

Semi-Annual Operations & Maintenance Report

**Rockwool Industries, Inc.
Federal Superfund Site
1741 Taylors Valley Road
Belton, Bell County, Texas**

Prepared for

**Texas Commission on
Environmental Quality**

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Semi-Annual Operations & Maintenance Report

1. Executive Summary

Daniel B. Stephens and Associates, Inc. (DBS&A) has been contracted by the Texas Commission on Environmental Quality (TCEQ) to perform operations and maintenance (O&M) activities at the Rockwool Industries, Inc. (RWI) Federal Superfund Site located in Belton, Bell County, Texas. The overall objectives of the O&M phase of the project are to perform long-term monitoring and O&M activities in accordance with the Operations & Maintenance Plan and the Field Sampling Plan (FSP). Semi-annual groundwater monitoring and other inspection and maintenance tasks are to be performed as required in support of the Record of Decision (ROD) for the Rockwool Industries Inc. Federal Superfund Site (EPA, 2004) in order to ensure the continued protectiveness of the selected remedy.

In order to assess the continued protectiveness of the selected remedy at the RWI Site and as part of the long-term monitoring and O&M activities, groundwater samples were collected from the network of twenty-three (23) existing groundwater monitoring wells and submitted to the selected analytical laboratory for chemical analysis of the contaminants of concern (COCs), which consist of inorganic metals (antimony, arsenic and lead). In addition to the collection of groundwater samples, groundwater monitoring tasks included groundwater level measurement of all monitoring wells; evaluation of the condition and integrity of each monitoring well; and field measurement of groundwater in each monitoring well for pH, dissolved oxygen, conductivity, temperature, and oxidation-reduction potential.

Other O&M activities conducted at the RWI Site include general site landscaping, which consisted of weed eradication and large woody vegetation removal around the monitoring wellheads; replacement of secure padlocks on all hinged monitoring well access vaults; installation of protective bollards around eight monitoring wells (MW-16, MW-24-90, MW-27-90, MW-28-90, MW-29-90, MW-30-90, MW-33-90, and MW-34-90); cleaning and removal of debris and sediment from underground culverts and other property drainage features; addition of replacement rock to drainage swales for erosion control; and smoothing and leveling of furrows and other erosional features located in the soil cover.



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The following semi-annual O&M report documents the aforementioned completed groundwater monitoring and O&M site activities and presents the field data and photographic documentation as collected, the updated site maps and groundwater surface contour maps, the laboratory results of groundwater sample analysis and respective data tables, including data review and validation memoranda, a discussion of the findings and conclusions, and provides recommendations for future O&M activities.

2. Introduction

2.1 Project Background

In 2010, the TCEQ contracted DBS&A to perform O&M activities in the form of semi-annual groundwater monitoring and other inspection and maintenance tasks outlined below to ensure the continued protectiveness of the selected remedy at the Rockwool Industries, Inc. Federal Superfund Site located at 1741 Taylors Valley Road, Belton, Bell County, Texas. Figure 1 (Site Location Map) of this report presents a map illustrating the location of the RWI facility and the surrounding area.

The RWI Site includes an approximately 100-acre tract of land in a primarily industrial area located one quarter mile east of Interstate 35 in Bell County. The RWI Site is bounded to the north by the Leon River and to the south and west by Nolan Creek. East Belton Cemetery and other commercial and undeveloped private properties lie to the west of the RWI Site and light industrial properties lie to the east.

The RWI Site is broadly divided into three main areas; the North Property, the Central Property, and the Non-Process area as shown in Figure 2 (Site Map). The North Property and adjoining Geer Property-Cemetery area constitute a 14-acre tract of land on the north side of Taylor's Valley Road. The Central Property includes Operable Unit 2 (OU2) and forms a 47-acre tract of land south of Taylor's Valley Road extending to FM-93. The Non-Process area is the 40-acre tract of land south of FM-93 extending southwest to Nolan Creek. During the remedial investigation, the Non-Process area was determined to be free of contaminant impacts.



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Former consultants for the project executed the remedial action (RA) at the RWI Site as defined in the ROD and in accordance with the accepted remedial design (RD). The RA consisted of activities utilized to eliminate human and ecological exposure to contaminated waste emanating from the RWI Site. Such processes included drainage improvement activities, waste and soil excavation and removal and the placement of clay and topsoil caps over the contaminated areas. The clay/topsoil covered areas were marked and surveyed for institutional control and replanted with vegetative cover. The RA also consisted of the construction and capping of a containment cell designed to contain excavated waste from all areas of the RWI Site.

Additionally, stabilization and protection of the Leon River bank was accomplished utilizing articulated concrete blocks and the evaporation lagoon infrastructure consisting primarily of PVC piping was demolished. In addition, several groundwater monitoring wells were plugged and abandoned during RA activities, including MW-1, MW-2, MW-3, MW-4A, MW-6, MW-8, MW-12, MW-23, MW-31-90, MW-32-90 and DW-1. Groundwater monitoring on the reduced number of wells commenced in mid-2006. While remediation of the shallow perched aquifer was not a part of the remedial design or action, it was previously determined that contaminated groundwater was seeping from this aquifer into the Leon River and Nolan Creek, thereby creating a human health and ecological exposure risk (EPA, 2004). Therefore, groundwater samples are being collected from the shallow aquifer for chemical analysis of the COCs as part of the long-term monitoring and O&M activities.

2.2 Project Objectives

The purpose of this report is to document groundwater monitoring and O&M activities approved in a TCEQ Remediation Division work order (No. 248-0019) for the RWI Site. The O&M activities were conducted by DBS&A as provided for and pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 United States Code (USC) §9601, et seq., and, to the extent practicable, the National Oil and Hazardous Substances Contingency Plan, 40 C.F.R. Part 300 (NCP).

All O&M activities described in this report were performed by DBS&A under the TCEQ Assessment, Investigation and Remediation Services (AIRS) Contract (No. 582-10-91051) and in accordance with the February 11, 2011 Rockwool Industries, Inc. Superfund Site Operations & Maintenance Plan (DBS&A, Feb 2011); the April 25, 2011 Rockwool Industries, Inc. Federal



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Superfund Site Field Sampling Plan (FSP) for Operations & Maintenance Activities (DBS&A, April 2011); the applicable TCEQ Superfund Program Standard Operating Procedures (SOPs); and the TCEQ Quality Assurance Project Plan for the Superfund Program (Document No. 200919.7) (TCEQ, 2010).

The primary objective of the groundwater monitoring program is to compare the analytical results from groundwater sample analysis to the human health Preliminary Remediation Goals (PRGs) established in the ROD (EPA, 2004) for the COCs in order to ensure the continued protectiveness of the selected remedy and to determine the level of contamination in groundwater. The concentrations of the PRGs for the COCs in groundwater, as defined in the RWI Site FSP are 6 µg/L for antimony, 10 µg/L for arsenic, and 5 µg/L for lead (DBS&A, 2011). The sample measurement performance criteria for analytical data generation and acquisition are specified in Group B of the TCEQ Superfund Program QAPP (Document No. 200919.7) (TCEQ, 2010).

Specific inspection and maintenance activities have been established in order to ensure that the selected remedy remains protective of human health and the environment. The site inspection and maintenance activities have been developed in accordance with Texas Administrative Code (TAC) requirements for post-closure care of commercial industrial non-hazardous waste landfill facilities per 30 TAC §335.593 and the applicable provisions of 30 TAC §330.254(b).

Periodic inspections will be performed at the RWI Site to ensure that the cover and drainage controls installed in the Geer Property-Cemetery Area, North Property, and Central Property areas are performing as designed, and to document that regular maintenance and repairs are performed as needed. Visual inspection of the soil covers will be performed to document any evidence of settlement, cracking, animal holes, pooled water, erosion, or deep-rooted vegetation, and indications of a dense grass mat. Inspection and maintenance of the MatCon Cover will be conducted by the governing regulatory agency.

Surface water drainage controls shall be kept clear of rocks and debris so that the full capacity of the drainage system is available during large storm events. The drainage system may require periodic cleaning to remove sediment and debris accumulation. Small-scale efforts should be performed during each inspection, whereas larger scale efforts should be performed by a licensed subcontractor. Berms for the drainage ditches and storm water detention basin must



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be maintained to ensure stability and functionality of these features. The articulated concrete blocks along the Leon River bank will be inspected to identify displacement or loss of the blocks, the loss of continuity of interlocking blocks and any evidence of instability.

Groundwater monitoring wells will be inspected for any evidence of damage and tampering, and to ensure that the protective covers are securely locked and that the well identification number is clearly visible. Exterior conditions of the monitoring wells to be verified include well visibility and accessibility, casing and cap condition, signs of unauthorized tampering, and proper operation of the security padlocks. Any evidence of vegetation overgrowth will also be noted on the inspection form and will be scheduled for removal.

Security and control devices at the site include fences, locked gates, and posted signs. Maintenance of these site control devices is necessary to prevent unauthorized access and vandalism. Fencing will be inspected for holes, damaged posts, and broken or missing wire. Warning signs along the Institutional Control Boundary will be clearly visible. The intended future use of the RWI Site and adjacent property is industrial or commercial; therefore, site inspections will also document changes in land use that might affect the protections afforded by the remedy.

An initial site visit and inspection was conducted by DBS&A in November 2010, which identified additional O&M tasks, some of which were performed during the subsequent site visits described below.

3. Site Inspection & Maintenance

Initial site visit and inspection activities in November 2010 identified and recommended specific O&M tasks for completion. The TCEQ selected some of the identified tasks to be completed which were performed at the RWI Site during the months of May and August 2011, including clearing of overgrown brush and woody vegetation around the monitoring wellheads; replacement of security padlocks on hinged monitoring well access vaults; installation of protective bollards around eight monitoring wells; cleaning and removal of debris and sediment from underground culverts and other property drainage features; addition of coarse replacement



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rock and gravel to drainage swales for erosion control; and smoothing and leveling of furrows and other erosional features located in the soil cover. Photographic documentation collected during the O&M activities is provided in Appendix 1-A of this report.

Four protective bollards were installed around eight monitoring wells located on the Central Property, including MW-16, MW-24-90, MW-27-90, MW-28-90, MW-29-90, MW-30-90, MW-33-90, and MW-34-90. Each bollard consisted of a fluorescent yellow, 3.5-inch diameter, six-foot long heavy gauge steel pipe placed two feet below ground surface with four feet of the pipe exposed above the ground. Each bollard pipe was secured with concrete the entire two-foot interval below ground surface and then filled with concrete, which was mounded at the top of the pipe to facilitate drainage.

Subsurface drainage culverts were cleared of debris and sediment and four loads of coarse rock and gravel were delivered to the site via dump truck and placed along the North Property drainage swale that flows towards the Leon River using a skid-steer loader. A skid-steer loader was also utilized to smooth and level the erosional furrows located on the ground surface at the North Property.

4. Groundwater Monitoring

On May 2-4, 2011 DBS&A conducted semi-annual groundwater monitoring activities at the Rockwool Industries, Inc. Federal Superfund Site. Tabular data, including groundwater level measurements and laboratory analytical results, collected during the May 2011 groundwater monitoring event are located in Table 1 (Summary of Groundwater Analytical Results) and Table 2 (Water Level Measurements and Groundwater Elevation Data) of this report. Laboratory analytical data reports, including the data review and data validation memoranda, are located in Appendix 2 of this report. Figure 3 of this report presents a site map depicting the groundwater surface gradient and flow direction at the site as interpreted from data collected during the May 2011 semi-annual groundwater monitoring event. Photographic documentation collected during the groundwater monitoring event is provided in Appendix 1-B of this report.



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Groundwater sample collection, quality assurance procedures and laboratory analyses were completed pursuant to the Rockwool Industries, Inc. Superfund Site Operations & Maintenance Plan (DBS&A, 2011); the Rockwool Industries, Inc. Federal Superfund Site Field Sampling Plan (FSP) for Operations & Maintenance Activities (DBS&A, 2011); the applicable TCEQ Superfund Program Standard Operating Procedures (SOPs); and the TCEQ Quality Assurance Project Plan for the Superfund Program (Document No. 200919.7) (TCEQ, 2010a).

4.1 Groundwater Level Measurement

Prior to groundwater sample collection, each monitoring well was visually inspected in order to verify the integrity of the protective casing and surface seal. In addition, the presence and condition of the security padlocks, hinged protective access covers and monitoring well plugs were verified. Depth-to-groundwater and total depth of all monitoring wells were measured and recorded preceding the sampling of each well using a water level meter in accordance with TCEQ Superfund Program SOP No. 7.1 (Water Level/Sediment Measurement). Water level measurement data collected during this semi-annual groundwater monitoring event is located in Table 2 (Water Level Measurements and Groundwater Elevation Data) of this report. Calculated groundwater surface elevations are also presented in Table 2 of this report.

4.2 Groundwater Sampling Methods

A Horiba Model U-20XD Series Multi-Parameter Water Quality Monitoring System was utilized for collecting groundwater quality measurements, including pH, dissolved oxygen (DO), conductivity, temperature and oxidation-reduction potential (ORP) in the field. The water quality meter was calibrated each day according to the manufacturer specifications prior to the collection of groundwater quality measurements. Water quality measurements were collected prior to the collection of groundwater samples and in accordance with TCEQ Superfund Program SOP No. 7.5 (Measurement of Field Parameters).

In order to meet groundwater monitoring objectives, each monitoring well was purged according to TCEQ Superfund Program SOP No. 7.4 (Micro Purging a Monitoring Well) prior to sampling and groundwater samples were collected from each monitoring well in accordance with TCEQ Superfund Program SOP No. 7.8 (Groundwater Sampling Using a Low-flow Technique).



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Groundwater sample containers and chemical preservative (HNO_3) were provided by the DHL Analytical. Unfiltered groundwater samples were collected from monitoring wells containing sufficient water in accordance with the RWI Site FSP (DBS&A, April 2011) and the methodology described in the applicable TCEQ Superfund Program SOPs. All samples were submitted to DHL Analytical for inorganic metals (arsenic, antimony, and lead) analysis using EPA SW-846 Method 6020A.

4.3 Groundwater Sample Analysis

A completed chain-of-custody for eighteen (18) groundwater samples collected from the RWI Site on May 2-4, 2011 was submitted to DHL Analytical on May 4, 2011 for inorganic metals analysis by EPA SW-846 Method 6020A. DHL Analytical laboratory is recognized by the National Environmental Laboratory Accreditation Program (NELAP) and certified by the Texas Commission on Environmental Quality (Certificate No. T104704211-11-6).

Laboratory preparation of the aqueous samples for inorganic metals analysis by EPA SW-846 Method 6020A was performed by DHL Analytical following EPA SW-846 Method 3005A as referenced in EPA publication SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. Sample preparation by SW-846 Method 3005A is a laboratory acid digestion procedure used to prepare water samples for analysis by inductively coupled plasma-mass spectrometry (ICP-MS). The groundwater samples were analyzed by DHL Analytical using SW-846 Method 6020A, which involves ICP-MS to determine the concentration of multiple chemical elements, including the subject COCs for this project, in aqueous samples.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are spiked with known concentrations of the chemicals of concern prior to sample preparation and analysis at the laboratory and are used to evaluate the bias of the sample matrix. The MS/MSD samples were collected at predetermined sample locations suspected to be contaminated with low to medium levels of COCs, as outlined in the FSP, and submitted to DHL Analytical for chemical analysis.

4.4 Quality Assurance/Quality Control Samples

Quality assurance and quality control (QA/QC) samples were collected in the field and analyzed by DHL Analytical in order to serve as a check on sampling and analytical precision, accuracy,



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and representativeness. QA/QC samples were collected in accordance with TCEQ Superfund Program SOP No. 6.5 (Collection of QA/QC Samples). Laboratory analytical results from the QA/QC samples collected during the May 2011 groundwater monitoring event are located in Table 1 (Summary of Groundwater Analytical Results) of this report. General descriptions of the QA/QC samples collected are presented in the sections below, while QA/QC analytical results are discussed in detail in Section 5 (Analytical Results) of this report.

4.4.1 Field Duplicate Samples

Field duplicate samples were collected at the same time and from the same source as the primary sample collection point and submitted as separate samples for confidentiality purposes to the laboratory for COC chemical analysis in order to evaluate sampling and analytical precision. The field duplicates were collected at a predetermined sample location known to be contaminated or suspected to be contaminated with COCs immediately after the primary environmental sample was collected. During the May 2011 groundwater monitoring event, field duplicates were collected from monitoring wells MW-21 (DUP-1) and MW-34-90 (DUP-2), as per the FSP.

4.4.2 Equipment Rinsate Blank Samples

Equipment rinsate blank samples were collected during sampling activities in order to assess the effectiveness of equipment decontamination procedures. In accordance with the FSP, one equipment rinsate blank per equipment type per medium per day was collected when non-dedicated sampling equipment was used. Two equipment rinsate blanks were collected during the May 2011 sampling event. ER-1 was collected on May 3 and ER-2 was collected on May 4.

4.4.3 Temperature Blank Samples

A temperature blank demonstrates that the environmental samples have been properly preserved at the required temperature ($\leq 6^{\circ}\text{C}$) until receipt at the laboratory. Temperature blanks for the May 2011 groundwater monitoring event were supplied by the DHL Analytical as part of the sampling supply kit and one temperature blank was placed in each cooler with the samples prior to delivering the samples to the laboratory for analysis. Upon receipt at the



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laboratory, the DHL Analytical lab technician measured and recorded the temperature of the blank in order to verify proper sample preservation temperatures.

4.5 Investigative Derived Waste

All investigative derived waste (IDW), including purged groundwater fluids and decontamination wastewater recovered during the May 2011 groundwater monitoring activities, was managed according to TCEQ Superfund Program SOP No. 1.4. Purged groundwater and decontamination wastewater was stored on-site in a chemically compatible 55 gallon drum. Once the IDW water has been properly sampled and classified, DBS&A will coordinate with a licensed disposal company for the removal, transport and disposal/recycling of all generated waste stored on-site. Other waste generated during the O&M activities, including contaminated personal protective equipment (PPE) and disposable sampling equipment, was placed in plastic bags after use and disposed of as non-hazardous solid waste.

5. Groundwater Analysis

Discussion of the laboratory analytical results for the May 2-4, 2011 groundwater monitoring event at the Rockwool Industries, Inc. Federal Superfund Site is presented in the following sections. Analytical data tables are provided in Table 1 (Summary of Groundwater Analytical Results) of this report. Complete laboratory analytical data reports, including the data review and data validation memoranda, are located in Appendix 2 of this report.

5.1 Groundwater Analytical Results

Analytical results from groundwater samples collected from the RWI Site monitoring wells were compared to the human health Preliminary Remediation Goals (PRGs) for the contaminants of concern in order to ensure the continued protectiveness of the selected remedy and to determine the level of contamination in groundwater. The concentrations of the PRGs for the contaminants of concern (COCs) in groundwater, as defined in the RWI FSP are 6 µg/L for antimony, 10 µg/L for arsenic, and 5 µg/L for lead (DBS&A, April 2011).



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Table 5.1 (Summary of COC Exceedances) below presents the analytical data results groundwater samples collected from the RWI Site monitoring wells in May 2011 that were found to have concentrations above the PRGs for one or more of the COCs. Several of the groundwater samples collected from the monitoring wells demonstrated concentrations of both antimony and arsenic above their respective PRGs. The maximum concentration of antimony is 1.01 mg/L found in MW-35-90 and the maximum concentration of arsenic is 0.408 mg/L found in DUP-2, which is the field duplicate of MW-34-90. The concentration of arsenic in MW-34-90 at 0.358 mg/L is the next highest analyzed concentration. The highest concentration of lead is 0.00364 mg/L in MW-11, which is below the PRG for lead. None of the samples collected from the monitoring wells indicate concentrations of lead above the PRG.

Table 5.1. Summary of PRG Exceedances

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	Arsenic (mg/L)	Lead (mg/L)
MW-9	1105024-10A	05/04/2011	0.266	0.0911	0.000715 J
MW-17	1105024-13A	05/03/2011	0.0353	0.00525	0.000855 J
MW-21	1105024-02A	05/02/2011	0.105	0.0160	<0.000300
DUP-1 (MW-21)	1105024-06A	05/02/2011	0.120	0.0143	<0.000300
MW-24-90	1105024-14A	05/03/2011	0.00717	0.0110	0.000986 J
MW-33-90	1105024-15A	05/04/2011	0.174	0.0347	0.000732 J
MW-34-90	1105024-16A	05/04/2011	0.315	0.358	0.000650 J
DUP-2 (MW-34-90)	1105024-17A	05/04/2011	0.320	0.408	0.00201
MW-35-90	1105024-03A	05/03/2011	1.01	0.0760	0.00166
MW-37-90	1105024-04A	05/03/2011	0.000933 J	0.0145	<0.000300
MW-38-90	1105024-05A	05/03/2011	0.0286	0.0121	0.000334 J
Preliminary Remediation Goals (mg/L)			0.006	0.010	0.005

* Values in **bold** indicate results above Preliminary Remediation Goals (PRGs)

5.2 Quality Assurance/Quality Control Sample Results

Laboratory analytical results of the QA/QC samples collected during the May 2011 groundwater monitoring event are located in Table 1 (Summary of Groundwater Analytical Results) of this



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report. Complete laboratory analytical data reports, including QA/QC data results and the data review and data validation memoranda are located in Appendix 2 of this report.

5.2.1 Field Duplicate Samples

Field duplicates were collected from monitoring wells MW-21 and MW-34-90 during the May 2011 groundwater monitoring event and respectively labeled as DUP-1 and DUP-2 for confidentiality purposes. The calculated relative percent differences (RPD) between the MW-21 primary sample and the field duplicate (DUP-1) are 13.3% for antimony and 11.2% for arsenic. Lead was not detected above the sample detection limit (SDL) in either the MW-21 primary sample or the field duplicate (DUP-1). The calculated relative percent differences (RPD) between the MW-34-90 primary sample and the field duplicate (DUP-2) are 1.57% for antimony and 13.1% for arsenic. Each of the above calculated RPD values were less than the 30% criterion established in the TCEQ Quality Assurance Project Plan (QAPP) for the Superfund Program (Document No. 200919.7) (TCEQ, 2010a); therefore, no qualification is required for these samples. The MW-34-90 primary sample and the DUP-2 sample results for lead are both less than five times the method quantitation limit (MQL) and the absolute difference between the sample concentrations (0.00136 mg/L) is greater than the SDL (0.0003 mg/L). Therefore, the MW-34-90 primary sample (DUP-2) result has been qualified as estimated.

5.2.2 Equipment Rinsate Blank Samples

Two equipment rinsate blank samples (ER-1 and ER-2) were collected during the May 2011 sampling event. Analytical results for the equipment rinsate blank samples indicate that none of the contaminants of concern were identified in either of the blank samples above the sample detection limits. Therefore, the equipment decontamination procedures performed during this groundwater monitoring event are deemed effective.

5.2.3 Temperature Blank Samples

The temperature of the collected groundwater samples was reported by DHL Analytical to be 1.3°C upon receipt by the laboratory, which is below the required temperature of 6°C. Therefore, the environmental samples were properly preserved at the required temperature until receipt at the laboratory.



5.3 Data Review & Validation

The independent data usability review for the May 2011 groundwater monitoring analytical data package was completed as specified in TCEQ Superfund QAPP Element D.2.1.2. Additionally, data validation was performed as specified in TCEQ Superfund QAPP Element D.2.1.3. The data review and data validation memoranda prepared pursuant to the contract requirements are located in located in Appendix 2 of this report. The technical data review and validation resulted in no significant quality control anomalies, rejected data nor any corrective actions taken or recommended for future analyses.

6. Discussion of Findings and Conclusions

Operation and maintenance activities were performed at the Rockwool Industries, Inc. Federal Superfund Site in order to ensure that the selected remedy remains protective of human health and the environment. As a result of the continued performance of inspection and maintenance activities at the RWI Site, the underground culverts, drainage features and erosion control measures, including the articulated concrete blocks along the Leon River bank, appear to be preventing the migration of contaminated soil and/or waste into the Leon River through surface water runoff and erosion. In addition, the soil and vegetation covers at the site appear to be preventative of direct human and wildlife contact and exposure with the contaminants of concern, which include antimony, arsenic, and lead.

The primary objective of the groundwater monitoring program is to compare the analytical results from groundwater sample analysis to the human health Preliminary Remediation Goals (PRGs) for the contaminants of concern in order to ensure the continued protectiveness of the selected remedy and to determine the level of contamination in groundwater. Several corrective maintenance activities were performed during the above-described O&M event on the monitoring well network in order to ensure their continued security and effectiveness in meeting remedial objectives.

Results from the groundwater monitoring event indicate that the contaminants of concern, especially antimony and arsenic, continue to impact groundwater above the established



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Preliminary Remediation Goals as a result of contaminant leaching and migration from the subsurface soil and waste located across the RWI site.

7. Recommendations

Based on the results obtained from the 2011 annual O&M activities described in this report, DBS&A recommends the continued inspection and maintenance of the Rockwool Industries, Inc. Federal Superfund Site on a semi-annual basis. DBS&A recommends the repair of damaged perimeter fences; the installation of protective bollards around additional wells located on the North Property; the installation of additional warning signs at the RWI Site at approximately 200-foot intervals on the perimeter security fence; sampling the content of the on-site 55-gallon steel drums containing known and suspected non-hazardous purge water for waste characterization, removal and proper disposal; and removal and proper disposal of empty drums, discarded trash and solid waste drums, and other trash and scrap metal debris located on-site. DBS&A also recommends continued vegetative control and continued semi-annual groundwater monitoring as part of the ongoing O&M activities at the site.



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8. References

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Tables



**Table 1. Summary of Groundwater Analytical Results
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas**

Sample ID	Lab Sample ID	Sample Date	Antimony (mg/L)	SDL (mg/L)	MQL (mg/L)	Arsenic (mg/L)	SDL (mg/L)	MQL (mg/L)	Lead (mg/L)	SDL (mg/L)	MQL (mg/L)
PRGs (mg/L)			0.006			0.010			0.005		
MW-7	1105024-09	5/4/2011	0.00208 J	0.0008	0.0025	<0.00200	0.002	0.005	0.000972 J	0.0003	0.001
MW-9	1105024-10	5/4/2011	0.266	0.0008	0.0025	0.0911	0.002	0.005	0.000715 J	0.0003	0.001
MW-10	1105024-11	5/4/2011	<0.000800	0.0008	0.0025	<0.00200	0.002	0.005	0.000351 J	0.0003	0.001
MW-11	1105024-12	5/3/2011	<0.000800	0.0008	0.0025	<0.00200	0.002	0.005	0.00364	0.0003	0.001
MW-17	1105024-13	5/3/2011	0.0353	0.0008	0.0025	0.00525	0.002	0.005	0.000855 J	0.0003	0.001
MW-20	1105024-01	5/3/2011	0.00280	0.0008	0.0025	0.00262 J	0.002	0.005	0.000845 J	0.0003	0.001
MW-21	1105024-02	5/2/2011	0.105	0.0008	0.0025	0.016	0.002	0.005	<0.000300	0.0003	0.001
DUP-1 (MW-21)	1105024-06	5/2/2011	0.120	0.0008	0.0025	0.014	0.002	0.005	<0.000300	0.0003	0.001
MW-22	1105024-08	5/3/2011	0.00199 J	0.0008	0.0025	<0.00200	0.002	0.005	<0.000300	0.0003	0.001
MW-24-90	1105024-14	5/3/2011	0.00717	0.0008	0.0025	0.0110	0.002	0.005	0.000986 J	0.0003	0.001
MW-33-90	1105024-15	5/4/2011	0.174	0.0008	0.0025	0.0347	0.002	0.005	0.000732 J	0.0003	0.001
MW-34-90	1105024-16	5/4/2011	0.315	0.0008	0.0025	0.358	0.002	0.005	0.000650 J	0.0003	0.001
DUP-2 (MW-34-90)	1105024-17	5/4/2011	0.320	0.0008	0.0025	0.408	0.002	0.005	0.00201 J	0.0003	0.001
MW-35-90	1105024-03	5/3/2011	1.01	0.08	0.0025	0.0760	0.002	0.005	0.00166	0.0003	0.001
MW-37-90	1105024-04	5/3/2011	0.000933 J	0.0008	0.0025	0.0145	0.002	0.005	<0.000300	0.0003	0.001
MW-38-90	1105024-05	5/3/2011	0.0286	0.0008	0.0025	0.0121	0.002	0.005	0.000334 J	0.0003	0.001
ER-1	1105024-07	5/3/2011	<0.000800	0.0008	0.0025	<0.00200	0.002	0.005	<0.000300	0.0003	0.001
ER-2	1105024-18	5/4/2011	<0.000800	0.0008	0.0025	<0.00200	0.002	0.005	<0.000300	0.0003	0.001

Notes:

Values in **bold** indicate results above PRGs.

PRGs = Preliminary Remediation Goals

SDL = Sample Detection Limit

MQL = Method Quantitation Limit, adjusted for moisture and sample size

J = Estimated result /analyte detected between SDL and MQL



**Table 2. Water Level Measurements and Groundwater Elevation Data
Rockwool Industries, Inc. Federal Superfund Site
1741 Taylors Valley Road, Belton, Bell County, Texas**

Well ID	Northing (ft)	Easting (ft)	TOC Elevation	Date	DTW (ft bgs)	Groundwater Surface Elevation (ft)	Top of Limestone Elevation (ft)
MW-7	10358000.55	3201475.37	521.23	5/2/2011	30.40	490.83	491.8
MW-9	10357733.35	3201552.67	518.86	5/2/2011	28.99	489.87	486.5
MW-10	10357635.35	3201683.33	518.45	5/2/2011	27.59	490.86	489.3
MW-11	10357652.64	3201805.07	519.37	5/2/2011	28.23	491.14	491.6
MW-14	10357199.82	3202218.05	514.02	5/2/2011	DRY	---	477.5
MW-15	10358936.41	3202230.39	506.49	5/2/2011	DRY	---	488.0
MW-16	10357985.96	3202227.94	519.22	5/2/2011	DRY	---	485.7
MW-17	10357494.71	3201976.57	518.18	5/2/2011	26.26	491.92	491.1
MW-19	10357815.89	3202478.34	520.31	5/2/2011	32.64	487.67	487.5
MW-20	10358596.28	3202126.66	519.70	5/2/2011	32.26	487.44	No well log
MW-21	10358526.27	3202730.33	505.11	5/2/2011	10.92	494.19	No well log
MW-22	10358587.03	3202646.56	505.18	5/2/2011	11.37	493.81	No well log
MW-24-90	10357535.22	3202554.55	518.46	5/2/2011	33.81	484.65	No well log
MW-27-90	10358240.31	3202111.37	519.76	5/2/2011	34.49	485.27	487.2
MW-28-90	10358377.38	3201743.14	519.84	5/2/2011	30.45	489.39	491.9
MW-29-90	10358223.82	3201524.01	517.56	5/2/2011	27.91	489.65	491.8
MW-30-90	10357873.98	3202043.34	520.17	5/2/2011	27.74	492.43	491.4
MW-33-90	10357865.25	3201459.31	520.25	5/2/2011	30.32	489.93	488.4
MW-34-90	10357611.50	3201589.38	519.12	5/2/2011	29.09	490.03	487.9
MW-35-90	10358825.67	3202797.17	501.03	5/2/2011	16.61	484.42	No well log
MW-36-90	10358815.08	3202843.96	501.96	5/2/2011	Casing obstructed at 2.5'		No well log
MW-37-90	10358806.57	3202888.58	501.52	5/2/2011	18.67	482.85	No well log
MW-38-90	10358674.78	3202942.28	504.05	5/2/2011	10.15	493.90	No well log

Notes:

Values in **bold** indicate top of casing elevations from Wendy Lopez and Associates (2001) survey.

All others elevations from Cook-Joyce (1985-1993) survey.

DTW = Depth-to-Water, from TOC

bgs = below ground surface

TOC = top of well casing

Monitoring wells MW-01, MW-02, MW-03, MW-04A, MW-05, MW-06, MW-08, MW-12, MW-18, MW-23, MW-25-90, MW-26-90 and MW-32-90 were previously abandoned.

Figures

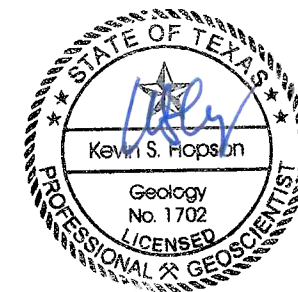
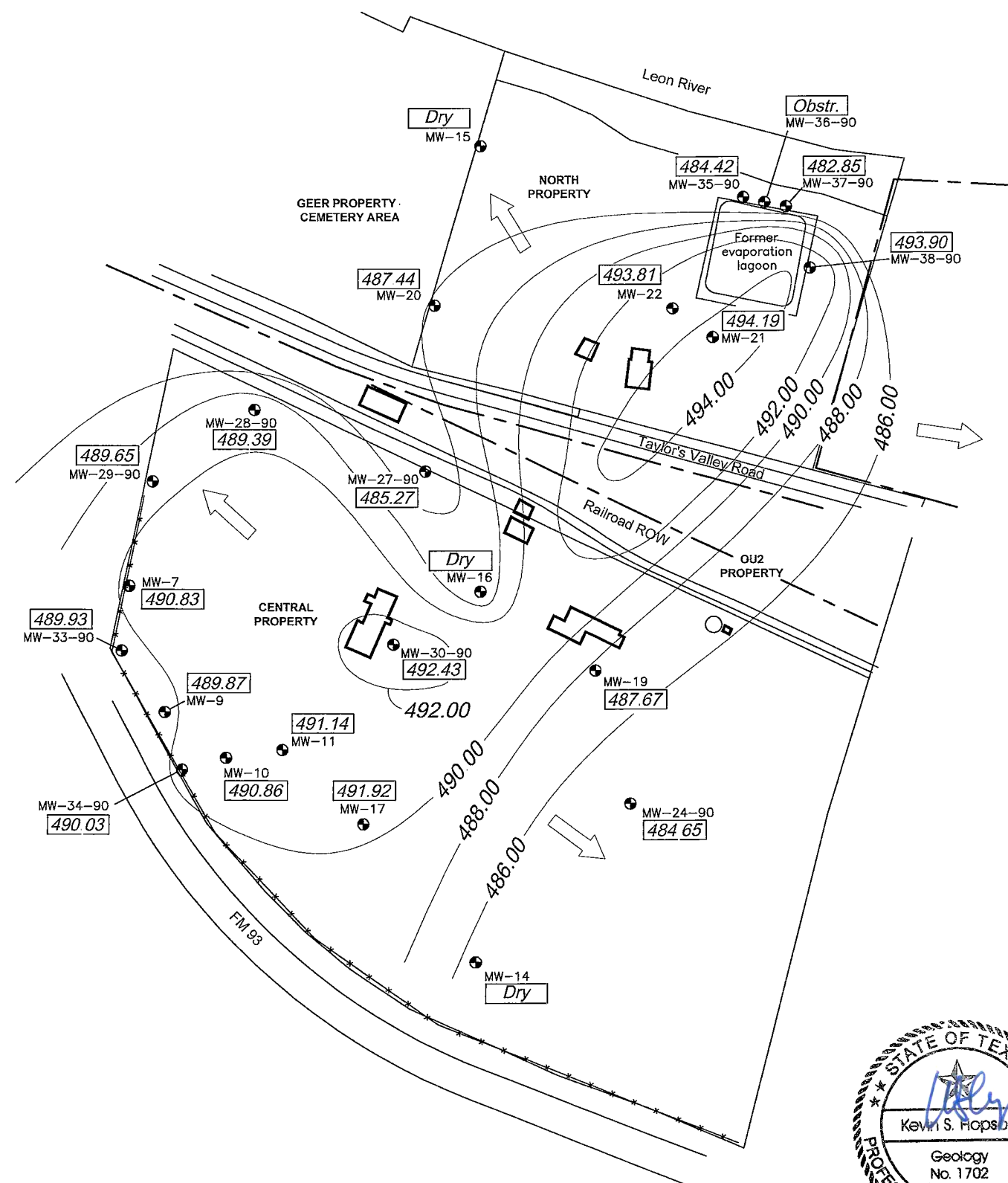


0 500 1,000 Feet

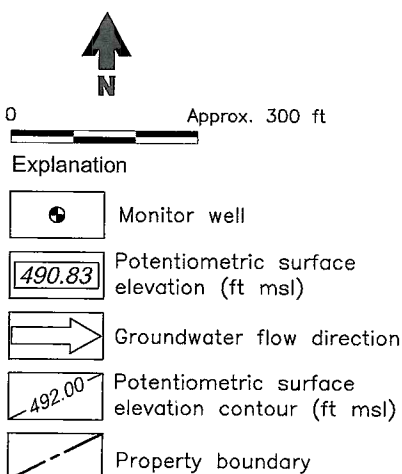
2010 Color Aerial Imagery Courtesy Google Earth

N:\Client\TCEQ-AIRS\Rockwool\Maps

Figure 1. Site Location Map
Rockwool Industries, Inc.
Federal Superfund Site
1741 Taylor Valley Road
Belton, Bell County, Texas
EPA ID No. TXD066379645
TCEQ Site ID No. SUP033



Rockwool Industries Superfund Site
1741 Taylor's Valley Rd
Belton, Texas
Potentiometric Surface Elevations
May 2, 2011



Daniel B. Stephens & Associates, Inc.
6/8/11

Figure 3

Appendix 1-A

Operations & Maintenance Photographic Documentation



Daniel B. Stephens & Associates, Inc.



Photo #1
Date: August 2, 2011
Description: Looking South at Inlet of Drainage Culvert Located on the West Side of the Cemetery Property.



Photo #1
Date: August 2, 2011
Description: Looking South at Discharge of Drainage Culvert Located on the West Side of the Cemetery Property.



Photo #3
Date: August 2, 2011
Description: Looking South at Inlet of Drainage Culvert Located on the West Side of the Cemetery Property.



Photo #4
Date: August 2, 2011
Description: Looking South at Discharge of Drainage Culvert Located on the West Side of the Cemetery Property.



Photo #5
Date: August 2, 2011
Description: Looking South at Discharge of Drainage Culvert Located on the North Property Prior to Cleaning.



Photo #6
Date: August 2, 2011
Description: Looking South at Discharge of Drainage Culvert Located on the North Property After Cleaning.



Photo #7
Date: November 23, 2010
Description: Looking Northeast at MW-16 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #8
Date: August 3, 2011
Description: Looking North at MW-16 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #9
Date: November 23, 2010
Description: Looking East-Southeast at MW-24-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #10
Date: August 3, 2011
Description: Looking North at MW-24-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #11
Date: August 3, 2011
Description: Looking Northeast at MW-27-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #12
Date: August 3, 2011
Description: Looking Northeast at MW-27-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #13
Date: August 3, 2011
Description: Looking Northwest at MW-28-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #14
Date: August 3, 2011
Description: Looking North at MW-28-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #15
Date: August 3, 2011
Description: Looking West at MW-29-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #16
Date: August 3, 2011
Description: Looking West at MW-29-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #17
Date: August 3, 2011
Description: Looking West at MW-30-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #18
Date: August 3, 2011
Description: Looking West at MW-30-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #19
Date: August 3, 2011
Description: Looking Southwest at MW-33-90 on the Central Property prior to Bollard Installation and Vegetation Removal.



Photo #20
Date: August 3, 2011
Description: Looking Southwest at MW-33-90 on the Central Property with Bollards Installed and Vegetation Removed.



Daniel B. Stephens & Associates, Inc.



Photo #21
Date: August 3, 2011
Description: Looking South at MW-34-90 on the Central Property Prior to Bollard Installation and Vegetation Removal.



Photo #22
Date: August 3, 2011
Description: Looking Northeast at MW-34-90 on the Central Property with Bollards Installed and Vegetation Removed.



Photo #23
Date: August 3, 2011
Description: Looking Northwest at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Photo #24
Date: August 3, 2011
Description: Looking Northeast at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Daniel B. Stephens & Associates, Inc.



Photo #25
Date: August 3, 2011
Description: Looking Northwest at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Photo #26
Date: August 3, 2011
Description: Looking Northwest at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Photo #27
Date: August 3, 2011
Description: Looking North at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Photo #28
Date: August 3, 2011
Description: Looking Southwest at North Property Coarse Gravel Installation for Runoff and Erosion Control.



Daniel B. Stephens & Associates, Inc.



Photo #29
Date: August 3, 2011
Description: Looking West at North Property
Soil Cover Furrow Repair.



Photo #30
Date: August 3, 2011
Description: Looking West at North Property
Soil Cover Furrow Repair.



Photo #31
Date: August 3, 2011
Description: Looking Northwest at North
Property Repaired Soil Cover Furrows.



Photo #32
Date: August 3, 2011
Description: Looking Northwest at North
Property Repaired Soil Cover Furrows.

Appendix 1-B

Groundwater Monitoring Photographic Documentation



Photo #1
Date: May 4, 2011
Description: Looking Southwest at MW-7 Low-Flow Sampling on the Central Property.



Photo #2
Date: May 4, 2011
Description: Looking Southeast at MW-9 Low-Flow Sampling on the Central Property.



Photo #3
Date: May 4, 2011
Description: Looking West-Northwest at MW-10 Low-Flow Sampling on the Central Property.



Photo #4
Date: May 4, 2011
Description: Looking Northeast at MW-17 Low-Flow Sampling on the Central Property.



Photo #5
Date: May 4, 2011
Description: Looking Northeast at MW-19 Low-Flow Sampling on the Central Property.



Photo #6
Date: May 3, 2011
Description: Looking Southwest at MW-20 Low-Flow Sampling on the North Property.



Photo #7
Date: May 2, 2011
Description: Looking Southeast at MW-21 Low-Flow Sampling on the North Property.



Photo #8
Date: May 3, 2011
Description: Looking East at MW-22 Low-Flow Sampling on the North Property.



Photo #9
Date: May 3, 2011
Description: Looking North at MW-24-90 Low-Flow Sampling on the North Property.



Photo #10
Date: May 3, 2011
Description: Looking Northeast at MW-28-90 Low-Flow Sampling on the Central Property.



Photo #11
Date: May 4, 2011
Description: Looking Southwest at MW-29-90 Low-Flow Sampling on the Central Property.



Photo #12
Date: May 4, 2011
Description: Looking Southwest at MW-33-90 Low-Flow Sampling on the Central Property.



Daniel B. Stephens & Associates, Inc.



Photo #13
 Date: May 4, 2011
 Description: Looking North at MW-34-90 Low-Flow Sampling on the Central Property.



Photo #14
 Date: May 4, 2011
 Description: Looking south at MW-35-90 low-flow sampling on the North Property.

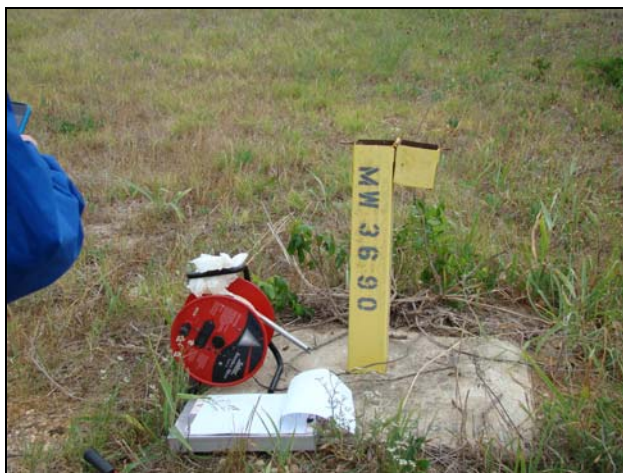


Photo #15
 Date May 2, 2011
 Description: Looking East at MW-36-90 on the North Property.



Photo #16
 Date: May 2, 2011
 Description: Looking at Obstruction Located Inside Well Casing at MW-36-90 on the North Property.



Photo #17
Date: May 3, 2011
Description: Looking East-Northeast at MW-37-90 Low-Flow Sampling on the North Property.



Photo #18
Date: May 3, 2011
Description: Looking Southwest at MW-38-90 Low-Flow Sampling on the North Property.



Photo #19
Date: May 3, 2011
Description: Looking Southwest at the Equipment Decontamination Area and IDW Drums Located on the Central Property.



Photo #20
Date: May 4, 2011
Description: Looking at the Equipment Decontamination Area Located on the Central Property.



Daniel B. Stephens & Associates, Inc.



Photo #21
Date: May 3, 2011
Description: Looking Southwest at the IDW Drums Located on the Central Property.



Photo #22
Date: May 3, 2011
Description: Looking at Non-Hazardous Waste Label on IDW Drum Located on the Central Property.

Appendix 2

Data Review and Validation Memoranda and Laboratory Analytical Reports

ECS Environmental Chemistry Services

PO Box 79782 Houston, TX 77279 ♦ Voice/Fax: (713) 935-0222 ♦ ecschem@sbcglobal.net

To: William Gamblin, Project Manager, Daniel B. Stephens & Associates, Inc.

From: Nan Toole, ECS Environmental Chemistry Services

Date: 8/15/2011

Re: Data Review Memorandum, Rockwool Industries, Inc. Federal Superfund Site, Groundwater Sampling Event, May 2-4, 2011

This Data Review Memorandum summarizes the results of the data review conducted for samples collected during May 2011 from the Rockwool Industries, Inc. Federal Superfund Site. ECS Environmental Chemistry Services (ECS) reviewed chemical data analyzed by DHL Analytical in Round Rock, Texas. The following data are covered by this memo:

DATA PACKAGE	LAB SAMPLE ID	FIELD SAMPLE ID	DATE COLL.	MEDIA	PARAMETER
1105024	1105024-01	MW-20	05/03/11	Aqueous	MET
	1105024-02	MW-21	05/02/11	Aqueous	MET
	1105024-03	MW-35-90	05/03/11	Aqueous	MET
	1105024-04	MW-37-90	05/03/11	Aqueous	MET
	1105024-05	MW-38-90	05/03/11	Aqueous	MET
	1105024-06	DUP-1	05/02/11	Aqueous	MET
	1105024-07	ER-1	05/03/11	Aqueous	MET
	1105024-08	MW-22	05/03/11	Aqueous	MET
	1105024-09	MW-7	05/04/11	Aqueous	MET
	1105024-10	MW-9	05/04/11	Aqueous	MET
	1105024-11	MW-10	05/04/11	Aqueous	MET
	1105024-12	MW-11	05/03/11	Aqueous	MET
	1105024-13	MW-17	05/03/11	Aqueous	MET
	1105024-14	MW-24-90	05/03/11	Aqueous	MET
	1105024-15	MW-33-90	05/04/11	Aqueous	MET
	1105024-16	MW-34-90	05/04/11	Aqueous	MET
	1105024-17	DUP-2	05/04/11	Aqueous	MET
	1105024-18	ER-2	05/04/11	Aqueous	MET

MET=ICP/MS metals (antimony, arsenic, lead) by EPA Method 6020A

Analytical data were evaluated for conformance to the requirements of *Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846)* and the Texas Commission on Environmental Quality (TCEQ) Quality Assurance Project Plan (QAPP) (Document Control Number 200919.7). The technical data review resulted in no significant quality control anomalies, rejected data nor any corrective actions taken or recommended for future analyses.

ECS Environmental Chemistry Services

PO Box 79782 Houston, TX 77279 ♦ Voice/Fax: (713) 935-0222 ♦ ecschem@sbcglobal.net

To: TCEQ

From: Nan Toole, ECS Environmental Chemistry Services

CC: William Gamblin, Daniel B. Stephens & Associates, Inc.

Date: 8/15/2011

Re: Data Validation Memorandum, Rockwool Industries, Inc. Federal Superfund Site, Groundwater Sampling Event, May 2-4, 2011

This Data Validation memorandum contains the results of the data validation conducted for samples collected May 2-4, 2011 from Rockwool Industries, Inc. Federal Superfund Site. ECS Environmental Chemistry Services (ECS) validated one batch analyzed for metals by DHL Analytical in Round Rock, Texas. The following data are covered by this report:

SDG	LAB SAMPLE ID	FIELD SAMPLE ID	DATE COLL.	MEDIA	PARAMETER
1105024	1105024-01	MW-20	05/03/11	Aqueous	MET
	1105024-02	MW-21	05/02/11	Aqueous	MET
	1105024-03	MW-35-90	05/03/11	Aqueous	MET
	1105024-04	MW-37-90	05/03/11	Aqueous	MET
	1105024-05	MW-38-90	05/03/11	Aqueous	MET
	1105024-06	DUP-1	05/02/11	Aqueous	MET
	1105024-07	ER-1	05/03/11	Aqueous	MET
	1105024-08	MW-22	05/03/11	Aqueous	MET
	1105024-09	MW-7	05/04/11	Aqueous	MET
	1105024-10	MW-9	05/04/11	Aqueous	MET
	1105024-11	MW-10	05/04/11	Aqueous	MET
	1105024-12	MW-11	05/03/11	Aqueous	MET
	1105024-13	MW-17	05/03/11	Aqueous	MET
	1105024-14	MW-24-90	05/03/11	Aqueous	MET
	1105024-15	MW-33-90	05/04/11	Aqueous	MET
	1105024-16	MW-34-90	05/04/11	Aqueous	MET
	1105024-17	DUP-2	05/04/11	Aqueous	MET
	1105024-18	ER-2	05/04/11	Aqueous	MET

MET=ICP/MS Metals (antimony, arsenic, lead) by EPA Method 6020A

Analytical data were evaluated for conformance to the requirements of the laboratory Standard Operating Procedures (SOP) for the methods referenced above and the Texas Commission on Environmental Quality (TCEQ) Quality Assurance Project Plan (QAPP) (Document Control Number 200919.7). The data validation resulted in no significant quality control anomalies, rejected data nor any corrective actions taken or recommended for future analyses.



Texas Commission on Environmental Quality

NELAP-Recognized Laboratory Accreditation is hereby awarded to



DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664-3801

in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Certificate Number: T104704211-11-7

Effective Date: 7/8/2011

Expiration Date: 4/30/2012

A handwritten signature in black ink, appearing to read "Mark Wiley".

Executive Director Texas Commission on
Environmental Quality



May 13, 2011

William Gamblin
D. B. Stephens & Assoc, Inc.
4030 W Braker #325
Austin, Texas 78759

Order No: 1105024

TEL: (512) 821-2765
FAX:

RE: Rockwool - North Property

Dear William Gamblin:

DHL Analytical received 18 sample(s) on 5/4/2011 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "John DuPont". The signature is fluid and cursive, with the first and last names being more prominent.

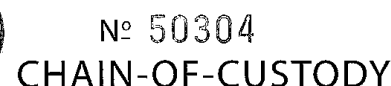
John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-11-6



Table of Contents

Miscellaneous Documents	3
Case Narrative	12
Sample Summary	13
Prep Dates Report	14
Analytical Dates Report	15
Sample Results	16
Analytical QC Summary Report	34
MQL Summary Report	38



DATE: 5-4-11 PAGE 2 OF 2
PO #: _____ DHL WORK ORDER #: 1105024
PROJECT LOCATION OR NAME: Rockwood - Central Property
CLIENT PROJECT #: ES11.AIRS.11 COLLECTOR: Bad Shriker

Page 4 of 38

Sample Receipt Checklist

Client Name D. B. Stephens & Assoc, Inc.

Date Received: 5/4/2011

Work Order Number 1105024

Received by JB

Checklist completed by:

Signature

Date

Reviewed by

Initials

Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1.3 °C
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Adjusted?

no

Checked by

JB

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Laboratory Data Package Signature Page – RG-366/TRRP-13

Revised May 2010

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

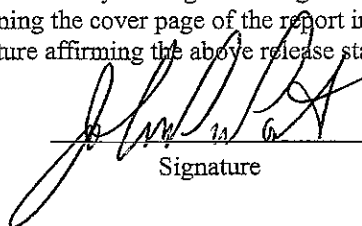
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC Chapter 5,
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) The amount of analyte measured in the duplicate,
 - b) The calculated RPD, and
 - c) The laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results (DCS results can be found with the Miscellaneous Documents) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in Laboratory Review checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on April 6-8, 2009. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

John DuPont – General Manager
Scott Schroeder – Technical Director



Signature

05/13/11
Date

DHL Analytical, Inc.
Laboratory Review Checklist: Reportable Data

Project Name: Rockwool – North Property		Date: 5/13/11					
Reviewer Name: Carlos Castro		Laboratory Work Order: 1105024					
Prep Batch Number(s): See Prep Dates Report		Run Batch: See Analytical Dates Report					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-Custody (C-O-C)					
R1	OI	1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and Quality Control (QC) Identification					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test Reports					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample detection limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			X		
		9) If required for the project, TICs reported?			X		
R4	O	Surrogate Recovery Data					
		1) Were surrogates added prior to extraction?			X		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test Reports/Summary Forms for Blank Samples					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	Laboratory Control Samples (LCS):					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?	X				
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical Duplicate Data					
		1) Were appropriate analytical duplicates analyzed for each matrix?			X		
		2) Were analytical duplicates analyzed at the appropriate frequency?			X		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method Quantitation Limits (MQLs):					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs and DCs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.
Laboratory Review Checklist (continued): Supporting Data

Project Name: Rockwool – North Property

Date: 5/13/11

Reviewer Name: Carlos Castro

Laboratory Work Order: 1105024

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial Calibration (ICAL)					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass Spectral Tuning:					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal Standards (IS):					
		1) Were IS area counts and retention times within the method-required QC limits?		X			S4-01
S5	OI	Raw Data (NELAC Section 5.5.10)					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual Column Confirmation					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively Identified Compounds (TICs):					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) Results:					
		1) Were percent recoveries within method QC limits?	X				
S9	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method Detection Limit (MDL) Studies					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency Test Reports:					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/Analyte Identification Procedures					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation for Methods (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs):					
		1) Are laboratory SOPs current and on file for each method performed?	X				

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DCS REPORTING

RunID: ICP-MS2_110412A
SampID: DCS-45854-1
TestNo: SW6020
BatchID: 45854

Prep Date: 4/12/2011
Analysis Date: 4/12/2011
Units: µg/L

Analyte	Result	RL	SPK Val	%REC	Low Limit	High Limit	Flag
Antimony	0.894	2.5	1	89.4	60	140	
Beryllium	1.04	1	1	104	60	140	
Cadmium	1.05	1	1	105	60	140	
Lead	1.01	1	1	101	60	140	
Silver	1.00	2	1	100	60	140	
Thallium	1.05	1.5	1	105	60	140	

DCS REPORTING

RunID: ICP-MS3_110412A

Prep Date: 4/12/2011

SampID: DCS-45854-1

Anaysis Date: 4/12/2011

TestNo: SW6020

Units: µg/L

BatchID: 45854

Analyte	Result	RL	SPK Val	%REC	Low Limit	High Limit	Flag
Antimony	0.966	2.5	1	96.6	60	140	
Beryllium	1.03	1	1	103	60	140	
Cadmium	0.980	1	1	98.0	60	140	
Lead	1.02	1	1	102	60	140	
Silver	0.993	2	1	99.3	60	140	
Thallium	1.03	1.5	1	103	60	140	

DCS REPORTING

RunID: ICP-MS3_110412A
 SampID: DCS-45854-2
 TestNo: SW6020
 BatchID: 45854

Prep Date: 4/12/2011
 Analysis Date: 4/12/2011
 Units: µg/L

Analyte	Result	RL	SPK Val	%REC	Low Limit	High Limit	Flag
Aluminum	46.1	30	40	115	60	140	
Arsenic	3.80	6	4	94.9	60	140	
Barium	3.77	10	4	94.3	60	140	
Boron	2.86	30	4	71.4	60	140	
Calcium	106	300	100	106	60	140	
Chromium	3.92	6	4	97.9	60	140	
Cobalt	3.91	10	4	97.7	60	140	
Copper	3.99	10	4	99.7	60	140	
Iron	123	150	100	123	60	140	
Lithium	3.64	6	4	90.9	60	140	
Magnesium	94.8	300	100	94.8	60	140	
Manganese	3.90	10	4	97.4	60	140	
Molybdenum	3.82	6	4	95.5	60	140	
Nickel	3.87	10	4	96.8	60	140	
Potassium	91.7	300	100	91.7	60	140	
Selenium	4.01	6	4	100	60	140	
Strontium	3.73	10	4	93.4	60	140	
Tin	3.73	10	4	93.3	60	140	
Titanium	3.92	10	4	98.1	60	140	
Vanadium	3.54	1	4	88.6	60	140	
Zinc	4.50	5	4	112	60	140	

CLIENT: D. B. Stephens & Assoc, Inc.
Project: Rockwool - North Property
Lab Order: 1105024

CASE NARRATIVE

The samples were analyzed using the methods outlined in the following references:

Method SW6020A - Metals Analysis

Exception Report R1-01

The samples were received and log-in performed on 5/4/11. A total of 18 samples were received. The samples arrived in good condition and were properly packaged.

Exception Report S4-01

For Metals analysis the matrix spike and matrix spike duplicate had low responses for the internal standard Indium. The associated analyte (Antimony) was within control limits. No further corrective actions were taken.

CLIENT: D. B. Stephens & Assoc, Inc.
Project: Rockwool - North Property
Lab Order: 1105024

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
1105024-01	MW-20		05/03/11 12:50 PM	05/04/11
1105024-02	MW-21		05/02/11 01:00 PM	05/04/11
1105024-03	MW-35-90		05/03/11 11:00 AM	05/04/11
1105024-04	MW-37-90		05/03/11 09:49 AM	05/04/11
1105024-05	MW-38-90		05/03/11 09:06 AM	05/04/11
1105024-06	DUP-1		05/02/11 01:00 PM	05/04/11
1105024-07	ER-1		05/03/11 02:10 PM	05/04/11
1105024-08	MW-22		05/03/11 11:37 AM	05/04/11
1105024-09	MW-7		05/04/11 01:28 PM	05/04/11
1105024-10	MW-9		05/04/11 11:30 AM	05/04/11
1105024-11	MW-10		05/04/11 09:21 AM	05/04/11
1105024-12	MW-11		05/03/11 06:40 PM	05/04/11
1105024-13	MW-17		05/03/11 05:34 PM	05/04/11
1105024-14	MW-24-90		05/03/11 04:35 PM	05/04/11
1105024-15	MW-33-90		05/04/11 12:25 PM	05/04/11
1105024-16	MW-34-90		05/04/11 10:25 AM	05/04/11
1105024-17	DUP-2		05/04/11 10:28 AM	05/04/11
1105024-18	ER-2		05/04/11 08:32 AM	05/04/11

CLIENT: D. B. Stephens & Assoc, Inc.
Project: Rockwool - North Property
Lab Order: 1105024

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1105024-01A	MW-20	05/03/11 12:50 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-02A	MW-21	05/02/11 01:00 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-03A	MW-35-90	05/03/11 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
	MW-35-90	05/03/11 11:00 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-04A	MW-37-90	05/03/11 09:49 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
	MW-37-90	05/03/11 09:49 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-05A	MW-38-90	05/03/11 09:06 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
	MW-38-90	05/03/11 09:06 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
	MW-38-90	05/03/11 09:06 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-06A	DUP-1	05/02/11 01:00 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-07A	ER-1	05/03/11 02:10 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-08A	MW-22	05/03/11 11:37 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-09A	MW-7	05/04/11 01:28 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-10A	MW-9	05/04/11 11:30 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-11A	MW-10	05/04/11 09:21 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-12A	MW-11	05/03/11 06:40 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-13A	MW-17	05/03/11 05:34 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-14A	MW-24-90	05/03/11 04:35 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-15A	MW-33-90	05/04/11 12:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-16A	MW-34-90	05/04/11 10:25 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-17A	DUP-2	05/04/11 10:28 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195
1105024-18A	ER-2	05/04/11 08:32 AM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	05/05/11 09:22 AM	46195

CLIENT: D. B. Stephens & Assoc, Inc.
 Project: Rockwool - North Property
 Lab Order: 1105024

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1105024-01A	MW-20	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:02 PM	ICP-MS3_110506A
1105024-02A	MW-21	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:13 PM	ICP-MS3_110506A
1105024-03A	MW-35-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	100	05/09/11 02:41 PM	ICP-MS2_110509C
	MW-35-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:19 PM	ICP-MS3_110506A
1105024-04A	MW-37-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/09/11 02:02 PM	ICP-MS2_110509C
	MW-37-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:24 PM	ICP-MS3_110506A
1105024-05A	MW-38-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/09/11 02:08 PM	ICP-MS2_110509C
	MW-38-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:30 PM	ICP-MS3_110506A
	MW-38-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 02:19 PM	ICP-MS3_110506A
1105024-06A	DUP-1	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:35 PM	ICP-MS3_110506A
1105024-07A	ER-1	Equip Blank	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:41 PM	ICP-MS3_110506A
1105024-08A	MW-22	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 01:46 PM	ICP-MS3_110506A
1105024-09A	MW-7	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:25 PM	ICP-MS3_110506A
1105024-10A	MW-9	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:30 PM	ICP-MS3_110506A
1105024-11A	MW-10	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:36 PM	ICP-MS3_110506A
1105024-12A	MW-11	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:41 PM	ICP-MS3_110506A
1105024-13A	MW-17	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:47 PM	ICP-MS3_110506A
1105024-14A	MW-24-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:52 PM	ICP-MS3_110506A
1105024-15A	MW-33-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 03:58 PM	ICP-MS3_110506A
1105024-16A	MW-34-90	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 04:03 PM	ICP-MS3_110506A
1105024-17A	DUP-2	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 04:09 PM	ICP-MS3_110506A
1105024-18A	ER-2	Equip Blank	SW6020A	Trace Metals: ICP-MS - Water	46195	1	05/06/11 04:14 PM	ICP-MS3_110506A

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-20**Lab ID:** 1105024-01**Collection Date:** 05/03/11 12:50 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.00280	0.000800	0.00250		mg/L	1	05/06/11 01:02 PM
Arsenic	0.00262	0.00200	0.00500	J	mg/L	1	05/06/11 01:02 PM
Lead	0.000845	0.000300	0.00100	J	mg/L	1	05/06/11 01:02 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-21**Lab ID:** 1105024-02**Collection Date:** 05/02/11 01:00 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.105	0.000800	0.00250		mg/L	1	05/06/11 01:13 PM
Arsenic	0.0160	0.00200	0.00500		mg/L	1	05/06/11 01:13 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 01:13 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-35-90**Lab ID:** 1105024-03**Collection Date:** 05/03/11 11:00 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	1.01	0.0800	0.250		mg/L	100	05/09/11 02:41 PM
Arsenic	0.0760	0.00200	0.00500		mg/L	1	05/06/11 01:19 PM
Lead	0.00166	0.000300	0.00100		mg/L	1	05/06/11 01:19 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-37-90**Lab ID:** 1105024-04**Collection Date:** 05/03/11 09:49 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.000933	0.000800	0.00250	J	mg/L	1	05/09/11 02:02 PM
Arsenic	0.0145	0.00200	0.00500		mg/L	1	05/06/11 01:24 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 01:24 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-38-90**Lab ID:** 1105024-05**Collection Date:** 05/03/11 09:06 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.0286	0.000800	0.00250		mg/L	1	05/09/11 02:08 PM
Arsenic	0.0121	0.00200	0.00500		mg/L	1	05/06/11 01:30 PM
Lead	0.000334	0.000300	0.00100	J	mg/L	1	05/06/11 02:19 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** DUP-1**Lab ID:** 1105024-06**Collection Date:** 05/02/11 01:00 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.120	0.000800	0.00250		mg/L	1	05/06/11 01:35 PM
Arsenic	0.0143	0.00200	0.00500		mg/L	1	05/06/11 01:35 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 01:35 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** ER-1**Lab ID:** 1105024-07**Collection Date:** 05/03/11 02:10 PM**Matrix:** Equip Blank

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	<0.000800	0.000800	0.00250		mg/L	1	05/06/11 01:41 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 01:41 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 01:41 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-22**Lab ID:** 1105024-08**Collection Date:** 05/03/11 11:37 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.00199	0.000800	0.00250	J	mg/L	1	05/06/11 01:46 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 01:46 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 01:46 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-7**Lab ID:** 1105024-09**Collection Date:** 05/04/11 01:28 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.00208	0.000800	0.00250	J	mg/L	1	05/06/11 03:25 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 03:25 PM
Lead	0.000972	0.000300	0.00100	J	mg/L	1	05/06/11 03:25 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-9**Lab ID:** 1105024-10**Collection Date:** 05/04/11 11:30 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.266	0.000800	0.00250		mg/L	1	05/06/11 03:30 PM
Arsenic	0.0911	0.00200	0.00500		mg/L	1	05/06/11 03:30 PM
Lead	0.000715	0.000300	0.00100	J	mg/L	1	05/06/11 03:30 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-10**Lab ID:** 1105024-11**Collection Date:** 05/04/11 09:21 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	<0.000800	0.000800	0.00250		mg/L	1	05/06/11 03:36 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 03:36 PM
Lead	0.000351	0.000300	0.00100	J	mg/L	1	05/06/11 03:36 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-11**Lab ID:** 1105024-12**Collection Date:** 05/03/11 06:40 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	<0.000800	0.000800	0.00250		mg/L	1	05/06/11 03:41 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 03:41 PM
Lead	0.00364	0.000300	0.00100		mg/L	1	05/06/11 03:41 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-17**Lab ID:** 1105024-13**Collection Date:** 05/03/11 05:34 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.0353	0.000800	0.00250		mg/L	1	05/06/11 03:47 PM
Arsenic	0.00525	0.00200	0.00500		mg/L	1	05/06/11 03:47 PM
Lead	0.000855	0.000300	0.00100	J	mg/L	1	05/06/11 03:47 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-24-90**Lab ID:** 1105024-14**Collection Date:** 05/03/11 04:35 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.00717	0.000800	0.00250		mg/L	1	05/06/11 03:52 PM
Arsenic	0.0110	0.00200	0.00500		mg/L	1	05/06/11 03:52 PM
Lead	0.000986	0.000300	0.00100	J	mg/L	1	05/06/11 03:52 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-33-90**Lab ID:** 1105024-15**Collection Date:** 05/04/11 12:25 PM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.174	0.000800	0.00250		mg/L	1	05/06/11 03:58 PM
Arsenic	0.0347	0.00200	0.00500		mg/L	1	05/06/11 03:58 PM
Lead	0.000732	0.000300	0.00100	J	mg/L	1	05/06/11 03:58 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** MW-34-90**Lab ID:** 1105024-16**Collection Date:** 05/04/11 10:25 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.315	0.000800	0.00250		mg/L	1	05/06/11 04:03 PM
Arsenic	0.358	0.00200	0.00500		mg/L	1	05/06/11 04:03 PM
Lead	0.000650	0.000300	0.00100	J	mg/L	1	05/06/11 04:03 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** DUP-2**Lab ID:** 1105024-17**Collection Date:** 05/04/11 10:28 AM**Matrix:** Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	0.320	0.000800	0.00250		mg/L	1	05/06/11 04:09 PM
Arsenic	0.408	0.00200	0.00500		mg/L	1	05/06/11 04:09 PM
Lead	0.00201	0.000300	0.00100		mg/L	1	05/06/11 04:09 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.**Project:** Rockwool - North Property**Project No:** ES11.AIRS.11**Lab Order:** 1105024**Client Sample ID:** ER-2**Lab ID:** 1105024-18**Collection Date:** 05/04/11 08:32 AM**Matrix:** Equip Blank

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Trace Metals: ICP-MS - Water		SW6020A					Analyst: AJR
Antimony	<0.000800	0.000800	0.00250		mg/L	1	05/06/11 04:14 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	05/06/11 04:14 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	05/06/11 04:14 PM

Qualifiers:	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

CLIENT: D. B. Stephens & Assoc, Inc.
Work Order: 1105024
Project: Rockwool - North Property

ANALYTICAL QC SUMMARY REPORT**RunID: ICP-MS2_110509C**

Sample ID:	ICV1-110509	Batch ID:	R54807	TestNo:	SW6020A	Units:	mg/L				
SampType:	ICV	Run ID:	ICP-MS2_110509C	Analysis Date:	05/09/11 11:56 AM	Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.0924	0.00250	0.100	0	92.4	90	110			
Sample ID:	CCV1-110509	Batch ID:	R54807	TestNo:	SW6020A	Units:	mg/L				
SampType:	CCV	Run ID:	ICP-MS2_110509C	Analysis Date:	05/09/11 01:32 PM	Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.197	0.00250	0.200	0	98.4	90	110			
Sample ID:	LLCV-110509	Batch ID:	R54807	TestNo:	SW6020A	Units:	mg/L				
SampType:	LCVL	Run ID:	ICP-MS2_110509C	Analysis Date:	05/09/11 01:49 PM	Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.00107	0.00250	0.00100	0	107	70	130			
Sample ID:	CCV2-110509	Batch ID:	R54807	TestNo:	SW6020A	Units:	mg/L				
SampType:	CCV	Run ID:	ICP-MS2_110509C	Analysis Date:	05/09/11 02:53 PM	Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.192	0.00250	0.200	0	96.2	90	110			
Sample ID:	LLCV2-110509	Batch ID:	R54807	TestNo:	SW6020A	Units:	mg/L				
SampType:	LCVL	Run ID:	ICP-MS2_110509C	Analysis Date:	05/09/11 03:26 PM	Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.000950	0.00250	0.00100	0	95.0	70	130			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: D. B. Stephens & Assoc, Inc.
Work Order: 1105024
Project: Rockwool - North Property

ANALYTICAL QC SUMMARY REPORT**RunID: ICP-MS3_110506A**

Sample ID:	MB-46195	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	MBLK	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 12:40 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	<0.000800	0.00250									
Arsenic	<0.00200	0.00500									
Lead	<0.000300	0.00100									

Sample ID:	LCS-46195	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	LCS	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 12:46 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	0.187	0.00250	0.200	0	93.4	80	120				
Arsenic	0.193	0.00500	0.200	0	96.4	80	120				
Lead	0.194	0.00100	0.200	0	96.8	80	120				

Sample ID:	LCSD-46195	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	LCSD	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 12:51 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	0.203	0.00250	0.200	0	102	80	120	8.31	15		
Arsenic	0.205	0.00500	0.200	0	102	80	120	5.89	15		
Lead	0.208	0.00100	0.200	0	104	80	120	6.98	15		

Sample ID:	1105024-01A SD	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	SD	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 01:08 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	<0.00400	0.0125	0	0.00280				0	10		
Arsenic	<0.0100	0.0250	0	0.00262				0	10		
Lead	<0.00150	0.00500	0	0.000845				0	10		

Sample ID:	1105024-01A PDS	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	PDS	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 01:57 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	0.194	0.00250	0.200	0.00280	95.8	80	120				
Arsenic	0.201	0.00500	0.200	0.00262	99.2	80	120				
Lead	0.216	0.00100	0.200	0.000845	108	80	120				

Sample ID:	1105024-01A MS	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	MS	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 02:03 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	0.209	0.00250	0.200	0.00280	103	80	120				
Arsenic	0.197	0.00500	0.200	0.00262	97.1	80	120				
Lead	0.210	0.00100	0.200	0.000845	104	80	120				

Sample ID:	1105024-01A MSD	Batch ID:	46195	TestNo:	SW6020A	Units:	mg/L				
SampType:	MSD	Run ID:	ICP-MS3_110506A	Analysis Date:	05/06/11 02:08 PM	Prep Date:	05/05/11				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual	
Antimony	0.212	0.00250	0.200	0.00280	104	80	120	1.28	15		
Arsenic	0.197	0.00500	0.200	0.00262	97.3	80	120	0.152	15		

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: D. B. Stephens & Assoc, Inc.
Work Order: 1105024
Project: Rockwool - North Property

ANALYTICAL QC SUMMARY REPORT**RunID: ICP-MS3_110506A**

Lead	0.213	0.00100	0.200	0.000845106	80	120	1.66	15
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Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: D. B. Stephens & Assoc, Inc.
Work Order: 1105024
Project: Rockwool - North Property

ANALYTICAL QC SUMMARY REPORT**RunID: ICP-MS3_110506A**

Sample ID:	ICV1-110506	Batch ID:	R54786		TestNo:	SW6020A		Units:	mg/L		
SampType:	ICV	Run ID:	ICP-MS3_110506A		Analysis Date:	05/06/11 12:17 PM		Prep Date:			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.0991	0.00250	0.100	0	99.1	90	110			
Arsenic		0.100	0.00500	0.100	0	100	90	110			
Lead		0.102	0.00100	0.100	0	102	90	110			

Sample ID:	LLCV-110506	Batch ID:	R54786			TestNo:	SW6020A		Units:	mg/L	
SampType:	LCVL	Run ID:	ICP-MS3_110506A			Analysis Date:	05/06/11 12:28 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.00104	0.00250	0.00100	0	104	70	130			
Arsenic		0.00115	0.00500	0.00100	0	115	70	130			
Lead		0.00108	0.00100	0.00100	0	108	70	130			

Sample ID:	CCV1-110506	Batch ID:	R54786			TestNo:	SW6020A		Units:	mg/L	
SampType:	CCV	Run ID:	ICP-MS3_110506A			Analysis Date:	05/06/11 02:39 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.206	0.00250	0.200	0	103	90	110			
Arsenic		0.196	0.00500	0.200	0	97.8	90	110			
Lead		0.207	0.00100	0.200	0	103	90	110			

Sample ID:	LLCV1-110506	Batch ID:	R54786		TestNo:	SW6020A		Units:	mg/L		
SampType:	LCVL	Run ID:	ICP-MS3_110506A		Analysis Date:	05/06/11 03:05 PM		Prep Date:			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.00111	0.00250	0.00100	0	111	70	130			
Arsenic		0.00106	0.00500	0.00100	0	106	70	130			
Lead		0.00105	0.00100	0.00100	0	105	70	130			

Sample ID:	CCV2-110506	Batch ID:	R54786		TestNo:	SW6020A		Units:	mg/L		
SampType:	CCV	Run ID:	ICP-MS3_110506A		Analysis Date:	05/06/11 04:20 PM		Prep Date:			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.219	0.00250	0.200	0	109	90	110			
Arsenic		0.203	0.00500	0.200	0	101	90	110			
Lead		0.217	0.00100	0.200	0	108	90	110			

Sample ID:	LLCV2-110506	Batch ID:	R54786		TestNo:	SW6020A		Units:	mg/L		
SampType:	LCVL	Run ID:	ICP-MS3_110506A		Analysis Date:	05/06/11 04:48 PM		Prep Date:			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.00129	0.00250	0.00100	0	129	70	130			
Arsenic		0.00104	0.00500	0.00100	0	104	70	130			
Lead		0.00108	0.00100	0.00100	0	108	70	130			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT: D. B. Stephens & Assoc, Inc.
Work Order: 1105024
Project: Rockwool - North Property

MQL SUMMARY REPORT

TestNo: SW6020A Analyte	MDL mg/L	MQL mg/L
Antimony	0.000800	0.00250
Arsenic	0.00200	0.00500
Lead	0.000300	0.00100

Qualifiers:

MQL - Method Quantitation Limit as defined by TRRP
MDL - Method Detection Limit as defined by TRRP

Appendix 3

Field Notes

[illegible]

1040 - Buddy Henderson (TCEQ) departs site.

②

11-23-10 Rockwool Ind. - Belton, TX

ES II AIRS. II - B. Shirley + W. Gambelin.

1100 - Alvie Nichols + Charmaine Backens
depart site.1105 - Billy + I continue to conduct
site visit.NORTH PROPERTY AREA:

- Keep the Culvert located centrally
on the property clear of debris.
We inspected the Northern (discharge)
end - (contains some debris/trash).

- Inspect/Maintain Articulated Blocks
on South bank of the Leon River

- MW's Located: MW-15, MW-20, MW-21,
MW-22, MW-35-90, MW-36-90,
MW-37-90, MW-38-90 - (Note: MW-23
doesn't exist).

MW-20 - Area around well/well pad is
grown up w/ heavy vegetation + trees.

MW-35-90 - No guard/frame around well pad.

MW-36-90 - " " " " " "

MW-37-90 - " " " " " "

MW-38-90 - " " " " " "

Also brush needs to be cleared away
around well pad (MW-38-90).

- SE Corner of Security fence

③

11-29-10 Rockwool, Ind. - Belton, TX

ES II AIRS. II - B. Shirley + W. Gambelin.

is missing.

MW-21 - No guard/frame around well pad

MW-22 - " " " " " "

Area on west side of former evaporation
lagoon is beginning to form an erosion
channel (~ 3 ft. wide) - Channel that has
formed goes to the Northern Boundary
of Property. Becomes increasingly deeper +
wider as you approach the river bank on
South side of Leon River.

There is no signage along the North side
of Property adjacent to river bank.

There is only one sign ~~around~~ on North
side of IC (former evaporation lagoon).
located in the NE corner of property.

Need to add a No Parking/Do Not Block
gate on the main entrance gate. DBS+A
added a new Combination Lock on
gate. Combo = 3272.
Fence is down on West side of Property adj to MW-15.

④

11-23-10 Rockwool, Ind. - Belton, TX
ESII. AIRS. II - B. Shirley + W. Gamblin.

GEER PROPERTY - CEMETERY AREA:

- Need New signs around perimeter.
- Need to address grass / brush on property.
- Need to add fence on west side of property.
- Concrete Facility: Caliche pile has been pushed onto Cemetery Property (mostly on NNW end of Property).
- Hay Bales (Erosion Barrier) on the North end of buried slag pile needs to be replaced/addressed.

CENTRAL PROPERTY AREA:

- Whole area needs to be moved.
- Only responsible for area around the perimeter around MATCO CAP. (EPA responsible for maintenance on CAP).
- Use Round-up on MATCO CAP edge.
- Chainlink fence on West side

⑤

11-23-10 Rockwool, Ind. - Belton, TX
ESII. AIRS. II - B. Shirley + W. Gamblin.

OF Property - in need of repair/replaced.
- Overflow Collection Lagoon + Spillway - must be maintained (mowed) - Includes drainage discharge from spillway (located just off/adj to SE corner of MATCO CAP).

ON SITE WASTE:

There are 2 55 gallon steel drums (Labeled Non-Hazardous waste) located inside the Brick Plant Bldg.)

There are also 2 55 gallon steel drums adj. to the above mentioned drums that contain trash & are not labeled.

Signage:

There currently are no signs on the East Perimeter Fence or The East IC Boundary.

There are Signs posted @ the IC Boundary approx. every 800 yards.

Sparsc Signage @ IC Boundary on Northside near/adj Stormwater Runoff Pond

Sparsc signage along Western Perimeter/Boundary fence line. (one sign located in NW corner of property).

⑥ 11-23-10 Rockwool, Ind. - Belton, TX
ESII. AIRS. II - B. Shirley & W. Gamblin,

CENTRAL PROPERTY AREA CONT.:

MW's Located/Confirmed:

MW-34-90, MW-10, MW-11, MW-17, MW-14, MW-24-90,
MW-19, MW-16, MW-27-90, MW-28-90, MW-29-90,
MW-9, MW-33-90, MW-7.

MW-34-90 - No Frame/Guard in place around well pad.

MW-17 - Overgrown w/brush/tree. # plate missing
Tree needs to be removed in order to access well.

MW-14 - # plate missing.

MW-16 - No Frame/Guard in place around well pad.

MW-24-90 - No Frame/Guard in place around well pad.

MW-27-90 " " " " " " " "

MW-28-90 " " " " " " " "

MW-29-90 " " " " " " " "

MW-9 - Frame/Guard around well pad is knocked
over & well pad/damaged.

MW-33-90 - Frame/Guard around well pad is missing;
well pad is damaged/moved.

WELL PAD FRAME/Guard Dimensions:

Legs (x4) 48" Long (12" of legs in ground)

Square Frame on legs (36" x 36").

Rockwool - 5-2-11 B.S. ⑦
ESII. AIRS. II J.S.

1000 - Arrive on site. Meet w/ Alvie
Nichols (CEO) & LES w/ City of
Belton. Conduct Tailgate Safety
Meeting when Joel arrive on site
@ 1130.

Gauging data for North Property
area:

Well ID	DTP (FE)	DTW (FE)	IN (FE)
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MW-15-20	N.P.	32.26	39.90
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MW-20-15	N.P.	DRY	17.20
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MW-21	N.P.	10.92	15.50
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MW-22	N.P.	11.37	14.56
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MW-35-90	N.P.	16.61	17.30
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MW-36-90	N.P.	Casing plugged @ 2.5 feet *	
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MW-37-90	N.P.	18.67	26.30
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MW-38-90	N.P.	10.15	12.23
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* See photos

All Locks on well stand-ups need to
be replaced as per Alvie Nichols. He wants
Combo locks. Replaced J-plug on MW-35-
90; MW-36-90;

BS 5-2-11

⑧ 5-2-11 Rockwool - ES 11. AIRS. 11 B.S. J.S.

Gauging Data: Central Property.
Well ID DTA(ft) DTW(ft) TD(ft)

MW-7	N.P.	30.40	35.60
MW-9	N.P.	28.99	35.68
MW-10	N.P.	27.59	35.60
MW-11	N.P.	28.23	35.65
MW-14	N.P.	DRY	41.00
MW-16	N.P.	DRY	31.50
MW-17	N.P.	26.26	31.50
MW-19	N.P.	32.64	34.30
MW-24-90	N.P.	33.81	40.63
MW-27-90	N.P.	34.49	35.40
MW-28-90	N.P.	30.45	31.94
MW-29-90	N.P.	27.91	29.92
MW-30-90	N.P.	27.74	28.40
MW-33-90	N.P.	32.30.32	33.00
MW-34-90	N.P.	29.09	32.50

DUP-2 (MW-34-90)

BS

5-2-11

5-2-11 Rockwool - ES 11. AIRS. 11 B.S. J.S. ⑨

MW-21

Low-Flow using peristaltic pump. Tubing inlet set @ 13.5 ft.

1215 - Start pump. (5-2-11)

Time	pH	Cond	DO	TEMP	DEP	SAL	TDS	ORP
1239	5.90	85.1	147.0	0.20	20.0		0.55	-24
1249	6.31	87.3	9.6	0.36	20.3		0.56	-31
1252	6.35	87.7	4.2	0.00	20.2		0.56	-95
1255	6.38	89.3	2.2		20.2		0.52	-139

1256 H₂O quality parameters stable.
 Collect the sample @ 1259
 1259 Sample collected from MW-21
 1300 Collecting duplicate sample per FSD from MW-21 (Dup-1)
 1315-1415 Lunch
 1545 - Complete brush clearing + gauging on North Property.
 1600 - Move over to Central Property.
 1610 - Begin Brush Clearing + gauging on the Central Property.
 1830 - Depart site. Return tomorrow to collect samples.

BS 5-2-11

5-3-11
 ⑩ Rockwood - ES11-AIRS.11 B.S.
 0745 - Arrive on site, at North Property.
 0830 - Set up on MW-38-90. Set tubing
 intake for peristaltic pump @ 11.75'
 flow rate = 235 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
0850	6.34	0.155	35.2	0.06	18.1	1.0	-176
0853	6.46	0.155	23.4	0.00	18.5	1.0	-186
0856	6.53	0.156	17.9	0.22	18.7	1.0	-194
0859	6.57	0.156	11.5	0.71	18.8	1.0	-204
0902	6.57	0.157	9.7	0.71	18.9	1.0	-209

Parameters have stabilized. TURB is < 10

0906 - Collect Sample (Metals-EPA (6020A))
 1.0 gallons - Purged

0925 - Set up on MW-37-90. Set tubing
 intake @ 25'. Flow rate = 220 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
0937	6.54	980	8.2	1.33	18.7	0.63	-6
0940	6.62	99.9	5.8	0.13	19.1	0.65	-35
0943	6.65	0.09	5.3	0.00	19.6	0.6	-51
0946	6.65	0.09	4.3	0.00	19.7	0.6	-62

parameters have stabilized. TURB < 10

0949 - Collect Sample (Metals EPA (6020A))
 1.0 gallon purged

BS 5-3-11

5-3-11 Rockwood - ES11-AIRS.11 B.S. ⑩
 1005 - Set up on MW-35-90. Set tubing intake
 for peristaltic pump @ 17'. Flow Rate = 150 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1021	6.85	0.119	15.4	2.65	19.6	0.8	76
1024	6.79	0.125	3.4	0.94	19.8	0.8	85
1027	6.78	0.122	5.0	1.83	19.8	0.8	98

Parameters have stabilized. TURB is < 10.

1100 - Collect Sample - (Metals EPA-6020A)
 purged ~ 5 gallons. Well must dry while
 filling sample container. Filled ~ 3/4 full.

1111 - Set up on MW-22. Set tubing depth @
 14.3' for peristaltic pump. Pump Rate = 150 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1123	6.62	0.113	46.1	3.38	20.7	0.7	78
1126	6.69	0.111	20.8	1.58	20.5	0.7	78
1129	6.65	0.108	10.7	1.02	20.4	0.7	77
1132	6.66	0.106	9.3	0.73	20.5	0.7	76

Parameters have stabilized. TURB is < 10.

1137 - Collect Sample (Metals EPA-6020A)
 purged ~ 2.5 gallons

BS 5-3-11

⑫ 5-3-11 Rockwood - ES II, AIRS II B.S.

1155 - Set up on MW-20. Set pump depth @ 39 ft. Flow Rate = 235 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1219	6.38	0.145	-5.0	2.63	23.3	0.9	51
1222	6.54	0.133	-5.0	6.94	22.2	0.9	64
1225	6.44	0.139	-5.0	1.66	22.8	0.9	64
1228	6.45	0.143	312	2.16	22.8	0.9	69
1230	6.44	0.143	186	1.00	23.0	0.9	69
1234	6.43	0.143	126	0.90	23.4	0.9	69
1237	6.44	0.143	82.6	1.10	23.6	0.9	71
1240	6.43	0.143	59.6	1.02	23.3	0.9	71
1243	6.42	0.143	24.5	0.88	23.5	0.9	71
1246	6.43	0.143	9.8	0.88	23.8	0.9	71

Parameters are stable & TURB is < 10

1250 - Collect Sample (Metals EPA 6020A)

~ 2-gallons purged.

1305 - Move to Central Property.

1345 - Set up Decon area.

1350 - Begin Decon of Pump.

1410 - Collect Equipment Rinse Sample. Use Reagent Grade

II Deionized Water. Sample for Metals (EPA 6020A).

BS 5-3-11

5-3-11 Rockwood - ES II, AIRS II B.S. ⑬

1415 - Set up on MW-28-90. Pump depth set at 31.8 ft. Flow Rate = 265 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1432	6.54	0.162	197.0	4.96	23.1	1.0	100
1435	6.45	0.159	117.0	3.39	23.6	1.0	98

1438 - Well went dry. No sample collected. ~ 0.25 gallon purged.

1455 - Decon Pump.

MW-27-90 - Not sampled due to insufficient water column in well casing. (0.91 ft)

MW-30-90 - Same as above (0.66 ft)

MW-16 + MW-14 are both dry - no samples collected

1512 - Set up @ MW-19. Set pump intake @ 34'. Flow Rate = 150 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1522	6.49	0.120	720.0	3.72	23.5	0.8	97
1525	6.52	0.118	636.0	2.70	24.0	0.8	96
1528	6.58	0.115	395.0	5.63	22.9	0.8	96
1531	6.55	0.116	184.0	2.61	23.6	0.7	95
1534	6.55	0.116	92.1	2.20	24.5	0.7	94

1537 - Well went dry. No sample collected.

1545 - Decon Pump.

BS 5-3-11

⑭ 5-3-11 Rockwool - ES11. AIRS. 11 B.S.

MW-24-90 Set pump intake @ 40'

Flow Rate = 190 ml/min

Time	pH	Cond	TURB	DO	TEMP	IDS	ORP
1615	6.54	0.123	-5.0	3.64	22.3	0.8	92
1618	6.49	0.115	-5.0	6.41	22.5	0.8	93
1621	6.48	0.118	-5.0	5.98	22.4	0.8	94
1624	6.47	0.121	816.0	3.64	22.3	0.8	93
1627	6.49	0.117	415.0	4.75	22.6	0.8	95
1630	6.50	0.117	152.0	5.49	22.6	0.8	94

1635 - Collect sample (Metals EPA 6020A).

1645 - Decon Pump.

MW-17 Set pump intake @ 31 feet.

Flow Rate = 150 ml/min

Time	pH	Cond	TURB	DO	TEMP	IDS	ORP
1715	6.48	0.116	647.0	2.86	23.4	0.7	-52
1718	6.55	0.113	448.0	8.19	23.7	0.7	-40
1721	6.53	0.117	297	1.60	24.2	0.7	-43
1724	6.53	0.117	241	0.63	23.4	0.7	-39
1727	6.58	0.113	140	5.47	23.4	0.7	-19
1730	6.54	0.115	98.1	0.28	24.2	0.7	-8

1734 - Collect Sample. (Metals - EPA 6020A)

~~5-3-11~~

5-3-11 Rockwool - ES11. AIRS. 11 B.S. ⑮
1745. Decon Pump.

MW-11 Set pump intake @ 35'

Flow Rate = 180 ml/min

Time	pH	Cond	TURB	DO	TEMP	IDS	ORP
1814	6.46 ⁵⁷	0.112	583	3.34	21.9	0.7	81
1817	6.46	0.117	702	2.07	22.5	0.7	76
1820	6.76	1.0	-5.0	8.62	23.1	0.7	78
1823	6.68	0.113	-5.0	3.52	23.1	0.7	78
1826	6.70	0.113	863	4.07	22.7	0.7	75
1830	6.67	0.113	622	1.79	23.0	0.7	72
1833	6.46	0.115	300	0.84	23.0	0.7	65
1836	6.46	0.115	245	0.54	23.0	0.7	61

840 - Collect Sample (Metals - EPA 6020A)

1900 - Depart site. Complete low-flow sampling on 5-4-11.

Go to Lowe's Home Improvement and purchase replacement OOMBO locks for well vaults.

~~5-3-11~~

① 5-4-11 Rockwood - ESII.AIRS.II B.S.

0815 - Arrive on site.

Decon pump & equipment.
Calibrate Horiba Probe using
Horiba 100-4 pH 4 Cal. Solution.

0832 - Collect (ER-2) equipment
rinse blank sampling
using Reagent Grade II
Deionized water.

0840 - MW-10 Set pump depth @
34'. Flow Rate = 170 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
0903	5.79	93.6	26.7	5.09	19.1	0.60	151
0906	6.10	94.8	12.3	2.89	19.4	0.61	145
0909	6.35	95.0	9.3	2.76	20.5	0.61	136
0912	6.45	95.1	10.5	2.76	20.5	0.61	131
0915	6.51	95.2	8.6	2.82	21.0	0.61	128
0918	6.55	95.3	7.6	2.87	21.3	0.61	126

0921 - Collect Sample (Metals - EPA 6020A)

0932 - Decon Pump & Tubing.

0948 - Mob to MW-34-90

BS 5-4-11

5-4-11 Rockwood - ESII.AIRS.II B.S. ②

0953 - MW-34-90 Set pump depth @
32'. Flow Rate = ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1006	6.55	0.111	-5.0	10.04	22.1	0.7	135
1009	6.49	0.116	-5.0	4.86	22.8	0.7	132
1012	6.49	0.115	460	5.20	22.3	0.7	131
1015	6.49	0.115	575	5.20	23.4	0.7	131
1018	6.49	0.115	382	5.31	23.8	0.7	130
1021	6.52	0.114	248	4.74	23.9	0.7	128

1025 - Collect Sample (Metals - EPA 6020A).

1028 - Dup-2 (Duplicate - MW-34-90).

1035 - Decon Pump & Tubing.

1100 - MW-9 Set pump depth @ 34'
Flow Rate = 285 ml/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1114	6.54	2099	48.2	4.35	22.1	0.6	136
1117	6.48	0.098	90.7	2.51	22.5	0.6	131
1120	6.50	0.097	113.0	5.79	22.5	0.6	130
1123	6.48	0.099	207.0	2.68	22.6	0.6	129
1126	6.47	0.099	201.0	2.49	22.8	0.6	129
1129	6.5						

1130 - Collect Sample (Metals - EPA 6020A)

1145 - Decon Pump.

BS 5-4-11

⑪ 5-4-11 Rockwood - ESII. AIRS. II B.S.
 1158 - MIN-33-90 Set pump @ 32.5'
 Flow Rate = 250 mL/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1209	6.50	0.098	746.0	5.84	25.1	0.6	129
1212	6.48	0.097	-5.0	4.77	25.5	0.6	125
1215	6.51	0.098	-5.0	5.49	26.0	0.6	125
1218	6.49	0.098	943.0	4.82	26.6	0.6	125

1225 - Collect Sample (Metals - EPA 6020A)

1235 - Decon Pump.

1300 - MIN-7 Set pump @ 34.5'
 Flow Rate = 285 mL/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1310	6.45	0.107	78.2	5.82	24.6	0.7	131
1313	6.36	0.106	57.5	2.94	26.0	0.7	129
1316	6.36	0.106	43.4	2.76	28.5	0.7	129
1319	6.36	0.105	35.8	2.62	30.0	0.7	128
1322	6.36	0.106	32.2	2.66	30.6	0.7	128

1328 - Collect Sample (Metals - EPA 6020A)

1340 - Decon Pump.

~~BS~~ 5-4-11

5-4-11 Rockwood - ESII. AIRS. II B.S. ⑫
 1400 - MIN-29-90 Set pump @ 29.3'
 Flow Rate = 255 mL/min.

Time	pH	Cond	TURB	DO	TEMP	TDS	ORP
1411	6.34	0.099	-5.0	4.98	27.0	0.6	123
1414	6.40						
1417	BS						
1420	BS						

1415 - Well ~~was~~ purged dry. No Sample collected.

1440 - Decon Pump + Equipment.

1500 - Fill out COC's. (DHL ANALYTICAL)

COC #'s:

North Property - 50303

Central Property - 50304

- Onsite waste: 4 drums

1 - Drum used this event.

1 - Drum empty

2 - Unknown content.

1530 - Finish installing new locks. (Combo is 3272)

1600 - Depart site. Go to DHL Lab and deliver samples.

~~BS~~ 5-4-11

8-2-11

- ② Rockwool Industries - Belton, TX
B. Shirley, B. Gamblin - ESII, A/RS. II
- 0830 - Arrive on site. (B. Shirley)
- 0840 - Sunbelt & B. Gamblin, Les Hallbauer (City, Belton) arrive on site.
- 0900 - Conduct H+S meeting. Attendees: Bud Shirley, Billy Gamblin, Casey Padgett, Francisco Chavez, Jose Gonzalez, Juan Hernandez.
- 0910 - Billy & I conduct a site survey to determine which well pads will get bollards installed.
- 0940 - Billy & I determine that there are 8 well pads on the Central Property that need bollards installed.
- 1000 - We show the Sunbelt crew the areas/wells that need brush cleared, & bollards installed. Also show them the culverts, ruts & drainage feature that needs cleaning, filling & rocks added respectively on the North Property.

BS 8-2-11

8-2-11

(21)

- Rockwool Industries - Belton, TX
B. Shirley, W. Gamblin - ESII, A/RS. II
- 1045 - Casey w/ Sunbelt departs site. Sunbelt begins to drill holes for bollard installation @ MW-27-90 (see photos)
- 1145 Two truck loads of rock and caliche (mixed) arrive on-site. Pope Materials - Georgetown.
- 1200 Two trucks dump their load of rock on the North Property drainage swale and depart site.
- 1215 Sunbelt crew is attempting to use vac trailer to clean out boreholes. Not working well - clogging.
- 1220 OBS PA off-site for lunch.
- 1320 - Return from site lunch. Sunbelt continues work drilling holes for bollards @ MW-16.
- 1350 - Complete drilling holes for bollards @ MW-16. Mob to MW-24-90

BS 8-2-11

8-2-11
(22) Rockwool Industries - Belton, TX
B. Shirley, W. Gamblin - ESII AIRS. II

and begin drilling holes (4)
around well pad for bollards.

1400 Third load of rock
is delivered with little
fines. All 3" Rock.

1430 Sunbelt crew completes
Augering holes. MW-
30-90.

1435 Sunbelt crew at
MW-34-90 begin to
drill post holes.

1500 - Mob to MW-33-90 and begin
drilling holes for bollards. Depth
is 2 feet.

1525 - Complete hole @ MW-33-90
Mob to ~~MW-29-90~~
MW-29-90. Begin
drilling holes (4) for
bollards. Depth is 2 feet.

1500 - W. Gamblin departs
Site.

BS 8-2-11

8-2-11
Rockwool Industries - Belton, TX
B. Shirley - ESII AIRS. II (23)

1535 - Complete drilling holes @
MW-29-90. Mob to MW-28-90.
Begin drilling holes (4) for
bollards around well pad.
Depth is 2 feet.

1630 - Complete holes @ MW-28-90.
~~Mob back to MW-27-90.~~
Begin storing equipment inside
one of the on site buildings
(old Brick Plant). Sunbelt
will begin to install bollards
+ concrete in the morning.

1715 - Sunbelt + I depart site.
Lock the gate on FM 93.

BS 8-2-11

8-3-11
(24) Rockwool Industries - Belton, TX
B. Shirley - ES II. A.R.S. II

0700 - Arrive on site.

0707 - Sunbelt arrives on site. Conduct
Health & Safety Meeting.

Attendees: Bud Shirley, Francisco
Chavez, Jose A. Gonzalez, Juan
Hernandez.

0715 - Begin prepping equipment & supplies
to install bollards.

0745 - Begin installing bollards @
MW-30-90.

Jose Gonzalez (Sunbelt)
mobs skid loader to the
North Property & begins spreading
3" rock in the erosion eroded/
low places in the drainage
ditch going towards the Leon
River.

1000 - Complete spreading 3" rock
in drainage ditch.

Begin smoothing/leveling
cuts on the North Property.

1015 - Complete smoothing/leveling
cuts. Mob back to the
Central Property.

BS 8-3-11

8-3-11
(25) Rockwool Industries - Belton, TX
B. Shirley - ES II. A.R.S. II

1030 - Sunbelt has completed the
bollard installation @ well
locations MW-16, MW-24-90.

1045 - Depart site. Go to the
City of Belton equipment
facility to get more water
to continue installing bollards.
Also eat lunch. (1130-1200)

1200 - Return from lunch. Resume
installing bollards.

1220 - Complete installing concrete
around bollards @ MW-24-90

1245 - Mob to MW-34-90. Pour concrete
around bollards.

1330 - Complete MW-34-90. Mob to
MW-33-90. Begin pouring
concrete/installing bollards.

1430 - Complete MW-33-90. Mob to
MW-29-90. Begin pouring
concrete/installing bollards.

1530 - Complete bollard install @
MW-29-90. Mob to MW-28-90

BS 8-3-11

(26) 8-3-11
Rockwood Industries - Belton, TX
B. Shirley - ES 11. AIRS. 11

1630 - Complete bollard installation
on MW-28-90. Sunbelt
is out of sackcrete. Depart
site to go get more sackcrete

1730 - Return to site. Begin bollard
install on MW-27-90.

1830 - Complete bollard installation
on MW-27-90. Sunbelt
begins to move to each well
location ^{where} ~~that~~ bollards were
installed and plan off
bollards + add top cap
if needed. Angel (Taze) moves
over to the North Property
to clean out culverts.

1930 - Finish cleaning culverts on
North Property. Complete
cleaning bollards. Sunbelt
begins to load up their
equipment and trash.

2000 - Depart site. Lock gate.

B-S 8-3-11

(27)