	7.25	9.31 mS/cm	25.3 °C	clear
1124A	5 gal	7.24	9.38 mS/cm	25.4 °C	clear
1125A	7 gal	7.24	9.30 mS/cm	25.4 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1128A Time Finished: 1128A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-33

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14-Nov-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: clear

Well Information:

Total Well Depth: 34.8 feet Time: 930A

Depth to Water: - 26.48 feet

Water Column (L): 8.32 feet X

Well Diameter (circle one)		
2-in.	**4-in.**	**6-in**
0.4893	1.9	4.41

= **Purge Volume** 4 gal/3

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
932A		24.1°C	clear

Comments:

Sample Collection Time - 937A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-54

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm sunny

Well Information:

Total Well Depth: 34.60 feet Time: 914A

Depth to Water: 22.60 feet

Height of Water Column (L): 12.00 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.9 gal. * Purge Factor: 3 = Purge Volume: 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
917A	----	----	------	-----	
9:19A	2 gal	7.34	5.79 mS/cm	26.0 °C	clear
920A	4 gal	7.31	5.99 mS/cm	26.2 °C	clear
921A	6 gal	7.29	5.88 mS/cm	26.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 923A Time Finished: 923A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-55

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 55.41 feet Time: 107p

Depth to Water: - 26.80 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	28.6 feet	X	0.4893	1.9	4.41	= 1.26 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
109p		23.6°C	CLEAR

Comments:

Sample Collection Time - 216p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-56

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 54.2 feet Time: 1184

Depth to Water: - 12.75 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	41.45 feet	X	0.4893	1.9	4.41	= 20 GALS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1200		23.8°C	CLEAR

Comments:

Sample Collection Time - 1300

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-58

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR AND CALM

Well Information:

Total Well Depth: 32.6 feet Time: 102p

Depth to Water: - 13.05 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	19.55 feet	X (0.4893)	1.9	4.41	=	10 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
104p		23.7°C	CLEAR

Comments:

Sample Collection Time - 111p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-5-9

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: NO WIND

Well Information:

Total Well Depth: 34.5 feet Time: 200p

Depth to Water: - 11.80 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	22.7 feet	X (0.4893)	1.9	4.41	=	11 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
200p		23.4°C	CLEAR

Comments:

Sample Collection Time - 209p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-60

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: clear

Well Information:

Total Well Depth: 39.5 feet Time: 1410

Depth to Water: - 12.55 feet

			Well Diameter (circle one)				**Purge Volume**
			2-in.	**4-in.**	**6-in**		
Water Column (L):	26.95 feet	X	0.4893	1.9	4.41	=	13 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1420		24.10c	clear

Comments:

Sample Collection Time - 1500

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-62

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13-NOV 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 37.3 feet Time: 219 p

Depth to Water: - 11.25 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	26.05 feet	X 0.4893	1.9	4.41	=	13 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
221p		25.10C	CLEAR

Comments:

Sample Collection Time - 227p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-68

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: No WIND

Well Information:

Total Well Depth: 54.5 feet Time: 235p

Depth to Water: - 9.88 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	44.62 feet	X (0.4893)	1.9	4.41	=	22 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
235p		23.20C	CLEAR

Comments:

Sample Collection Time - 253p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-71

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny, slight breeze

Well Information:

Total Well Depth: 33.23 feet Time: 1027A

Depth to Water: 25.63 feet

Height of Water Column (L): 7.60 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.21 gal.

Purge Factor: * 3

Purge Volume: = 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1030A	----	----	----	----	
1032A	2 gal	7.39	8.38 mS/cm	25.0 °C	clear
1033A	3 gal	7.31	8.79 mS/cm	25.6 °C	clear
1034A	4 gal	7.28	8.94 mS/cm	25.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1036A Time Finished: 1036A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-72

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 39.54 feet Time: 1041A

Depth to Water: 28.11 feet

Height of Water Column (L): 11.43 feet

Well Diameter (circle one)			Well Volume (WV)		Purge Factor		**Purge Volume**
2-in.	4-in.	6-in					
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.82	gal. *	3	=	5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1045A	----	----	-----	----	
1047A	2 gal	7.28	8.07 mS/cm	24.7°C	clear
1048A	4 gal	7.28	8.15 mS/cm	25.4 °C	clear
1049A	5 gal	7.28	8.12 mS/cm	25.6°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1051A Time Finished: 1051A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: VD-3 taken here 5 bottles

Water Sampling Field Log

Well No.: PC-73

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, breezy, sunny

Well Information:

Total Well Depth: 49.44 feet Time: 1058A

Depth to Water: 29.08 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 20.36 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = 3.25 gal. * 3 = 10 gal

Well Volume (WV)	Purge Factor	Purge Volume
3.25 gal.	* 3 =	10 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1100A	----	----	----	----	
1103A	4 gal	7.30	841 mS/cm	25.0 °C	clear
1106A	7 gal	7.24	8.29 mS/cm	25.1 °C	clear
1108A	10 gal	7.26	8.42 mS/cm	25.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1110A Time Finished: 1110A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-86

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 28.0 feet Time: 1154A

Depth to Water: - 5.15 feet

			Well Diameter (circle one)				
			2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	22.85 feet	X	0.4893	1.9	4.41	=	11.0

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
~~1202p~~ 1156A		22.20C	CLEAR

Comments:

Sample Collection Time - 1202p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-90

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: CLEAR AND CALM

Well Information:

Total Well Depth: 33.0 feet Time: 1135A

Depth to Water: - 6.25 feet

Water Column (L):		Well Diameter (circle one)			Purge Volume
		2-in.	4-in.	6-in	
26.75 feet	X	0.4893	1.9	4.41	= 13

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1137A		23.2°C	CLEAR

Comments:

Sample Collection Time - 1145A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-91

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Wind calm

Well Information:

Total Well Depth: 37.0 feet Time: 1215

Depth to Water: - 11.53 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	25.47 feet	X 0.4893	1.9	4.41	=	12.0 gals.

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1217p		22.50c	CLEAR

Comments:

Sample Collection Time - 1225p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-92

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Wind calm

Well Information:

Total Well Depth: 22.0 feet Time: 1230p

Depth to Water: - 11.14 feet

	Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**	**Purge Volume**
Water Column (L):	10.86 feet, X	0.4893	1.9	4.41	= 5 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1232p		22.6°C	CLEAR

Comments:

Sample Collection Time - 1236p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-94

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: CALM

Well Information:

Total Well Depth: 20.0 feet Time: 1236p

Depth to Water: - 11.35 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	8.65 feet	X (0.4893)	1.9	4.41	=	4 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1238p		22.7°C	CLEAR

Comments:

Sample Collection Time - 1242p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-9M

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 13 Nov 12

Sampling Method: Electric Pump ⊕ Disposable Bailer O

Weather Conditions: No wind clear

Well Information:

Total Well Depth: 33.5 feet Time: 11:12

Depth to Water: - 41.78 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		Purge Volume
Water Column,(L):	28.72 feet	X (0.4893)	1.9	4.41	=	14

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1115A		22.5°C	CLEAR

Comments:

Sample Collection Time - 1125A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-98R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 NOV 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: NICE AND CLEAR

Well Information:

Total Well Depth: 40.5 feet Time: 1151A

Depth to Water: - 22.30 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	18.2 feet	X 0.4893	1.9	4.41	=	35 gals.

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1154A		73.4°F	CLEAR

Comments:

Sample Collection Time - 1215P

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-99R2/R3

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Sample Port ● Disposable Bailer O

Weather Conditions: 59°C

Well Information:

Total Well Depth: 55.3 feet Time: 242p

Depth to Water: - 36.63 feet

		Well Diameter (circle one)			Purge Volume
		2-in.	4-in.	6-in	
Water Column (L):	18.67 feet X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1046p			CLEAR

Comments:

Sample Collection Time - 1046A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-101R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: 81°F CALM AND CLEAR

Well Information:

Total Well Depth: 50.5 feet Time: 1227 P

Depth to Water: - 28.65 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	21.82 feet	X (0.4893)	1.9	4.41	=	11 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1230p		24.2°C	CLEAR

Comments:

Sample Collection Time - 1238p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-103

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14 Nov 12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: clear

Well Information:

Total Well Depth: 31.8 feet Time: 1137A

Depth to Water: - 22.70 feet

		Well Diameter (circle one)				
		2-in.	4-in.	6-in		**Purge Volume**
Water Column (L):	9.1 feet	X (0.4893)	1.9	4.41	=	5 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1139A		22.9°C	clear

Comments:

Sample Collection Time - 1146A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-115R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● SC Disposable Bailer O SAMPLE PORT ●

Weather Conditions: 58° - NICE

Well Information:

Total Well Depth: 55.5 feet Time: 237p

Depth to Water: - 8.30 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	47.2 feet	X 0.4893	1.9	4.41	=	____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1050A			CLEAR

Comments:

Sample Collection Time - 1050A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-116R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O Sample pump

Weather Conditions: _____

Well Information:

Total Well Depth: 55.5 feet Time: 2450

Depth to Water: - 14.49 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	41.01 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1053A			CLEAR

Comments:

Sample Collection Time - 1053A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-117

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port ●

Weather Conditions: Clear - No wind

Well Information:

Total Well Depth: 58.0 feet Time: 248p

Depth to Water: - 13.13 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	39.87 feet	X	0.4893	1.9	4.41	= ____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1056A			Clear

Comments:

Sample Collection Time - 1056A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-118

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: 59° - clear

Well Information:

Total Well Depth: 51.0 feet Time: 235p

Depth to Water: - 8.56 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	42.44 feet	X 0.4893	1.9	4.41	=	____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1100A			clear

Comments:

Sample Collection Time - 1100A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-119

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O SAMPLE PORT

Weather Conditions: CLEAR - NO WIND

Well Information:

Total Well Depth: 47.0 feet Time: 2327

Depth to Water: - 6.57 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	40.43 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1104A			CLEAR

Comments:

Sample Collection Time - 1104A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-120

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port ●

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 47.0 feet Time: 227p

Depth to Water: - 4.54 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	42.46 feet	X 0.4893	1.9	4.41	=	____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1106A			CLEAR

Comments:

Sample Collection Time - 1106A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-121

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: 58°

Well Information:

Total Well Depth: 38.5 feet Time: 223p

Depth to Water: - 4.53 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	33.97 feet	X	0.4893	1.9	4.41	=	____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1109A			CLEAR

Comments:

Sample Collection Time - 1109 A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-122

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 14-NOV-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: CLEAR

Well Information:

Total Well Depth: 37.9 feet Time: 915A

Depth to Water: - 32.27 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	5.63 feet	X (0.4893)	1.9	4.41	=	3 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
918A		24.1°C	CLEAR

Comments:

Sample Collection Time - 921A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-123

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, cool

Well Information:

Total Well Depth: 34.70 feet Time: 441A

Depth to Water: 23.80 feet

Height of Water Column (L): 10.9 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.74 gal. * Purge Factor: 3 = **Purge Volume**: 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
446A	----	----	----	----	
448A	2 gal	7.01	7.96 mS/cm	23.5°C	clear
450A	4 gal	7.14	7.82 mS/cm	23.9°C	clear
451A	5 gal	7.18	8.02 mS/cm	23.6°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 453A Time Finished: 453A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-124

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, cool, sunny

Well Information:

Total Well Depth: 34.60 feet Time: 648A

Depth to Water: 25.28 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)		Purge Factor		Purge Volume
9.32 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.49 gal.	*	3	=	5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
649A	----	----	----	----	
651A	2 gal	7.02	10.31 mS/cm	22.2 °C	Very slightly cloudy
652A	4 gal	7.01	10.52 mS/cm	23.4 °C	clear
653A	5 gal	7.04	10.64 mS/cm	23.5 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 655A Time Finished: 655A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-125

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear sunny

Well Information:

Total Well Depth: 33.50 feet Time: 712A

Depth to Water: 22.91 feet

Height of Water Column (L): 10.59 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.69 gal. * Purge Factor 3 = Purge Volume 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
714A	-----	-----	-----	-----	
715A	2 gal	7.07	9.67 mS/cm	21.5°C	clear
717A	4 gal	7.05	9.64 mS/cm	22.3°C	clear
718A	5 gal	7.08	9.73 mS/cm	22.3°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start 719A Time Finished: 719A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-126

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, Warming

Well Information:

Total Well Depth: 34.30 feet Time: 726A

Depth to Water: 21.91 feet

Height of Water Column (L): 12.39 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. * 0.65 gal/ft / 6-in * 1.47 gal/ft = Well Volume (WV): 1.98 gal. * Purge Factor: 3 = Purge Volume: 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
730A	----	----	----	----	
732A	2 gal	7.08	13.0 mS/cm	22.2 °C	muddy
733A	4 gal	7.06	13.17 mS/cm	23.1 °C	cloudy
734A	6 gal	7.07	13.04 mS/cm	23.1 °C	slightly cloudy
	gal				
	gal				
	gal				

Sample Appearance: slightly cloudy

Sample Collection Time Start: 736A Time Finished: 736A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-127

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear Warming

Well Information:

Total Well Depth: 34.70 feet Time: 743A

Depth to Water: 18.51 feet

Well Diameter (circle one): 2-in. / 4-in. / 6-in

Height of Water Column (L): 16.19 feet * 0.16 gal/ft (2-in.) / * 0.65 gal/ft (4-in.) / * 1.47 gal/ft (6-in) = Well Volume (WV): 2.59 gal. * Purge Factor: 3 = Purge Volume: 8 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
745A	----	----	----	----	
747A	3 gal	7.28	7.45 mS/cm	23.4 °C	Very slightly cloudy
749A	6 gal	7.20	7.57 mS/cm	23.8 °C	Clear
750A	8 gal	7.20	7.73 mS/cm	24.3 °C	Clear
	gal				
	gal				
	gal				

Sample Appearance: Clear

Sample Collection - Time Start: 752A Time Finished: 752A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: PC-24 missing lid last visit

Water Sampling Field Log

Well No.: PC-128

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear, cool

Well Information:

Total Well Depth: 34.70 feet Time: 503A

Depth to Water: 18.18 feet

Height of Water Column (L): 16.52 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 2.64 gal. * Purge Factor: 3 = **Purge Volume**: 8 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
505A	---	---	---	---	
509A	3 gal	7.17	6.98 mS/cm	24.5°C	clear
511A	6 gal	7.20	7.05 mS/cm	24.6°C	clear
519A	8 gal	7.21	7.03 mS/cm	23.2°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 522A Time Finished: 522A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: PC-129

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool clear

Well Information:

Total Well Depth: 37.70 feet Time: 528A

Depth to Water: 18.31 feet

Height of Water Column (L):	Well Diameter (circle one) 2-in.	4-in.	6-in	Well Volume (WV)	Purge Factor	Purge Volume
19.39 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 3.10 gal.	* 3	= 9 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
531A	-----	-----	-----	-----	
533A	3 gal	7.17	6.98 mS/cm	23.2°C	clear
535A	6 gal	7.04	7.92 mS/cm	24.2	clear
537A	9 gal	7.02	8.24 mS/cm	24.3°C	clear
539A	120 gal	7.04	8.25 mS/cm	23.8°C	clear
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 540A Time Finished: 540A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-130

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 49.70 feet Time: 546A

Depth to Water: 19.15 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 30.55 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 4.88 gal. * Purge Factor 3 = Purge Volume 15 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
547A	-----	-----	-----	-----	
550A	5 gal	7.18	8.62 mS/cm	23.5°C	clear
553A	10 gal	7.08	8.66 mS/cm	23.5°C	clear
556A	15 gal	7.11	8.85 mS/cm	23.7°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 558A Time Finished: 558A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: PVC cap missing replaced with well plug

Water Sampling Field Log

Well No.: PC-131

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear cool

Well Information:

Total Well Depth: 39.40 feet Time: 605A

Depth to Water: 10.55 feet

Height of Water Column (L): 28.85 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 4.61 gal. * Purge Factor 3 = Purge Volume 14 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
609A	----	----	----	----	
612A	5 gal	7.02	12.95 mS/cm	23.9 °C	clear
616A	10 gal	7.01	12.98 mS/cm	24.2 °C	clear
618A	14 gal	7.00	13.04 mS/cm	24.5 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 620A Time Finished: 620A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-132

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: clear cool

Well Information:

Total Well Depth: 39.70 feet Time: 625A

Depth to Water: 9.51 feet

Height of Water Column (L): 30.19 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 4.83 gal. * Purge Factor: 3 = **Purge Volume**: 15 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
626A	----	----	----	----	
630A	5 gal	7.16	12.64 mS/cm	24.3 °C	cloudy
633A	10 gal	7.04	12.61 mS/cm	24.4 °C	clear
636A	15 gal	7.0	12.78 mS/cm	25.2 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 638A Time Finished: 638A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-133

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 11-5-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: 59°C

Well Information:

Total Well Depth: 40.2 feet Time: 1113A

Depth to Water: - _____ feet

Water Column (L):	feet	X	Well Diameter (circle one) 2-in.	4-in.	6-in	=	Purge Volume
			0.4893	1.9	4.41		

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample

Comments: DTW Only

Roots in well

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-135A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 50.8 feet Time: 1026A

Depth to Water: 28.71 feet

Height of Water Column (L): 22.09 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 3.53 gal.	* 3	= 11 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1028A	----	----	----	----	
1031A	4 gal	7.15	12.18 mS/cm	25.5 °C	slightly cloudy
1033A	8 gal	7.17	12.49 mS/cm	25.5 °C	clear
1036A	11 gal	7.13	12.26 mS/cm	25.5 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1039A Time Finished: 1039A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-136

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 40.3 feet Time: 953A

Depth to Water: 33.22 feet

Height of Water Column (L): 7.08 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.13 gal. * Purge Factor: 3 = Purge Volume: 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
954A	----	~~7.31~~ MB	----	----	
955A	1 gal	~~7.94~~	7.96 mS/cm	24.6 °C	clear
956A	2 gal	7.28	8.15 mS/cm	25.1 °C	clear
957A	3 gal	7.26	8.13 mS/cm	25.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1000A Time Finished: 1000A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-144

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: warm sunny

Well Information:

Total Well Depth: 39.7 feet Time: 1009A

Depth to Water: 29.75 feet

Height of Water Column (L): 9.95 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 1.59 gal. * Purge Factor: 3 = Purge Volume: 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1011A	----	----	-----	-----	
1012A	2 gal	7.32	7.38 mS/cm	25.0 °C	clear
1013A	4 gal	7.22	7.72 mS/cm	25.1 °C	clear
1014A	5 gal	7.21	7.93 mS/cm	25.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1016A Time Finished: 1016A

Analyses / Bottles: CLO4 / CR / TDS / pH — 5 Bottles (X) | pH / CLO4 / CR6 / TDS / CR — 6 Bottles | NO3 / CLO3 — 2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-148

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, Sunny, Clear

Well Information:

Total Well Depth: 50.2 feet Time: 1152a

Depth to Water: 28.03 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)	Purge Factor	Purge Volume
22.17 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 32.58 gal.	* 3	= 98 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1154A	-----	-----	-----	-----	
1201p	10 gal	7.41	9.60mS/cm	24.8°C	Clear
1209p	20 gal	7.37	9.59 mS/cm	24.7°C	Clear
1218p	30 gal	7.32	9.63mS/cm	24.6°C	Clear
	gal				
	gal				
	gal				

Sample Appearance: Clear

Sample Collection - Time Start: 1220P Time Finished: 1220P

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments: Historical data: purge 30 gal before sampling well slow to recharge

Water Sampling Field Log

Well No.: PC-149

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 50.0 feet Time: 1228p

Depth to Water: 28.83 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 21.17 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV) 31.11 gal. * Purge Factor 3 = **Purge Volume** 93 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1231p	----	---	-----	-----	
1239p	12 gal	7.45	5.43mS/cm	24.3°C	clear
1247p	24 gal	7.27	5.58 mS/cm	24.4°C	clear
1255p	35 gal	7.33	5.68mS/cm	24.5°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1258p Time Finished: 1258p

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

Comments: Historical data - purged 35 gal before sampling well slow to recharge

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: PC-150

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Keinan Pate, Eric Crawford Date: 11-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Warm Sunny Clear

Well Information:

Total Well Depth: 45.7 feet Time: 1051A

Depth to Water: 29.21 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 16.49 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = 24.24 gal. * Purge Factor 3 = Purge Volume 73 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1052A	----	----	----	----	
1108A	24 gal	7.45	7.56 mS/cm	25.0 °C	clear
1123A	48 gal	7.33	7.54 mS/cm	25.0 °C	clear
1138A	73 gal	7.37	7.52 mS/cm	24.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1141A Time Finished: 1141A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR	NO3 / CLO3
Bottles:	5 Bottles	6 Bottles	2 bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: I- AA

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 46.0 feet Time: 219p

Depth to Water: 31.22 feet

Height of Water Column (L): 14.78 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AB

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 52.0 feet Time: 215p

Depth to Water: 30.51 feet

Height of Water Column (L): 21.49 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AC

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool clear

Well Information:

Total Well Depth: 50.0 feet Time: 1618

Depth to Water: 29.14 feet

Height of Water Column (L): 20.86 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
	~~mS/cm~~ mV			DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AD

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 50.0 feet Time: 1621A

Depth to Water: 29.55 feet

Height of Water Column (L):* 20.45 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
_____	_____	_____	_____	DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AR

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: warm, sunny

Well Information:

Total Well Depth: 45.0 feet Time: 927p

Depth to Water: 28.88 feet

Height of Water Column (L): 16.12 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
139p	822 mS/cm	26.5°C	6.94	clear

Sample Appearance: clear

Sample Collection - Time Start: 141p Time Finished: 141p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Dup EC reading

814 mS/cm EC 26.6 Temp

Water Sampling Field Log

Well No.: I- B

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny, slight breeze

Well Information:

Total Well Depth: 45.70 feet Time: 207p

Depth to Water: 36.40 feet

Height of Water Column (L): 9.30 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
127p	6.99 mS/cm	26.8°C	6.84	clear

Sample Appearance: clear

Sample Collection - Time Start: 129p Time Finished: 129p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- C

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 43.80 feet Time: 148p

Depth to Water: 28.50 feet

Height of Water Column (L): 15.30 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
109p	852 mS/cm	27.0 °C	7.22	Very slightly yellow

Sample Appearance: Very slightly yellow

Sample Collection - Time Start: 112p Time Finished: 112p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- D

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 47.70 feet Time: 141p

Depth to Water: 28.99 feet

Height of Water Column (L): 18.71 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
105p	8.99 mS/cm	27.1 °C	7.46	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 107p Time Finished: 107p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- E

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 46.70 feet Time: 133p

Depth to Water: 44.0 feet

Height of Water Column (L): 2.70 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1254p	11.61 mS/cm	27.3 °C	6.98	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1256p Time Finished: 1256p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- F

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: sunny, warm

Well Information:

Total Well Depth: 45.80 feet Time: 1200

Depth to Water: 27.12 feet

Height of Water Column (L): 18.68 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1244p	14.64 mS/cm	26.6 °C	7.06	Yellow

Sample Appearance: Yellow

Sample Collection - Time Start: 1248p Time Finished: 1248p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-G

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 42.60 feet Time: 1115

Depth to Water: 38.42 feet

Height of Water Column (L): 4.18 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1230p	14.94 mS/cm	30.2 °C	6.90	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1232p Time Finished: 1232p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-H

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm & Sunny

Well Information:

Total Well Depth: 46.50 feet Time: 1252p

Depth to Water: 33.05 feet ←

Height of Water Column (L): 13.45 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1215p	14.48 mS/cm	28.5 °C	6.82	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1218p Time Finished: 1218p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- I

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: clear cool sunny

Well Information:

Total Well Depth: 44.20 feet Time: 1634

Depth to Water: 23.15 feet

Height of Water Column (L): 21.05 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1642A	8.88 mS/cm	23.5 °C	7.34	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1643A Time Finished: 1643A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-J

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 44.50 feet Time: 626A

Depth to Water: 30.25 feet

Height of Water Column (L): 14.25 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
627A	621 mS/cm	22.5°C	7.32	Very slight yellow

Sample Appearance: Very slight yellow

Sample Collection - Time Start: 628A Time Finished: 628A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- K

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool clear

Well Information:

Total Well Depth: 40.60 feet Time: 612A

Depth to Water: 25.83 feet

Height of Water Column (L): 14.77 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
613A	5.86 mS/cm	22.6 °C	7.15	very slightly yellow

Sample Appearance: very slightly yellow

Sample Collection - Time Start: 614A Time Finished: 614A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- L

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm sunny

Well Information:

Total Well Depth: 43.40 feet Time: 157p

Depth to Water: 26.15 feet

Height of Water Column (L): 17.25 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1184p	11.84 mS/cm	30.8°C	6.74	clear

Sample Appearance: clear

Sample Collection - Time Start: 119p Time Finished: 119p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- M

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 43.70 feet Time: 139p

Depth to Water: 38.11 feet ←

Height of Water Column (L): 5.59 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
100p	11.43 mS/cm	26.1 °C	7.37	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 102p Time Finished: 102p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- N

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Sunny, Warm

Well Information:

Total Well Depth: 41.70 feet Time: 1280

Depth to Water: 29.67 feet

Height of Water Column (L): 12.03 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1250p	17.22mS/cm	26.8 °C	7.04	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1252p Time Finished: 1252p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- O

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 43.80 feet Time: 1240p

Depth to Water: 31.11 feet

Height of Water Column (L): 12.69 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1208PM	13.24 mS/cm	26.6 °C	7.00	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1209p Time Finished: 1209p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- P

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 47.80 feet Time: 1247p

Depth to Water: 39.62 feet

Height of Water Column (L): 8.18 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
12:11p	13.75 mS/cm	26.9 °C	6.80	Yellow

Sample Appearance: Yellow

Sample Collection - Time Start: 1213p Time Finished: 1213p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-Q

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, Sunny

Well Information:

Total Well Depth: 43.80 feet Time: 1146

Depth to Water: 29.92 feet

Height of Water Column (L): 13.88 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1235p	15.40 mS/cm	32.5 °C	7.11	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1237p Time Finished: 1237p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS

Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm) Sunny

Well Information:

Total Well Depth: 45.30 feet Time: 159p

Depth to Water: 40.96 feet ←

Height of Water Column (L): 4.34 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
123p	9.49mS/cm	26.5°	6.99	clear

Sample Appearance: clear

Sample Collection - Time Start: 125p Time Finished: 125p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- 8

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm) Sunny

Well Information:

Total Well Depth: 47.70 feet Time: 155p

Depth to Water: 24.65 feet

Height of Water Column (L): 23.05 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
114p	11.98mS/cm	27.1 °C	7.19	Clear

Sample Appearance: Clear

Sample Collection - Time Start: 116p Time Finished: 116p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- T

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 47.80 feet Time: 1259p

Depth to Water: 37.50 feet

Height of Water Column (L): 10.30 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1224p	15.52 mS/cm	31.3 °C	6.69	Yellow

Sample Appearance: Yellow

Sample Collection - Time Start: 1226p Time Finished: 1226p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- U

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 47.60 feet Time: 1254p

Depth to Water: 43.58 feet

Height of Water Column (L): 4.02 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1220p	15.13 mS/cm	29.3 °C	6.69	yellow

Sample Appearance: Yellow

Sample Collection - Time Start: 1222p Time Finished: 1222p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- V

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool, clear, sunny

Well Information:

Total Well Depth: 47.70 feet Time: 1636 A

Depth to Water: 31.65 feet

Height of Water Column (L): 16.05 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1648 A	11.66 mS/cm	23.1 °C	7.21	Yellow

Sample Appearance: Yellow

Sample Collection - Time Start: 1649 A Time Finished: 1649 A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- IW

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 50.0 feet Time: 1244p

Depth to Water: 29.31 feet

Height of Water Column (L): 20.69 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
_____	_____	_____	_____	DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- X

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny, slight breeze

Well Information:

Total Well Depth: 50.0 feet Time: 1250

Depth to Water: 25.51 feet

Height of Water Column (L): 24.49 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
_____	_____	_____	_____	DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- Y

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-5-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: Warm, sunny

Well Information:

Total Well Depth: 35.0 feet Time: 2015

Depth to Water: 26.92 feet

Height of Water Column (L): 8.08 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- 2

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford, Keinan Pate Date: 11-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: cool, clear

Well Information:

Total Well Depth: 37.00 feet Time: 1629A

Depth to Water: 34.33 feet

Height of Water Column (L): 2.67 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1634A	6.71 mS/cm	23.2°C	7.29	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1635A Time Finished: 1635A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

VEOLIA
WATER

Third Quarter
Well Monitoring

Nevada Environmental
Response Trust
Henderson, Nevada

August 6 – August 16 , 2012

CONTENTS

Field Data Letter Report

Section

VEOLIA
WATER

Letter of Transmittal

Attention: John Pekala
Senior Manager
Environ International Corp.
510 Fourth St.
Henderson, NV 89015

Date: August 27, 2012

Project:

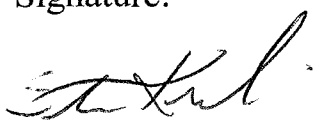
2012 3rd Quarter Groundwater Monitoring

Enclosed:

1 copy of Field Data Letter Report

Remarks:
John,
The enclosed Quarterly Groundwater Monitoring Report with supporting documents is provided for your records.

Signature:



Steve Kubacki
Veolia Water NA

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-6001 / Fax 702-566-9030
www.Veoliawaterna.com

VEOLIA
WATER

Field Data Letter Report

1 INTRODUCTION

Nevada Environmental Response Trust (NERT) contracts with Veolia Water North America West LLC. (VWNA) to conduct groundwater sampling and analysis at their Chemical facility, located at 510 Fourth Street, in Henderson, Nevada. The work described herein represents the third quarter groundwater sampling event for 2012. The work was conducted in accordance with the Sampling and Analysis Work plan, submitted to Tronox January 9, 2004.

VWNA has 4 staff members trained to assist the quarterly well monitoring events. VWNA monitoring team meets twice prior to the sampling event to discuss all issues associated with this project and to review the status of action items noted in the first meeting. Sampling and laboratory equipment needs, time tables and well site schedules are reviewed. Samples and coolers are checked to ensure that there are no missing bottles.

1.1 SCOPE OF SAMPLING EVENT

This sampling effort included the following tasks:

- Soundings of the pumping water levels in 23 interceptor wells.
- Soundings of the water levels in 7 interceptor wells
- Collection of groundwater samples from 23 interceptor wells.
- Soundings of water levels in 102 monitoring wells.
- Collection of groundwater samples from 87 monitoring wells.
- Collection of groundwater samples from 16 pumping wells.
- Collection of water levels in 7 buddy wells.

Analysis of samples collected from the interceptor and monitoring wells, range from Perchlorate (CLO4), Total Chromium (Cr), Hexavalent Chromium (Cr+6), pH, Specific Conductance (EC),

Total Dissolved Solids (TDS) and NPDES list for well M-10, (Up Well). (CR-MS, MN-MS, CU-MS, MO-MS, FE, B, CL, F, TDS, NO3, NO2-N, N-INOR, NH3, NH3-DIST)

Groundwater samples were shipped daily to Montgomery Watson (MWH) for analysis, in Monrovia, California. MWH is certified by the State of Nevada.
The scope of this assignment also included compiling the water level and analytical data presented in this report. Data are presented in tabular form.

2 FIELD ACTIVITIES

VWNA conducted the field activities associated with this quarterly sampling event between Monday August 6th and Thursday, August 16th, 2012. Activities included the sounding of "pumping water" levels in the interceptor wells, sounding the "static water" level in the monitoring wells and sampling of both the interceptor and monitoring wells. Prior to each quarter, an inventory list was issued to Environ and their consultants for review and comment. Sampling was conducted according to their specifications.

Michele Brown and Eric Crawford were responsible for sample collection and recording all pertinent data on sample bottles. Michele Brown supervised the groundwater sampling activities. She is responsible for executing all work elements related to the groundwater sampling program, including laboratory equipment maintenances and calibration, fieldwork, documenting field activities, maintaining field notes and photographs (when applicable), maintaining a record of onsite personnel and visitors, and providing the Operations Manager with information concerning implementation of the sampling plan.

VWNA maintained records of daily events and pertinent sampling data of each well on a field log sheet and addendum data in a bound log book. Log sheet entries included personnel onsite, weather conditions, water levels, activities conducted, sampling times, pH, EC, temperature and other significant field information.

2.1 Groundwater Level Soundings

VWNA sounded pumping water levels in 23 interceptor wells. The static water readings were taken in Interceptor wells I-AA, I-AB, I-AD, I-AC, I-W, I-X and I-Y. In addition to the interceptor wells, static water levels in 102 monitoring wells were taken. There were twenty-one (21) wells where only static water levels were required. The following are the 21 wells:

M-166	M-167	M-168	M-169	M-170	M-172	M-173	M-174	M-175	M-176	M-177
ART-1A	ART-2A	ART-3	ART-4	ART-7A	ART-8A	M-55	M-56	M-58	M-60	

The water levels were sounded to the nearest 0.01 foot using an electronic well sounder.

2.2 Equipment Cleaning Procedures

During the sounding of water levels, the equipment was rinsed with 3 to 4 gallons of de-ionized water after use at each well. The rinse water was collected in a polyethylene container and transported to GW-11 for treatment.

3.0 GROUNDWATER SAMPLING

3.1 Sampling Locations

The following presents the identification of wells sampled.

3.1.1 Interceptor Wells

I-AR	I-B	I-C	I-D	I-E	I-F	I-G	I-H	I-I	I-J	I-K
I-L	I-M	I-N	I-O	I-P	I-Q	I-R	I-S	I-T	I-U	I-V
I-Z										

3.1.2 Monitoring Wells

PC-123	PC-124	PC-125	PC-126	PC-127	PC-128	PC-129	PC-130	PC-131	PC-132
PC-54	M-96	PC-71	PC-72	PC-73	PC-37	M-23	M-48A	M-80	M-44
M-64	M-65	M-66	M-79	M-69	M-135	M-131	M-57A	M-37	PC-136
M-22A	PC-150		M-31A		M-71	M-35	M-19	PC-144	M-68

M-74	M-73	M-12A	M-83	M-70	M-72	PC-135A	M-14A	M-11	M-10
M-67	M-25	M-36	M-38	PC-97	PC-90	PC-86	PC-91	M-81A	PC-94
PC-101R	PC-18	PC-55	ARP-1	PC-122	PC-148	PC-149	ART-7B	PC-53	MW-K5
ARP-7	ARP-6B	ARP-5A	ARP-4A	MW-K4	ARP-3A	ARP-2A	PC-103	PC-98R	PC-58

PC-56	PC-60	PC-59	PC-62	PC-68	H-28A	M-5A	M-6A	M-7B	

4.0 SAMPLING TECHNIQUES

4.1 Interceptor Wells

All interceptor wells were sampled using dedicated sampling ports. At the beginning of sampling each well or line, personnel wore a new pair of clean nitrile or latex gloves.

The sampling port was opened to drain any stagnant water from piping and valves. This water is captured and containerized. All captured water is off-loaded at GW-11 for onsite treatment. Following the purging of the sample port, a "water quality" sample was collected for analysis of Perchlorate, Total Chromium, pH, and TDS. VWNA also recorded the "*field*" temperature, pH, and conductivity as well as the pumping water level. The "*field*" parameters are provided in Table 1.

4.2 Monitoring Wells

Monitoring wells were purged before sampling to assure that each sample was collected from fresh formation water.

Eighty-one (81) wells were purged and sampled, using the 12 volt submersible pump. Two wells (2), M-10 and M-11, were purged with the "Ready Flo 2" with variable pump flow control. Three (3) wells, M-6A, M-36 and M-38 were purged with a dedicated bailer. Two wells were sampled using a non dedicated/disposable bailer, ART-6 and H-28A. Hand bailing was done as a result of only needing to purge less than 3 gallons of water, if there was an insufficient amount of water in the well casing to use a pump or due to the location of the well.

Samples for both the interceptor and monitoring wells were collected in appropriate containers supplied by MWH Laboratories and analyzed for the specific required analysis of the well. The bottles were filled with minimal aeration, using laminar flow.

The samples were labeled, packaged, stored, and transported using the procedures outlined in the work plan for well samples. Clear tape may have been used on some bottles to maintain the information integrity of the labels. Where leaking acid` removed the pre labeled information, it was hand restored.

4.3 Problems Encountered

M-22A PVC cap was jammed on the well casing. It was removed and replaced with a well plug. The rain caused a large washout in the drainage basin wall north of M-80.

4.4 Equipment Cleaning Procedures

In addition to using much more water to flush and decontaminate the deionized is changed each morning so the rinsing water is fresh. Non-dedicated sampling equipment was cleaned and decontaminated before use at each new sampling location. Conductivity meter probes, pH electrodes, were thoroughly rinsed with de-ionized water after each well was sampled. The rinsate is captured in a special use bucket for decontamination.

5.0 QUALITY CONTROL

Quality control (QC) procedures include collection and analysis of QC duplicate samples, equipment and field blanks. The analytical laboratory is also required to meet specific QA/QC requirements for surrogate recovery, MS/MSD recovery and RPDs, and LCS recoveries. Duplicate SC readings were conducted at one well each day to insure the accuracy of the Hanna field probe.

5.1 QC Duplicate Samples

QC duplicate samples were collected during the sampling event to evaluate the precision and accuracy of analytical data. The QC duplicates were collected, packaged, and transported in the same manner as the primary sample, but assigned a different identification number.

Four (4) duplicates were collected from the wells, representing at least 5 percent of the samples collected. The duplicate samples were collected from wells M-23, M-35, M-44 and M-12A. They were analyzed for the same parameters as the primary samples. MWH was not informed of the identity of these "blind" samples.

Duplicate "field" EC monitoring was conducted on one well visited for that day.

5.2 Equipment Blanks

Two equipment blanks were taken this quarter. The equipment blanks were collected on August 8th and August 9th, 2012. One set of six bottles for each day for a total of twelve bottles. This was done to evaluate the adequacy of cleaning procedures used by field personnel during this sampling event.

5.3 Field Blanks

One field blank sample was collected on August 6, 2012. One set of six bottles was sent to the laboratory for analysis to evaluate the integrity of the de-ionized water used to clean and purge the sampling equipment.

6.0 ANALYTICAL PROCEDURES

The following designates the parameter, analytical method and method reporting limits for groundwater. Some of the following analysis may not have been performed for this reporting period. VWNA lists all appropriate information to include analysis conducted throughout the entire year:

PARAMETER	ANALYTICAL METHOD	MRL
CLO4	EPA Method 314	4.0 µg/L
Total Chromium	EPA Method 200.7	0.01 mg/L
Hexavalent Chromium (Cr+6)	EPA Method 4500 CR-D	0.005 mg/L,
pH	EPA Method 150	.01 units
EC	EPA Method 2510	2 µohms/cm
TDS	EPA Method 2540C.	10 mg/L

MWH Laboratory QC analytical method and method reporting limits information, was taken from the MWH Laboratory Data Report.

PARAMETER	ANALYTICAL METHOD	MRL
Chloride	EPA Method 300	80.0 mg/L
Iron (ICAP)	EPA Method 200.7	0.005 mg/L
Manganese (ICAP/MS)	EPA Method 200.8	100 µg/L
Sodium (ICAP)	EPA Method 200.7	5 mg/L
Phenolic Compounds	EPA Method 420.1, 420.2	.010 mg/L
Sulfate	EPA Method 300	80 mg/L
Total Organic Carbon, TOC	EPA Method (ML/SM 5310C)	unknown
Total Organic Halogen, TOX	EPA Method (ML/9020 / SM5320)	unknown
Boron	EPA 200.7	.10 mg/L
Fluoride	SM4500F-C	.050 mg/L
Molybdenum	EPA 200.8	2.0 ug/L
Total Organic Nitrogen	EPA Method 300	0.200 mg/L
Ammonia Nitrogen	EPA Method 350	0.050 mg/L
Nitrate Nitrogen	EPA Method 300	2.0 mg/L
Copper	EPA Method 200.8	2.0 ug/L

6.1 Field Equipment Calibration

Prior to the start of each day's events, field laboratory equipment was calibrated. A Hanna HI 98130 water proof pH, EC/TDS and temperature field probe was calibrated and measurements recorded on daily laboratory calibration maintenance forms, which have been provided.

7.0 SUMMARY RESULTS

7.1 Groundwater Level Soundings

A summary of water level soundings collected for the interceptor and monitoring wells are presented in Table 1.

Pumping water level in interceptors wells. (Measured in feet from below the top of casing.)

LOW	HIGH
45.40 (I-D)	24.90 (I-I)

Static water level monitoring wells. (Measured in feet from below the top of casing.)

LOW	HIGH
47.21 (M-10)	6.85 (PC-97)

7.2 Summary of Field Activities

7.2.1 Interceptor Wells

CLO4, Cr, TDS, pH — 23 interceptor wells

7.2.2 Monitoring Wells

CLO4, Cr, Cr+6, pH, and TDS — 6 monitoring wells

CLO4, Cr, pH and TDS — 75 monitoring wells

CLO4, Cr and TDS — 2 monitoring wells

TOX, TOC, TDS, Phenolic Compounds, CLO4, Cr, Iron, Manganese, Sodium, Chloride, Specific Conductance, Sulfate — 4 RCRA wells

7.2.3 QC Duplicate Samples (Measured for the same analyses as the primary samples.)

M-44 and M-12A (Measured for CLO4, Total Cr., Hex Cr., pH and TDS)

M-23 and M-35 (Measured for Total Cr., pH, CLO4 and TDS)

7.2.4 Equipment Blanks

Two equipment blanks were analyzed for CLO4, Total Cr., Hex Cr., pH, and TDS.

7.2.5 Field Blank

One field blank was analyzed for CLO4, Total Cr., Hex Cr., pH and TDS.

Weather	Hot /Humid
Total # of wells sampled	104
Total water samples collected	111
Total Wells measured DTW only	28
Total Duplicate Samples (5%)	4
Total Equipment Blanks	2
Total Field Blanks	1
Total Wells hand bailed	5
Total Wells considered DRY	4
Total Wells not accessible	0

VEOLIA
WATER

Table of Well Gauging Data

This Section Contains:

- Field Sign - In Log
- Daily Maintenance & Calibration Log
- Table 1 Well Inventory
- Chain-of-Custody & Bottle Order Forms

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-3521 / Fax 702-566-9030
www.Veoliawaterna.com

VEOLIA SAMPLING SIGN IN SHEET

DATE	NAME	COMPANY	SIGNATURE
8-6-12	Michele B	VIENA	Michele Brown
8-6-12	Eric C	Veolia	
8-6-12	Keenan Pate	MP / Veolia	
8-7-12	Michele B	VIENA	Michele Brown
8-7-12	Eric C.	Veolia	
8-7-12	Keenan P	MP/Veolia	
8-8-12	Michele B	Veolia	Michele Brown
8-8-12	Eric C.	Veolia	
8-8-12	Keenan Pate	MP/Veolia	
8-9-12	Michele B	VIENA	Michele Brown
8-9-12	Keenan	MP/Veolia	
8-9-12	Eric C.	VIENA	

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD

DATE 8-6-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 6.99	2) 8.01	335A/MB
Buffer Temperature	3) 26.8	3) 26.5	
	changed buffers yes_____ please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1337	330A/MB
Calibration Value	1) 1288	
Standard Temp	1) 26.7°C	
	changed standards yes X please check	

Duplicate EC reading Well # M-127

1st Reading

EC 8.03 mS/cm TEMP 24.9°C

2nd Reading

EC 8.05 mS/cm TEMP 25.1°C

All equipment was rinsed and purged with Deionized water after each well.

Date 8-6-12 Verified MB

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD

DATE 8-7-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 7.0	2) 8.01	410A / MB
Buffer Temperature	3) 26.2	3) 28.6	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1313	405A / MB
Calibration Value	1) 1288	
Standard Temp	1) 26.2	
	changed standards yes X please check	

Duplicate EC reading Well # M-66

1st Reading

EC 15.20 mS/cm TEMP 27.0 °C

2nd Reading

EC 15.14 mS/cm TEMP 27.3 °C

All equipment was rinsed and purged with Deionized water after each well.

Date 8-7-12 Verified MM

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD

DATE 8-8-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 7.0	2) 7.99	445A/MD
Buffer Temperature	3) 25.8	3) 26.1	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1313	440A/MD
Calibration Value	1) 1288	
Standard Temp	1) 26.4	
	changed standards yes X please check	

Duplicate EC reading Well # M-11

1st Reading

EC 3.62 TEMP 28.3°C

mS/cm

2nd Reading

EC 3.60 TEMP 28.4°C

mS/cm

All equipment was rinsed and purged with Deionized water after each well.

Date 8-8-12 Verified MB

VEOLIA Water

DAILY MANTENANCE AND CALIBRATION RECORD

DATE 8-9-12

HANNA FIELD PH METER

Known value	1) 7.0	1) 8.0	Time/analyst
CalibrationValue	2) 6.98	2) 802	515A/MB
Buffer Temperature	3) 25.8	3) 26.0	
	changed buffers yes X please check		

HANNA FIELD EC METER

Known Value	1) 1288	Time/analyst
Temp. Comp. Value	1) 1337	510A / MB
Calibration Value	1) 1296	
Standard Temp	1) 26.5	
	changed standards yes X please check	

Duplicate EC reading Well # M-14A

1st Reading

EC 4.71 TEMP 27.0°C

mS/cm

2nd Reading

EC 4.69 TEMP 27.1°C

mS/cm

All equipment was rinsed and purged with Deionized water after each well.

Date 8-9-12 Verified MB

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
ARP-1	44.2	1613.32	24.38		1588.94			8/14/2012	11:13a		pH, TDS, Cr, ClO_4
ARP-2A	54	1614.18	26.07		1588.11			8/14/2012	9:48a		pH, TDS, Cr, ClO_4
ARP-3A	41	1614.67	27.5		1587.17			8/14/2012	9:35a		pH, TDS, Cr, ClO_4
ARP-4A	33	1615.47	29.49		1585.98			8/14/2012	8:45a		pH, TDS, Cr, ClO_4
ARP-5A	38	1616.10	33.18		1582.92			8/14/2012	8:20a		pH, TDS, Cr, ClO_4
ARP-6B	43	1615.56	32.8		1582.76			8/14/2012	8:05a		pH, TDS, Cr, ClO_4
ARP-7	39.2	1613.20	30.76		1582.44			8/14/2012	7:45a		pH, TDS, Cr, ClO_4
ART-1	56	1614.47	30.72		1583.75			8/6/2012	9:28a	Pumping	pH, TDS, Cr, ClO_4
ART-1A	56	1614.40	24.61		1589.79			8/6/2012	9:30a		DTW Only
ART-2	56	1617.10	28.40		1588.70			8/6/2012	9:23a	Pumping	pH, TDS, Cr, ClO_4
ART-2A	58	1616.81	27.36		1589.45			8/6/2012	9:25a		DTW Only
ART-3	47	1617.94	31.48		1586.46			8/6/2012	9:04a		DTW Only
ART-3A	55	1617.60	39.13		1578.47			8/6/2012	8:59a	Pumping	pH, TDS, Cr, ClO_4
ART-4	46	1617.39	29.41		1587.98			8/6/2012	8:55a		DTW Only
ART-4A	46	1617.46	42.26		1575.20			8/6/2012	8:54a	Pumping	pH, TDS, Cr, ClO_4
ART-6	36	1615.31	31.95		1583.36			8/6/2012	9:48a		pH, TDS, Cr, ClO_4
ART-7	38.9	1615.38	31.55		1583.83			8/6/2012	10:12a	Pumping	pH, TDS, Cr, ClO_4
ART-7A	40	1614.78	32.76		1582.02			8/6/2012	10:15a		DTW Only
ART-7B	50	1619.62	35.00		1584.62			8/13/2012	12:05p		pH, TDS, Cr, ClO_6

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
ART-8	50.5	1617.69	33.28		1584.41			8/6/2012	9:12a	Pumping	pH, TDS, Cr, ClO_4
ART-8A	54	1617.10	28.50		1588.60			8/6/2012	9:19a		DTW Only
ART-9	43	1614.90	41.09		1573.81			8/6/2012	10:04a	Pumping	pH, TDS, Cr, ClO_4
M-2A	47.57	1781.16			1781.16	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-5A	50.00	1751.80	38.13		1713.67	7.27	17.17	8/7/2012	11:00a		(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-6A	46.00	1733.19	39.08		1694.11	7.38	10.17	8/7/2012	6:00a		(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-7B	55.00	1732.83	36.39		1696.44	7.57	11.45	8/7/2012	11:40a		(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
M-10	69.45	1836.21	47.21		1789.00	7.67	3.68	8/8/2012	11:15a		pH / CR6 / Cr / ClO_4 /TDS /+NPDES list
M-11	58.00	1815.53	42.68		1772.85	8.03	3.62	8/8/2012	10:11a		pH / TDS / Cr / Cr6 / Cl04
M-12A	50.00	1812.76	40.53		1772.23	8.22	8.09	8/8/2012	9:49a		pH / TDS / Cr / Cr6 / Cl04
M-13	54.76	1814.89			1814.89	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-14A	42.40	1760.93	32.80		1728.13	7.74	4.71	8/9/2012	11:10a		pH, TDS, Cr, ClO_4
M-19	41.20	1766.77	35.48		1731.29	7.56	7.15	8/9/2012	6:08a		pH, TDS, Cr, ClO_4
M-21	44.74	1792.07			1792.07	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-22A	36.92	1759.46	31.13		1728.33	7.39	13.23	8/9/2012	6:46a		pH, TDS, Cr, ClO_4
M-23	44.47	1720.35	33.80		1686.55	7.51	5.93	8/6/2012	10:55a		pH, TDS, Cr, ClO_4
M-25	41.47	1759.93	33.69		1726.24	7.46	9.23	8/8/2012	7:58a		pH, TDS, Cr, ClO_4
M-31A	55.00	1796.87	45.95		1750.92	7.62	7.88	8/8/2012	9:31a		pH, TDS, Cr, ClO_4

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
M-33	46.78	1800.29			1800.29	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-35	39.70	1772.78	32.52		1740.26	7.61	5.24	8/8/2012	1:11p		pH, TDS, Cr, ClO_4
M-36	37.85	1759.82	32.76		1727.06	7.44	15.02	8/9/2012	7:05a		pH / Cr / Cr^6 / ClO_4 / TDS
M-37	37.18	1761.06	32.17		1728.89	7.30	7.11	8/8/2012	7:08a		pH / Cr / Cr^6 / ClO_4 / TDS
M-38	36.82	1759.73	31.48		1728.25	7.50	13.22	8/9/2012	7:08a		pH, TDS, Cr, ClO_4
M-44	37.65	1698.31	23.03		1675.28	7.60	10.13	8/6/2012	9:37a		pH / TDS / Cr / Cr6 / Cl04
M-48A	40	1718.36	30.04		1688.32	7.59	6.53	8/6/2012	9:16a		pH, TDS, Cr, ClO_4
M-52	47.38	1801.92			1801.92	Sampled in the 2nd and 4th Quarters only					pH, TDS, Cr, ClO_4
M-55	45.00	1750.88	31.00		1719.88			8/6/2012	12:54p		DTW Only
M-56	40.00	1750.83	31.62		1719.21			8/6/2012	12:41p		DTW Only
M-57A	42.40	1753.44	29.83		1723.61	7.88	4.26	8/8/2012	6:52a		pH, TDS, Cr, ClO_4
M-58	45.00	1751.25	30.69		1720.56			8/7/2012	4:38a		DTW Only
M-60	43.00	1750.94	32.72		1718.22			8/7/2012	4:39a		DTW Only
M-64	38.00	1749.76	29.77		1719.99	7.85	7.28	8/7/2012	12:17p		pH, TDS, Cr, ClO4
M-65	40.00	1753.91	33.15		1720.76	7.39	14.45	8/7/2012	1:29p		pH, TDS, Cr, ClO4
M-66	43.00	1754.24	31.85		1722.39	7.26	15.20	8/7/2012	1:41p		pH, TDS, Cr, ClO4
M-67	38.00	1745.91	22.60		1723.31	7.56	6.69	8/9/2012	7:34a		pH, TDS, Cr, ClO4
M-68	41.00	1750.23	27.22		1723.01	7.67	7.03	8/8/2012	1:32p		pH, TDS, Cr, ClO_4

Signature Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
M-69	40.00	1749.75	33.71		1716.04	7.61	5.11	8/8/2012	5:59a		pH, TDS, Cr, ClO_4
M-70	41.00	1748.25	35.51		1712.74	7.61	7.10	8/9/2012	10:00a		pH, TDS, Cr, ClO_4
M-71	43.00	1747.04	35.58		1711.46	7.59	6.82	8/9/2012	10:16a		pH, TDS, Cr, ClO_4
M-72	36.00	1746.49	32.12		1714.37	7.24	11.33	8/9/2012	10:42a		pH, TDS, Cr, ClO_4
M-73	36.00	1741.14	29.24		1711.90	7.60	8.28	8/9/2012	8:09a		pH, TDS, Cr, ClO_4
M-74	39.00	1744.38	30.34		1714.04	7.65	7.17	8/9/2012	7:52a		pH, TDS, Cr, ClO_4
M-75	53.90	1784.21			1784.21	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-76	54.60	1785.22			1785.22	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-77	47.20	1799.61			1799.61	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-79	37.60	1742.53	31.64		1710.89	7.56	6.00	8/8/2012	5:42a		pH / TDS / Cr / ClO_4
M-80	43.70	1746.04	36.16		1709.88	7.98	2.22	8/9/2012	9:02a		TDS / Cr / ClO_4
M-81A	41.60	1744.16	35.69		1708.47	7.59	7.13	8/9/2012	8:49a		TDS / Cr / ClO_4
M-83	42.50	1742.77	33.19		1709.58	7.78	2.76	8/9/2012	9:48a		pH, TDS, Cr, ClO_4
M-92	48.50	1800.76			1800.76	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-93	49.00	1797.54			1797.54	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-95	30.00	1694.09			1694.09	Sampled in the 2nd Quarter only					pH / TDS / Cr / Cr6 / Cl04
M-96	16.90	1693.52	15.76		1677.76	7.64	6.47	8/6/2012	8:24a		pH, TDS, Cr, ClO_4
M-97	52.50	1800.85			1800.85	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
M-98	33.40	1731.90			1731.90			8/7/2012	6:13a	DRY	pH, TDS, Cr, ClO_4
M-99	35.59	1730.74			1730.74			8/8/2012	8:15a	DRY	pH, TDS, Cr, ClO_4
M-100	33.81	1730.93			1730.93			8/8/2012	8:19a	DRY	pH / TDS / Cr / Cr6 / Cl04
M-101	32.15	1730.81			1730.81			8/8/2012	8:21a	DRY	pH, TDS, Cr, ClO_4
M-115	47.50	1787.64			1787.64	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
M-131	39.00	1754.13	32.90		1721.23	7.82	4.65	8/8/2012	6:31a		pH, TDS, Cr, ClO_4
M-135	39.00	1751.85	34.61		1717.24	7.73	4.77	8/8/2012	6:14a		pH, TDS, Cr, ClO_4
M-166	32.00	1751.09	29.78		1721.31			8/6/2012	1:22p		DTW Only
M-167	30.00	1749.95	28.44		1721.51			8/6/2012	1:14p		DTW Only
M-168	35.00	1748.46	26.71		1721.75			8/6/2012	1:09p		DTW Only
M-169	35.00	1750.22	29.30		1720.92			8/6/2012	1:07p		DTW Only
M-170	35.00	1750.66	29.51		1721.15			8/6/2012	1:00p		DTW Only
M-172	37.00	1750.58	33.45		1717.13			8/6/2012	12:45p		DTW Only
M-173	40.00	1749.88	29.58		1720.30			8/6/2012	12:30p		DTW Only
M-174	28.00	1742.29	21.02		1721.27			8/7/2012	12:51p		DTW Only
M-175	29.00	1742.74	21.71		1721.03			8/7/2012	12:52p		DTW Only
M-176	30.00	1745.35	24.52		1720.83			8/7/2012	12:54p		DTW Only
M-177	30.00	1743.23	22.31		1720.92			8/7/2012	12:55p		DTW Only

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
MW-K4	50	1614.96	28.28		1586.68			8/14/2012	9:00a		pH, TDS, Cr, ClO_4
MW-K5	44	1598.87	31.15		1567.72			8/13/2012	1:55p		pH, TDS, Cr, ClO_4
PC-18	52	1618.50	28.89		1589.61			8/15/2012	7:35a		pH, TDS, Cr, ClO_4
PC-53	33	1595.03	29.08		1565.95			8/13/2012	1:40p		pH, TDS, Cr, ClO_4
PC-55	54.9	1618.46	27.80		1590.66			8/14/2012	1:15p		pH, TDS, Cr, ClO_4
PC-56	55	1568.25	15.42		1552.83			8/15/2012	9:19a		pH, TDS, Cr, ClO_4
PC-58	33	1,568.01	15.65		1552.36			8/15/2012	9:06a		pH, TDS, Cr, ClO_4
PC-59	35	1567.92	14.18		1553.74			8/15/2012	10:10a		pH, TDS, Cr, ClO_4
PC-60	40.0	1568.38	15.22		1553.16			8/15/2012	9:45a		pH, TDS, Cr, ClO_4
PC-62	38.0	1567.83	13.30		1554.53			8/15/2012	10:27a		pH, TDS, Cr, ClO_4
PC-68	55.3	1566.97	11.83		1555.14			8/15/2012	10:52a		pH, TDS, Cr, ClO_4
PC-86	28.0	1553.85	7.13		1546.72			8/13/2012	10:35a		pH, TDS, Cr, ClO_4
PC-90	15.0	1550.46	8.05		1542.41			8/13/2012	10:17a		pH, TDS, Cr, ClO_4
PC-91	37.0	1552.33	13.30		1539.03			8/13/2012	10:55a		pH, TDS, Cr, ClO_4
PC-92	22.0	1552.05			1552.05	Sampled in the 2nd Quarter only					pH, TDS, Cr, ClO_4
PC-94	20.0	1548.95	14.15		1534.80			8/15/2012	8:42a		pH, TDS, Cr, ClO_4
PC-97	33.5	1548.53	6.85		1541.68			8/13/2012	9:55a		pH, TDS, Cr, ClO_4
PC-98R	40.5	1593.35	24.59		1568.76			8/14/2012	11:54a		pH, TDS, Cr, ClO_4

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
PC-99R2/R3	55.3	1552.55	40.66		1511.89			8/6/2012	7:52a	Pumping	pH, TDS, Cr, ClO_4
PC-101R	50.5	1618.12	29.74		1588.38			8/14/2012	10:46a		pH, TDS, Cr, ClO_4
PC-103	29.5	1599.49	23.28		1576.21			8/15/2012	8:00a		pH, TDS, Cr, ClO_4
PC-115R	55.5	1554.71	14.52		1540.19			8/6/2012	7:45a	Pumping	pH, TDS, Cr, ClO_4
PC-116R	55.5	1552.10	17.10		1535.00			8/6/2012	7:57a	Pumping	pH, TDS, Cr, ClO_4
PC-117	53.0	1552.26	15.61		1536.65			8/6/2012	8:00a	Pumping	pH, TDS, Cr, ClO_4
PC-118	51.0	1554.53	11.47		1543.06			8/6/2012	7:43a	Pumping	pH, TDS, Cr, ClO_4
PC-119	47.0	1554.66	9.17		1545.49			8/6/2012	7:40a	Pumping	pH, TDS, Cr, ClO_4
PC-120	47.0	1554.64	7.01		1547.63			8/6/2012	7:35a	DTW after well was on for sampling/ lower than usual	pH, TDS, Cr, ClO_4
PC-121	38.5	1554.10	6.92		1547.18			8/6/2012	7:32a	DTW after well was on for sampling/ lower than usual	pH, TDS, Cr, ClO_4
PC-122	38.0	1618.02	33.41		1584.61			8/13/2012	1:03p		pH, TDS, Cr, ClO_4
PC-123	34.70	1626.44	22.93		1603.51	7.28	8.16	8/6/2012	5:22a		pH, TDS, Cr, ClO_4
PC-124	34.60	1635.73	25.35		1610.38	7.54	10.30	8/6/2012	7:14a		pH, TDS, Cr, ClO_4
PC-125	33.50	1635.06	23.48		1611.58	7.61	8.64	8/6/2012	7:28a		pH, TDS, Cr, ClO_4
PC-126	34.30	1634.33	22.46		1611.87	7.49	12.53	8/6/2012	7:43a		pH, TDS, Cr, ClO_4
PC-127	34.70	1632.42	19.10		1613.32	7.65	8.03	8/6/2012	7:57a		pH, TDS, Cr, ClO_4
PC-128	34.70	1633.36	18.42		1614.94	7.56	7.12	8/6/2012	5:39a		pH, TDS, Cr, ClO_4
PC-129	37.70	1633.99	18.48		1615.51	7.40	8.65	8/6/2012	5:59a		pH, TDS, Cr, ClO_4

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
PC-130	49.70	1633.21	19.21		1614.00	7.54	9.08	8/6/2012	6:20a		pH, TDS, Cr, ClO_4
PC-131	39.40	1633.58	11.13		1622.45	7.49	12.72	8/6/2012	6:37a		pH, TDS, Cr, ClO_4
PC-132	39.70	1634.84	9.66		1625.18	7.52	12.60	8/6/2012	6:53a		pH, TDS, Cr, ClO_4
PC-133	40.2	1553.00			1553.00			8/6/2012	6:51a	Roots in casing no DTW but sampled	pH, TDS, Cr, ClO_4
PC-135A	50.8	1618.58	29.91		1588.67	7.57	12.52	8/7/2012	7:08a		pH, TDS, Cr, ClO_4
PC-136	40.3	1618.04	34.31		1583.73	7.59	7.94	8/7/2012	6:38a		pH, TDS, Cr, ClO_4
PC-144	39.7	1618.63	30.91		1587.72	7.59	7.93	8/7/2012	6:56a		pH, TDS, Cr, ClO_4
PC-148	50.2	1617.96	29.18		1588.78	7.69	9.99	8/7/2012	7:26a		pH, TDS, Cr, ClO_4
PC-149	50	1618.93	30.05		1588.88	7.84	5.34	8/7/2012	8:16a		pH, TDS, Cr, ClO_4
PC-150	45.7	1619.09	30.40		1588.69	7.65	7.58	8/7/2012	8:50a		pH, TDS, Cr, ClO_4
INTERCEPTOR WELLS											
I-AA	46.00	1753.93	32.33		1721.60			8/7/2012	4:29a	Pump Off	pH, TDS, Cr, ClO_4
I-AB	52..0	1753.89	33.37		1720.52			8/7/2012	4:30a	Pump Off	pH, TDS, Cr, ClO_4
I-AC	50	1752.76	30.56		1722.20			8/8/2012	8:59a	Pump Off	pH, TDS, Cr, ClO_5
I-AD	50	1755.39	30.79		1724.60			8/8/2012	9:02a	Pump Off	pH, TDS, Cr, ClO_6
I-AR	45.00	1758.35	42.34		1716.01	7.14	8.26	8/6/2012	1:39p		pH, TDS, Cr, ClO_4
I-B	45.70	1752.70	42.93		1709.77	7.39	5.76	8/6/2012	1:19p		pH, TDS, Cr, ClO_4
I-C	43.80	1752.80	42.51		1710.29	7.50	8.53	8/6/2012	1:06p		pH, TDS, Cr, ClO_4
I-D	47.70	1752.70	45.40		1707.30	7.35	9.25	8/6/2012	12:58p		pH, TDS, Cr, ClO_4

Signature: Michelle Brown

Print: Michelle Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
I-E	46.70	1752.40	44.23		1708.17	7.17	10.06	8/6/2012	12:52p		pH, TDS, Cr, ClO_4
I-F	45.80	1749.70	39.73		1709.97	7.15	13.12	8/6/2012	12:47p		pH, TDS, Cr, ClO_4
I-G	42.60	1752.50	40.93		1711.57	7.12	15.22	8/6/2012	12:39p		pH, TDS, Cr, ClO_4
I-H	46.50	1753.20	43.88		1709.32	6.99	14.63	8/6/2012	12:28p		pH, TDS, Cr, ClO_4
I-I	44.20	1745.50	24.90		1720.60	7.67	9.87	8/8/2012	8:34a		pH, TDS, Cr, ClO_4
I-J	44.50	1750.09	36.95		1713.14	7.36	7.38	8/8/2012	8:47a		pH, TDS, Cr, ClO_4
I-K	40.60	1746.04	31.82		1714.22	7.45	6.91	8/8/2012	8:53a		pH, TDS, Cr, ClO_4
I-L	43.40	1751.70	33.60		1718.10	7.21	8.02	8/6/2012	1:12p		pH, TDS, Cr, ClO_4
I-M	43.70	1752.90	41.41		1711.49	7.39	10.21	8/6/2012	12:55p		pH, TDS, Cr, ClO_4
I-N	41.70	1751.40	37.50		1713.90	7.27	10.91	8/6/2012	12:49p		pH, TDS, Cr, ClO_4
I-O	43.80	1752.80	36.92		1715.88	7.16	12.90	8/6/2012	12:24p		pH, TDS, Cr, ClO_4
I-P	47.80	1751.70	39.02		1712.68	7.38	9.94	8/6/2012	12:32p		pH, TDS, Cr, ClO_4
I-Q	43.80	1753.10	34.28		1718.82	7.30	14.87	8/6/2012	12:43p		pH, TDS, Cr, ClO_4
I-R	45.30	1751.35	41.70		1709.65	7.34	7.73	8/6/2012	1:17p		pH, TDS, Cr, ClO_4
I-S	47.70	1750.03	44.11		1705.92	7.23	8.05	8/6/2012	1:11p		pH, TDS, Cr, ClO_4
I-T	47.80	1751.66	38.59		1713.07	6.85	15.30	8/6/2012	12:37p		pH, TDS, Cr, ClO_4
I-U	47.60	1752.17	37.68		1714.49	7.06	15.17	8/6/2012	12:35p		pH, TDS, Cr, ClO_4
I-V	47.70	1752.13	35.09		1717.04	7.63	11.74	8/8/2012	8:29a		pH, TDS, Cr, ClO_4

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
I-W	50.00	1751.50	30.99		1720.51			8/7/2012	4:36a		DTW ONLY
I-X	50.00	1748.60	30.61		1717.99			8/7/2012	4:33a		DTW ONLY
I-Y	35.00	1751.40	30.09		1721.31			8/7/2012	4:31a		DTW ONLY
I-Z	37.00	1743.78	31.89		1711.89	7.65	7.88	8/8/2012	8:40a		pH, TDS, Cr, ClO_4
OTHER WELLS (OFFSITE)											
PC-37	43.08	1707.72	29.03		1678.69	7.63	9.34	8/6/2012	10:36a		pH, TDS, Cr, ClO_4
PC-54	34.60	1704.43	22.54		1681.89	7.62	6.05	8/6/2012	8:57a		pH, TDS, Cr, ClO_4
PC-71	33.23	1698.73	26.03		1672.70	7.71	8.8	8/6/2012	9:52a		pH, TDS, Cr, ClO_4
PC-72	39.54	1699.43	29.10		1670.33	7.69	8.52	8/6/2012	10:10a		pH, TDS, Cr, ClO_4
PC-73	49.44	1699.50	30.61		1668.89	7.64	8.32	8/6/2012	10:22a		pH, TDS, Cr, ClO_4
PIONEER CHEMICAL WELL											
H-28A	51.00	1731.75	39.36		1692.39	6.65	13.81	8/7/2012	5:36a		(pH / SC / TOC / TOX) x 4 / CLO4 / CR / TDS
DUPLICATE SAMPLES											
VD-1	M-23		33.80		1686.55	7.51	5.93	8/6/2012	10:55a		pH, TDS, Cr, ClO_4
VD-2	M-35		32.52		1740.26	7.61	5.24	8/8/2012	1:11p		pH, TDS, Cr, ClO_4
VD-3	M-44		23.03		1675.28	7.60	10.13	8/6/2012	9:37a		pH / TDS / Cr / Cr6 / Cl04
VD-4	M-11		40.53		1772.23	8.22	8.09	8/8/2012	9:49a		pH / TDS / Cr / Cr6 / Cl04
OTHER SAMPLES COLLECTED											
Equipment Blank Sample:	EB-1							8/8/2012	6:46a		pH / TDS / Cr / Cr6 / Cl04

Signature: Michele Brown

Print: Michele Brown

TABLE 1
Well Inventory for Groundwater Sampling
NERT Project, Henderson, Nevada
Summary of Field Data for: 3rd Quarter Groundwater Monitoring, Aug. 2012

WELL #	TOTAL DEPTH (from TOC)	TOP OF CASING ELEVATION (MSL)	DEPTH TO WATER (FEET)	NON-AQUEOUS PHASE LIQUID [1]	GROUNDWATER ELEVATION (FT MSL)	pH	SPECIFIC CONDUCTIVITY (mS/cm)	DATE	TIME	MONITORING QUALIFIER [2]	COMMENTS/Analytical Plan
Equipment Blank Sample:	EB-2							8/9/2012	8:45a		pH / TDS / Cr / Cr6 / Cl04
Field Blank Sample:	FB-1							8/6/2012	10:13a		pH / TDS / Cr / Cr6 / Cl04

NOTES:

Monthly Wells	Not sampled this quarter

Signature: Michele Brown

Print: Michele Brown

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown — Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI									SAMPLER Comments
1225p	8-6-12		I-O	RGW	X		X	X	X	X	X										5 Bottles
1220p	8-6-12		I-P	RGW	X		X	X	X	X	X										5 Bottles
1229p	8-6-12		I-H	RGW	X		X	X	X	X	X										5 Bottles
1232p	8-6-12		I-L	RGW	X		X	X	X	X	X										5 Bottles
1236p	8-6-12		I-T	RGW	X		X	X	X	X	X										5 Bottles
1241p	8-6-12		I-G	RGW	X		X	X	X	X	X										5 Bottles
1245p	8-6-12		I-Q	RGW	X		X	X	X	X	X										5 Bottles
1248p	8-6-12		I-F	RGW	X		X	X	X	X	X										5 Bottles
1252p	8-6-12		I-N	RGW	X		X	X	X	X	X										5 Bottles
1255p	8-6-12		I-E	RGW	X		X	X	X	X	X										5 Bottles
1259p	8-6-12		I-M	RGW	X		X	X	X	X	X										5 Bottles
1040	8-6-12		I-D	RGW	X		X	X	X	X	X										5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI									SAMPLER Comments
109p	8-6-12		I-C	RGW	X		X	X	X	X	X										5 Bottles
112p	8-6-12		I-S	RGW	X		X	X	X	X	X										5 Bottles
116p	8-6-12		I-L	RGW	X		X	X	X	X	X										5 Bottles
119p	8-6-12		I-R	RGW	X		X	X	X	X	X										5 Bottles
123p	8-6-12		I-B	RGW	X		X	X	X	X	X										6 Bottles
128p	8-6-12		I-AR	RGW	X		X	X	X	X	X										5 Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

Sampler Michele Brown Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

ANALYSES REQUIRED (mark an 'X' In all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
531A	8-6-12		PC-123	RGW	X		X	X	X	X	X		5 Bottles
553A	8-6-12		PC-128	RGW	X		X	X	X	X	X		5 Bottles
614A	8-6-12		PC-129	RGW	X		X	X	X	X	X		5 Bottles
631A	8-6-12		PC-130	RGW	X		X	X	X	X	X		5 Bottles
723A	8-6-12		PC-124	RGW	X		X	X	X	X	X		5 Bottles
736A	8-6-12		PC-125	RGW	X		X	X	X	X	X		5 Bottles
749A	8-6-12		PC-126	RGW	X		X	X	X	X	X		5 Bottles
805A	8-6-12		PC-127	RGW	X		X	X	X	X	X		5 Bottles
648A	8-6-12		PC-131	RGW	X		X	X	X	X	X		5 Bottles
706A	8-6-12		PC-132	RGW	X		X	X	X	X	X		5 Bottles
846A	8-6-12		M-96	RGW	X		X	X	X	X	X		5 Bottles
905A	8-6-12		PC-54	RGW	X		X	X	X	X	X		5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown — Michele Brown

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

John Pekala 602-734-7710

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	SAMPLER Comments
936A	8-6-12		M-48A	RGW	X		X	X	X	X	X		5 Bottles
945A	8-6-12		M-44	RGW	X		X	X	X	X	X	X	6 Bottles
1005A	8-6-12		PC-71	RGW	X		X	X	X	X	X		5 Bottles
1015A	8-6-12		PC-72	RGW	X		X	X	X	X	X		5 Bottles
1030A	8-6-12		PC-73	RGW	X		X	X	X	X	X		5 Bottles
1046A	8-6-12		PC-37	RGW	X		X	X	X	X	X		5 Bottles
1103A	8-6-12		M-23	RGW	X		X	X	X	X	X		5 Bottles
1013A	8-6-12		FB-1	RGW	X		X	X	X	X	X	X	6 Bottles
—	8-6-12		VD-1	RGW	X		X	X	X	X	X		5 Bottles
—	8-6-12		VD-3	RGW	X		X	X	X	X	X	X	6 Bottles
				RGW	X		X	X	X	X	X		Bottles
				RGW	X		X	X	X	X	X		Bottles

* MATRIX TYPES:

Reported by Volume:
- CFW = Chlor(am)inated Finished Water
- FW = Other Finished Water
- RGW = Raw Ground Water
- RSW = Raw Surface Water
- CWW = Chlorinated Waste Water
- WW = Other Waste Water
- SW = Storm Water

Reported by Weight:
- SO = Soil
- SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-6-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Weekly - SO #12373

Sampler Mic Russell Speckin

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	SterileCLO4	TDS	CR											SAMPLER COMMENTS
0816	8/6/12		ART-1	RSW	X		X	X	X											
0820	8/6/12		ART-2	RSW	X		X	X	X											
0823	8/6/12		ART-3	RSW	X		X	X	X											
0827	8/6/12		ART-4	RSW	X		X	X	X											
0943	8/6/12		ART-6	RSW	X		X	X	X											
0833	8/6/12		ART-7	RSW	X		X	X	X											
0830	8/6/12		ART-8	RSW	X		X	X	X											
0700	8/6/12		PC-99R2/R3	RSW	X		X	X	X											
PR 0703	8/6/12		PC-115R	RSW	X		X	X	X											
0708	8/6/12		PC-116R	RSW	X		X	X	X											

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Russell Speckin	Veolia Water for Nevada Environmental Response Trust	8/6/2012	1200pm
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Monthly - SO #12373

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

Sampler Signature: Russell Speckin

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 Wacker Suite 1550
Chicago, IL 60606

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	sterile filtered ClO4	TDS	CR	SAMPLER COMMENTS
0643	8/6/12		SF-1	RSW	X		X	X	X	
0710	8/6/12		PC-117	RSW	X		X	X	X	
0713	8/6/12		PC-118	RSW	X		X	X	X	
0716	8/6/12		PC-119	RSW	X		X	X	X	
0720	8/6/12		PC-120	RSW	X		X	X	X	
0723	8/6/12		PC-121	RSW	X		X	X	X	
0651	8/6/12		PC-133	RSW	X		X	X	X	
0837	8/6/12		ART-9	RSW	X		X	X	X	

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Russell Speckin	Veolia Water for Nevada Environmental Response Trust	8/6/2012	12:00 PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	See bottle order								SAMPLER Comments
546A	8-7-12		H-28A	RGW	X		X	X	X	X	X		X								21 Bottles
610A	8-7-12		M-6A	RGW	X		X	X	X	X	X		X								21 Bottles
717A	8-7-12		PC-135A	RGW	X		X	X	X	X	X										5 Bottles
643A	8-7-12		PC-136	RGW	X		X	X	X	X	X										5 Bottles
810A	8-7-12		PC-148	RGW	X		X	X	X	X	X										5 Bottles
702A	8-7-12		PC-144	RGW	X		X	X	X	X	X										5 Bottles
840A	8-7-12		PC-149	RGW	X		X	X	X	X	X										5 Bottles
940A	8-7-12		PC-150	RGW	X		X	X	X	X	X										5 Bottles
1230	8-7-12		M-64	RGW	X		X	X	X	X	X										5 Bottles
1350	8-7-12		M-65	RGW	X		X	X	X	X	X										5 Bottles
1480	8-7-12		M-66	RGW	X		X	X	X	X	X										5 Bottles
—	8-7-12		M-79	RGW	X		X	X	X	X	X		NO	SAMPLE							5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-7-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES

CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS:

SAMPLES CHECKED/LOGGED IN BY:

SAMPLE TEMP, RECEIPT AT LAB:

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME: Nevada Environmental Response Trust

PROJECT JOB # / P.O.#: Quarterly Groundwater Sampling, Schedule B CWA-RCRA

Sampler: Michele Brown (signature: Michele Brown)

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI	See bottle order								SAMPLER Comments
1120A	8-7-12		M-5A	RGW	X		X	X	X	X	X		X								21 Bottles
1155A	8-7-12		M-7B	RGW	X		X	X	X	X	X		X								21 Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles

* MATRIX TYPES:

Reported by Volume:
- CFW = Chlor(am)inated Finished Water
- FW = Other Finished Water
- RGW = Raw Ground Water
- RSW = Raw Surface Water
- CWW = Chlorinated Waste Water
- WW = Other Waste Water
- SW = Storm Water

Reported by Weight:
- SO = Soil
- SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-7-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# ________

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI									SAMPLER Comments
553A	8-8-12		M-19	RGW	X		X	X	X	X	X										5 Bottles
609A	8-8-12		M-69	RGW	X		X	X	X	X	X										5 Bottles
620A	8-8-12		M-135	RGW	X		X	X	X	X	X										5 Bottles
642A	8-8-12		M-131	RGW	X		X	X	X	X	X										5 Bottles
700A	8-8-12		M-57A	RGW	X		X	X	X	X	X										5 Bottles
805A	8-8-12		M-25	RGW	X		X	X	X	X	X										5 Bottles
646A	8-8-12		EB-1	RGW	X		X	X	X	X	X	X									6 Bottles
745A	8-8-12		M-37	RGW	X		X	X	X	X	X	X									6 Bottles
831A	8-8-12		I-V	RGW	X		X	X	X	X	X										5 Bottles
855A	8-8-12		I-K	RGW	X		X	X	X	X	X										5 Bottles
850A	8-8-12		I-J	RGW	X		X	X	X	X	X										5 Bottles
844A	8-8-12		I-2	RGW	X		X	X	X	X	X										5 Bottles

* MATRIX TYPES:

Reported by Volume:
- **CFW** = Chlor(am)inated Finished Water
- **FW** = Other Finished Water
- **RGW** = Raw Ground Water
- **RSW** = Raw Surface Water
- **CWW** = Chlorinated Waste Water
- **WW** = Other Waste Water
- **SW** = Storm Water

Reported by Weight:
- **SO** = Soil
- **SL** = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-8-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown

Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI									SAMPLER Comments
938A	8-8-12		I-I	RGW	X		X	X	X	X	X										5 Bottles
940A	8-8-12		M-31A	RGW	X		X	X	X	X	X										5 Bottles
1000A	8-8-12		M-12A	RGW	X		X	X	X	X	X	X									6 Bottles
1055A	8-8-12		M-11	RGW	X		X	X	X	X	X	X									6 Bottles
1225p	8-8-12		M-10	RGW	X		X	X	X	X	X	X									6 Bottles
125p	8-8-12		M-35	RGW	X		X	X	X	X	X										5 Bottles
201p	8-8-12		M-16B	RGW	X		X	X	X	X	X										5 Bottles
—	8-8-12		VD-4	RGW	X		X	X	X	X	X	X									6 Bottles
—	8-8-12		VD-2	RGW	X		X	X	X	X	X										5 Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles
				RGW	X		X	X	X	X	X										Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-8-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks dr. Suite 100 Monrovia, Ca., 91016-3629
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA

Sampler Signature: Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	see bottle order														SAMPLER COMMENTS
12:25P	8/8/2012		M-10	RSW	X		X														

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8/8/2012	12:00p
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler Michele Brown Michele Brown

John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI										SAMPLER Comments
1035a	8-9-12		M-19	RGW	X		X	X	X	X	X											5 Bottles
654a	8-9-12		M-22A	RGW	X		X	X	X	X	X											5 Bottles
719A	8-9-12		M-36	RGW	X		X	X	X	X	X	X										6 Bottles
723A	8-9-12		M-38	RGW	X		X	X	X	X	X											5 Bottles
741A	8-9-12		M-67	RGW	X		X	X	X	X	X											5 Bottles
802a	8-9-12		M-74	RGW	X		X	X	X	X	X											5 Bottles
840a	8-9-12		M-73	RGW	X		X	X	X	X	X											5 Bottles
845a	8-9-12		EB-2	RGW	X		X	X	X	X	X	X										6 Bottles
955A	8-9-12		M-83	RGW	X		X	X	X	X	X											5 Bottles
941a	8-9-12		M-80	RGW	X	MS/MSD	X	X	X	X	X											4 Bottles
857a	8-9-12		M-81A	RGW	X	MS/MSD	X	X	X	X	X											4 Bottles
1010A	8-9-12		M-70	RGW	X		X	X	X	X	X											5 Bottles

* MATRIX TYPES:

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-9-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# _____

MONTGOMERY WATSON LABORATORIES

CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS:

SAMPLES CHECKED/LOGGED IN BY:

SAMPLE TEMP, RECEIPT AT LAB:

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	Quarterly Groundwater Sampling Schedule B CWA-RCRA

Sampler: Michele Brown
Michele Brown
John Pekala 602-734-7710

Nevada Environmental Response Trust
35 East Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	pH	TDS	CR	CLO4	Sterile CLO4	CRVI										SAMPLER Comments
1034a	8-9-12		M-71	RGW	X		X	X	X	X	X											5 Bottles
1100a	8-9-12		M-72	RGW	X		X	X	X	X	X											5 Bottles
1116a	8-9-12		M-14A	RGW	X		X	X	X	X	X											5 Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles
				RGW	X		X	X	X	X	X											Bottles

* MATRIX TYPES:

Reported by Volume:
- CFW = Chlor(am)inated Finished Water
- FW = Other Finished Water
- RGW = Raw Ground Water
- RSW = Raw Surface Water
- CWW = Chlorinated Waste Water
- WW = Other Waste Water
- SW = Storm Water

Reported by Weight:
- SO = Soil
- SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Nevada Environmental Response Trust	8-9-12	12:00PM
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# ____________

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Monthly - SO #12374

Sampler: Eric Crawford

John Pekala 602-7 (702) 651-2200

Nevada Environmental Response Trust
35 Wacker Suite 1550
Chicago, IL 60606

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	Sterile ClO_4	TDS	ClO4	CR	SAMPLES SHIPPED DAILY DUE TO SHORT HOLDING FOR NO3	SAMPLER COMMENTS
			M-83	RSW	X		X	X	X	X		NO SAMPLE
1230	8-14-12		PC-98R	RSW	X		X	X	X	X		
1047A	8-13-12		PC-86	RSW	X		X	X	X	X		
1024A	8-13-12		PC-90	RSW	X		X	X	X	X		
935A	8-15-12		PC-56	RSW	X		X	X	X	X		
914A	8-15-12		PC-58	RSW	X		X	X	X	X		
1020A	8-15-12		PC-59	RSW	X		X	X	X	X		
955A	8-15-12		PC-60	RSW	X		X	X	X	X		
1045A	8-15-12		PC-62	RSW	X		X	X	X	X		
1112A	8-15-12		PC-68	RSW	X		X	X	X	X		
1100	8-13-12		PC-122	RSW	X		X	X	X	X		

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Eric Crawford	Veolia Water for Nevada Environmental Response Trust	8-15-12	1200pm
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Monthly - SO #12374

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

Sampler Eric Crawford

John Pekala 602-7 (702) 651-2200

Nevada Environmental Response Trust
35 Wacker Suite 1550
Chicago, IL 60606

SAMPLES SHIPPED DAILY DUE TO SHORT HOLDING FOR NO3

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	SterileClO4	TDS	CLO4	CR	SAMPLER COMMENTS
1107A	8-13-12		PC-91	RSW	X		X	X	X	X	1
1007A	8-13-12		PC-97	RSW	X		X	X	X	X	
746A	8-15-12		PC-18	RSW	X		X	X	X	X	
225P	8-14-12		PC-55	RSW	X		X	X	X	X	
1057A	8-14-12		PC-101R	RSW	X		X	X	X	X	
854A	8-15-12		PC-94	RSW	X		X	X	X	X	

* MATRIX TYPES:

Reported by Volume:
- CFW = Chlor(am)inated Finished Water
- FW = Other Finished Water
- RGW = Raw Ground Water
- RSW = Raw Surface Water
- CWW = Chlorinated Waste Water
- WW = Other Waste Water
- SW = Storm Water

Reported by Weight:
- SO = Soil
- SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		Eric Crawford	Veolia Water for Nevada Environmental Response Trust	8-15-12	1200pm
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

MONTGOMERY WATSON LABORATORIES — CHAIN OF CUSTODY RECORD

750 Royal Oaks Ave, Suite 100, Monrovia, CA 91016
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED/LOGGED IN BY: _____

SAMPLE TEMP, RECEIPT AT LAB: _____

BLUE ICE: FROZEN ___ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#
Nevada Environmental Response Trust	CWA-RCRA Collection Wells Fields - Monthly - SO #12374

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

Sampler Eric Crawford

John Pekala 602-7 (702) 651-2200

Nevada Environmental Response Trust
35 Wacker Suite 1550
Chicago, IL 60606

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX*	GRAB	COMP	SAMPLES SHIPPED DAILY DUE TO SHORT HOLDING FOR NO3: Sterile ClO_4	TDS	ClO4	CR	ClO3	NO3									SAMPLER COMMENTS
914A	8-14-12		MW-K4	RSW	X		X	X	X	X											
1120A	8-14-12		ARP-1	RSW	X		X	X	X	X											
1000A	8-14-12		ARP-2A	RSW	X		X	X	X	X											
944A	8-14-12		ARP-3A	RSW	X		X	X	X	X											
851A	8-14-12		ARP-4A	RSW	X		X	X	X	X											
827A	8-14-12		ARP-5A	RSW	X		X	X	X	X											
814A	8-14-12		ARP-6B	RSW	X		X	X	X	X											
754A	8-14-12		ARP-7	RSW	X		X	X	X	X											
150P	8-13-12		PC-53	RSW	X		X	X	X	X											
806A	8-15-12		PC-103	RSW	X		X	X	X	X											
205P	8-13-12		MW-K5	RSW	X		X	X	X	X											

* MATRIX TYPES:

Reported by Volume:

CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:

SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:		EricCrawford	Veolia Water for Nevada Environmental Response Trust	8-15-12	1200pm
RECEIVED BY:					
RELINQUISHED BY:					
RECEIVED BY:					

MWH Laboratories, a Division of MWH Americas, Inc.
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124

Bottle Order for Tronox L.

Group#
Date Sampled
Date Received

Linda Geddes Your MWHL Project Manager

BO #: 20747

Created By: LXG

Order Date: 07/02/2010

Bottle Orders

Sampler: please return this paper with your samples

Client Code TRONOX
Project Code CWA-RCRA Bottle Orders
Group Name Monthly PC/ARP Wells
PO# / Job#

Ship By:
07/22/2010

Ship Sample Kits to
Veolia Water-Tronox LLC
Gate 1
560 West Lake Mead Pkwy
Henderson, NV 89015

Attn: Wendy Prescott
Phone:
Fax:

Send Report to
Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

Billing Address
Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

# of Samples	Tests	Qteline#	Bottles - Qty for each sample, type & preservative if any	UN DOT #
36	Perchlorate	1	125ml poly CLO4 - no preservative	
36	Total Dissolved Solid (TDS)	1	500ml poly TDS - no preservative	

Comments

Monthly PC/ARP Wells - do NOT prelabel bottles Extra bottles included

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

MWH
LABORATORIES
A Division of MWH Americas, Inc
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124

Kit Order for Environ International Corp.

Rita S Sprinkle is Your MWH Labs Project Manager

Sampler: please return this paper with your samples

Kit #: 49992
Created AutoGenerated
Order Date: 06/04/2012
STG: Bottle Orders

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: M-10 Quarterly
PO#/JOB#:

Ship By:
05/20/2012

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307
Fax:

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Samples	Tests	Bottles - Qty for each sample, type & preservative if any	UN DOT #
1	Ammonia Nitrogen	1 250ml poly 0.5ml H2SO4 (50%)	UN1830
1	Boron Total ICAP, Chromium Total ICAP, Iron Total ICAP, Manganese Total ICAP	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
1	Chloride, Nitrate as Nitrogen by IC, Nitrite Nitrogen by IC, Total Inorganic Nitrogen-Calc	1 125ml poly no preservative	
1	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

M-10 Quarterly Sampling - No blue ice needed

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

MWH Laboratories, a Division of MWH Americas, Inc.
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124

Bottle Order for Tronox LLC

Group#

Date Sampled

Date Received

Linda Geddes Your MWHL Project Manager

Client Code TRONOX

Project Code CWA-RCRA Bottle Orders

Group Name Monthly ART and PC Wells

PO# / Job#

IO #: 9843

Created By: LXG

Order Date: 10/07/2009

Bottle Orders

Sampler: please return this paper with your samples

Ship By: 10/22/2009

Ship Sample Kits to

Veolia Water-Tronox LLC
Gate 1
560 West Lake Mead Pkwy
Henderson, NV 89015

Attn: Wendy Prescott
Phone:
Fax:

Send Report to

Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

Billing Address

Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

# of Samples	Tests	Qteline#	Bottles - Qty for each sample, type & preservative if any	UN DOT #
20	Perchlorate		1 125ml poly CLO4 - no preservative	
20	Total Dissolved Solid (TDS)		1 500ml poly TDS - no preservative	

Comments

Monthly ART and PC Wells - Do not prelabel bottles

Status | Date Shipped | Via | Tracking # | # of Coolers | Prepared By

MWH
LABORATORIES
A Division of MWH Americas, Inc
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124

Kit Order for Environ International Corp.

Rita S Sprinkle is Your MWH Labs Project Manager

Sampler: please return this paper with your samples

Kit #: 49994
Created AutoGenerated
Order Date: 06/04/2012
STG: Bottle Orders

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA -Bottle Orders
Group Name: Quarterly CR6010
PO#/JOB#:

Ship By:
05/20/2012

Ship Sample Kits to
Veolia Water-Tronox LLC
510 Fourth Street
Henderson, NV 89015

Attn: Wendy Prescott
Phone: 702-371-9307
Fax:

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Samples	Tests	Bottles - Qty for each sample, type & preservative if any	UN DOT #
70	Chromium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031

Comments

QUARTERLY CR6010

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

MWH
LABORATORIES
A Division of MWH Americas, Inc.

750 Royal Oaks Dr., Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)

Kit Order for Environ International Corp.

Rita S. Sprinkle is your MWH Laboratories Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 53791
Created By: LXG
Order Date: 04/27/2012
Ship By: 04/12/2012
STG: Bottle Orders

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: Annual Quads
PO#/JOB#:

Ship Sample Kits to
Veolia Water
510 S. Fourth Street
Henderson, NV 89015

Attn: Michele Brown
Phone: 702-467-6299

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
4	Chloride by EPA 9056, PH by EPA 9040, Specific Conductance RCRA, Sulfate by EPA 9056	1 125ml poly no preservative	
4	Chromium Total ICAP RCRA, Iron Total ICAP RCRA, Manganese Total ICAP RCRA, Sodium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
4	Perchlorate	1 125ml poly CLO4 - no preservative	
12	PH by EPA 9040, Specific Conductance RCRA	1 125ml poly no preservative	
4	Phenolic Compounds	1 250ml amber glass 1ml H2SO4	UN1830
4	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	
16	Total Organic Carbon RCRA	1 125ml amber glass 0.5ml H2SO4 (50%)	UN1830
16	Total Organic Halogen	2 250ml amber glass 2ml H2SO4 (50%)	UN1830

Comments

Please ship to Client for receipt by Friday, July 27 (at the latest).

Please ship 4 additional empty large coolers with blue ice packs.

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

MWH
LABORATORIES
A Division of MWH Americas, Inc.

750 Royal Oaks Dr., Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626)

Kit Order for Environ International Corp.

Rita S. Sprinkle is your MWH Laboratories Project Manager

Note: Sampler Please return this paper with your samples

Kit #: 53792
Created By: LXG
Order Date: 04/27/2012
Ship By: 04/12/2012
STG: Bottle Orders

Client ID: ENVIRON-NVTRUST
Project Code: CWA-RCRA Bottle Orders
Group Name: CR6010 QUARTERLY
PO#/JOB#:

Ship Sample Kits to
Veolia Water
510 S. Fourth Street
Henderson, NV 89015

Attn: Michele Brown
Phone: 702-467-6299

Send Report to
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

Billing Address
Environ International Corp.
1702 E. Highland Ave.
Suite 412
Phoenix, AZ 85016

Attn: John M. Pekala, P.G.
Phone: 602.734.7710
Fax: 602.734.7701

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if a	UN DOT #
101	Chromium Total ICAP RCRA	1 250ml acid rinsed 1ml HNO3 (18%)	UN2031
15	CRVI 7196	1 125ml poly acid rinsed no preservative	
101	Perchlorate	1 125ml poly CLO4 - no preservative	
101	PH by EPA 9040	1 125ml poly no preservative	
101	Total Dissolved Solid (TDS)	1 500ml poly TDS - no preservative	

Comments

CR6010 QUARTERLY SAMPLING
PERCHLORATE IS STERILE FILTERED!!! SEND SYRINGES AND STERILE CONTAINERS

Please ship to client for receipt by Friday, July 27 (at the latest).

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

VEOLIA
WATER

Groundwater Field Log

This Section Contains:

- Water Sampling Field Logs

VEOLIA WATER NORTH AMERICA
PO BOX 90578 Henderson, NV 89009
Tel 702-566-3521 / Fax 702-566-9030
www.Veoliawaterna.com

Water Sampling Field Log

Well No.: PC-123

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 90°F humid

Well Information:

Total Well Depth: 34.70 feet Time: 522A

Depth to Water: 22.93 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
11.77 feet * 0.16 gal/ft (2-in.) / * 0.65 gal/ft (4-in.) / * 1.47 gal/ft (6-in)	= 1.88 gal.	* 3	= 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
524A	-----	-----	-----	-----	
525A	2 gal	6.46	7.24mS/cm	25.7°C	slightly cloudy
526A	4 gal	6.94	6.84mS/cm	25.3°C	clear
527A	6 gal	7.02	8.13mS/cm	25.3°C	clear
528A	8 gal	7.22	8.14mS/cm	24.9°C	clear
530A	10 gal	7.28	8.16mS/cm	25.0°C	clear
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 531A Time Finished: 531A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-128

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 92°F Humid

Well Information:

Total Well Depth: 34.70 feet Time: 539A

Depth to Water: 18.42 feet

Height of Water Column (L): 16.28 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 2.60 gal. * Purge Factor 3 = Purge Volume 8 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
5:42A	----	----	----	----	
5:45A	3 gal	7.46	6.89 mS/cm	26.4°C	clear
5:50A	6 gal	7.54	7.10 mS/cm	26.2°C	clear
5:52A	8 gal	7.56	7.12 mS/cm	25.7°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 553A Time Finished: 553A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-129

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 92°F Humid

Well Information:

Total Well Depth: 37.70 feet Time: 559A

Depth to Water: 18.48 feet

Height of Water Column (L): 19.22 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): 3.07 gal. * Purge Factor: 3 = Purge Volume: 9 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
601A	-----	-----	-----	-----	
604A	3 gal	7.60	7.15 mS/cm	25.1°C	cloudy
607A	6 gal	7.47	8.10 mS/cm	24.8°C	cloudy
610A	9 gal	7.47	8.42 mS/cm	25.0°C	cloudy
612A	12 gal	7.40	8.65 mS/cm	24.7°C	cloudy
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 614A Time Finished: 614A

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles | 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-130

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8.6.12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: humid 92°F

Well Information:

Total Well Depth: 49.70 feet Time: 620A

Depth to Water: 19.21 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
30.49 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 4.87 gal.	*	3	=	15 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
620A	-----	-----	-----	-----	
623A	5 gal	7.63	8.94 mS/cm	25.0 °C	clear
626A	10 gal	7.53	9.05 mS/cm	24.9 °C	clear
629A	15 gal	7.54	9.08 mS/cm	25.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 631A Time Finished: 631A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-131

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: humid overcast

Well Information:

Total Well Depth: 39.40 feet Time: 637A

Depth to Water: 11.13 feet

Height of Water Column (L): 28.27 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 4.52 gal. * Purge Factor: 3 = **Purge Volume**: 14 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
638A	----	----	----	----	
641A	5 gal	7.58	11.98 mS/cm	26.5 °C	Very slightly cloudy
644A	10 gal	7.59	12.61 mS/cm	26.1 °C	clear
647A	14 gal	7.49	12.72 mS/cm	25.9 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 648A Time Finished: 648A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-132

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: humid overcast

Well Information:

Total Well Depth: 39.70 feet Time: 1653A

Depth to Water: 9.66 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 30.04 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV): 4.80 gal. * Purge Factor: 3 = **Purge Volume**: 14 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1656A	-----	-----	-----	-----	
1659A	5 gal	7.76	12.30 mS/cm	26.1 °C	slightly cloudy
1702A	10 gal	7.57	12.54 mS/cm	25.9 °C	clear
1705A	14 gal	7.52	12.60 mS/cm	26.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1706A Time Finished: 1706A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-124

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: 96°F hot humid overcast

Well Information:

Total Well Depth: 34.60 feet Time: 714A

Depth to Water: 25.35 feet

Height of Water Column (L): 9.25 feet

Well Diameter (circle one): 2-in. (* 0.16 gal/ft) 4-in. (* 0.65 gal/ft) 6-in (* 1.47 gal/ft)

Well Volume (WV) = 1.48 gal. * Purge Factor 3 = **Purge Volume** 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
716A	-----	-----	-----	-----	
719A	2 gal	7.65	10.36mS/cm	24.6°C	Slightly cloudy
721A	4 gal	7.61	10.29mS/cm	24.6°C	Very slightly cloudy
723A	5 gal	7.54	10.30mS/cm	24.7°C	None
	gal				
	gal				
	gal				

Sample Appearance: Slightly cloudy

Sample Collection - Time Start: 723A Time Finished: 723A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-125

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: hot, humid, overcast

Well Information:

Total Well Depth: 33.50 feet Time: 728A

Depth to Water: 23.48 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 10.02 feet * 0.16 gal/ft (2-in.) * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV): 1.60 gal. * Purge Factor: 3 = **Purge Volume**: 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
730A	-----	-----	-----	-----	
733A	2 gal	7.77	8.89 mS/cm	23.6 °C	cloudy
734A	4 gal	7.64	8.69 mS/cm	23.2 °C	cloudy
735A	5 gal	7.61	8.64 mS/cm	23.3 °C	cloudy
	gal				
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 736A Time Finished: 736A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-126

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid, overcast

Well Information:

Total Well Depth: 34.30 feet Time: 743A

Depth to Water: 22.46 feet

Height of Water Column (L): 11.84 feet

Well Diameter (circle one): 2-in. (0.16 gal/ft) 4-in. (0.65 gal/ft) 6-in. (1.47 gal/ft)

Well Volume (WV): 1.89 gal. * Purge Factor: 3 = **Purge Volume**: 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
745A	----	----	----	----	
746A	2 gal	7.58	12.54 mS/cm	24.2 °C	cloudy
747A	4 gal	7.56	12.56 mS/cm	24.1 °C	cloudy
748	6 gal	7.49	12.53 mS/cm	24.0 °C	slightly cloudy
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 749A Time Finished: 749A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-127

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid, overcast, sprinkling

Well Information:

Total Well Depth: 34.70 feet Time: 757A

Depth to Water: 19.10 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
15.60 feet	* 0.16 gal/ft (2-in.) / 0.65 gal/ft (4-in.) / 1.47 gal/ft (6-in)	= 2.49 gal.	*	3	=	8 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
758A	-----	-----	-----	-----	
800A	3 gal	7.78	8.10 mS/cm	25.1 °C	clear
802A	6 gal	7.72	8.03 mS/cm	25.0 °C	clear
804A	8 gal	7.65	8.03 mS/cm	24.9 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 805A Time Finished: 808A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments: Dup EC reading 25.1 Temp 805 EC

Water Sampling Field Log

Well No.: M-96

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 96°F hot humid sprinkling

Well Information:

Total Well Depth: 16.90 feet Time: 824A

Depth to Water: 15.76 feet

Height of Water Column (L): 1.14 feet

Well Diameter (circle one) 2-in.	4-in.	6-in	Well Volume (WV)		Purge Factor		Purge Volume
0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .18	gal. *	3	=	3gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
831	-----	-----	-----	-----	
835	1 gal	7.71	6.39 mS/cm	27.8 °C	clear
840	2 gal	7.67	6.47 mS/cm	26.8 °C	clear
845	3 gal	7.64	6.47 mS/cm	27.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 846A Time Finished: 846A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-54

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 93°F hot humid overcast

Well Information:

Total Well Depth: 34.60 feet Time: 857A

Depth to Water: 22.54 feet

Height of Water Column (L): 12.06 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.92 gal.

Purge Factor: * 3

Purge Volume: = 6 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
900A	-----	-----	-----	-----	
901A	2 gal	7.73	5.89 mS/cm	26.5 °C	cloudy
902A	4 gal	7.63	6.00 mS/cm	26.4 °C	slightly cloudy
903A	6 gal	7.62	6.05 mS/cm	26.2 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 905A Time Finished: 905A

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles | 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-48A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid overcast

Well Information:

Total Well Depth: 40.0 feet Time: 916A

Depth to Water: 30.04 feet

Height of Water Column (L): 9.96 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 1.59 gal.

Purge Factor: * 3

Purge Volume: = 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
918A	----	----	----	----	
922A	2 gal	7.73	6.42 mS/cm	25.9°C	muddy
924A	4 gal	7.68	6.49 mS/cm	26.1°C	cloudy
925A	5 gal	7.59	6.53 mS/cm	26.0°C	slightly cloudy
	gal				
	gal				
	gal				

Sample Appearance: muddy

Sample Collection - Time Start: 926A Time Finished: 926A

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles | 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-44

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 95°F overcast humid

Well Information:

Total Well Depth: 37.65 feet Time: 937A

Depth to Water: 23.03 feet

Height of Water Column (L): 14.62 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV): 2.33 gal. * Purge Factor: 3 = Purge Volume: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
938A	-----	-----	-----	-----	
940A	3 gal	7.70	9.87 mS/cm	25.3 °C	clear
941A	5 gal	7.61	10.12 mS/cm	25.3 °C	clear
943A	7 gal	7.60	10.13 mS/cm	25.3 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 945A Time Finished: 945A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments: VD-3 taken here 6 btls

Water Sampling Field Log

Well No.: PC-71

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ⊗ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid overcast

Well Information:

Total Well Depth: 33.23 feet Time: 952A

Depth to Water: 26.03 feet

Height of Water Column (L): 7.20 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.15 gal. * Purge Factor 3 = Purge Volume 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
953A	-----	-----	-----	-----	
956A	2 gal	7.72	9.63 mS/cm	25.9 °C	cloudy
959A	3 gal	7.70	9.71 mS/cm	27.0 °C	cloudy
1003A	4 gal	7.71	8.80 mS/cm	26.9 °C	cloudy
	gal				
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 1005A Time Finished: 1005A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-72

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid 97°F Overcast

Well Information:

Total Well Depth: 39.54 feet Time: 1010A

Depth to Water: 29.10 feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
	2-in.	4-in.	6-in			
Height of Water Column (L): 10.44 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.67 gal.	* 3	= 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1012A	----	----	----	----	
1013A	2 gal	7.81	8.46 mS/cm	26.5 °C	clear
1014A	4 gal	7.70	8.35 mS/cm	26.0 °C	clear
1015A	5 gal	7.69	8.52 mS/cm	26.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1016A Time Finished: 1016A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: FB-1 taken here 6 btls 1013A

Water Sampling Field Log

Well No.: PC-173

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid overcast

Well Information:

Total Well Depth: 49.44 feet Time: 1022A

Depth to Water: 30.61 feet

Height of Water Column (L): 18.83 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in 1.47 gal/ft = Well Volume (WV): 3.01 gal. * Purge Factor: 3 = **Purge Volume**: 9 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1023A	----	----	----	----	
1025A	3 gal	7.74	8.54 mS/cm	26.7 °C	clear
1027A	6 gal	7.70	8.36 mS/cm	25.9 °C	clear
1029A	9 gal	7.64	8.32 mS/cm	25.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: 1030A Time Finished: 1030A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-37

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid overcast 98°F

Well Information:

Total Well Depth: 43.08 feet Time: 1036A

Depth to Water: 29.03 feet

Height of Water Column (L): 14.05 feet * Well Diameter (circle one): (2-in.) 4-in. 6-in → * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = Well Volume (WV): 2.24 gal. * Purge Factor: 3 = **Purge Volume**: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1039A	----	----	----	-----	
1041A	3 gal	7.74	9.34 mS/cm	26.3 °C	clear
1043A	5 gal	7.66	9.33 mS/cm	25.9 °C	clear
1045A	7 gal	7.63	9.34 mS/cm	25.9 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1046A Time Finished: 1046A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-23

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: humid, hot, overcast

Well Information:

Total Well Depth: 44.47 feet Time: 1055A

Depth to Water: 33.80 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
		2-in.	4-in.	6-in			
10.67 feet	*	0.16 gal/ft	*0.65 gal/ft	* 1.47 gal/ft	= 1.70 gal.	* 3	= 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1057A	-----	-----	-----	-----	
1059A	2 gal	7.70	6.18 mS/cm	25.5°C	clear
1100A	4 gal	7.64	5.95 mS/cm	25.2°C	clear
1101A	5 gal	7.51	5.93 mS/cm	25.0°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1103A Time Finished: 1103A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: VD-1 taken here 5 btls

Water Sampling Field Log

Well No.: M-11ele

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid

Well Information:

Total Well Depth: 32.0 feet Time: 1232

Depth to Water: 29.78 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): 2.22 feet * 0.16 gal/ft / * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-167

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid

Well Information:

Total Well Depth: 30.0 feet Time: 114p

Depth to Water: 28.44 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
1.56 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-11e8

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid, sunny 99°F

Well Information:

Total Well Depth: 350 feet Time: 109p

Depth to Water: 26.71 feet

Well Diameter (circle one) 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): 8.29 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-169

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid sunny.

Well Information:

Total Well Depth: 35.0 feet Time: 1070

Depth to Water: 29.30 feet

Well Diameter (circle one) 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
5.70 feet * 0.16 gal/ft / * 0.65 gal/ft / * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-170

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid sunny

Well Information:

Total Well Depth: 35.0 feet Time: 1000

Depth to Water: 29.51 feet

Height of Water Column (L): 5.49 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
*0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-172

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid, sunny

Well Information:

Total Well Depth: 37.0 feet Time: 1245p

Depth to Water: 33.45 feet

Height of Water Column (L): 3.55 feet

Well Diameter (circle one)			Well Volume (WV)		Purge Factor		Purge Volume
2-in.	4-in.	6-in					
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	=	gal.	*	3	=

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	-----	-----	-----	-----	
	gal				
	gal				DTW ONLY
	gal				NO SAMPLE
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-173

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot humid 99°F

Well Information:

Total Well Depth: 40.0 feet Time: 1230p

Depth to Water: 29.58 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

		Well Volume (WV)	Purge Factor	Purge Volume
Height of Water Column (L): 10.42 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-55

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid

Well Information:

Total Well Depth: 45.0 feet Time: 1254p

Depth to Water: 31.0 feet

Height of Water Column (L): 14.0 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	**Purge Volume**
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-56

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, humid, clouds w/ sun

Well Information:

Total Well Depth: 40.0 feet Time: 1241p

Depth to Water: 31.62 feet

Height of Water Column (L): 8.38 feet

Well Diameter (circle one)			Well Volume (WV)		Purge Factor		Purge Volume
2-in.	4-in.	6-in					
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	=	gal.	* 3	=	

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	-----	-----	-----	
	gal				
	gal				DTW ONLY
	gal				NO SAMPLE
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-58

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot 89°F

Well Information:

Total Well Depth: 45.0 feet Time: 438A

Depth to Water: 30.69 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
14.31 feet * 0.16 gal/ft / * 0.65 gal/ft / * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-16D

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot

Well Information:

Total Well Depth: 43.0 feet Time: 439A

Depth to Water: 32.72 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): 10.28 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	----	----	----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: H-28A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated bailer O Non Dedicated Bailer O disposable bailer

Weather Conditions: hot

Well Information:

Total Well Depth: 51.0 feet Time: 536A

Depth to Water: 39.36 feet

Well Diameter (circle one): 2-in. *0.16 gal/ft | 4-in. *0.65 gal/ft | 6-in *1.47 gal/ft

Well Volume (WV)		Purge Factor		Purge Volume
11.64 feet	gal.	* 3		gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
----	----	-----	-----	-----	
	gal	6.65	13.81 mS/cm	25.2°C	cloudy
	gal				
	gal		will not purged due to location		
	gal				
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Started: 546A Time Finished: 546A

Analyses:	TOC	TOX	pH	TDS	Cr	Chloride	CLO4	Phenolic Compounds
Bottles:	8 Btls	4 Btls	4 Btls	1 Btl	1 Btl	1 Btl	1 Btl	1 Btl

TOTAL BOTTLES- 21

Comments:

Water Sampling Field Log

Well No.: M-16A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated bailer ● Non Dedicated Bailer O

Weather Conditions: hot

Well Information:

Total Well Depth: 46.0 feet Time: 600A

Depth to Water: 39.08 feet

Well Diameter (circle one)

2-in.	4-in.	6-in	Well Volume (WV)	Purge Factor	Purge Volume
6.92 feet	*0.16 gal/ft	*0.65 gal/ft	*1.47 gal/ft	gal. *	3	gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	---	---	---	---	
	gal	7.38	10.77 mS/cm	24.3°	cloudy
	gal				
	gal				
	gal		well not purged due to location		
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 610A Time Finished: 610A

Analyses:	TOC	TOX	pH	TDS	Cr	Chloride	CLO4	Phenolic Compounds
Bottles:	8 Btls	4 Btls	4 Btls	1 Btl	1 Btl	1 Btl	1 Btl	1 Btl

TOTAL BOTTLES- 21

Comments:

Water Sampling Field Log

Well No.: M-98

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot

Well Information:

Total Well Depth: 33.40 feet Time: 1613A

Depth to Water: 0 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): _____ feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	-----	-----	-----	-----	
	gal				
	gal				
	gal		WELL DRY		
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: PC-136

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot 90°F

Well Information:

Total Well Depth: 40.03 feet Time: 638A

Depth to Water: 34.31 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)			Well Volume (WV)		Purge Factor	Purge Volume
5.72 feet	* 0.16 gal/ft	* 0.65 gal/ft * 1.47 gal/ft	= .91 gal.	*	3	= 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
639A	-----	-----	-----	-----	
640A	1 gal	7.68	7.98 mS/cm	25.3°C	slightly yellow
641A	2 gal	7.60	7.95 mS/cm	25.5°C	slightly yellow
642A	3 gal	7.59	7.94 mS/cm	25.6°C	slightly yellow
	gal				
	gal				
	gal				

Sample Appearance: slightly yellow

Sample Collection - Time Start: 643A Time Finished: 643A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-144

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 39.7 feet Time: 656A

Depth to Water: 30.91 feet

Height of Water Column (L): 8.79 feet

Well Diameter (circle one): 2-in. (0.16 gal/ft) 4-in. (0.65 gal/ft) 6-in (1.47 gal/ft)

Well Volume (WV): 1.40 gal. * Purge Factor: 3 = **Purge Volume**: 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
657A	-----	-----	-----	-----	
659A	2 gal	7.63	7.89 mS/cm	25.8 °C	slightly yellow
700A	3 gal	7.61	7.90 mS/cm	26.0 °C	clear
701A	4 gal	7.59	7.93 mS/cm	25.7 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 702A Time Finished: 702A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-135A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 50.8 feet Time: 708A

Depth to Water: 29.91 feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
	2-in.	4-in.	6-in			
Height of Water Column (L): 20.89 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 3.34 gal.	* 3	= 10 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
710A	-----	-----	-----	-----	
712A	4 gal	7.67	12.41 mS/cm	26.0 °C	clear
714A	7 gal	7.57	12.53 mS/cm	25.8 °C	clear
716A	10 gal	7.57	12.52 mS/cm	26.1 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 717A Time Finished: 717A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: PC-148

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 50.2 feet Time: 726A

Depth to Water: 29.18 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
21.02 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 30.89 gal.	* 3	= 93 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
727A	-----	-----	-----	-----	
736A	10 gal	7.86	9.84 mS/cm	25.2 °C	clear
745A	20 gal	7.84	9.86 mS/cm	25.3 °C	clear
806A	30 gal	7.69	9.99 mS/cm	26.9 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 810A Time Finished: 810A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

Comments: well slow to recharge historically purged 30 gal

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: PC-149

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 50.0 feet Time: 816A

Depth to Water: 30.05 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 19.95 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = 29.32 gal. * Purge Factor 3 = Purge Volume 88 gal

Well Volume (WV)

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
817A	-----	-----	-----	-----	
824A	12 gal	7.92	5.48 mS/cm	24.8 °C	clear
832A	24 gal	7.78	5.42 mS/cm	25.1 °C	clear
839A	35 gal	7.84	5.34 mS/cm	24.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 840A Time Finished: 840A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

Comments: well historically slow to recharge sample collected before well goes dry

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: PC-150

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 45.7 feet Time: 850A

Depth to Water: 30.40 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)		Purge Factor		Purge Volume
15.30 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 22.49 gal.	*	3	=	67 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
850A	-----	-----	-----	-----	
908A	23 gal	7.72	7.60 mS/cm	25.8 °C	clear
921A	45 gal	7.76	7.61 mS/cm	25.8 °C	clear
938A	67 gal	7.65	7.58 mS/cm	25.6 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 940A Time Finished: 940A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-5A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated bailer O Non Dedicated Bailer O

Weather Conditions: hot, sunny clear 106°F

Well Information:

Total Well Depth: 50.0 feet Time: 1100A

Depth to Water: 38.13 feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
	2-in.	4-in.	6-in			
16.87 feet	*0.16 gal/ft	*0.65 gal/ft	*1.47 gal/ft	7.71 gal.	* 3	23 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1103A	-----	-----	-----	-----	
1108A	7 gal	7.67	16.99 mS/cm	27.3°C	clear
1113A	14 gal	7.20	16.83mS/cm	27.4°C	clear
1119A	23 gal	7.27	17.17 mS/cm	27.6°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1120 A Time Finished: 1120 A

Analyses:	TOC	TOX	pH	TDS	Cr	Chloride	CLO4	Phenolic Compounds
Bottles:	8 Btls	4 Btls	4 Btls	1 Btl	1 Btl	1 Btl	1 Btl	1 Btl

TOTAL BOTTLES- 21

Comments:

Water Sampling Field Log

Well No.: M-7B

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ◉ Dedicated bailer ○ Non Dedicated Bailer ○

Weather Conditions: hot sunny 106°F

Well Information:

Total Well Depth: 55.0 feet Time: 1140A

Depth to Water: 36.39 feet

18.61 feet	Well Diameter (circle one) 2-in. *0.16 gal/ft	4-in. *0.65 gal/ft	6-in *1.47 gal/ft	Well Volume (WV) 2.97 gal.	* Purge Factor 3	Purge Volume 9gal gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1141A	-----	-----	-----	-----	
1144A	3 gal	7.65	11.56 mS/cm	26.1°C	clear
1147A	6 gal	7.62	11.31 mS/cm	26.1°C	clear
1152A	9 gal	7.57	11.45 mS/cm	27.6°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1155A Time Finished: 1155A

Analyses:	TOC	TOX	pH	TDS	Cr	Chloride	CLO4	Phenolic Compounds
Bottles:	8 Btls	4 Btls	4 Btls	1 Btl	1 Btl	1 Btl	1 Btl	1 Btl

TOTAL BOTTLES- 21

Comments:

Water Sampling Field Log

Well No.: M-174

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot 109°F

Well Information:

Total Well Depth: 28.0 feet Time: 1252p

Depth to Water: 21.02 feet

Height of Water Column (L): 6.98 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	
_____	gal	_____	_____	_____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-175

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 29.0 feet Time: 1252-P

Depth to Water: 21.71 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): 7.29 feet * 0.16 gal/ft (2-in.) * 0.65 gal/ft (4-in.) * 1.47 gal/ft (6-in) = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
	----	----	-----	-----	
	gal				
	gal				DTW ONLY
	gal				NO SAMPLE
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 10

Comments:

Water Sampling Field Log

Well No.: M-176

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 30.0 feet Time: 1254p

Depth to Water: 24.52 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Well Volume (WV)	Purge Factor	Purge Volume

Height of Water Column (L): 5.48 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	NO SAMPLE
_____	gal	_____	_____	_____	DTW ONLY
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-177

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot, clear

Well Information:

Total Well Depth: 30.0 feet Time: 1255p

Depth to Water: 22.31 feet

Well Diameter (circle one) 2-in. 4-in. 6-in

Height of Water Column (L):				Well Volume (WV)		Purge Factor		Purge Volume
7.69 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= ____ gal.	*	3	=	____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
____	-----	-----	-----	-----	
____	____ gal	____	____	____	DTW ONLY
____	____ gal	____	____	____	
____	____ gal	____	____	____	NO SAMPLE
____	____ gal	____	____	____	
____	____ gal	____	____	____	
____	____ gal	____	____	____	

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 0

Comments:

Water Sampling Field Log

Well No.: M-164

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 6-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny 109°F

Well Information:

Total Well Depth: 38.0 feet Time: 1217 p

Depth to Water: 29.77 feet

Height of Water Column (L): 8.23 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.31 gal.	* 3	= 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1220p	-----	-----	-----	-----	
1229p	2 gal	7.82	5.58 mS/cm	35.1 °C	cloudy
1248p	3 gal	7.87	6.92 mS/cm	35.8 °C	light yellow
100p	4 gal	7.80	7.44 mS/cm	35.3 °C	light yellow
119p	5 gal	7.86	7.28 mS/cm	35.6 °C	light yellow
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 123p Time Finished: 123p

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

well purges dry

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-65

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot clear

Well Information:

Total Well Depth: 40.0 feet Time: 129p

Depth to Water: 33.15 feet

Height of Water Column (L): 6.85 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

2-in: * 0.16 gal/ft | 4-in: * 0.65 gal/ft | 6-in: * 1.47 gal/ft

Well Volume (WV): = 1.09 gal.

Purge Factor: * 3

Purge Volume: = 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
130p	-----	-----	-----	-----	
132p	1 gal	7.58	14.54 mS/cm	29.1 °C	yellow
133p	2 gal	7.40	14.53 mS/cm	28.4 °C	yellow
134p	3 gal	7.39	14.45 mS/cm	28.0 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 135p Time Finished: 135p

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-66

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot

Well Information:

Total Well Depth: 43.0 feet Time: 141p

Depth to Water: 31.85 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
11.15 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.78 gal.	* 3	= 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
142p	-----	-----	-----	-----	
144p	2 gal	7.35	15.34 mS/cm	28.2 °C	yellow
145p	4 gal	7.31	15.21 mS/cm	27.3 °C	yellow
146p	5 gal	7.26	15.20 mS/cm	27.0 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 148p Time Finished: 148p

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: Dup EC 15.14 27.3 EC Temp ND

Water Sampling Field Log

Well No.: M-79

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 94°F sticky

Well Information:

Total Well Depth: 37.60 feet Time: 542A

Depth to Water: 31.64 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
5.96 feet	* 0.16 gal/ft / 0.65 gal/ft * 1.47 gal/ft	= .95 gal.	*	3	=	3gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
545a	----	----	----	----	
548a	1 gal	7.10	6.05 mS/cm	25.6 °C	clear
550A	2 gal	7.47	5.98 mS/cm	25.1 °C	clear
553A	3 gal	7.56	6.00 mS/cm	25.2 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 553A Time Finished: 553A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-69

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sticky

Well Information:

Total Well Depth: 40.0 feet Time: 559A

Depth to Water: 33.71 feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
	2-in.	4-in.	6-in			
Height of Water Column (L): 6.29 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.00 gal.	* 3	= 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
601A	----	----	----	----	
604A	1 gal	7.55	5.12 mS/cm	25.7 °C	clear
605A	2 gal	7.58	5.13 mS/cm	25.8 °C	clear
609A	3 gal	7.61	5.11 mS/cm	25.7 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 609A Time Finished: 609A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-135

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 39.0 feet Time: 614A

Depth to Water: 34.61 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)		Purge Factor		Purge Volume
4.39 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .70 gal.	*	3	=	3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
615A	----	----	----	----	
617A	1 gal	7.84	4.71 mS/m	25.4 °C	clear
618A	2 gal	7.75	4.72 mS/m	25.7 °C	clear
619A	3 gal	7.73	4.77 mS/m	25.8 °C	slightly cloudy
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 620A Time Finished: 620A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-131

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 39.0 feet Time: 631A

Depth to Water: 32.90 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)		Purge Factor		Purge Volume
6.1 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .97 gal.	*	3	=	3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
633a	----	-----	-----	-----	
634a	1 gal	7.87	4.62mS/cm	25.3 °C	clear
636a	2 gal	7.86	4.63 mS/cm	25.8 °C	clear
640A	3 gal	7.82	4.65mS/cm	26.1	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 642A Time Finished: 642A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: EB-1 6:44A taken here 6 btls before moving to next well

Water Sampling Field Log

Well No.: M-57A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 42.40 feet Time: 652A

Depth to Water: 29.83 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	12.57	feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	=	2.01	gal.	* 3	= 6 gal

Well Volume (WV) | Purge Factor | **Purge Volume**

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
654A	----	----	----	----	
656A	2 gal	7.97	4.15 mS/cm	26.0°C	cloudy
657A	4 gal	7.90	4.26 mS/cm	25.6°C	cloudy
658A	6 gal	7.88	4.26 mS/cm	25.5°C	cloudy
	gal				
	gal				
	gal				

Sample Appearance: cloudy

Sample Collection - Time Start: 700A Time Finished: 700A

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-37

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sticky sunny 95°F

Well Information:

Total Well Depth: 37.18 feet Time: 708A

Depth to Water: 32.17 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
5.01 feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= .80 gal.	* 3	= 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
7:10A	-----	-----	-----	-----	
722A	1 gal	7.27	7.28 mS/cm	28.2 °C	clear
730A	2 gal	7.28	7.06 mS/cm	28.3 °C	clear
739A	3 gal	7.30	7.11 mS/cm	29.7 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 745A Time Finished: 745A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments: well purges dry

Water Sampling Field Log

Well No.: M-25

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 41.47 feet Time: 758A

Depth to Water: 33.69 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
7.78 feet	* 0.16 gal/ft / 0.65 gal/ft * 1.47 gal/ft	= 1.24 gal.	*	3	=	4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
759A	----	----	----	----	
801A	2 gal	7.37	9.22 mS/cm	26.1°C	yellow
802A	3 gal	7.43	9.23 mS/cm	25.9°C	yellow
803A	4 gal	7.46	9.23 mS/cm	25.7°C	yellow
	gal				
	gal				
	gal				

Sample Appearance: yellow

Sample Collection - Time Start: 805A Time Finished: 805A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-99

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 35.59 feet Time: 815A

Depth to Water: _____ feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):		Well Volume (WV)	Purge Factor	Purge Volume
_____ feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	-----	-----	-----	
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	well dry
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____
_____	_____ gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: M-100

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8.8.12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 33.81 feet Time: 819A

Depth to Water: _____ feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
	2-in.	4-in.	6-in			
Height of Water Column (L): _____ feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= _____ gal.	* 3	= _____

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	-----	-----	-----	-----	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	Well dry	
_____	gal	_____	_____	No stable sound ow probe	
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: M-101

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 32.15 feet Time: 821A

Depth to Water: _____ feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): _____ feet * 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal. * 3 = _____

Well Volume (WV)	Purge Factor	**Purge Volume**

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
_____	----	-----	-----	-----	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	Well dry	_____
_____	gal	_____	_____	No static sound on probe	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____
_____	gal	_____	_____	_____	_____

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: _____

Comments:

Water Sampling Field Log

Well No.: M-31A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot 104°F

Well Information:

Total Well Depth: 55.0 feet Time: 930A

Depth to Water: 45.95 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):	Well Volume (WV)	Purge Factor	Purge Volume
9.05 feet * 0.16 gal/ft (2-in.) / * 0.65 gal/ft (4-in.) / * 1.47 gal/ft (6-in)	= 1.44 gal.	* 3	= 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
933A	-----	-----	-----	-----	
936A	2 gal	7.80	7.87 mS/cm	26.8°C	light yellow
937A	3 gal	7.66	7.91 mS/cm	25.8°C	light yellow
939A	4 gal	7.62	7.88 mS/cm	26.6°C	cloudy
	gal				
	gal				
	gal				

Sample Appearance: light yellow clear

Sample Collection - Time Start: 940A Time Finished: 940A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-12A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 50.0 feet Time: 949A

Depth to Water: 40.53 feet

Height of Water Column (L): 9.47 feet

Well Diameter (circle one): 2-in. 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = 1.51 gal. * Purge Factor 3 = Purge Volume 5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
952A	-----	-----	-----	-----	
954A	2 gal	8.24	8.10 mS/cm	26.5 °C	yellow
955A	4 gal	8.27	7.98 mS/cm	26.1 °C	yellow
956A	5 gal	~~8.22~~ 8.22	8.09 mS/cm	25.6 °C	yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 1000A Time Finished: 1000A

Analyses: CLO4 / CR / TDS / pH ~~pH~~ / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments: VD-4 collected here 6 btls

Water Sampling Field Log

Well No.: M-11

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" ●

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 58.0 feet Time: 1011A

Depth to Water: 42.68 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L): 15.32 feet * 0.16 gal/ft * 0.65 gal/ft (* 1.47 gal/ft) = Well Volume (WV) 22.52 gal. * Purge Factor 3 = Purge Volume 68 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1019	----	----	----	----	
1030	22 gal	8.54	3.89 mS/cm	27.9 °C	clear
1041	45 gal	8.17	3.72 mS/cm	28.7 °C	clear
1054	68 gal	8.03	3.62 mS/cm	28.3 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1055A Time Finished: 1055A

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments: dup EC 28.4 temp 3.60 EC

Water Sampling Field Log

Well No.: M-10

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump O Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" ●

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 69.45 feet Time: 1115A

Depth to Water: 47.21 feet

Height of Water Column (L): 22.24 feet

Well Diameter (circle one): 2-in. 4-in. (6-in)

* 0.16 gal/ft * 0.65 gal/ft * (1.47 gal/ft) = Well Volume (WV): 32.69 gal. * Purge Factor: 3 = **Purge Volume**: 98 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1117A	----	----	----	----	
1140A	33 gal	7.58	3.69 mS/cm	26.6°C	slightly iron colored
1159A	66 gal	7.62	3.77 mS/cm	26.1°C	Very slight color
1223P	98 gal	7.67	3.68 mS/cm	25.6°C	clear
	gal				
	gal				
	gal				

Sample Appearance: _____

Sample Collection - Time Start: 1225P Time Finished: 1225P

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments: Xtra cooler NDEP collected 1225P

Water Sampling Field Log

Well No.: M-35

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 39.70 feet Time: 111p

Depth to Water: 32.52 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
7.18 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.14 gal.	*	3	=	3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
115p	----	----	----	----	
118p	1 gal	7.85	3.26 mS/cm	28.7 °C	clear
119p	2 gal	7.68	4.20 mS/cm	27.7 °C	clear
120p	3 gal	7.64	4.88 mS/cm	27.4 °C	clear
121p	4 gal	7.62	5.14 mS/cm	27.5 °C	clear
122p	5 gal	7.61	5.24 mS/cm	27.2	clear
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 125p Time Finished: 125p

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: VD-2 taken here

Water Sampling Field Log

Well No.: M-68

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot hot 112 °F

Well Information:

Total Well Depth: 41.0 feet Time: 132p

Depth to Water: 27.22 feet

Height of Water Column (L): 13.78 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV): = 2.20 gal. * Purge Factor: 3 = Purge Volume: 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
146p	----	----	----	----	
151p	3 gal	7.66	6.65 mS/cm	30.3 °C	clear
155p	5 gal	7.74	6.79 mS/cm	28.8 °C	clear
159p	7 gal	7.67	7.03 mS/cm	28.5 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 201p Time Finished: 201p

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-19

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: 96°F clear sunny

Well Information:

Total Well Depth: 41.20 feet Time: 608A

Depth to Water: 35.48 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)	Purge Factor	Purge Volume
5.72 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .91 gal.	* 3	= 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
611a	-----	-----	-----	-----	
617a	1 gal	6.73	7.12 mS/cm	27.0°C	clear
623a	2 gal	7.31	7.10 mS/cm	25.8°C	clear
630a	3 gal	7.52	7.16 mS/cm	24.1	clear
633a	4 gal	7.56	7.15 mS/cm	25.9	clear
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 635a Time Finished: 635a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: well purged dry

Water Sampling Field Log

Well No.: M-22A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 36.92 feet Time: 1646

Depth to Water: 31.13 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor	Purge Volume
5.79 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= .92 gal.	*	3	= 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1647a	-----	-----	-----	-----	
1649a	1 gal	7.30	12.90 mS/cm	25.9°C	yellow
1651a	2 gal	7.36	13.16 mS/cm	26.1°C	Yellow
1652a	3 gal	7.39	13.23 mS/cm	26.0°C	Yellow
	gal				
	gal				
	gal				

Sample Appearance: Yellow

Sample Collection - Time Start: 1654a Time Finished: 1654a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: replaced PVC cap with well plug

Water Sampling Field Log

Well No.: M-36

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump O Dedicated Bailer ● Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 37.85 feet Time: 1105a

Depth to Water: 32.76 feet

Height of Water Column (L): 5.09 feet

Well Diameter (circle one): (2-in.) 4-in. 6-in

Well Volume (WV): 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft = _____ gal.

Purge Factor: * 3

Purge Volume: = 3gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1104a	-----	-----	-----	-----	
1110a	1 gal	7.42	15.13 mS/cm	25.9 °C	Yellow
1113a	2 gal	7.37	15.00 mS/cm	25.6 °C	Yellow
1116a	3 gal	7.44	1502 mS/cm	26.0 °C	Yellow
	gal				
	gal				
	gal				

Sample Appearance: Yellow

Sample Collection - Time Start: 1119a Time Finished: 1119a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 6

Comments:

Water Sampling Field Log

Well No.: M-38

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump O Dedicated Bailer ● Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: Hot sunny clear

Well Information:

Total Well Depth: 36.82 feet Time: 708A

Depth to Water: 31.48 feet

Height of Water Column (L): 5.34 feet

Well Diameter (circle one)			Well Volume (WV)		Purge Factor		Purge Volume
2-in.	4-in.	6-in					
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= ____ gal.		* 3	=	3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
709A	----	----	----	----	
711A	1 gal	7.43	13.18 mS/cm	25.2°C	yellow
714A	2 gal	7.44	13.22 mS/cm	24.8°C	Yellow
717A	3 gal	7.44 7.50 NM	13.22 mS/cm	24.9°C	Yellow
	gal				
	gal				
	gal				

Sample Appearance: Yellow

Sample Collection - Time Start: 723a Time Finished: 723a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-67

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 38.0 feet Time: 734a

Depth to Water: 22.60 feet

Height of Water Column (L): 15.4 feet

Well Diameter (circle one): 2-in. (* 0.16 gal/ft) 4-in. (* 0.65 gal/ft) 6-in (* 1.47 gal/ft)

Well Volume (WV) = 2.46 gal. * Purge Factor 3 = Purge Volume 7 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
735a	----	----	----	----	
738a	3 gal	7.75	6.81 mS/cm	26.7 °C	light yellow
739a	5 gal	7.57	6.68 mS/cm	26.1 °C	light yellow
740a	7 gal	7.56	6.69 mS/cm	26.2 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 741a Time Finished: 741a

Analyses/Bottles: CLO4 / CR / TDS / pH — 5 Bottles; pH / CLO4 / CR6 / TDS / CR — 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: MW-74

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ◉ Dedicated Bailer ○ Non Dedicated Bailer ○ Ready Flo 2" ○

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 39.0 feet Time: 752a

Depth to Water: 30.34 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)		Well Volume (WV)		Purge Factor		Purge Volume
8.66 feet	* 0.16 gal/ft * 0.65 gal/ft * 1.47 gal/ft	= 1.38 gal.	*	3	=	4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
755a	----	-----	-----	-----	
758a	2 gal	7.80	7.33 mS/cm	26.8°C	clear
759a	3 gal	7.75	7.32 mS/cm	26.5°C	clear
800a	4 gal	7.65	7.17 mS/cm	26.9°C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 802a Time Finished: 802a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: well casing broken

Water Sampling Field Log

Well No.: M-73

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 36.0 feet Time: 809A

Depth to Water: 29.24 feet

Height of Water Column (L): 6.76 feet * Well Diameter (circle one): 2-in. 0.16 gal/ft / 4-in. 0.65 gal/ft / 6-in. * 1.47 gal/ft = Well Volume (WV): 1.08 gal. * Purge Factor: 3 = **Purge Volume**: 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
810a	----	----	----	----	
826a	1 gal	7.61	8.19 mS/cm	33.1 °C	light yellow
827a	2 gal	7.56	8.81 mS/cm	28.9 °C	light yellow
836a	3 gal	7.60	8.28 mS/cm	33.2 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 840a Time Finished: 840a

Analyses: CLO4 / CR / TDS / pH | pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles | 6 Bottles

Comments: EB-2 collected here before moving to 845a next well ie bottles

well purges dry slow to recharge

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: M-81A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 41.60 feet Time: 849a

Depth to Water: 35.69 feet

Height of Water Column (L): 5.91 feet

Well Diameter (circle one): 2-in. * 0.16 gal/ft | 4-in. * 0.65 gal/ft | 6-in * 1.47 gal/ft

Well Volume (WV) = .94 gal. * Purge Factor 3 = Purge Volume 3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
852a	-----	-----	-----	-----	
854a	1 gal	7.73	7.25 mS/cm	26.9 °C	clear
855a	2 gal	7.66	7.19 mS/cm	26.3 °C	clear
856a	3 gal	7.59	7.13 mS/cm	26.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 857a Time Finished: 857a

Analyses: CLO4 / CR / TDS / ~~pH~~ pH / CLO4 / CR6 / TDS / CR

Bottles: ~~5~~ Bottles 6 Bottles

4

TOTAL BOTTLES: 4

Comments:

Water Sampling Field Log

Well No.: M-80

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 43.70 feet Time: 902a

Depth to Water: 36.16 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L):			Well Volume (WV)		Purge Factor	Purge Volume
7.54 feet	* 0.16 gal/ft	* 0.65 gal/ft	= 4.90 gal.	*	3	= 15 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
904a	-----	-----	-----	-----	
915a	5 gal	8.14	2.14 mS/cm	26.4 °C	clear
925a	10 gal	8.05	2.30 mS/cm	28.9 °C	clear
930a	15 gal	7.98	2.22 mS/cm	29.6 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 941a Time Finished: 941a

Analyses: CLO4 / CR / TDS / ~~NH4~~ pH / CLO4 / CR6 / TDS / CR

Bottles: ~~5~~ Bottles 6 Bottles

4

TOTAL BOTTLES: 4

Comments: high wash out in bank to drainage area by this well (NORTH)

well purges dry

Water Sampling Field Log

Well No.: M-83

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 42.50 feet Time: 948a

Depth to Water: 33.19 feet

Height of Water Column (L):	Well Diameter (circle one)			Well Volume (WV)		Purge Factor		Purge Volume
	2-in.	4-in.	6-in					
9.31 feet	0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.48	gal. *	3	=	5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
949a	----	-----	-----	-----	
951a	2 gal	7.81	2.70 mS/cm	25.7 °C	clear
953a	4 gal	7.81	2.77 mS/cm	24.2 °C	clear
954a	5 gal	7.78	2.76 mS/cm	23.8 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 955a Time Finished: 955a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-70

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny clear

Well Information:

Total Well Depth: 41.0 feet Time: 1000A

Depth to Water: 35.51 feet

Height of Water Column (L): ~~5.50~~ MB 5.49 feet

Well Diameter (circle one)			Well Volume (WV)		Purge Factor		Purge Volume
2-in.	4-in.	6-in					
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .87	gal. *	3	=	3 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1001A	----	----	----	----	
1003a	1 gal	7.75	6.19 mS/cm	27.7 °C	clear
1004a	2 gal	7.63	6.93 mS/cm	27.9 °C	light yellow tint
1006a	3 gal	7.60	7.08 mS/cm	28.2 °C	light yellow tint
1008a	4 gal	7.61	7.10 mS/cm	27.8 °C	light yellow tint
	gal				
	gal				

Sample Appearance: light yellow tint

Sample Collection - Time Start: 1010a Time Finished: 1010a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments:

Water Sampling Field Log

Well No.: M-11

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ◉ Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 43.0 feet Time: 1016a

Depth to Water: 35.58 feet

Height of Water Column (L): 7.42 feet

Well Diameter (circle one)			Well Volume (WV)	Purge Factor	Purge Volume
2-in.	4-in.	6-in			
* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.18 gal.	* 3	= 4 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1018a	----	-----	-----	-----	
1021a	2 gal	7.57	7.19 mS/cm	27.8 °C	light yellow
1023a	3 gal	7.52	7.01 mS/cm	28.9 °C	light yellow
1031a	4 gal	7.59	6.82 mS/cm	31.2 °C	light yellow
	gal				
	gal				
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 1034a Time Finished: 1034a

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

Comments: well purged dry

TOTAL BOTTLES: 5

Water Sampling Field Log

Well No.: M-72

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 36.0 feet Time: 1042a

Depth to Water: 32.12 feet

	Well Diameter (circle one)			Well Volume (WV)	Purge Factor	**Purge Volume**
	2-in.	4-in.	6-in			
Height of Water Column (L): 3.88 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= .62 gal.	* 3	= 2 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1043a	----	----	----	----	
1044a	1 gal	7.46	7.04 mS/cm	35.5 °C	light yellow
1049a	1.5 gal	7.33	9.55 mS/cm	32.3 °C	light yellow
1054a	2 gal	7.28	1056 mS/cm	31.3 °C	light yellow
1055a	2.5 gal	7.34	11.00 mS/cm	32.9 °C	light yellow
1059a	3 gal	7.24	11.33 mS/cm	36.2 °C	light yellow
	gal				

Sample Appearance: light yellow

Sample Collection - Time Start: 1100a Time Finished: 1100a

Analyses: CLO4 / CR / TDS / pH pH / CLO4 / CR6 / TDS / CR

Bottles: 5 Bottles 6 Bottles

TOTAL BOTTLES: 5

Comments: well purged dry

Water Sampling Field Log

Well No.: M-14A

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-9-12

Sampling Method: Electric Pump ● Dedicated Bailer O Non Dedicated Bailer O Ready Flo 2" O

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 42.40 feet Time: 1110A

Depth to Water: 32.80 feet

Well Diameter (circle one): 2-in. 4-in. 6-in

Height of Water Column (L)				Well Volume (WV)		Purge Factor		Purge Volume
9.60 feet	* 0.16 gal/ft	* 0.65 gal/ft	* 1.47 gal/ft	= 1.53 gal.	*	3	=	5 gal

Field Measurements:

Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	pH	Specific Conductivity	Temp	Observations
1111a	-----	-----	-----	-----	
1113a	2 gal	7.80	4.53 mS/cm	29.3 °C	slightly cloudy
1114a	4 gal	7.74	4.71 mS/cm	27.3 °C	clear
1115a	5 gal	7.74	4.71 mS/cm	27.0 °C	clear
	gal				
	gal				
	gal				

Sample Appearance: clear

Sample Collection - Time Start: 1116a Time Finished: 1116a

Analyses:	CLO4 / CR / TDS / pH	pH / CLO4 / CR6 / TDS / CR
Bottles:	5 Bottles	6 Bottles

TOTAL BOTTLES: 5

Comments: Dup EC 4.69 / EC 27.1 / Temp

Water Sampling Field Log

Well No.: I-0

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 43.80 feet Time: 1224p

Depth to Water: 36.92 feet

Height of Water Column (L): 6.88 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1224p	12.90 mS/cm	28.1 °C	7.16	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1225p Time Finished: 1225p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- P

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot humid

Well Information:

Total Well Depth: 47.80 feet Time: 1232p

Depth to Water: 39.02 feet

Height of Water Column (L): 8.78 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1219p	9.94 mS/cm	28.1°C	7.38	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1220p Time Finished: 1220p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- H

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 46.50 feet Time: 1228p

Depth to Water: 43.88 feet

Height of Water Column (L): 2.62 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1228p	14.63 mS/cm	29.3°C	6.99	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1229p Time Finished: 1229p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-11

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 47.60 feet Time: 1235p

Depth to Water: 37.68 feet

Height of Water Column (L): 9.92 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1231p	15.17 mS/cm	33.1°C	7.06	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1232p Time Finished: 1232p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- T

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot humid clouds sunny

Well Information:

Total Well Depth: 47.80 feet Time: 1237p

Depth to Water: 38.59 feet

Height of Water Column (L): 9.21 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1235p	15.30mS/cm	32.3	6.85	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1236p Time Finished: 1236p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- G

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny w/ clouds

Well Information:

Total Well Depth: 42.60 feet Time: 1239p

Depth to Water: 40.93 feet

Height of Water Column (L): 1.67 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1240p	15.22 mS/cm	33.2°	7.12	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1241p Time Finished: 1241p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- Q

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, cloudy w/sun 99°F

Well Information:

Total Well Depth: 43.80 feet Time: 1243p

Depth to Water: 34.28 feet

Height of Water Column (L): 9.52 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1244p	14.87 mS/cm	37.3°C	7.30	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1245p Time Finished: 1245p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- F

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 45.80 feet Time: 1247p

Depth to Water: 39.73 feet

Height of Water Column (L): 6.07 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1247p	13.12 ms/cm	27.8°c	7.15	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 1248p Time Finished: 1248p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- N

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, clouds/sunny.

Well Information:

Total Well Depth: 41.70 feet Time: 1249p

Depth to Water: 37.50 feet

Height of Water Column (L): 4.20 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1251p	10.91 mS/cm	28.1°C	7.27	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1252p Time Finished: 1252p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-E

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 46.70 feet Time: 1252p

Depth to Water: 44.23 feet

Height of Water Column (L): 2.47 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1254p	10.06mS/cm	29.4°C	7.17	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1255p Time Finished: 1256p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-M

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 43.70 feet Time: 1255p

Depth to Water: 41.41 feet

Height of Water Column (L): 2.29 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1258p	10.21 mS/cm	28.6°C	9.39	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 1259p Time Finished: 1259p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- D

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 47.70 feet Time: 1258p

Depth to Water: 45.40 feet

Height of Water Column (L): 2.30 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
103p	9.25 mS/cm	30.6 °C	7.35	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 104p Time Finished: 104p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- C

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot humid sunny

Well Information:

Total Well Depth: 43.80 feet Time: 1046p

Depth to Water: 42.51 feet

Height of Water Column (L): 1.29 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
1084p	8.53 mS/cm	28.1°C	7.50	slight yellow tint

Sample Appearance: slight yellow tint

Sample Collection - Time Start: 1094p Time Finished: 1094p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-S

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 47.70 feet Time: 111p

Depth to Water: 44.11 feet

Height of Water Column (L): 3.59 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
111p	8.05 mS/cm	27.4 °C	7.23	clear

Sample Appearance: clear

Sample Collection - Time Start: 112p Time Finished: 112p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-L

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, sunny, humid

Well Information:

Total Well Depth: 43.40 feet Time: 112p

Depth to Water: 33.60 feet

Height of Water Column (L): 9.80 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
115p	8.02 mS/cm	28.1 °C	7.21	clear

Sample Appearance: clear

Sample Collection - Time Start: 111p Time Finished: 111p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS

Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-R

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 45.30 feet Time: 1:17p

Depth to Water: 41.70 feet

Height of Water Column (L): 3.60 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
118p	7.73 mS/cm	28.5 °C	7.34	Clear

Sample Appearance: Clear

Sample Collection - Time Start: 119p Time Finished: 119p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-B

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-16-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 45.70 feet Time: 119p

Depth to Water: 42.93 feet

Height of Water Column (L): 2.77 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
122p	5.76mS/cm	28.6°C	7.39	Clear

Sample Appearance: Clear

Sample Collection - Time Start: 123p Time Finished: 123p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AR

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-6-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, humid, sunny

Well Information:

Total Well Depth: 45.0 feet Time: 139p

Depth to Water: 42.34 feet

Height of Water Column (L): 2.66 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
127p	8.26 mS/cm	30.5 °C	7.14	clear

Sample Appearance: clear

Sample Collection - Time Start: 128p Time Finished: 128p

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-W

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot 90°F

Well Information:

Total Well Depth: 50.0 feet Time: 436A

Depth to Water: 30.99 feet

Height of Water Column (L): 19.01 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- X

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot

Well Information:

Total Well Depth: 50.0 feet Time: 433A

Depth to Water: 30.61 feet

Height of Water Column (L): 19.39 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- Y

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot

Well Information:

Total Well Depth: 35.0 feet Time: 431A

Depth to Water: 30.09 feet

Height of Water Column (L): 4.91 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW only

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AA

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot

Well Information:

Total Well Depth: 46.0 feet Time: 4:29A

Depth to Water: 32.33 feet

Height of Water Column (L): 13.67 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations

Sample Appearance: DTW ONLY

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AB

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-7-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot

Well Information:

Total Well Depth: 52.0 feet Time: 430A

Depth to Water: 33.37 feet

Height of Water Column (L): 18.63 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AC

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: 106°F hot sunny

Well Information:

Total Well Depth: 50.0 feet Time: 859A

Depth to Water: 30.56 feet

Height of Water Column (L): 19.44 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW ONLY

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- AD

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 50 feet Time: 902A

Depth to Water: 30.79 feet

Height of Water Column (L): 19.21 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
				DTW only

Sample Appearance: _____

Sample Collection - Time Start: _____ Time Finished: _____

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- K

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 40.60 feet Time: 853 A

Depth to Water: 31.82 feet

Height of Water Column (L): 8.78 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
854A	6.91 mS/cm	26.5 °C	7.45 ~~7.5~~ NC	Very light yellow

Sample Appearance: very light yellow

Sample Collection - Time Start: 855a Time Finished: 855a

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- J

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 44.50 feet Time: 847 A

Depth to Water: 36.95 feet

Height of Water Column (L): 7.55 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
848A	7.38 mS/cm	26.9 °C	7.36	light yellow

Sample Appearance: light yellow

Sample Collection - Time Start: 850A Time Finished: 856A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- 2

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8.8.12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot, sunny

Well Information:

Total Well Depth: 37.0 feet Time: 840A

Depth to Water: 31.89 feet

Height of Water Column (L): 5.11 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
842a	7.88 mS/cm	26.5°C	7.65	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 844a Time Finished: 844a

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I- I

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 44.20 feet Time: 834a

Depth to Water: 24.90 feet

Height of Water Column (L): _____ feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
836a	9.87mS/cm	27.1 °C	7.69	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 830A Time Finished: 838a

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: I-V

Project No.: _____ Site: TRONOX LLC- HENDERSON, NEVADA

Sampling Team: Michele Brown, Eric Crawford Date: 8-8-12

Sampling Method: Sample taken from spigot on treatment system discharge line

Weather Conditions: hot sunny

Well Information:

Total Well Depth: 47.70 feet Time: 829A

Depth to Water: 35.09 feet

Height of Water Column (L): 12.61 feet

Field Measurements:

Time	Specific Conductivity	Temperature	pH	Oberservations
830A	1174 mS/cm	26.6°C	7.63	yellow

Sample Appearance: yellow

Sample Collection - Time Start: 831A Time Finished: 831A

Analyses: pH / CLO4 / Sterile CLO4 / CR / TDS
Bottles: 5 Bottles

Comments:

Water Sampling Field Log

Well No.: PC-97

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ◉ Disposable Bailer O

Weather Conditions: CA/M 95°F

Well Information:

Total Well Depth: 33.5 feet Time: 935A

Depth to Water: - 6.85 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	26.65 feet X	0.4893	1.9	4.41	=	13 gal 1 hrs

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
9,57		25,1°C	CLEAR

Comments:

Sample Collection Time - 1007A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-90

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot calm 96°

Well Information:

Total Well Depth: 15.0 feet Time: 1017A

Depth to Water: - 8.05 feet

			Well Diameter (circle one)				
			2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	6.95 feet	X	0.4893	1.9	4.41	=	3 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1019A		26.20C	CLEAR

Comments:

Sample Collection Time - 1024A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-86

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Hot calm 97°F

Well Information:

Total Well Depth: 28.0 feet Time: 1035

Depth to Water: - 7.13 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	20.87 feet	X (0.4893)	1.9	4.41	=	10 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1037A		27.3°C	CLEAR

Comments:

Sample Collection Time - 1047A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-91

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot calm 99°F

Well Information:

Total Well Depth: 37.0 feet Time: 1055A

Depth to Water: - 13.30 feet

			Well Diameter (circle one)				**Purge Volume**
			2-in.	**4-in.**	**6-in**		
Water Column (L):	23.7 feet	X	0.4893	1.9	4.41	=	12 gals

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1057A		28°C	CLEAR

Comments:

Sample Collection Time - 1107A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-12B

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot calm 103°C

Well Information:

Total Well Depth: 38.0 feet Time: 103p

Depth to Water: - 33.41 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	**4-in.**	**6-in**		
Water Column (L):	4.59 feet	X	0.4893	1.9	4.41	=	3

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
104p		29.80C	Clear

Comments:

Sample Collection Time - 110p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-53

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-18-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot 105°C

Well Information:

Total Well Depth: 54.9 feet Time: 140P

Depth to Water: - 29.08 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	25.82 feet	X (0.4893)	1.9	4.41	=	13 GALLONS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
142P		30.2°C	CLEAR

Comments:

Sample Collection Time - 150P

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: MW-K5

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-13-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Hot & clear 109°C

Well Information:

Total Well Depth: 414.0 feet Time: 1557

Depth to Water: - 31.15 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	12.85 feet	X (0.4893)	1.9	4.41	=	6 gal/Hours

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
157p		31.1°C	Clear

Comments:

Sample Collection Time - 205p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-7

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot calm 94°C

Well Information:

Total Well Depth: 39.2 feet Time: 745A

Depth to Water: - 30.76 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	8.44 feet	X (0.4893)	1.9	4.41	=	4 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
748A		27.1°C	CLEAR

Comments:

Sample Collection Time - 754A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-6B

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot + clear 96°c

Well Information:

Total Well Depth: 113.0 feet Time: 805A

Depth to Water: - 32.80 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	10.2 feet	X (0.4893)	1.9	4.41	=	5 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
807p		26.5°c	CLEAR

Comments:

Sample Collection Time - 814A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-5A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot calm 96°C

Well Information:

Total Well Depth: 38.0 feet Time: 820A

Depth to Water: - 33.18 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	4.82 feet	X (0.4893)	1.9	4.41	=	.3 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
822A		27.2°C	clear

Comments:

Sample Collection Time - 827A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-4A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot calm 96°F

Well Information:

Total Well Depth: 33.0 feet Time: 845A

Depth to Water: - 29.49 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	3.51 feet	X (0.4893)	1.9	4.41	=	3 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
847A		27.9°C	Clear

Comments:

Sample Collection Time - 851A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: MW-K4

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot calm 96°F

Well Information:

Total Well Depth: 50.0 feet Time: 900A

Depth to Water: - 28.28 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	21.72 feet , X	0.4893	1.9	4.41	=	11 GALLONS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
904A		28.5°C	CLEAR

Comments:

Sample Collection Time - 914A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-3A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ⊛ Disposable Bailer O

Weather Conditions: Hot calm 96°C

Well Information:

Total Well Depth: 41.0 feet Time: ~~950~~ 935A

Depth to Water: - 27.50 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	**4-in.**	**6-in**		
Water Column (L):	13.5 feet	X	0.4893	1.9	4.41	=	7 GALLONS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
937A		29.4°C	CLEAR

Comments:

Sample Collection Time - 944A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-2A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot 98°F

Well Information:

Total Well Depth: 54.0 feet Time: 948A

Depth to Water: - 26.07 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	27.93 feet	X 0.4893	1.9	4.41	=	14 gal 1 1/2 NS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
950A		29.4°C	Clear

Comments:

Sample Collection Time - 1000A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-101R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ● Disposable Bailer ○

Weather Conditions: Hot calm 101°F

Well Information:

Total Well Depth: 50.5 feet Time: 1046 A

Depth to Water: - 29.74 feet

		Well Diameter (circle one)			Purge Volume
		2-in.	**4-in.**	**6-in**	
Water Column (L):	20.76 feet	X (0.4893)	1.9	4.41	= 10 gal 10x1.5

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
1049A		29.0°C	CLEAR

Comments:

Sample Collection Time - 1057A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ARP-1

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Hot calm 101°~

Well Information:

Total Well Depth: 44.2 feet Time: 1113A

Depth to Water: - 24.38 feet

			Well Diameter (circle one)				**Purge Volume**
			2-in.	**4-in.**	**6-in**		
Water Column (L):	19.82 feet	X	0.4893	1.9	4.41	=	10 gal/0.4 l*

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1115A		29.6°C	clear

Comments:

Sample Collection Time - 1120A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-98R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Hot calm 102°F

Well Information:

Total Well Depth: 40.5 feet Time: 1154A

Depth to Water: - 24.59 feet

			Well Diameter (circle one)			
			2-in.	**4-in.**	**6-in**	**Purge Volume**
Water Column (L):	15.91 feet	X	0.4893	(1.9)	4.41	= 30 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1154A		30.7°C	CLEAR

Comments:

Sample Collection Time - 1230

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-55

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-14-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Hot calm 108°F

Well Information:

Total Well Depth: 54.9 feet Time: 115p

Depth to Water: - 27.80 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	27.1 feet	X 0.4893	1.9	(4.41)	=	120 gal/3x/5

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
118p		27.7°C	Clear

Comments:

Sample Collection Time - 225p

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-18

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: clear 86°C

Well Information:

Total Well Depth: 52.0 feet Time: 735A

Depth to Water: - 28.89 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	23.11 feet	X 0.4893	1.9	4.41	=	11 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
740		26.1°C	Clear

Comments:

Sample Collection Time - 746A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-103

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot clear 90°C

Well Information:

Total Well Depth: 29.5 feet Time: 800 A

Depth to Water: - 23.28 feet

		Well Diameter (circle one)			Purge Volume
		2-in.	4-in.	6-in	
Water Column (L):	6.12 feet	X 0.4893	1.9	4.41	= 3 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
802A		27.9°C	clear

Comments:

Sample Collection Time - 806A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-94

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot & Clear 95°C

Well Information:

Total Well Depth: 20.0 feet Time: 842 A

Depth to Water: - 14.15 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	**4-in.**	**6-in**		
Water Column (L):	5.85 feet	X	(0.4893)	1.9	4.41	=	3 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
842A		29.1°C	~~Clear~~ & Cloudy

Comments:

Sample Collection Time - 854A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-58

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ● Disposable Bailer O

Weather Conditions: Hot windy 96°C

Well Information:

Total Well Depth: 33.0 feet Time: 906A

Depth to Water: - 15.65 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	17.35 feet	X 0.4893	1.9	4.41	=	8 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
908A		25.6°C	clear

Comments:

Sample Collection Time - 914A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-56

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Hot windy 96°C

Well Information:

Total Well Depth: 55.0 feet Time: 919A

Depth to Water: - 15.42 feet

Water Column (L): 39.58 feet X

Well Diameter (circle one)		
2-in.	**4-in.**	**6-in**
0.4893	1.9	4.41

= ~~MZO~~ 9A 1/0.5

Purge Volume 19

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
921A		28.1°C	CLEAR

Comments:

Sample Collection Time - 935A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-60

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ⊘ Disposable Bailer O

Weather Conditions: Calm Hot 97°C

Well Information:

Total Well Depth: 40.0 feet Time: 9457

Depth to Water: - 15.22 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	24.78 feet	X (0.4893)	1.9	4.41	=	12 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
947A		27.2°C	clear

Comments:

Sample Collection Time - 953A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-59

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-18-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Windy Hot 97°F

Well Information:

Total Well Depth: 35.0 feet Time: 1010h

Depth to Water: - 14.18 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	**4-in.**	**6-in**		
Water Column (L):	20.82 feet	X	0.4893	1.9	4.41	=	10 GALLONS

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1012h		27.8°C	CLEAR

Comments:

Sample Collection Time - 1020h

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-62

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ◉ Disposable Bailer ○

Weather Conditions: Windy Hot 96°F

Well Information:

Total Well Depth: 38.0 feet Time: 1027A

Depth to Water: - 13.30 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	24.7 feet	X (0.4893)	1.9	4.41	=	12 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1029A		26°C	Clear

Comments:

Sample Collection Time - 1045A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-68

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-15-12

Sampling Method: Electric Pump ⊗ Disposable Bailer O

Weather Conditions: Hot 98°C

Well Information:

Total Well Depth: 55.3 feet Time: 1055 hr

Depth to Water: - 11.85 feet

		Well Diameter (circle one)			Purge Volume
		2-in.	**4-in.**	**6-in**	
Water Column (L):	43.47 feet	. X (0.4893)	1.9	4.41	= 21 gallons

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
1055 hr		26.9°C	CLEAR

Comments:

Sample Collection Time - 1112 AM

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-1

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: hot

Well Information:

Total Well Depth: 56.0 feet Time: 928A

Depth to Water: - 30.72 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	25.28 feet	X 0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
816A			clear

Comments:

Sample Collection Time - 816A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-14

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 56.0 feet Time: 930A

Depth to Water: - 24.61 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	31.39 feet	X 0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
			DTW ONLY

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-2

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 96°F

Well Information:

Total Well Depth: 56.0 feet Time: 923A

Depth to Water: - 28.40 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	27.6 feet	X 0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
0820A			Clear

Comments:

Sample Collection Time - 0820A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-2A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot CA/M

Well Information:

Total Well Depth: 56.0 feet Time: 925A

Depth to Water: - 27.36 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	28.64 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
			DTW ONLY

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-3

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot

Well Information:

Total Well Depth: 47.0 feet Time: 904a

Depth to Water: - 31.48 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	15.52 feet	X	0.4893	1.9	4.41	= _____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
			DTW ONLY

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-3A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 55.0 feet Time: 859A

Depth to Water: - 39.13 feet

		Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in	
Water Column (L):	15.87 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
823A			clear

Comments:

Sample Collection Time - 823A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-4

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 46.0 feet Time: 855 A

Depth to Water: - 29.41 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	**4-in.**	**6-in**		
Water Column (L):	16.59 feet	X 0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
			DTW only

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-4A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sampling port

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 46.0 feet Time: 854A

Depth to Water: - 42.26 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	3.74 feet	X 0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
827A			clear

Comments:

Sample Collection Time - 827A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-6

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer ⊘

Weather Conditions: Hot clr/m 95°c

Well Information:

Total Well Depth: 36.0 feet Time: 948A

Depth to Water: - 31.95 feet

		Well Diameter (circle one)				**Purge Volume**
		2-in.	**4-in.**	**6-in**		
Water Column (L):	4.05 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
943A			CLEAR

Comments:

Sample Collection Time - 943A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-7

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 96°C

Well Information:

Total Well Depth: 38.9 feet Time: 1012A

Depth to Water: - 31.55 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	7.35 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
833A			clear

Comments:

Sample Collection Time - 833A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-7A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 40.0 feet Time: 1015A

Depth to Water: - 32.76 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	7.24 feet	X 0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
			DTW ONLY

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-8

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 96°

Well Information:

Total Well Depth: 50.5 feet Time: 912A

Depth to Water: - 33.28 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	17.22 feet	X	0.4893	1.9	4.41	= _____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
830A			clear

Comments:

Sample Collection Time - 830A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-8A

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: calm Hot 97°F

Well Information:

Total Well Depth: 54.0 feet Time: 919A

Depth to Water: - 28.50 feet

			Well Diameter (circle one)				**Purge Volume**
			2-in.	**4-in.**	**6-in**		
Water Column (L):	25.5 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
			DTW only

Comments:

Sample Collection Time - _____

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: ART-9

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 43.0 feet Time: 1004A

Depth to Water: - 41.09 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	1.91 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
837A			clear

Comments:

Sample Collection Time - 837A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-99R2/R3

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 93°F

Well Information:

Total Well Depth: 57.41 feet Time: 752A

Depth to Water: - 40.66 feet

			Well Diameter (circle one)				
			2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	16.74 feet	X	0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
0700A			CLEAR

Comments:

Sample Collection Time - 700A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-115R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 93°F

Well Information:

Total Well Depth: 55.5 feet Time: 745A

Depth to Water: - 14.52 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	40.98 feet	X	0.4893	1.9	4.41	= _____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
703A			clear

Comments:

Sample Collection Time - 703A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-116R

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O

Weather Conditions: Hot calm 94°F

Well Information:

Total Well Depth: 55.5 feet Time: 757A

Depth to Water: - 17.10 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	38.4 feet	X 0.4893	1.9	4.41	=	_____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
708A			CLEAR

Comments:

Sample Collection Time - 708H

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-117

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sampling port

Weather Conditions: Hot calm 94°

Well Information:

Total Well Depth: 55.0 feet Time: 800A

Depth to Water: - 15.61 feet

		Well Diameter (circle one)				Purge Volume
		2-in.	4-in.	6-in		
Water Column (L):	39.39 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
710A			Clear

Comments:

Sample Collection Time - 710A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-118

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sampling port

Weather Conditions: Hot calm 94°-

Well Information:

Total Well Depth: 53.0 feet Time: 713A

Depth to Water: - 11.47 feet

		Well Diameter (circle one)				
		2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	41.53 feet	X 0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
713A			clear

Comments:

Sample Collection Time - 713A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-119

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 49.0 feet Time: 740A

Depth to Water: - 9.17 feet

		Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in	
Water Column (L):	39.83 feet	X	0.4893	1.9	4.41	=

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
710A			CLEAR

Comments:

Sample Collection Time - 710A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-120

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm

Well Information:

Total Well Depth: 49.0 feet Time: 735 R

Depth to Water: - 7.01 feet

			Well Diameter (circle one)				Purge Volume
			2-in.	4-in.	6-in		
Water Column (L):	41.99 feet	X	0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
720R			Clear

Comments:

Sample Collection Time - 720A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-121

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-6-12

Sampling Method: Electric Pump O Disposable Bailer O Sample port

Weather Conditions: Hot calm 93°

Well Information:

Total Well Depth: 40.5 feet Time: 732A

Depth to Water: - 6.92 feet

			Well Diameter (circle one)				
			2-in.	**4-in.**	**6-in**		**Purge Volume**
Water Column (L):	33.58 feet	X	0.4893	1.9	4.41	=	

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	**Cumulative Volume Purged**	**Temp**	**Observations of Sample**
723A			clear

Comments:

Sample Collection Time - 723A

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Water Sampling Field Log

Well No.: PC-133

Project No.: _____ Site: NERT PROJECT- HENDERSON, NEVADA

Sampling Team: Eric Crawford Date: 8-16-12

Sampling Method: Electric Pump O Disposable Bailer O sample port

Weather Conditions: hot

Well Information:

Total Well Depth: 40.2 feet Time: _____

Depth to Water: - 0 feet ← NO DTW Roots in well

		Well Diameter (circle one)			Purge Volume
		2-in.	4-in.	6-in	
Water Column (L):	_____ feet	X 0.4893	1.9	4.41	= _____

Field Measurements Depth Purging From: 2 ft. below depth to water

Time	Cumulative Volume Purged	Temp	Observations of Sample
6:51 am			clear

Comments:

Sample Collection Time - 651 am

Analyses: CR / TDS / STERILE FILTERED CLO4 / CLO4

Bottles: 4 Bottles

TOTAL Bottles- 4

Appendix C

Data Validation Summary Report (DVSR)

Provided on CD

Data Validation Summary Report
July to December 2012
Semi-Annual Remedial Performance Sampling
Nevada Environmental Response Trust (NERT)
Henderson, Nevada

Prepared for

ENVIRON International Corporation
Emeryville, California

Prepared by

Laboratory Data Consultants, Inc.
7750 El Camino Real, Suite 2C
Carlsbad, California 92009

February 15, 2013

Table of Contents

LIST OF TABLES

ATTACHMENT

LIST OF ACRONYMS AND ABBREVIATIONS

DQO	Data Quality Objectives
DUP	Duplicate
DVSR	Data Validation Summary Report
ICV	Initial Calibration Verification
LCS/LCSD	Laboratory Control Sample / Laboratory Control Sample Duplicate
LDC	Laboratory Data Consultants, Inc.
MS/MSD	Matrix Spike / Matrix Spike Duplicate
PARCC	Precision, Accuracy, Representativeness, Comparability, Completeness
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance / Quality Control
QAPP	Quality Assurance Project Plan
RPD	Relative Percent Difference
SDG	Sample Delivery Group
SQL	Sample Quantitation Limit
ug/L	Micrograms per Liter
ug/Kg	Micrograms per Kilogram
mg/L	Milligram per Liter
mg/Kg	Milligram per Kilogram
USEPA	United States Environmental Protection Agency
%D	Percent Difference
%R	Percent Recovery

1.0 INTRODUCTION

This data validation summary report (DVSR) has been prepared by Laboratory Data Consultants, Inc. (LDC) to assess the validity and usability of laboratory analytical data from the Semi-Annual Remedial Performance Sampling conducted at the Nevada Environmental Response Trust (NERT) site in Henderson, Nevada. The assessment was performed by ENVIRON as a part of the *Revised Phase B Quality Assurance Project Plan Tronox LLC Facility, Henderson, Nevada* dated May 2009 and included the collection and analyses of 450 environmental and quality control (QC) samples. The analyses were performed by the following methods:

Chromium by EPA SW 846 Method 6010 and EPA Method 200.7

Wet Chemistry:
Hexavalent Chromium by EPA SW 846 Method 7196
Total Dissolved Solids by EPA Method 160.1 and Standard Method 2540C
Perchlorate by EPA Method 314.0

Laboratory analytical services were provided by Eurofins (formerly MWH Laboratories, Inc.). The samples were grouped into sample delivery groups (SDGs). The water samples are associated with QA/QC samples designed to document the data quality of the entire SDG or a sub-group of samples within an SDG. Table I is a cross-reference table listing each sample, analysis, SDG, collection date, laboratory sample number, and matrix. All shaded samples in Table I were reviewed under Stage 4 validation guidelines.

The laboratory analytical data were validated in accordance with procedures described in the Nevada Division of Environmental Protection (NDEP) *Data Verification and Validation Requirements - Supplement* established for the BMI Plant Sites and Common Areas Projects, Henderson, Nevada, April 13, 2009. Consistent with the NDEP requirements, approximately ninety percent of the analytical data were validated according to Stage 2A data validation procedures and ten percent of the analytical data were validated according to Stage 4 data validation procedures. The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following documents: *Basic Remediation Company (BRC) Standard Operating Procedures (SOP) 40 Data Review/Valdiation,* Revision 1, July 2007, *Revised Phase B Quality Assurance Project Plan Tronox LLC Facility, Henderson, Nevada (*QAPP), Revision, May 2009, *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review,* October 2004, and the *EPA SW 846 Third Edition, Test Methods for Evaluating Solid Waste,* update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IV, February 2007.

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness, and comparability (PARCC) relative to the project data quality objectives (DQOs). This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability.

The PARCC summary report evaluates and summarizes the results of QA/QC data validation for the entire sampling program. Each analytical fraction has a separate section for each of the PARCC criteria. These sections interpret specific QC deviations and their effects on both individual data points and the analyses as a whole. Section 5.0 presents a summary of the PARCC criteria by comparing quantitative parameters with acceptability criteria defined in the project DQO's. Qualitative PARCC criteria are also summarized in this section.

Precision and Accuracy of Environmental Data

Environmental data quality depends on sample collection procedures, analytical methods and instrumentation, documentation, and sample matrix properties. Both sampling procedures and laboratory analyses contain potential sources of uncertainty, error, and/or bias, which affect the overall quality of a measurement. Errors for sample data may result from incomplete equipment decontamination, inappropriate sampling techniques, sample heterogeneity, improper filtering, and improper preservation. The accuracy of analytical results is dependent on selecting appropriate analytical methods, maintaining equipment properly, and complying with QC requirements. The sample matrix also is an important factor in the ability to obtain precise and accurate results within a given media.

Environmental and laboratory QA/QC samples assess the effects of sampling procedures and evaluate laboratory contamination, laboratory performance, and matrix effects. QA/QC samples include: equipment blanks, field blanks, field duplicates, method blanks, laboratory control samples and laboratory control sample duplicates (LCS/LCSDs), laboratory duplicates (DUP), and matrix spike/matrix spike duplicates (MS/MSDs).

Before conducting the PARCC evaluation, the analytical data were validated according to the BRC SOP-40 (July 2007), QAPP (May 2009), Functional Guidelines (USEPA 2004), and EPA SW 846 Test Methods. Samples not meeting the acceptance criteria were qualified with a flag, an abbreviation indicating a deficiency with the data. The following are flags used in data validation.

J- Estimated The associated numerical value is an estimated quantity with a negative bias. The analyte was detected but the reported value may not be accurate or precise.

J+ Estimated The associated numerical value is an estimated quantity with a positive bias. The analyte was detected but the reported value may not be accurate or precise.

J Estimated The associated numerical value is an estimated quantity. It is not possible to assess the direction of the potential bias. The analyte was detected but the reported value may not be accurate or precise. The "J" qualification indicates the data fell outside the QC limits, but the exceedance was not sufficient to cause rejection of the data.

R Rejected The data is unusable (the compound or analyte may or may not be present). Use of the "R" qualifier indicates a significant variance from functional guideline acceptance criteria. Either resampling or reanalysis is necessary to determine the presence or absence of the rejected analyte. The "R" designation is also applied to yield only one complete set of data for a given sample and eliminate redundant data.

U Nondetected Analyses were performed for the compound or analyte, but it was not detected. The "U" designation is also applied to suspected blank contamination. The "U" flag is used to qualify any result that is detected in an environmental sample and associated blank at less than the PQL.

UJ Estimated/Nondetected Analyses were performed for the compound or analyte, but it was not detected and the sample quantitation or detection limit is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate, or other spike recovery.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

The hierarchy of flags is listed below:

R > J	The R flag will always take precedence over the J qualifier.
J > J+ or J-	A non-biased (J) flag will always supersede biased (J+ or J-) flags since it is not possible to assess the direction of the potential bias.
J = J+ plus J-	Adding biased (J+, J-) flags with opposite signs will result in a non-biased flag (J).
UJ = U plus J or J+ or J-	The UJ flag is used when a non-detected (U) flag is added to a biased (J+ or J-) or non-biased flag (J).

Table II lists the reason codes used. Reason codes explain why flags have been applied and identify possible limitations of data use. Reason codes are cumulative except when one of the flags is R then only the reason code associated to the R flag will be used.

Table III presents the overall qualified results after all the flags or validation qualifiers and associated reason codes have been applied.

Once the data are reviewed and qualified according to the BRC SOP-40, QAPP, functional guidelines, and EPA Test Methods, the data set is then evaluated using PARCC criteria. PARCC criteria provide an evaluation of overall data usability. The following is a discussion of PARCC criteria as related to the project DQOs.

Precision is a measure of the agreement or reproducibility of analytical results under a given set of conditions. It is a quantity that cannot be measured directly but is calculated from percent recovery data. Precision is expressed as the relative percent difference (RPD):

$$RPD = (D1-D2)/\{1/2(D1+D2)\} \text{ X } 100$$

where:
D1 = reported concentration for the sample
D2 = reported concentration for the duplicate

Precision is primarily assessed by calculating an RPD from the percent recoveries of the spiked compounds for each sample in the MS/MSD pair. In the absence of an MS/MSD pair, a laboratory duplicate or LCS/LCSD pair can be analyzed as an alternative means of assessing precision. An additional measure of sampling precision was obtained by collecting and analyzing field duplicate samples, which were compared using the RPD result as the evaluation criteria.

MS and MSD samples are field samples spiked by the laboratory with target analytes prior to preparation and analysis. These samples measure the overall efficiency of the analytical method in recovering target analytes from an environmental matrix. A LCS is similar to an MS/MSD sample in that the LCS is spiked with the same target analytes prior to preparation and analysis. However, the LCS is prepared using a controlled interference-free matrix instead of a field sample aliquot. Laboratory reagent water is used to prepare aqueous LCS. The LCS measures laboratory efficiency in recovering target analytes from either an aqueous matrix in the absence of matrix interferences.

One primary sample is analyzed and accompanied by an unspiked laboratory duplicate. The data reviewer compares the reported results of the primary analysis and the laboratory duplicate, then calculates RPDs, which are used to assess laboratory precision.

Laboratory and field sampling precision are evaluated by calculating RPDs for aqueous field sample duplicate pairs. The sampler collects two field samples at the same location and under identically controlled conditions. The laboratory then analyzes the samples under identical conditions.

An RPD outside the numerical QC limit in either MS/MSD samples or LCS/LCSD indicates imprecision. Imprecision is the variance in the consistency with which the laboratory arrives at a particular reported result. Thus, the actual analyte concentration may be higher or lower than the reported result.

Possible causes of poor precision include sample matrix interference, improper sample collection or handling, inconsistent sample preparation, and poor instrument stability. In some duplicate pairs, results maybe reported in either the primary or duplicate samples at levels below the practical quantitation limit (PQL) or non-detected. Since these values are considered to be estimates, RPD exceedances from these duplicate pairs do not suggest a significant impact on the data quality.

Accuracy is a measure of the agreement of an experimental determination and the true value of the parameter being measured. It is used to identify bias in a given measurement system. Recoveries outside acceptable QC limits may be caused by factors such as instrumentation, analyst error, or matrix interference. Accuracy is assessed through the analysis of MS, MSD, LCS, and LCSD. In some cases, samples from multiple SDGs were within one QC batch and therefore are associated with the same laboratory QC samples. Accuracy of inorganic analyses is determined using the percent recoveries of MS and LCS analyses.

Percent recovery (%R) is calculated using the following equation:

$$\%R = (A-B)/C \times 100$$

where:
A = measured concentration in the spiked sample
B = measured concentration of the spike compound in the unspiked sample
C = concentration of the spike

The percent recovery of each analyte spiked in MS/MSD samples and LCS/LCSD is evaluated with the acceptance criteria specified by the previously noted documents. Spike recoveries outside the acceptable QC accuracy limits provide an indication of bias, where the reported data may overestimate or underestimate the actual concentration of compounds detected or quantitation limits reported for environmental samples.

Representativeness is a qualitative parameter that expresses the degree to which the sample data are characteristic of a population. It is evaluated by reviewing the QC results of blanks, samples and holding times. Positive detects of compounds in the blank samples identify compounds that may have been introduced into the samples during sample collection, transport, preparation, or analysis. The QA/QC blanks collected and analyzed are method blanks, equipment blanks and field blanks.

A method blank is a laboratory grade water or solid matrix that contains the method reagents and has undergone the same preparation and analysis as the environmental samples. The method blank provides a measure of the combined contamination derived from the laboratory source water, glassware, instruments, reagents, and sample preparation steps. Method blanks are prepared for each sample of a similar matrix extracted by the same method at a similar concentration level.

Initial and continuing calibration blanks consist of acidified laboratory grade water, which are injected at the beginning and at a regular frequency during each 12 - hour sample analysis run. These blanks estimate residual contaminants from the previous sample or standards analysis and measure baseline shifts that commonly occur in emission and absorption spectroscopy. Initial and continuing calibration blanks were only reviewed for samples on which Stage 4 review was performed.

Equipment blanks consist of analyte-free water poured over or through the sample collection equipment. The water is collected in a sample container for laboratory analysis. These blanks are collected after the sampling equipment is decontaminated and measure efficiency of the decontamination procedure. Equipment blanks were collected and analyzed for all target analytes.

Field blanks consist of analyte-free source water stored at the sample collection site. The water is collected from each source water used during each sampling event. Field blanks were collected and analyzed for all target analytes.

Contaminants found in both the environmental sample and the blank samples are assumed to be laboratory artifacts if both values are less than the PQL.

Holding times are evaluated to assure that the sample integrity is intact for accurate sample preparation and analysis. Holding times will be specific for each method and matrix analyzed. Holding time exceedance can cause loss of sample constituents due to biodegradation, precipitation, volatization, and chemical degradation. In accordance with EPA guidance (USEPA 2004), sample results for analyses that were performed after the method holding time but less than two times the method holding time were qualified as estimated (J- or UJ) and sample results for analyses that were performed after two times the method holding time were qualified as rejected (R).

Comparability is a qualitative expression of the confidence with which one data set may be compared to another. It provides an assessment of the equivalence of the analytical results to data obtained from other analyses. It is important that data sets be comparable if they are used in conjunction with other data sets. The factors affecting comparability include the following: sample collection and handling techniques, matrix type, and analytical method. If these aspects of sampling and analysis are carried out according to standard analytical procedures, the data are considered comparable. Comparability is also dependent upon other PARCC criteria, because only when precision, accuracy, and representativeness are known can data sets be compared with confidence.

Completeness is defined as the percentage of acceptable sample results compared to the total number of sample results. Completeness is evaluated to determine if an acceptable amount of usable data were obtained so that a valid scientific site assessment can be completed. Completeness equals the total number of sample results for each fraction minus the total number of rejected sample results divided by the total number of sample results multiplied by 100. As specified in the project DQOs, the goal for completeness for target analytes in each analytical fraction is 90 percent.

Percent completeness is calculated using the following equation:

$$\%C = (T - R)/T \times 100$$

where:
%C = percent completeness
T = total number of sample results
R = total number of rejected sample results

Completeness is also determined by comparing the planned number of samples per method and matrix as specified in the QAPP, with the number determined above.

The following sections present a review of QC data for each analytical method.

2.0 CHROMIUM

A total of 275 water samples were analyzed for chromium by EPA SW 846 Method 6010 and EPA Method 200.7. All metal data were assessed to be valid since none of the 275 total results were rejected based on holding time and QC exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

2.1 Precision and Accuracy

2.1.1 Instrument Calibration

Initial and continuing calibration verification results provide a means of evaluating accuracy within a particular SDG. Correlation coefficient (r) and percent recovery (%R) are the two major parameters used to measure the effectiveness of instrument calibration. The correlation coefficient indicates the linearity of the calibration curve. %R is used to verify the ongoing calibration acceptability of the analytical system.

The most critical of the two calibration parameters, r, has the potential to affect data accuracy across an SDG when it is outside the acceptable QC limits. %R exceedances suggest more routine instrumental anomalies, which typically impact all sample results for the affected analytes.

The correlation coefficients in the initial calibrations were within the acceptance criteria of ≥ 0.995 and the %Rs in the continuing calibration verification met the acceptance criteria of 90-110%.

2.1.2 MS/MSD Samples

All MS/MSD %Rs and RPDs met acceptance criteria.

2.1.3 LCS/LCSD Samples

All LCS/LCSD %Rs and RPDs met acceptance criteria.

2.1.4 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs or difference in instances the results were less than five times the reporting limit for the compounds. The field duplicate RPDs or differences were within the acceptance criteria. The field duplicate RPDs or differences are presented in detail in Attachment A, Section XIV.

2.1.5 ICP Interference Check Sample

All ICP interference check %Rs met acceptance criteria for the Stage 4 samples.

2.1.6 Analyte Quantitation and Target Identification

Raw data were evaluated for the Stage 4 samples. All analyte quantitation and target identifications were acceptable.

2.2 Representativeness

2.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All samples met the 180-day analysis holding time criteria for chromium.

2.2.2 Blanks

Method blanks, initial and continuing calibration blanks, equipment blanks, and field blanks were analyzed to evaluate representativeness. The concentration for an individual target compound in any of the types of QA/QC blanks was used for data qualification.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation. The corrective action consisted of amending the laboratory reported results based on the following criteria.

> Results Below the PQL If a sample result and blank contaminant value were less than the PQL, the sample result was amended as estimated (J) at the concentration reported in the sample results.
>
> Results Above the PQL If a sample result and blank contaminant value were greater than the PQL and less than 10 times the blank contaminant value, the sample result was qualified as detected estimated (J+) at the concentration reported in the sample results.
>
> No Action If a sample result and blank contaminant values were greater than the PQL, the result was not amended.

2.2.2.1 Method and Calibration Blanks

No data were qualified due to contaminants detected in the calibration blanks for this analysis.

2.2.2.2 Equipment and Field Blanks

No data were qualified due to contaminants detected in the equipment blanks for this analysis.

2.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the Sample Quantitation Limits (SQLs) attained were at or below the PQLs. Methods 6010 and 200.7 both utilize multielemental determinations by inductively coupled plasma-atomic emission spectrometry using simultaneous optical systems and axial or radial viewing of the plasma, the comparability of the metals data is regarded as acceptable.

2.4 Completeness

The completeness level attained for chromium field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

3.0 WET CHEMISTRY

A total of 23 water samples were analyzed for hexavalent chromium by EPA SW 846 Method 7196; 447 water samples were analyzed for perchlorate by EPA Method 314.0; and 449 water samples were analyzed for total dissolved solids by EPA Method 160.1 and Standard Method 2540C. All wet chemistry data were assessed to be valid with the exception of four of the 919 total results which were rejected based on holding time exceedances. This section discusses the QA/QC supporting documentation as defined by the PARCC criteria and evaluated based on the DQOs.

3.1 Precision and Accuracy

3.1.1 Instrument Calibration

As previously discussed in Section 2.1.1, initial and continuing calibration results provide a means of evaluating accuracy.

The correlation coefficients in the initial calibrations were within the acceptance criteria of ≥ 0.995 and the %Rs in the continuing calibration verification met the acceptance criteria of 90-110%.

3.1.2 MS/MSD Samples

All MS/MSD %Rs and RPDs met the acceptance criteria

3.1.3 Duplicate (DUP) Samples

All DUP RPDs met the acceptance criteria.

3.1.4 LCS/LCSD Samples

All LCS/LCSD %Rs and RPDs met the acceptance criteria.

3.1.5 Field Duplicate Samples

The field duplicate samples were evaluated for acceptable precision with RPDs or difference in instances the results were less than five times the reporting limit for the compounds. Two perchlorate results were qualified as detected estimated (J) due to RPD outside of acceptance criteria in field duplicate pair M-44 and VD-3. The details regarding the qualification of results are presented in Attachment B, Section X.

3.1.6 Analyte Quantitation and Target Identification

Raw data were evaluated for the Stage 4 samples. All analyte quantitation and target identifications were acceptable.

3.2 Representativeness

3.2.1 Sample Preservation and Holding Times

The evaluation of holding times to verify compliance with the method was conducted. All water samples met the 7-day analysis holding time criteria for total dissolved solids.

Due to a severe holding time criteria exceedance, the hexavalent chromium results for samples EB-1 (sampled on 8/8/12), EB-2 (sampled on 8/9/12), EB-2 (sampled on 11/7/12), and FB-1 (sampled on 8/6/12) were qualified as rejected (R). Additionally, 17 results for hexavalent chromium and perchlorate

were qualified as detected estimated (J-) or non-detected estimated (UJ). The analysis holding time criteria for water samples is 24 hours for hexavalent chromium and 28 days for perchlorate. The details regarding the qualification of results are presented in Attachment B, Section I.

3.2.2 Blanks

As previously discussed in Section 2.2.2, method blanks, initial and calibration blanks, equipment blanks, and field blanks were analyzed to evaluate representativeness.

3.2.2.1 Method and Calibration Blanks

No contaminants were detected in the method or calibration blanks for this analysis.

3.2.2.2 Equipment and Field Blanks

No data were qualified due to contaminants detected in the equipment blanks for this analysis.

3.3 Comparability

The laboratory used standard analytical methods for all of the analyses. In all cases, the SQLs attained were at or below the PQLs. Methods 160.1 and 2540C both utilize a well-mixed sample filtered through a glass fiber filter and the residue retained on the filter is dried to constant weight at 103-105^{o}C, the comparability of the total dissolved solids data is regarded as acceptable.

3.4 Completeness

The completeness level attained for wet chemistry field samples was 100 percent. This percentage was calculated as the total number of accepted sample results divided by the total number of sample results multiplied by 100.

4.0 VARIANCES IN ANALYTICAL PERFORMANCE

The laboratory used standard analytical methods for all of the analyses throughout the project. No systematic variances in analytical performance were noted in the laboratory case narratives.

5.0 SUMMARY OF PARCC CRITERIA

The validation reports present the PARCC results for all SDGs. Each PARCC criterion is discussed in detail in the following sections.

5.1 Precision and Accuracy

Precision and accuracy were evaluated using data quality indicators such as calibration, surrogates, MS/MSD, DUP, LCS/LCSD, and field duplicates. The precision and accuracy of the data set were considered acceptable after integration of result qualification.

All calibrations were performed as required and met the acceptance criteria. All surrogate, MS/MSD, DUP, LCS/LCSD, and field duplicate percent recoveries, RPDs, and difference met acceptance criteria. All ICP interference check sample %Rs met acceptance criteria.

5.2 Representativeness

All samples for each method and matrix were evaluated for holding time compliance. All samples were associated with a method blank in each individual SDG. The representativeness of the project data is considered acceptable after integration of result qualification.

5.3 Comparability

Sampling frequency requirements were met in obtaining necessary equipment blanks, field blanks and field duplicates. The laboratory used standard analytical methods for the analyses. The analytical results were reported in correct standard units. Sample preservation, and sample integrity criteria were met. Holding times were within QC criteria with the exceptions noted in Section 3.2.1. The overall comparability is considered acceptable.

5.4 Completeness

Of the 1,194 total analytes reported, four of the sample results were rejected. The completeness for the SDGs is as follows:

Parameter	Total Analytes	No. of Rejects	% Completeness
Metals	275	0	100
Wet Chemistry	919	4	99.6
Total	**1,194**	**4**	**99.7**

The completeness percentage based on rejected data met the 90 percent DQO goal.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical data quality assessment for the water sample laboratory analytical results generated during the Semi-Annual Remedial Performance Sampling at the Nevada Environmental Response Trust (NERT) site in Henderson, Nevada established that the overall project requirements and completeness levels were met. The sample results that were found to be rejected (R) is unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Stage 2A and Stage 4 data validation all other results are considered valid and usable for all purposes.

7.0 REFERENCES

NDEP Data Verification and Validation Requirements - Supplement established for the BMI Plant Sites and Common Areas Projects, Henderson, Nevada, April, 13, 2009,

Basic Remediation Company (BRC) Standard Operating Procedures, SOP-40 Data Review/Valdiation, Revision 1, July 2007,

*Revised Phase B Quality Assurance Project Plan Tronox LLC Facility, Henderson, Nevada (*QAPP), Revision, May 2009,

Region 9 Superfund Data Evaluation/Validation Guidance, R6QA/006.1, Draft, December 2001,

USEPA 2004. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

____,1983. EPA *Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Cincinnati, Ohio*, March 1983

____,1996. EPA SW 846 *Third Edition, Test Methods for Evaluating Solid Waste, update I, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III*, December 1996; update IV, February 2007

Standard Method for the Examination of Water and Wastewater, 20th Edition, 1998

TABLE I

SDG#: 401431 **VALIDATION SAMPLE TABLE** **LDC#:** 29120A

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ART-1	201207030402	water		07/02/12	X	X									
ART-2	201207030403	water		07/02/12	X	X									
ART-3	201207030404	water		07/02/12	X	X									
ART-4	201207030405	water		07/02/12	X	X									
ART-6	201207030406	water		07/02/12	X	X									
ART-7	201207030407	water		07/02/12	X	X									
ART-8	201207030408	water		07/02/12	X	X									
PC-99R2/R3	201207030409	water		07/02/12	X	X									
PC-115R	201207030410	water		07/02/12	X	X									
PC-116R	201207030411	water		07/02/12	X	X									
SF-1	201207030412	water		07/02/12	X	X									
PC-117	201207030413	water		07/02/12	X	X									
PC-118	201207030414	water		07/02/12	X	X									
PC-119	201207030415	water		07/02/12	X	X									
PC-120	201207030416	water		07/02/12	X	X									
PC-121	201207030417	water		07/02/12	X	X									
ART-9	201207030419	water		07/02/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 402355 **VALIDATION SAMPLE TABLE** **LDC#:** 28996A

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)										
M-83	201207130066	water			X	X										
PC-98R	201207130067	water			X	X										
PC-86	201207130068	water			X	X										
PC-90	201207130069	water			X	X										
PC-56	201207130070	water			X	X										
PC-58	201207130071	water			X	X										
PC-59	201207130072	water			X	X										
PC-60	201207130073	water			X	X										
PC-62	201207130074	water			X	X										
PC-68	201207130075	water			X	X										
PC-122	201207130076	water			X	X										
MW-K4	201207130077	water			X	X										
ARP-1	201207130078	water			X	X										
ARP-2A	201207130079	water			X	X										
ARP-3A	201207130080	water			X	X										
ARP-4A	201207130081	water			X	X										
ARP-5A	201207130082	water			X	X										
ARP-6B	201207130083	water			X	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 402355 **VALIDATION SAMPLE TABLE** **LDC#:** 28996A

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ARP-7	201207130084	water			X	X									
PC-53	201207130085	water			X	X									
PC-103	201207130086	water			X	X									
MW-K5	201207130087	water			X	X									
PC-91	201207130088	water			X	X									
PC-97	201207130089	water			X	X									
PC-18	201207130090	water			X	X									
PC-55	201207130091	water			X	X									
PC-101R	201207130092	water			X	X									
M-83DUP	201207130066DUP	water	DUP			X									
PC-86DUP	201207130068DUP	water	DUP			X									
PC-58MS	201207130071MS	water	MS		X										
PC-58MSD	201207130071MSD	water	MSD		X										
PC-68DUP	201207130075DUP	water	DUP			X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404682 **VALIDATION SAMPLE TABLE** **LDC#:** 28996B

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
PC-123	201208080198	water		08/06/12	X	X	X								
PC-128	201208080199	water		08/06/12	X	X	X								
PC-129	201208080200	water		08/06/12	X	X	X								
PC-130	201208080201	water		08/06/12	X	X	X								
PC-124	201208080202	water		08/06/12	X	X	X								
PC-125	201208080203	water		08/06/12	X	X	X								
PC-126	201208080204	water		08/06/12	X	X	X								
PC-127	201208080205	water		08/06/12	X	X	X								
PC-131	201208080206	water		08/06/12	X	X	X								
PC-132	201208080207	water		08/06/12	X	X	X								
M-96	201208080208	water		08/06/12	X	X	X								
PC-54	201208080209	water		08/06/12	X	X	X								
M-48A	201208080210	water		08/06/12	X	X	X								
M-44	201208080211	water	FD2	08/06/12	X	X	X	X							
PC-71	201208080212	water		08/06/12	X	X	X								
PC-72	201208080213	water		08/06/12	X	X	X								
PC-73	201208080214	water		08/06/12	X	X	X								
PC-37	201208080215	water		08/06/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404682 **VALIDATION SAMPLE TABLE** **LDC#:** 28996B

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-23	201208080216	water	FD1	08/06/12	X	X	X								
FB-1	201208080217	water	FB	08/06/12	X	X	X	X							
VD-1	201208080218	water	FD1	08/06/12	X	X	X								
VD-3	201208080219	water	FD2	08/06/12	X	X	X	X							
PC-123MS	201208080198MS	water	MS	08/06/12	X	X									
PC-123MSD	201208080198MSD	water	MSD	08/06/12	X	X									
PC-126MS	201208080204MS	water	MS	08/06/12	X										
PC-126MSD	201208080204MSD	water	MSD	08/06/12	X										
M-96DUP	201208080208DUP	water	DUP	08/06/12			X								
PC-37MS	201208080215MS	water	MS	08/06/12	X										
PC-37MSD	201208080215MSD	water	MSD	08/06/12	X										
M-23DUP	201208080216DUP	water	DUP	08/06/12			X								
VD-1MS	201208080218MS	water	MS	08/06/12		X									
VD-1MSD	201208080218MSD	water	MSD	08/06/12		X									
VD-1DUP	201208080218DUP	water	DUP	08/06/12			X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404719 **VALIDATION SAMPLE TABLE** **LDC#:** 28996C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
I-O	201208080316	water		08/06/12	X	X	X								
I-P	201208080323	water		08/06/12	X	X	X								
I-H	201208080324	water		08/06/12	X	X	X								
I-U	201208080325	water		08/06/12	X	X	X								
I-T	201208080326	water		08/06/12	X	X	X								
I-G	201208080327	water		08/06/12	X	X	X								
I-Q	201208080328	water		08/06/12	X	X	X								
I-F	201208080329	water		08/06/12	X	X	X								
I-N	201208080330	water		08/06/12	X	X	X								
I-E	201208080331	water		08/06/12	X	X	X								
I-M	201208080332	water		08/06/12	X	X	X								
I-D	201208080333	water		08/06/12	X	X	X								
I-C	201208080334	water		08/06/12	X	X	X								
I-S	201208080335	water		08/06/12	X	X	X								
I-L	201208080336	water		08/06/12	X	X	X								
I-R	201208080337	water		08/06/12	X	X	X								
I-B	201208080338	water		08/06/12	X	X	X								
I-AR	201208080339	water		08/06/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404719 **VALIDATION SAMPLE TABLE** **LDC#:** 28996C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
I-BDUP	201208080338DUP	water	DUP	08/06/12			X								
I-ARMS	201208080339MS	water	MS	08/06/12	X										
I-ARMSD	201208080339MSD	water	MSD	08/06/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404737 **VALIDATION SAMPLE TABLE** **LDC#:** 28996D

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
ART-1	201208080449	water		08/06/12	X	X	X								
ART-2	201208080450	water		08/06/12	X	X	X								
ART-3	201208080451	water		08/06/12	X	X	X								
ART-4	201208080452	water		08/06/12	X	X	X								
ART-6	201208080454	water		08/06/12	X	X	X								
ART-7	201208080455	water		08/06/12	X	X	X								
ART-8	201208080456	water		08/06/12	X	X	X								
PC-99R2/R3	201208080457	water		08/06/12	X	X	X								
PC-115R	201208080458	water		08/06/12	X	X	X								
PC-116R	201208080459	water		08/06/12	X	X	X								
SF-1	201208080460	water		08/06/12	X	X	X								
PC-117	201208080461	water		08/06/12	X	X	X								
PC-118	201208080462	water		08/06/12	X	X	X								
PC-119	201208080463	water		08/06/12	X	X	X								
PC-120	201208080464	water		08/06/12	X	X	X								
PC-121	201208080465	water		08/06/12	X	X	X								
PC-133	201208080466	water		08/06/12	X	X	X								
ART-9	201208080467	water		08/06/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404737 **VALIDATION SAMPLE TABLE** **LDC#:** 28996D

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
ART-1MS	201208080449MS	water	MS	08/06/12		X									
ART-1MSD	201208080449MSD	water	MSD	08/06/12		X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404790 **VALIDATION SAMPLE TABLE** **LDC#:** 28996E

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
H-28A	201208080709	water		08/07/12	X	X	X								
M-6A	201208080710	water		08/07/12	X	X	X								
M-5A	201208080720	water		08/07/12	X	X	X								
M-7B	201208080721	water		08/07/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 404947 **VALIDATION SAMPLE TABLE** **LDC#:** 29120B

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-135A	201208080711	water		08/07/12	X	X	X								
PC-136	201208080712	water		08/07/12	X	X	X								
PC-148	201208080713	water		08/07/12	X	X	X								
PC-144	201208080714	water		08/07/12	X	X	X								
PC-149	201208080715	water		08/07/12	X	X	X								
PC-150	201208080716	water		08/07/12	X	X	X								
M-64	201208080717	water		08/07/12	X	X	X								
M-65	201208080718	water		08/07/12	X	X	X								
M-66	201208080719	water		08/07/12	X	X	X								
PC-144MS	201208080714MS	water	MS	08/07/12	X										
PC-144MSD	201208080714MSD	water	MSD	08/07/12	X										
PC-149MS	201208080715MS	water	MS	08/07/12	X										
PC-149MSD	201208080715MSD	water	MSD	08/07/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405034 **VALIDATION SAMPLE TABLE** **LDC#:** 28996F

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-79	201208100203	water		08/08/12	X	X	X								
M-69	201208100204	water		08/08/12	X	X	X								
M-135	201208100205	water		08/08/12	X	X	X								
M-131	201208100206	water		08/08/12	X	X	X								
M57A	201208100207	water		08/08/12	X	X	X								
M-25	201208100208	water		08/08/12	X	X	X								
EB-1	201208100209	water	EB	08/08/12	X	X	X	X							
M-37	201208100210	water		08/08/12	X	X	X	X							
I-V	201208100211	water		08/08/12	X	X	X								
I-K	201208100212	water		08/08/12	X	X	X								
I-J	201208100213	water		08/08/12	X	X	X								
I-Z	201208100214	water		08/08/12	X	X	X								
I-I	201208100215	water		08/08/12	X	X	X								
M-31A	201208100216	water		08/08/12	X	X	X								
M-12A	201208100217	water	FD1	08/08/12	X	X	X	X							
M-11	201208100218	water		08/08/12	X	X	X	X							
M-10	201208100219	water		08/08/12	X	X	X	X							
M-35	201208100220	water	FD2	08/08/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405034 **VALIDATION SAMPLE TABLE** **LDC#:** 28996F

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-68	201208100221	water		08/08/12	X	X	X								
VD-4	201208100222	water	FD1	08/08/12	X	X	X	X							
VD-2	201208100223	water	FD2	08/08/12	X	X	X								
M-79MS	201208100203MS	water	MS	08/08/12	X										
M-79MSD	201208100203MSD	water	MSD	08/08/12	X										
M-135MS	201208100205MS	water	MS	08/08/12	X										
M-135MSD	201208100205MSD	water	MSD	08/08/12	X										
M-131MS	201208100206MS	water	MS	08/08/12	X										
M-131MSD	201208100206MSD	water	MSD	08/08/12	X										
M-131DUP	201208100206DUP	water	DUP	08/08/12			X								
M57ADUP	201208100207DUP	water	DUP	08/08/12			X								
M-11DUP	201208100218DUP	water	DUP	08/08/12			X								
M-10MS	201208100219MS	water	MS	08/08/12	X										
M-10MSD	201208100219MSD	water	MSD	08/08/12	X										
M-10DUP	201208100219DUP	water	DUP	08/08/12			X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405048 **VALIDATION SAMPLE TABLE** **LDC#:** 29044A

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (200.7)	TDS (160.1/ 2540C)									
M-10	201208100245	water		08/08/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405208 **VALIDATION SAMPLE TABLE** **LDC#:** 28996G

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-19	201208110091	water		08/09/12	X	X	X								
M-22A	201208110092	water		08/09/12	X	X	X								
M-36	201208110093	water		08/09/12	X	X	X	X							
M-38	201208110094	water		08/09/12	X	X	X								
M-67	201208110095	water		08/09/12	X	X	X								
M-74	201208110096	water		08/09/12	X	X	X								
M-73	201208110097	water		08/09/12	X	X	X								
EB-2	201208110098	water	EB	08/09/12	X	X	X	X							
M-83	201208110099	water		08/09/12	X	X	X								
M-80	201208110100	water		08/09/12	X	X	X								
M-81A	201208110101	water		08/09/12	X	X	X								
M-70	201208110102	water		08/09/12	X	X	X								
M-71	201208110103	water		08/09/12	X	X	X								
M-72	201208110104	water		08/09/12	X	X	X								
M-14A	201208110105	water		08/09/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405883 **VALIDATION SAMPLE TABLE** **LDC#:** 28996H

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-98R	201208170274	water		08/14/12	X	X	X								
PC-86	201208170275	water		08/13/12	X	X	X								
PC-90	201208170276	water		08/13/12	X	X	X								
PC-56	201208170277	water		08/15/12	X	X	X								
PC-58	201208170278	water		08/15/12	X	X	X								
PC-59	201208170279	water		08/15/12	X	X	X								
PC-60	201208170280	water		08/15/12	X	X	X								
PC-62	201208170281	water		08/15/12	X	X	X								
PC-68	201208170282	water		08/15/12	X	X	X								
PC-122	201208170283	water		08/13/12	X	X	X								
MW-K4	201208170284	water		08/14/12	X	X	X								
ARP-1	201208170285	water		08/14/12	X	X	X								
ARP-2A	201208170286	water		08/14/12	X	X	X								
ARP-3A	201208170287	water		08/14/12	X	X	X								
ARP-4A	201208170288	water		08/14/12	X	X	X								
ARP-5A	201208170289	water		08/14/12	X	X	X								
ARP-6B	201208170290	water		08/14/12	X	X	X								
ARP-7	201208170291	water		08/14/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405883 **VALIDATION SAMPLE TABLE** **LDC#:** 28996H

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-53	201208170292	water		08/13/12	X	X	X								
PC-103	201208170293	water		08/15/12	X	X	X								
MW-K5	201208170294	water		08/13/12	X	X	X								
PC-91	201208170295	water		08/13/12	X	X	X								
PC-97	201208170296	water		08/13/12	X	X	X								
PC-18	201208170297	water		08/15/12	X	X	X								
PC-55	201208170298	water		08/14/12	X	X	X								
PC-101R	201208170299	water		08/14/12	X	X	X								
PC-94	201208170300	water		08/15/12	X	X	X								
ART-7B	201208170307	water		08/13/12	X	X	X								
PC-98RMS	201208170274MS	water	MS	08/14/12	X										
PC-98RMSD	201208170274MSD	water	MSD	08/14/12	X										
PC-86DUP	201208170275DUP	water	DUP	08/13/12			X								
PC-60MS	201208170280MS	water	MS	08/15/12	X										
PC-60MSD	201208170280MSD	water	MSD	08/15/12	X										
PC-62DUP	201208170281DUP	water	DUP	08/15/12			X								
PC-91MS	201208170295MS	water	MS	08/13/12	X										
PC-91MSD	201208170295MSD	water	MSD	08/13/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 405883 **VALIDATION SAMPLE TABLE** **LDC#:** 28996H

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-91DUP	201208170295DUP	water	DUP	08/13/12			X								
PC-18MS	201208170297MS	water	MS	08/15/12		X									
PC-18MSD	201208170297MSD	water	MSD	08/15/12		X									
PC-94MS	201208170300MS	water	MS	08/15/12	X										
PC-94MSD	201208170300MSD	water	MSD	08/15/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 408121 **VALIDATION SAMPLE TABLE** **LDC#:** 28996I

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ART-1	201209060585	water		09/05/12	X	X									
ART-2	201209060586	water		09/05/12	X	X									
ART-3	201209060587	water		09/05/12	X	X									
ART-4	201209060588	water		09/05/12	X	X									
ART-6	201209060589	water		09/05/12	X	X									
ART-7	201209060590	water		09/05/12	X	X									
ART-8	201209060591	water		09/05/12	X	X									
PC-99R2/R3	201209060592	water		09/05/12	X	X									
PC-115R	201209060593	water		09/05/12	X	X									
PC-116R	201209060594	water		09/05/12	X	X									
SF-1	201209060595	water		09/05/12	X	X									
PC-117	201209060596	water		09/05/12	X	X									
PC-118	201209060597	water		09/05/12	X	X									
PC-119	201209060598	water		09/05/12	X	X									
PC-120	201209060599	water		09/05/12	X	X									
PC-121	201209060600	water		09/05/12	X	X									
PC-133	201209060601	water		09/05/12	X	X									
ART-9	201209060602	water		09/05/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 408121 **VALIDATION SAMPLE TABLE** **LDC#:** 28996I

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
PC-117MS	201209060596MS	water	MS	09/05/12	X										
PC-117MSD	201209060596MSD	water	MSD	09/05/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 409004 **VALIDATION SAMPLE TABLE** **LDC#:** 28996J

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
M-83	201209140054	water		09/12/12		X	X								
PC-98R	201209140055	water		09/11/12		X	X								
PC-86	201209140056	water		09/10/12		X	X								
PC-90	201209140057	water		09/10/12		X	X								
PC-56	201209140058	water		09/10/12		X	X								
PC-58	201209140059	water		09/10/12		X	X								
PC-59	201209140060	water		09/10/12		X	X								
PC-60	201209140061	water		09/10/12		X	X								
PC-62	201209140062	water		09/10/12		X	X								
PC-68	201209140063	water		09/10/12		X	X								
PC-122	201209140064	water		09/11/12		X	X								
MW-K4	201209140065	water		09/11/12		X	X								
ARP-1	201209140066	water		09/11/12		X	X								
ARP-2A	201209140067	water		09/11/12		X	X								
ARP-3A	201209140068	water		09/11/12		X	X								
ARP-4A	201209140069	water		09/11/12		X	X								
ARP-5A	201209140070	water		09/11/12		X	X								
ARP-6B	201209140071	water		09/11/12		X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 409004 **VALIDATION SAMPLE TABLE** **LDC#:** 28996J

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
ARP-7	201209140072	water		09/11/12		X	X								
PC-53	201209140073	water		09/11/12		X	X								
PC-103	201209140074	water		09/11/12		X	X								
MW-K5	201209140075	water		09/11/12		X	X								
PC-91	201209140076	water		09/10/12		X	X								
PC-97	201209140077	water		09/10/12		X	X								
PC-18	201209140078	water		09/10/12		X	X								
PC-55	201209140079	water		09/10/12		X	X								
PC-101R	201209140080	water		09/11/12		X	X								
ART-7B	201209140081	water		09/11/12	X	X	X								
M-83DUP	201209140054DUP	water	DUP	09/12/12			X								
PC-68DUP	201209140063DUP	water	DUP	09/10/12			X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 411090 **VALIDATION SAMPLE TABLE** **LDC#:** 28996K

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ART-1	201210040094	water		10/02/12	X	X									
ART-2	201210040095	water		10/02/12	X	X									
ART-3	201210040096	water		10/02/12	X	X									
ART-4	201210040097	water		10/02/12	X	X									
ART-6	201210040098	water		10/02/12	X	X									
ART-7	201210040099	water		10/02/12	X	X									
ART-8	201210040100	water		10/02/12	X	X									
PC-99R2/R3	201210040101	water		10/02/12	X	X									
PC-115R	201210040102	water		10/02/12	X	X									
PC-116R	201210040103	water		10/02/12	X	X									
SF-1	201210040104	water		10/02/12	X	X									
PC-117	201210040105	water		10/02/12	X	X									
PC-118	201210040106	water		10/02/12	X	X									
PC-119	201210040107	water		10/02/12	X	X									
PC-120	201210040108	water		10/02/12	X	X									
PC-121	201210040109	water		10/02/12	X	X									
PC-133	201210040110	water		10/02/12	X	X									
ART-9	201210040111	water		10/02/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 412098 **VALIDATION SAMPLE TABLE** **LDC#:** 28996L

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
M-83	201210120126	water		10/10/12	X	X									
PC-98R	201210120127	water		10/10/12	X	X									
PC-86	201210120128	water		10/09/12	X	X									
PC-90	201210120129	water		10/09/12	X	X									
PC-56	201210120130	water		10/09/12	X	X									
PC-58	201210120131	water		10/09/12	X	X									
PC-59	201210120132	water		10/09/12	X	X									
PC-60	201210120133	water		10/09/12	X	X									
PC-62	201210120134	water		10/09/12	X	X									
PC-68	201210120135	water		10/09/12	X	X									
PC-122	201210120136	water		10/10/12	X	X									
MW-K4	201210120137	water		10/10/12	X	X									
ARP-1	201210120138	water		10/09/12	X	X									
ARP-2A	201210120139	water		10/10/12	X	X									
ARP-3A	201210120140	water		10/10/12	X	X									
ARP-4A	201210120141	water		10/10/12	X	X									
ARP-5A	201210120142	water		10/10/12	X	X									
ARP-6B	201210120143	water		10/10/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 412098 **VALIDATION SAMPLE TABLE** **LDC#:** 28996L

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ARP-7	201210120144	water		10/10/12	X	X									
PC-53	201210120145	water		10/10/12	X	X									
PC-103	201210120146	water		10/10/12	X	X									
MW-K5	201210120147	water		10/10/12	X	X									
PC-91	201210120148	water		10/09/12	X	X									
PC-97	201210120149	water		10/09/12	X	X									
PC-18	201210120150	water		10/09/12	X	X									
PC-55	201210120151	water		10/09/12	X	X									
PC-101R	201210120152	water		10/10/12	X	X									
M-83DUP	201210120126DUP	water	DUP	10/10/12		X									
PC-62MS	201210120134MS	water	MS	10/09/12	X										
PC-62MSD	201210120134MSD	water	MSD	10/09/12	X										
PC-68DUP	201210120135DUP	water	DUP	10/09/12		X									
ARP-1MS	201210120138MS	water	MS	10/09/12	X										
ARP-1MSD	201210120138MSD	water	MSD	10/09/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414468 **VALIDATION SAMPLE TABLE** **LDC#:** 29120C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1)	Cr(VI) (7196)							
M-48A	201211070300	water		11/05/13	X	X	X								
M-44	201211070301	water	FD1	11/05/13	X	X	X								
PC-71	201211070302	water		11/05/13	X	X	X								
PC-72	201211070303	water	FD2	11/05/13	X	X	X								
PC-73	201211070304	water		11/05/13	X	X	X								
PC-37	201211070305	water		11/05/13	X	X	X								
VD-1	201211070306	water	FD1	11/05/13	X	X	X	X							
VD-3	201211070307	water	FD2	11/05/13	X	X	X								
FB-1	201211070308	water	FB	11/05/13	X	X	X	X							
M-95	201211070309	water		11/05/13	X	X	X	X							
PC-123	201211070310	water		11/05/13	X	X	X								
PC-128	201211070311	water		11/05/13	X	X	X								
PC-129	201211070312	water		11/05/13	X	X	X								
PC-130	201211070313	water		11/05/13	X	X	X								
PC-131	201211070314	water		11/05/13	X	X	X								
PC-132	201211070315	water		11/05/13	X	X	X								
PC-124	201211070316	water		11/05/13	X	X	X								
PC-125	201211070317	water		11/05/13	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414468 **VALIDATION SAMPLE TABLE** **LDC#:** 29120C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1)	Cr(VI) (7196)							
PC-126	201211070318	water		11/05/13	X	X	X								
PC-127	201211070319	water		11/05/13	X	X	X								
M-96	201211070320	water		11/05/13	X	X	X								
PC-54	201211070321	water		11/05/13	X	X	X								
M-48DUP	201211070300DUP	water	DUP	11/05/13			X								
PC-73MS	201211070304MS	water	MS	11/05/13	X										
PC-73MSD	201211070304MSD	water	MSD	11/05/13	X										
VD-1MS	201211070306MS	water	MS	11/05/13	X			X							
VD-1MSD	201211070306MSD	water	MSD	11/05/13	X			X							
PC-128DUP	201211070311DUP	water	DUP	11/05/13			X								
PC-132MS	201211070315MS	water	MS	11/05/13		X									
PC-132MSD	201211070315MSD	water	MSD	11/05/13		X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414469 **VALIDATION SAMPLE TABLE** **LDC#:** 28996M

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
ART-1	201211070322	water		11/05/12	X	X	X								
ART-2	201211070323	water		11/05/12	X	X	X								
ART-3	201211070324	water		11/05/12	X	X	X								
ART-4	201211070325	water		11/05/12	X	X	X								
ART-6	201211070327	water		11/05/12	X	X	X								
ART-7	201211070328	water		11/05/12	X	X	X								
ART-8	201211070329	water		11/05/12	X	X	X								
PC-99R2/R3	201211070330	water		11/05/12	X	X	X								
PC-115R	201211070331	water		11/05/12	X	X	X								
PC-116R	201211070332	water		11/05/12	X	X	X								
SF-1	201211070333	water		11/05/12	X	X	X								
PC-117	201211070334	water		11/05/12	X	X	X								
PC-118	201211070335	water		11/05/12	X	X	X								
PC-119	201211070336	water		11/05/12	X	X	X								
PC-120	201211070337	water		11/05/12	X	X	X								
PC-121	201211070338	water		11/05/12	X	X	X								
PC-133	201211070339	water		11/05/12	X	X	X								
ART-9	201211070340	water		11/05/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414469 **VALIDATION SAMPLE TABLE** **LDC#:** 28996M

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-118MS	201211070335MS	water	MS	11/05/12		X									
PC-118MSD	201211070335MSD	water	MSD	11/05/12		X									
PC-119DUP	201211070336DUP	water	DUP	11/05/12			X								
PC-120MS	201211070337MS	water	MS	11/05/12	X										
PC-120MSD	201211070337MSD	water	MSD	11/05/12	X										
PC-120DUP	201211070337DUP	water	DUP	11/05/12			X								
PC-121MS	201211070338MS	water	MS	11/05/12	X										
PC-121MSD	201211070338MSD	water	MSD	11/05/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414470 **VALIDATION SAMPLE TABLE** **LDC#:** 29044B

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
I-O	201211070341	water		11/05/12	X	X	X								
I-P	201211070346	water		11/05/12	X	X	X								
I-H	201211070347	water		11/05/12	X	X	X								
I-U	201211070348	water		11/05/12	X	X	X								
I-T	201211070349	water		11/05/12	X	X	X								
I-G	201211070350	water		11/05/12	X	X	X								
I-Q	201211070351	water		11/05/12	X	X	X								
I-F	201211070352	water		11/05/12	X	X	X								
I-N	201211070353	water		11/05/12	X	X	X								
I-E	201211070354	water		11/05/12	X	X	X								
I-M	201211070355	water		11/05/12	X	X	X								
I-D	201211070356	water		11/05/12	X	X	X								
I-C	201211070357	water		11/05/12	X	X	X								
I-S	201211070358	water		11/05/12	X	X	X								
I-L	201211070359	water		11/05/12	X	X	X								
I-R	201211070360	water		11/05/12	X	X	X								
I-B	201211070361	water		11/05/12	X	X	X								
I-AR	201211070362	water		11/05/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414470 **VALIDATION SAMPLE TABLE** **LDC#:** 29044B

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
I-CMS	201211070357MS	water	MS	11/05/12		X									
I-CMSD	201211070357MSD	water	MSD	11/05/12		X									
I-LMS	201211070359MS	water	MS	11/05/12	X										
I-LMSD	201211070359MSD	water	MSD	11/05/12	X										
I-ARMS	201211070362MS	water	MS	11/05/12	X										
I-ARMSD	201211070362MSD	water	MSD	11/05/12	X										
I-ARDUP	201211070362DUP	water	DUP	11/05/12			X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414625 **VALIDATION SAMPLE TABLE** **LDC#:** 29044C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-23	201211080246	water		11/06/12	X	X	X								
M-64	201211080250	water		11/06/12	X	X	X								
M-65	201211080251	water		11/06/12	X	X	X								
M-66	201211080252	water		11/06/12	X	X	X								
M-69	201211080253	water		11/06/12	X	X	X								
M-135	201211080254	water		11/06/12	X	X	X								
M-131	201211080255	water		11/06/12	X	X	X								
M-57A	201211080256	water		11/06/12	X	X	X								
EB-1	201211080257	water	EB	11/06/12	X	X	X	X							
M-37	201211080258	water		11/06/12	X	X	X	X							
M-25	201211080259	water		11/06/12	X	X	X								
PC-136	201211080260	water		11/06/12	X	X	X								
PC-144	201211080261	water		11/06/12	X	X	X								
PC-135A	201211080262	water		11/06/12	X	X	X								
PC-148	201211080263	water		11/06/12	X	X	X								
PC-149	201211080264	water		11/06/12	X	X	X								
PC-150	201211080265	water		11/06/12	X	X	X								
M-97	201211080266	water		11/06/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414625 **VALIDATION SAMPLE TABLE** **LDC#:** 29044C

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-79	201211080650	water		11/06/12	X	X	X								
M-23DUP	201211080246DUP	water	DUP	11/06/12			X								
M-131DUP	201211080255DUP	water	DUP	11/06/12			X								
M-57ADUP	201211080256DUP	water	DUP	11/06/12			X								
M-25DUP	201211080259DUP	water	DUP	11/06/12			X								
PC-150MS	201211080265MS	water	MS	11/06/12	X										
PC-150MSD	201211080265MSD	water	MSD	11/06/12	X										
M-97MS	201211080266MS	water	MS	11/06/12	X										
M-97MSD	201211080266MSD	water	MSD	11/06/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414768 **VALIDATION SAMPLE TABLE** **LDC#:** 29044D

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
I-V	201211090194	water		11/07/12	X	X	X								
I-K	201211090195	water		11/07/12	X	X	X								
I-J	201211090196	water		11/07/12	X	X	X								
I-Z	201211090197	water		11/07/12	X	X	X								
I-I	201211090198	water		11/07/12	X	X	X								
M-35	201211090199	water		11/07/12	X	X	X								
M-19	201211090200	water		11/07/12	X	X	X								
M-68	201211090201	water	FD	11/07/12	X	X	X								
M-67	201211090202	water		11/07/12	X	X	X								
M-74	201211090203	water		11/07/12	X	X	X								
M-73	201211090204	water		11/07/12	X	X	X								
M-80	201211090205	water		11/07/12	X	X	X								
M-81A	201211090206	water		11/07/12	X	X	X								
M-83	201211090207	water		11/07/12	X	X	X								
M-70	201211090208	water		11/07/12	X	X	X								
M-71	201211090209	water		11/07/12	X	X	X								
M-72	201211090210	water		11/07/12	X	X	X								
VD-4	201211090211	water	FD	11/07/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414768 **VALIDATION SAMPLE TABLE** **LDC#:** 29044D

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
EB-2	201211090212	water	EB	11/07/12	X	X	X	X							
M-22A	201211090213	water		11/07/12	X	X	X								
M-115	201211090214	water		11/07/12	X	X	X								
I-VDUP	201211090194DUP	water	DUP	11/07/12			X								
M-19MS	201211090200MS	water	MS	11/07/12	X										
M-19MSD	201211090200MSD	water	MSD	11/07/12	X										
M-73DUP	201211090204DUP	water	DUP	11/07/12			X								
M-80DUP	201211090205DUP	water	DUP	11/07/12			X								
M-83DUP	201211090207DUP	water	DUP	11/07/12			X								
M-70MS	201211090208MS	water	MS	11/07/12		X									
M-70MSD	201211090208MSD	water	MSD	11/07/12		X									
EB-2MS	201211090212MS	water	MS	11/07/12	X										
EB-2MSD	201211090212MSD	water	MSD	11/07/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414918 **VALIDATION SAMPLE TABLE** **LDC#:** 29044E

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)	Cr(VI) (7196)							
M-14A	201211100213	water		11/08/12	X	X	X								
M-38	201211100214	water		11/08/12	X	X	X								
M-36	201211100215	water		11/08/12	X	X	X	X							
M-31A	201211100216	water		11/08/12	X	X	X								
M-52	201211100217	water		11/08/12	X	X	X								
M-12A	201211100218	water	FD	11/08/12	X	X	X	X							
M-11	201211100219	water		11/08/12	X	X	X	X							
M-10	201211100220	water		11/08/12	X	X	X	X							
M-79	201211100221	water		11/08/12	X	X	X								
VD-2	201211100222	water	FD	11/08/12	X	X	X	X							
M-14ADUP	201211100213DUP	water	DUP	11/08/12			X								
M-38MS	201211100214MS	water	MS	11/08/12		X									
M-38MSD	201211100214MSD	water	MSD	11/08/12		X									
M-11MS	201211100219MS	water	MS	11/08/12	X										
M-11MSD	201211100219MSD	water	MSD	11/08/12	X										
M-10MS	201211100220MS	water	MS	11/08/12	X										
M-10MSD	201211100220MSD	water	MSD	11/08/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 414973 **VALIDATION SAMPLE TABLE** **LDC#:** 28996N

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (200.7)	TDS (160.1/ 2540C)									
M-10	201211100402	water		11/08/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 415755 **VALIDATION SAMPLE TABLE** **LDC#:** 29044F

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
MW-K4	201211160091	water		11/14/12	X	X	X								
ARP-1	201211160092	water		11/14/12	X	X	X								
ARP-2A	201211160093	water		11/14/12	X	X	X								
ARP-3A	201211160094	water		11/14/12	X	X	X								
ARP-4A	201211160095	water		11/14/12	X	X	X								
ARP-5A	201211160096	water		11/14/12	X	X	X								
ARP-6B	201211160097	water		11/14/12	X	X	X								
ARP-7	201211160098	water		11/14/12	X	X	X								
PC-53	201211160099	water		11/14/12	X	X	X								
PC-103	201211160100	water		11/14/12	X	X	X								
MW-K5	201211160101	water		11/14/12	X	X	X								
PC-98R	201211160102	water		11/14/12	X	X	X								
PC-86	201211160103	water		11/13/12	X	X	X								
PC-90	201211160104	water		11/13/12	X	X	X								
PC-56	201211160105	water		11/13/12	X	X	X								
PC-58	201211160106	water		11/13/12	X	X	X								
PC-59	201211160107	water		11/13/12	X	X	X								
PC-60	201211160108	water		11/13/12	X	X	X								

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 415755 **VALIDATION SAMPLE TABLE** **LDC#:** 29044F

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-62	201211160109	water		11/13/12	X	X	X								
PC-68	201211160110	water		11/13/12	X	X	X								
PC-122	201211160111	water		11/14/12	X	X	X								
PC-91	201211160112	water		11/13/12	X	X	X								
PC-97	201211160113	water		11/13/12	X	X	X								
PC-18	201211160114	water		11/14/12	X	X	X								
PC-55	201211160115	water		11/14/12	X	X	X								
PC-101R	201211160116	water		11/14/12	X	X	X								
PC-92	201211160117	water		11/13/12	X	X	X								
PC-94	201211160118	water		11/13/12	X	X	X								
ART-7B	201211160119	water		11/14/12	X	X	X								
ARP-1MS	201211160092MS	water	MS	11/14/12		X									
ARP-1MSD	201211160092MSD	water	MSD	11/14/12		X									
PC-86MS	201211160103MS	water	MS	11/13/12		X									
PC-86MSD	201211160103MSD	water	MSD	11/13/12		X									
PC-86DUP	201211160103DUP	water	DUP	11/13/12			X								
PC-56MS	201211160105MS	water	MS	11/13/12	X	X									
PC-56MSD	201211160105MSD	water	MSD	11/13/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 415755 **VALIDATION SAMPLE TABLE** **LDC#:** 29044F

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr (6010)	CLO_4 (314.0)	TDS (160.1/ 2540C)								
PC-68DUP	201211160110DUP	water	DUP	11/13/12			X								
PC-122MS	201211160111MS	water	MS	11/14/12	X										
PC-122MSD	201211160111MSD	water	MSD	11/14/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 416332 **VALIDATION SAMPLE TABLE** **LDC#:** 28996O

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	Cr(VI) (7196)										
M-44	201211210428	water		11/20/12	X										

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 417707 **VALIDATION SAMPLE TABLE** **LDC#:** 29044G

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
ART-1	201212070008	water		12/04/12	X	X									
ART-2	201212070009	water		12/04/12	X	X									
ART-3	201212070010	water		12/04/12	X	X									
ART-4	201212070011	water		12/04/12	X	X									
ART-6	201212070012	water		12/04/12	X	X									
ART-7	201212070013	water		12/04/12	X	X									
ART-8	201212070014	water		12/04/12	X	X									
PC-99R2/R3	201212070015	water		12/04/12	X	X									
PC-115R	201212070016	water		12/04/12	X	X									
PC-116R	201212070017	water		12/04/12	X	X									
SF-1	201212070018	water		12/04/12	X	X									
PC-117	201212070019	water		12/04/12	X	X									
PC-118	201212070020	water		12/04/12	X	X									
PC-119	201212070021	water		12/04/12	X	X									
PC-120	201212070022	water		12/04/12	X	X									
PC-121	201212070023	water		12/04/12	X	X									
PC-133	201212070024	water		12/04/12	X	X									
ART-9	201212070025	water		12/04/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 417933 **VALIDATION SAMPLE TABLE** **LDC#:** 29044H

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
MW-K4	201212080200	water		12/06/12	X	X									
ARP-1	201212080201	water		12/06/12	X	X									
ARP-2A	201212080202	water		12/06/12	X	X									
ARP-3A	201212080203	water		12/06/12	X	X									
ARP-4A	201212080204	water		12/06/12	X	X									
ARP-5A	201212080205	water		12/06/12	X	X									
ARP-6B	201212080206	water		12/06/12	X	X									
ARP-7	201212080207	water		12/06/12	X	X									
PC-53	201212080208	water		12/06/12	X	X									
PC-103	201212080209	water		12/06/12	X	X									
MW-K5	201212080210	water		12/06/12	X	X									
M-83	201212080211	water		12/06/12	X	X									
PC-98R	201212080212	water		12/06/12	X	X									
PC-86	201212080213	water		12/05/12	X	X									
PC-90	201212080214	water		12/05/12	X	X									
PC-68	201212080215	water		12/05/12	X	X									
PC-122	201212080216	water		12/06/12	X	X									
PC-91	201212080217	water		12/05/12	X	X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

SDG#: 417933 **VALIDATION SAMPLE TABLE** **LDC#:** 29044H

Project Name: 2012 Annual Remedial Performance Sampling Parameters/Analytical Method

Client ID #	Lab ID #	Matrix	QC Type	Date Collected	CLO_4 (314.0)	TDS (160.1/ 2540C)									
PC-97	201212080218	water		12/05/12	X	X									
PC-18	201212080219	water		12/05/12	X	X									
PC-55	201212080220	water		12/05/12	X	X									
PC-101R	201212080221	water		12/06/12	X	X									
PC-53MS	201212080208MS	water	MS	12/06/12	X										
PC-53MSD	201212080208MSD	water	MSD	12/06/12	X										
M-83DUP	201212080211DUP	water	DUP	12/06/12		X									
PC-68DUP	201212080215DUP	water	DUP	12/05/12		X									

Shaded cells indicate sample underwent Stage 4

EB = Equipment Blank, FB = Field Blank, FD = Field Duplicate

DUP = Laboratory Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate

TABLE II

Table II. Qualification Codes and Definitions

Reason Code	Explanation
a	qualified due to low abundance (radiochemical activity)
be	qualified due to equipment blank contamination
bf	qualified due to field blank contamination
bl	qualified due to lab blank contamination
bt	qualified due to trip blank contamination
bp	qualified due to pump blank contamination (wells w/o dedicated pumps, when contamination is detected in the Pump Blk)
br	qualified due to filter blank contamination (aqueous Hexavalent Chromium and Dissolved sample fractions)
c	qualified due to calibration problems
cp	qualified due to insufficient ingrowth (radiochemical only)
dc	duel column confirmation %D exceeded
e	concentration exceeded the calibration range
fd	qualified due to field duplicate imprecision
h	qualified due to holding time exceedance
i	qualified due to internal standard areas
k	qualified as Estimated Maximum Possible Concentrations (dioxins and PCB congeners)
l	qualified due to LCS recoveries
ld	qualified due to lab duplicate imprecision (matrix duplicate, MSD, LCSD)
m	qualified due to matrix spike recoveries
nb	qualified due to negative lab blank contamination (nondetect results only)
nd	qualified due to non-detected target analyte
o	other
p	qualified as a false positive due to contamination during shipping
pH	sample preservation not within acceptance range
q	qualified due to quantitation problem
s	qualified due to surrogate recoveries
sd	serial dilution did not meet control criteria
sp	detected value reported >SQL <PQL
st	sample receipt temperature exceeded
t	qualified due to elevated helium tracer concentrations
vh	volatile headspace detected in aqueous sample containers submitted for VOC analysis
x	qualified due to low % solids
z	qualified due to ICS results

TABLE III

Table III. Overall Qualified Results

SDG	Client Sample ID	Sample Date	Method	Client Analyte ID	Analyte	Lab Result	Lab Qualifier	Units	Validator Qualifier	Reason Code	Reason Code Definition	Qualification Finding	
404682	M-44	08/06/12	EPA 314.0	14797-73-0	Perchlorate	750000		ug/l	J	fd	Field Duplicate	48	%
404682	VD-3	08/06/12	EPA 314.0	14797-73-0	Perchlorate	460000		ug/l	J	fd	Field Duplicate	48	%
414470	I-L	11/05/12	EPA 314.0	14797-73-0	Perchlorate	2000000		ug/l	J-	h	Holding Time	36	Days
405034	EB-1	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	R	h	Holding Time	63.75	Hours
405034	M-10	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.015		mg/l	J-	h	Holding Time	58.25	Hours
405034	M-11	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	2.5		mg/l	J-	h	Holding Time	59.75	Hours
405034	M-12A	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	8.9		mg/l	J-	h	Holding Time	60.75	Hours
405034	M-37	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.011		mg/l	J-	h	Holding Time	62.75	Hours
405034	VD-4	08/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	8.9		mg/l	J-	h	Holding Time	60.75	Hours
405208	EB-2	08/09/12	7196	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	R	h	Holding Time	8	Days
405208	M-36	08/09/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	28		mg/l	J-	h	Holding Time	8	Days
414468	FB-1	11/05/12	7196	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	UJ	h	Holding Time	31.5	Hours
414468	M-95	11/05/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.73		mg/l	J-	h	Holding Time	32.5	Hours
414468	VD-1	11/05/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.92		mg/l	J-	h	Holding Time	31.25	Hours
414625	EB-1	11/06/12	7196	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	UJ	h	Holding Time	29.75	Hours
414625	M-37	11/06/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.072		mg/l	J-	h	Holding Time	30.5	Hours
414768	EB-2	11/07/12	7196	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	R	h	Holding Time	57.25	Hours
414918	M-10	11/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	0.065		mg/l	J-	h	Holding Time	31.5	Hours
414918	M-11	11/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	1.7		mg/l	J-	h	Holding Time	33	Hours
414918	M-12A	11/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	8.5		mg/l	J-	h	Holding Time	33.75	Hours
414918	M-36	11/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	28		mg/l	J-	h	Holding Time	35.5	Hours
414918	VD-2	11/08/12	7196	18540-29-9	Hexavalent chromium (Cr VI)	8.2		mg/l	J-	h	Holding Time	34	Hours
404682	FB-1	08/06/12	EPA 7196A	18540-29-9	Hexavalent chromium (Cr VI)		u	mg/l	R	h	Holding Time	50.5	Hours
404682	M-44	08/06/12	EPA 7196A	18540-29-9	Hexavalent chromium (Cr VI)	0.94		mg/l	J-	h	Holding Time	51	Hours
404682	VD-3	08/06/12	EPA 7196A	18540-29-9	Hexavalent chromium (Cr VI)	0.96		mg/l	J-	h	Holding Time	51	Hours

ATTACHMENT A

Metals Data Validation Report

Chromium by EPA SW 846 Method 6010 and EPA Method 200.7

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in these SDGs.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met for samples on which a Stage 4 review was performed.

Calibration data were not evaluated for the samples reviewed by Stage 2A criteria.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the initial, continuing and preparation blanks with the following exceptions:

SDG	Method Blank ID	Analyte	Maximum Concentration	Associated Samples
404947	ICB/CCB	Chromium	0.0003 mg/L	PC-135A PC-136 PC-148 PC-144 PC-149 PC-150 M-64 M-65 M-66

Sample concentrations were compared to concentrations detected in the method blanks as required by the QAPP. No sample data was qualified.

Samples EB-1 (from SDG 405034), EB-2 (from SDG 405208), EB-1 (from SDG 414625), and EB-2 (from SDG 414768) were identified as equipment blanks. No chromium was found with the following exceptions:

SDG	Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
405208	EB-2	8/9/12	Chromium	0.0025 mg/L	M-19 M-22A M-36 M-38 M-67 M-74 M-73 M-83 M-80 M-81A M-70 M-71 M-72 M-14A

Samples FB-1 (from SDG 404682) and FB-1 (from SDG 414468) were identified as field blanks. No chromium was found.

Sample concentrations were compared to concentrations detected in the field blanks as required by the QAPP. No sample data was qualified.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis and criteria were met for samples on which a Stage 4 review was performed.

ICP Interference check sample analysis data were not evaluated for the samples reviewed by Stage 2A criteria.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in all SDGs, and therefore duplicate analyses were not performed.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards (ICP-MS)

ICP-MS was not utilized in these SDGs.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in these SDGs.

XI. ICP Serial Dilution

ICP serial dilution was not performed for these SDGs.

XII. Sample Result Verification

All sample result verifications were acceptable for samples on which a Stage 4 review was performed. Raw data were not evaluated for the samples reviewed by Stage 2A criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples M-23 and VD-1 and samples M-44 and VD-3 (from SDG 404682), samples M-12A and VD-4 and samples M-35 and VD-2 (from SDG 405034), samples M-44 and VD-1 and samples PC-72 and VD-3 (from SDG 414468), samples M-68 and VD-4 (from SDG 414768), and samples M-12A and VD-2 (from SDG 414918) were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-23	VD-1				
404682	Chromium	0.97	0.93	4 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-44	VD-3				
404682	Chromium	0.50	0.54	8 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-12A	VD-4				
405034	Chromium	8.6	8.7	1 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-35	VD-2				
405034	Chromium	4.6	4.7	2 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
		M-44	VD-1				
414468	Chromium	0.91	0.91	0 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
		PC-72	VD-3				
414468	Chromium	0.19	0.20	5 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
		M-68	VD-4				
414768	Chromium	1.2	1.2	0 (≤30)	-	-	-

SDG	Analyte	Concentration (mg/L)		RPD (Limits)	Difference (Limits)	Flag	A or P
		M-12A	VD-2				
414918	Chromium	7.8	7.9	0 (≤30)	-	-	-

2011 Annual Remedial Performance Sampling
Chromium - Data Qualification Summary - SDGs 404682, 404719,404737, 404790, 404947, 405034, 405048, 405208, 405883, 409004, 414468, 414469, 414470, 414625, 414768, 414918, 414973, and 415755

No Sample Data Qualified in these SDGs

2011 Annual Remedial Performance Sampling
Chromium - Laboratory Blank Data Qualification Summary - SDGs 404682, 404719, 404737, 404790, 404947, 405034, 405048, 405208, 405883, 409004, 414468, 414469, 414470, 414625, 414768, 414918, 414973, and 415755

No Sample Data Qualified in these SDGs

2011 Annual Remedial Performance Sampling
Chromium - Field Blank Data Qualification Summary – SDGs 404682, 404719,404737, 404790, 404947, 405034, 405048, 405208, 405883, 409004, 414468, 414469, 414470, 414625, 414768, 414918, 414973, and 415755

No Sample Data Qualified in these SDGs

ATTACHMENT B

Wet Chemistry Data Validation Report

Hexavalent Chromium by EPA SW 846 Method 7196
Perchlorate by EPA Method 314.0
Total Dissolved Solids by EPA Method 160.1 and Standard Method 2540C

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

SDG	Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
404682	M-44 VD-3	Hexavalent chromium	51 hours	24 hours	J- (all detects) R (all non-detects)	P
404682	FB-1	Hexavalent chromium	50.5 hours	24 hours	J- (all detects) R (all non-detects)	P
405034	EB-1	Hexavalent chromium	63.75 hours	24 hours	J- (all detects) R (all non-detects)	P
405034	M-37	Hexavalent chromium	62.75 hours	24 hours	J- (all detects) R (all non-detects)	P
405034	M-11	Hexavalent chromium	59.75 hours	24 hours	J- (all detects) R (all non-detects)	P
405034	M-10	Hexavalent chromium	58.25 hours	24 hours	J- (all detects) R (all non-detects)	P
405034	VD-4 M-12A	Hexavalent chromium	60.75 hours	24 hours	J- (all detects) R (all non-detects)	P
405208	M-36 EB-2	Hexavalent chromium	8 days	24 hours	J- (all detects) R (all non-detects)	P
414468	FB-1	Hexavalent chromium	31.5 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414468	M-95	Hexavalent chromium	32.5 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414468	VD-1	Hexavalent chromium	31.25 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414470	I-L	Perchlorate	36 days	28 days	J- (all detects) UJ (all non-detects)	P

SDG	Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
414625	EB-1	Hexavalent chromium	29.75 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414625	M-37	Hexavalent chromium	30.5 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414768	EB-2	Hexavalent chromium	57.25 hours	24 hours	J- (all detects) R (all non-detects)	P
414918	M-36	Hexavalent chromium	35.5 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414918	M-12A	Hexavalent chromium	33.75 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414918	M-11	Hexavalent chromium	33.0 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414918	M-10	Hexavalent chromium	31.5 hours	24 hours	J- (all detects) UJ (all non-detects)	P
414918	VD-2	Hexavalent chromium	34.0 hours	24 hours	J- (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met for samples on which a Stage 4 review was performed.

Initial calibration data were not evaluated for the samples reviewed by Stage 2A criteria.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for samples on which a Stage 4 review was performed.

Calibration verification data were not evaluated for the samples reviewed by Stage 2A criteria.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Samples EB-1 (from SDG 405034), EB-2 (from SDG 405208), EB-1 (from SDG 414625), and EB-2 (from SDG 414768) were identified as equipment blanks. No contaminant concentrations were found with the following exceptions:

SDG	Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
405034	EB-1	8/8/12	Perchlorate	2.9 ug/L	M-79 M-69 M-135 M-131 M57A M-25 M-37 I-V I-K I-J I-Z I-I M-31A M-12A M-11 M-10 M-35 M-68 VD-4 VD-2
405208	EB-2	8/9/12	Perchlorate Total dissolved solids	76 ug/L 20 mg/L	M-19 M-22A M-36 M-38 M-67 M-74 M-73 M-83 M-80 M-81A M-70 M-71 M-72 M-14A

SDG	Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
414625	EB-1	11/6/12	Perchlorate	61 ug/L	M-23 M-64 M-65 M-66 M-69 M-135 M-131 M-57A M-37 M-25 PC-136 PC-144 PC-135A PC-148 PC-149 PC-150 M-97 M-79
414768	EB-2	11/7/12	Perchlorate	19 ug/L	I-V I-K I-J I-Z I-I M-35 M-19 M-68 M-67 M-74 M-73 M-80 M-81A M-83 M-70 M-71 M-72 VD-4 M-22A M-115

Samples FB-1 (from SDG 404682) and FB-1 (from SDG 414468) were identified as field blanks. No contaminant concentrations were found.

Sample concentrations were compared to concentrations detected in the field blanks as required by the QAPP. No sample data was qualified.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable for samples on which a Stage 4 review was performed. Raw data were not evaluated for the samples reviewed by Stage 2A criteria.

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples M-44 and VD-3 and samples M-23 and VD-11 (from SDG 404682), samples M-12A and VD-4 and samples M-35 and VD-2 (from SDG 405034), samples M-44 and VD-1 and samples PC-72 and VD-3 (from SDG 414468), samples M-68 and VD-4 (from SDG 414768), and samples M-12A and VD-2 (from SDG 414918) were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-44	VD-3				
404682	Perchlorate	750000 ug/L	460000 ug/L	48 (≤30)	-	J (all detects)	A
404682	Total dissolved solids	8400 mg/L	8400 mg/L	0 (≤30)	-	-	-
404682	Hexavalent chromium	0.94 mg/L	0.96 mg/L	2 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-23	VD-1				
404682	Perchlorate	310000 ug/L	310000 ug/L	0 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-23	VD-1				
404682	Total dissolved solids	4400 mg/L	4500 mg/L	2 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-12A	VD-4				
405034	Perchlorate	170000 ug/L	180000 ug/L	6 (≤30)	-	-	-
405034	Total dissolved solids	6400 mg/L	6500 mg/L	2 (≤30)	-	-	-
405034	Hexavalent chromium	8.9 mg/L	8.9 mg/L	0 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-35	VD-2				
405034	Perchlorate	180000 ug/L	190000 ug/L	5 (≤30)	-	-	-
405034	Total dissolved solids	4600 mg/L	4500 mg/L	2 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-44	VD-1				
414468	Perchlorate	750000 ug/L	720000 ug/L	4 (≤30)	-	-	-
414468	Total dissolved solids	8500 mg/L	8400 mg/L	1 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		PC-72	VD-3				
414468	Perchlorate	230000 ug/L	240000 ug/L	4 (≤30)	-	-	-
414468	Total dissolved solids	6700 mg/L	6800 mg/L	1 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-68	VD-4				
414768	Perchlorate	120000 ug/L	120000 ug/L	0 (≤30)	-	-	-
414768	Total dissolved solids	6000 mg/L	5900 mg/L	2 (≤30)	-	-	-

SDG	Analyte	Concentration		RPD (Limits)	Difference (Limits)	Flags	A or P
		M-12A	VD-2				
414918	Perchlorate	170000 ug/L	170000 ug/L	0 (≤30)	-	-	-
414918	Total dissolved solids	6200 mg/L	6100 mg/L	2 (≤30)	-	-	-
414918	Hexavalent chromium	8.5 mg/L	8.2 mg/L	4 (≤30)	-	-	-

2012 Annual Remedial Performance Sampling
Wet Chemistry - Data Qualification Summary - SDGs 401431, 402355, 404682, 404719, 404737, 404790, 404947, 405034, 405048, 405208, 405883, 408121, 409004, 411090, 412098, 414468, 414469, 414470, 414625, 414768, 414918, 414973, 415755, 416332, 417707, 417933

SDG	Sample	Analyte	Flag	A or P	Reason
404682 405034 405208 414768	M-44 VD-3 FB-1 EB-1 M-37 M-11 M-10 VD-4 M-12A M-36 EB-2 EB-2	Hexavalent chromium	J- (all detects) R (all non-detects)	P	Technical holding times
414468 414625 414918	FB-1 M-95 VD-1 EB-1 M-37 M-36 M-12A M-11 M-10 VD-2	Hexavalent chromium	J- (all detects) UJ (all non-detects)	P	Technical holding times
414470	I-L	Perchlorate	J- (all detects) UJ (all non-detects)	P	Technical holding times
404682	M-44 VD-3	Perchlorate	J (all detects)	A	Field duplicates (RPD)

2012 Annual Remedial Performance Sampling
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDGs SDGs 401431, 402355, 404682, 404719, 404737, 404790, 404947, 405034, 405048, 405208, 405883, 408121, 409004, 411090, 412098, 414468, 414469, 414470, 414625, 414768, 414918, 414973, 415755, 416332, 417707, 417933

No Sample Data Qualified in these SDGs

2012 Annual Remedial Performance Sampling
Wet Chemistry - Field Blank Data Qualification Summary - SDGs SDGs 401431, 402355, 404682, 404719, 404737, 404790, 404947, 405034, 405048, 405208, 405883, 408121, 409004, 411090, 412098, 414468, 414469, 414470, 414625, 414768, 414918, 414973, 415755, 416332, 417707, 417933

No Sample Data Qualified in these SDGs

Appendix D

Electronic Data Deliverable (EDD)

(Database files provided electronically or on CD separately