



December 2, 2008

Mr. Leo Francendese  
On-Scene Coordinator  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW 11th Floor  
Atlanta, Georgia 30303

**Subject: Surface Water Sampling Letter Report  
Barite Hills Nevada Goldfields Site  
McCormick, McCormick County, South Carolina  
Contract No. EP-W-05-053  
Technical Direction Document (TDD) No.: TNA-05-003-0049**

Dear Mr. Francendese:

T N & Associates, Inc. (TN&A), Superfund Technical Assessment and Response Team (START), prepared this Letter Report detailing activities performed in support of the Barite Hills Nevada Goldfields site (the site) investigation under Contract Number (No.) EP-W-05-053, Technical Direction Document (TDD) No. TNA-05-003-0049. All activities and procedures were performed in accordance with the EPA Science and Ecosystems Support Division (SESD) Region 4 Field Branches Quality System and Technical Procedures dated November 2007, and the EPA-approved site-specific Quality Assurance Project Plan (QAPP).

Under this work assignment, START was tasked with conducting water sampling of the Main Pit lake (the lake) and Hawes Creek tributary (the creek). Two samples were collected from the lake and three samples were collected near seep locations along the creek. Water quality parameters were measured simultaneously to water sampling. The site location map with sample locations and a map of the creek pH changes are provided in Attachment A. Water quality parameters from November 2008 and a comparative table of potentially applicable standards can be found in Attachment B with corresponding graphs. Laboratory analytical data is in Attachment C and the HASP is Attachment D.

#### **Site Background**

The site is an abandoned pit mine located approximately 3 miles south of McCormick, McCormick County, South Carolina between US Highway (Hwy) 378 and US Hwy 221

on the northern side of Road 30. The site is located in a relatively remote area; there are no buildings, homes, or commercial buildings within 0.5 mile of the site boundary. The site is located along a topographic high ridge area forming the headwaters of Mineral Springs. The topography of the area consists of rolling hills with ridgelines at an elevation of about 500 feet above mean sea level (amsl). Within the site, the ridgeline comprising the site has a high point of about 510 feet amsl and an average elevation of approximately 480 feet amsl.

The Main Pit from the mining operations remains. When the mine was abandoned, the Main Pit flooded. The waste rock stockpiles previously surrounding the eastern and southeastern portions of the Main Pit were a source of acid rock drainage. The pit contains approximately 60 million gallons of water with an historical pH of 2 and a high dissolved metal content.

### **Field Investigation Activities**

On 11/19/08 and 11/21/08, START conducted surface water sampling. The investigation consisted of measuring water quality and collecting water samples from the lake on 11/19/08 and along the creek on 11/21/08. A Health and Safety Plan (HASP) was developed for the site prior to fieldwork activities.

START collected two samples from the lake and three samples from the creek (Figure 1). Water quality parameters were measured at each sample location (Table 1). The lake water column was measured every meter from the surface to the bottom. BHR-MPS-001 was collected one meter below the lake water surface and BHR-MPB-001 was collected one meter from the bottom of the lake using a Bacon Bomb. BHR-PIT-001, BHR-P2-005, and BHR-P3-005 were collected from pooled water along the creek at Seep 1, Seep 2, and Seep 3, respectively. Additional pH readings were taken between Seeps 2 and 3 (Figure 2). Lake samples were analyzed by Analytical Environmental Services, Inc. (AES) for dissolved target analyte list (TAL) metals, TAL metals, total organic carbon, pH, sulfate, and ferric/ferrous speciation. Creek samples were analyzed for pH, sulfate, and dissolved TAL metals. Aliquots sampled for dissolved TAL metals were filtered on-site using a 0.45 micron filter. Laboratory analytical reports are provided in Attachment C.

### **Conclusions**

Table 2 is an analytical comparison of the lake surface from June 2008 through November 2008 of potentially applicable standards including priority and non-priority pollutants ([http://www.epa.gov/waterscience/standards/wqslibrary/sc/sc\\_4\\_wqs.pdf](http://www.epa.gov/waterscience/standards/wqslibrary/sc/sc_4_wqs.pdf)). Graph 1 illustrates the lake surface dissolved metal concentrations overtime. Graph 2 is a close up of Graph 1 detailing lower concentrations. Table 3 is an analytical comparison of the lake bottom of potentially applicable standards. Table 4 is an analytical comparison of Seep 1, Seep 2, and Seep 3 overtime. Graph 3 compares seep concentrations for November 2008. Tables and graphs can be found in Attachment B.

Surface Water Sampling Letter Report

Barite Hills site

Page 3 of 3

If you have any questions or comments regarding this Letter Report or require any additional information, please contact me at (678) 355-5550 ext. 5710 or contact Russell Henderson, Project Manager, at ext. 5707.

Sincerely,

A handwritten signature in black ink, appearing to read "Dannena Bowman". The signature is fluid and cursive, with a large loop at the end.

Dannena Bowman

Junior Geologist

T N & Associates, Inc.

Superfund Technical Assessment and Response Team (START)

Enclosures

Attachment A – Figures

Attachment B – Tables & Graphs

Attachment C – Analytical Data

Attachment D – HASP

**ATTACHEMENT A**  
**FIGURES**

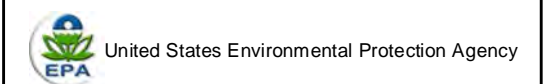
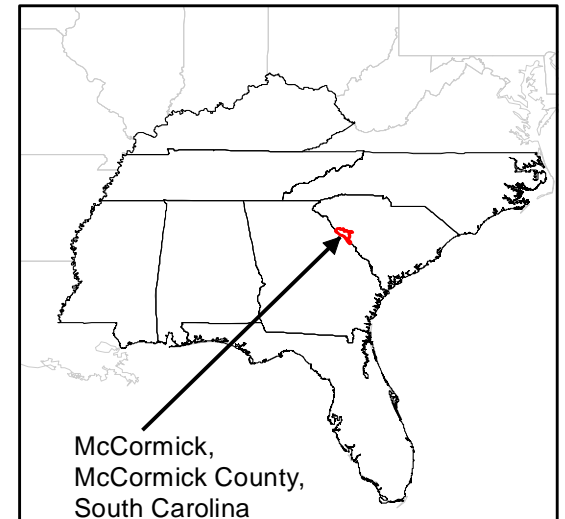




## Legend

- Sample Locations
- Hawes Creek

0 60 120 240  
Feet



**BARITE HILLS**  
**MCCORMICK, MCCORMICK**  
**COUNTY, SOUTH CAROLINA**  
**TDD No. TNA-05-003-0049**

**FIGURE 1**  
**SAMPLE LOCATIONS**

**TNTN & Associates, Inc.**  
**EPA Region 4 START**  
In association with Shaw E&I and Aerostar





## Legend

- pH Sample Locations

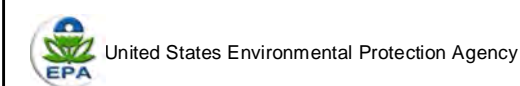
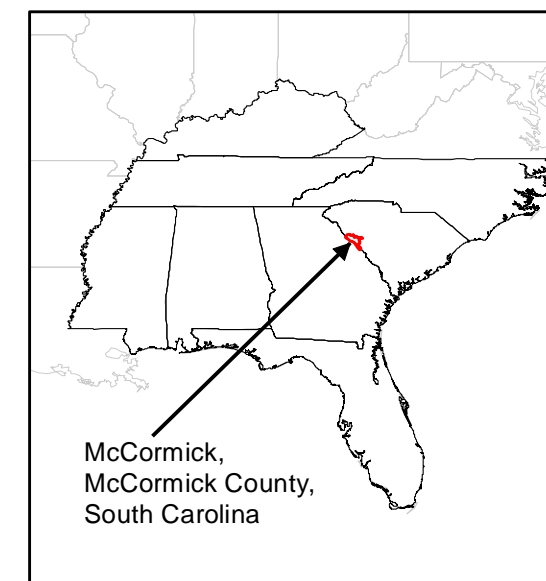
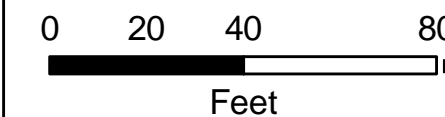
pH 3.0-3.9

pH 4.0-4.9

pH 5.0-5.9

pH 6.0-6.9

— Hawes Creek



**BARITE HILLS  
MCCORMICK, MCCORMICK  
COUNTY, SOUTH CAROLINA  
TDD No. TNA-05-003-0049**

**FIGURE 2  
HAWES CREEK pH LEVELS**

**TN** T N & Associates, Inc.  
**&A** EPA Region 4 START  
In association with Shaw E&I and Aerostar



**ATTACHMENT B**  
**TABLES & GRAPHS**

**Table 1**  
**Water Quality Parameters**

Nov. 19/21, 2008 YSI 5200

**Main Pit Lake**

depth (m)	pH	ORP (mV)	DO (mg/L)	Temp (°C)	Conductivity (mS/cm)
1	4.38	43.8	4.74	13.41	3.327
2	4.6	-74.5	0.9	14.83	3.607
3	4.73	-88.3	0.63	14.88	3.575
4	4.81	-94.2	0.6	14.87	3.559
5	4.76	-96.5	0.47	14.87	3.537
6	4.81	-99.4	0.43	14.87	3.534
7	4.82	-100.1	0.4	14.87	3.529
8	4.82	-102.8	0.38	14.81	3.527
9	4.72	-136.9	0.39	16.12	3.818
10	4.65	-154.9	0.3	16.71	4.009
11	4.8	-197	0.43	16.69	3.774
12	5.26	-196.8	0.4	16.66	3.684

**Creeks**

Location	pH	ORP (mV)	DO (mg/L)	Temp (°C)	Conductivity (mS/cm)
1					
2	3.05	452	3.1	7.91	3.568
3 SE	6.54	232	4.17	9.24	0.429
3 SW					



**Table 2**  
**Pit Lake Surface Potentially Applicable Standards Comparison**

	Human Health	SCDHEC WQC under R61-68a		Oct. 2007	Jun. 10, 2008	Jul. 30, 2008	Aug. 22, 2008	Nov. 19, 2008
	MCL	CMC	CCC	BHB-005	BHR-5-001	BRR-JR-LAKE		BHR-MPS-001
Potentially Applicable Standards (priority pollutants)				Pit Water Untreated (mg/L)	Pit water treated (Dissolved, mg/L)	Pit water treated (Dissolved, mg/L)	Pit water treated (Dissolved, mg/L)	Pit water treated (Dissolved, mg/L)
Antimony	0.006	NSA	NSA	0.02	0.006	0.2	0.2	BRL*
Arsenic	0.01	0.34	0.15	0.968	BRL†	BRL†	BRL†	BRL‡
Cadmium	0.005	0.008	0.0026	1.57	BRL#	BRL#	BRL#	BRL#
Chromium	0.1	0.57	0.074	0.141	BRL†	BRL†	BRL†	BRL†
Copper	1	0.057	0.039	287	BRL†	BRL†	BRL†	BRL†
Lead	0.015	0.32	0.005	0.161	BRL†	BRL†	BRL†	0.0353
Nickel	0.61	1.071	0.167	0.404	0.163	BRL*	BRL*	BRL*
Selenium	0.05	NSA	0.005	0.23	0.022	0.028	0.01	BRL*
Zinc	5	0.339	0.339	40.2	1.44	BRL*	BRL*	0.118
Potentially Applicable Standards (non-priority pollutants)								
Aluminum	0.2	0.75	0.087	224	0.347	BRL§	BRL§	0.257
Iron	0.3		1	1150	309	322	287	169
Manganese	0.05-0.1			13.6	10.6	11	11.7	9.33

**Notes:**

SCDHEC - South Carolina Department of Health and Environmental Control

a - South Carolina Regulation 61-68, Water Classifications and Standards,  
adopted June 2004 and adjusted for water hardness of 400 mg/L.

MCL - Maximum contaminant level

CMC - Criterion maximum concentration

CCC - Criterion continuous concentration

mg/L - Milligrams per liter

NSA - Standard not available

BRL - Below reporting limit

\* - Reporting limit 0.02

† - Reporting limit 0.01

‡ - Reporting limit 0.05

# - Reporting limit 0.005

§ - Reporting limit 0.2

**Yellow** - Exceeds one criteria (Human Health Standard or SCDHEC WQC)

**Red** - Exceeds all criteria (both Human Health Standard and SCDHEC WQC)

**Table 3**  
**Pit Lake Bottom Potentially Applicable Standards Comparison**

	Human Health	SCDHEC WQC under R61-68		Oct. 2007	Nov. 19, 2008
	MCL	CMC	CCC	BHB-005	BHR-MPB-001
Potentially Applicable Standards (priority pollutants)				Pit Water Untreated (mg/L)	Pit water treated (Dissolved, mg/L)
Antimony	0.006	NSA	NSA	0.02	BRL*
Arsenic	0.01	0.34	0.15	0.968	BRL‡
Cadmium	0.005	0.008	0.0026	1.57	BRL#
Chromium	0.1	0.57	0.074	0.141	BRL†
Copper	1	0.057	0.039	287	BRL†
Lead	0.015	0.32	0.005	0.161	0.0419
Nickel	0.61	1.071	0.167	0.404	BRL*
Selenium	0.05	NSA	0.005	0.23	0.0279
Zinc	5	0.339	0.339	40.2	0.0984
Potentially Applicable Standards (non-priority pollutants)					
Aluminum	0.2	0.75	0.087	224	0.293
Iron	0.3		1	1150	210
Manganese	0.05-0.1			13.6	9.82

**Notes:**

- SCDHEC - South Carolina Department of Health and Environmental Control  
a - South Carolina Regulation 61-68, Water Classifications and Standards,  
adopted June 2004 and adjusted for water hardness of 400 mg/L.  
MCL - Maximum contaminant level  
CMC - Criterion maximum concentration  
CCC - Criterion continuous concentration  
mg/L - Milligrams per liter  
NSA - Standard not available  
BRL - Below reporting limit  
\* - Reporting limit 0.02  
† - Reporting limit 0.01  
‡ - Reporting limit 0.05  
# - Reporting limit 0.005  
§ - Reporting limit 0.2  
Yellow - Exceeds one criteria (Human Health Standard or SCDHEC WQC)  
Red - Exceeds all criteria (both Human Health Standard and SCDHEC WQC)



**Table 4**  
**Creek Potentially Applicable Standards Comparison**

<b>Seep 1</b>	<b>Human Health</b>	<b>SCDHEC WQC under R61-68</b>		<b>Bucket #2</b>	<b>Bucket #2</b>	<b>Nov. 19, 2008</b>
	<b>MCL</b>	<b>CMC</b>	<b>CCC</b>	<b>Jul. 30, 2008</b>	<b>Aug. 22, 2008</b>	<b>BHR-PIT-001</b>
<b>Potentially Applicable Standards (priority pollutants)</b>						
Antimony	0.006	NSA	NSA	NA	NA	BRL*
Arsenic	0.01	0.34	0.15	NA	NA	BRL†
Cadmium	0.005	0.008	0.0026	5.05	0.005	0.353
Chromium	0.1	0.57	0.074	NA	NA	0.0136
Copper	1	0.057	0.039	84.3	0.138	13.7
Lead	0.015	0.32	0.005	NA	NA	0.0432
Nickel	0.61	1.071	0.167	NA	NA	0.0851
Selenium	0.05	NSA	0.005	NA	NA	0.0286
Zinc	5	0.339	0.339	45.6	0.157	10.3
<b>Potentially Applicable Standards (non-priority pollutants)</b>						
Aluminum	0.2	0.75	0.087	NA	NA	36.4
Iron	0.3		1	1070	493	58.9
Manganese	0.05-0.1			23.6	6.93	13.4

<b>Seep 2</b>	<b>Human Health</b>	<b>SCDHEC WQC under R61-68</b>		<b>Bucket #2</b>	<b>Bucket #2</b>	<b>Nov. 21, 2008</b>
	<b>MCL</b>	<b>CMC</b>	<b>CCC</b>	<b>Jul. 30, 2008</b>	<b>Aug. 22, 2008</b>	<b>BHR-P2-005</b>
<b>Potentially Applicable Standards (priority pollutants)</b>						
Antimony	0.006	NSA	NSA	NA	NA	BRL*
Arsenic	0.01	0.34	0.15	NA	NA	BRL†
Cadmium	0.005	0.008	0.0026	5.05	0.005	0.894
Chromium	0.1	0.57	0.074	NA	NA	0.013
Copper	1	0.057	0.039	84.3	0.138	27.7
Lead	0.015	0.32	0.005	NA	NA	0.0323
Nickel	0.61	1.071	0.167	NA	NA	0.215
Selenium	0.05	NSA	0.005	NA	NA	0.0562
Zinc	5	0.339	0.339	45.6	0.157	31.2
<b>Potentially Applicable Standards (non-priority pollutants)</b>						
Aluminum	0.2	0.75	0.087	NA	NA	48.6
Iron	0.3		1	1070	493	171
Manganese	0.05-0.1			23.6	6.93	53.3

<b>Seep 3</b>	<b>Human Health</b>	<b>SCDHEC WQC under R61-68</b>		<b>Bucket #2</b>	<b>Bucket #2</b>	<b>Nov. 21, 2008</b>
	<b>MCL</b>	<b>CMC</b>	<b>CCC</b>	<b>Jul. 30, 2008</b>	<b>Aug. 22, 2008</b>	<b>BHR-P3-005</b>
<b>Potentially Applicable Standards (priority pollutants)</b>						
Antimony	0.006	NSA	NSA	NA	NA	BRL*
Arsenic	0.01	0.34	0.15	NA	NA	BRL†
Cadmium	0.005	0.008	0.0026	5.05	0.005	BRL#
Chromium	0.1	0.57	0.074	NA	NA	BRL†
Copper	1	0.057	0.039	84.3	0.138	0.0192
Lead	0.015	0.32	0.005	NA	NA	BRL†
Nickel	0.61	1.071	0.167	NA	NA	BRL*
Selenium	0.05	NSA	0.005	NA	NA	BRL*
Zinc	5	0.339	0.339	45.6	0.157	0.349
<b>Potentially Applicable Standards (non-priority pollutants)</b>						
Aluminum	0.2	0.75	0.087	NA	NA	BRL§
Iron	0.3		1	1070	493	0.172
Manganese	0.05-0.1			23.6	6.93	0.414

**Notes:**

SCDHEC - South Carolina Department of Health and Environmental Control  
a - South Carolina Regulation 61-68, Water Classifications and Standards,  
adopted June 2004 and adjusted for water hardness of 400 mg/L.

MCL - Maximum contaminant level

CMC - Criterion maximum concentration

CCC - Criterion continuous concentration

mg/L - Milligrams per liter

NSA - Standard not available

NA - Not analyzed

BRL - Below reporting limit

\* - Reporting limit 0.02

† - Reporting limit 0.01

‡ - Reporting limit 0.05

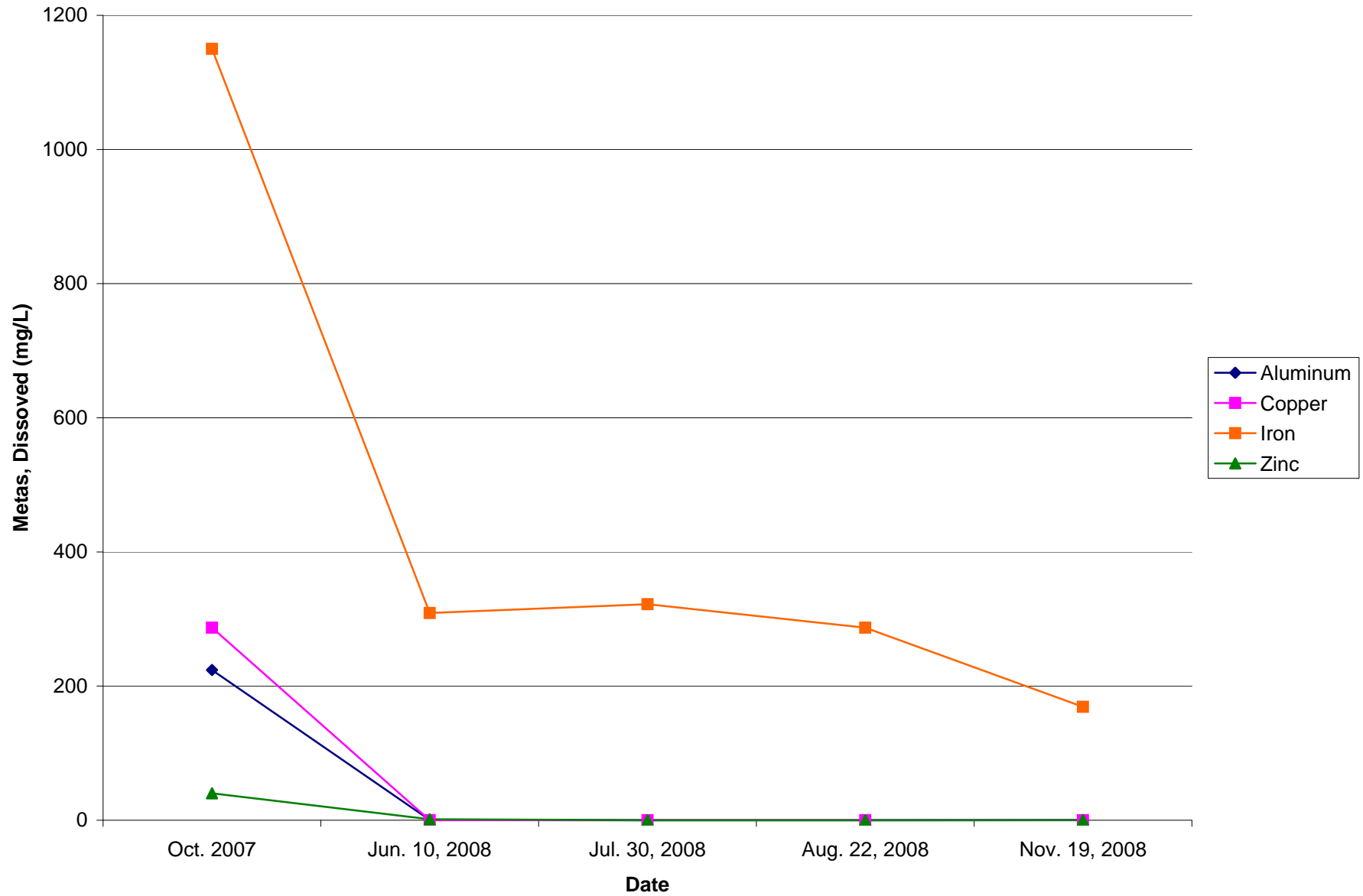
# - Reporting limit 0.005

§ - Reporting limit 0.2

**Yellow** - Exceeds one criteria (Human Health Standard or SCDHEC WQC)

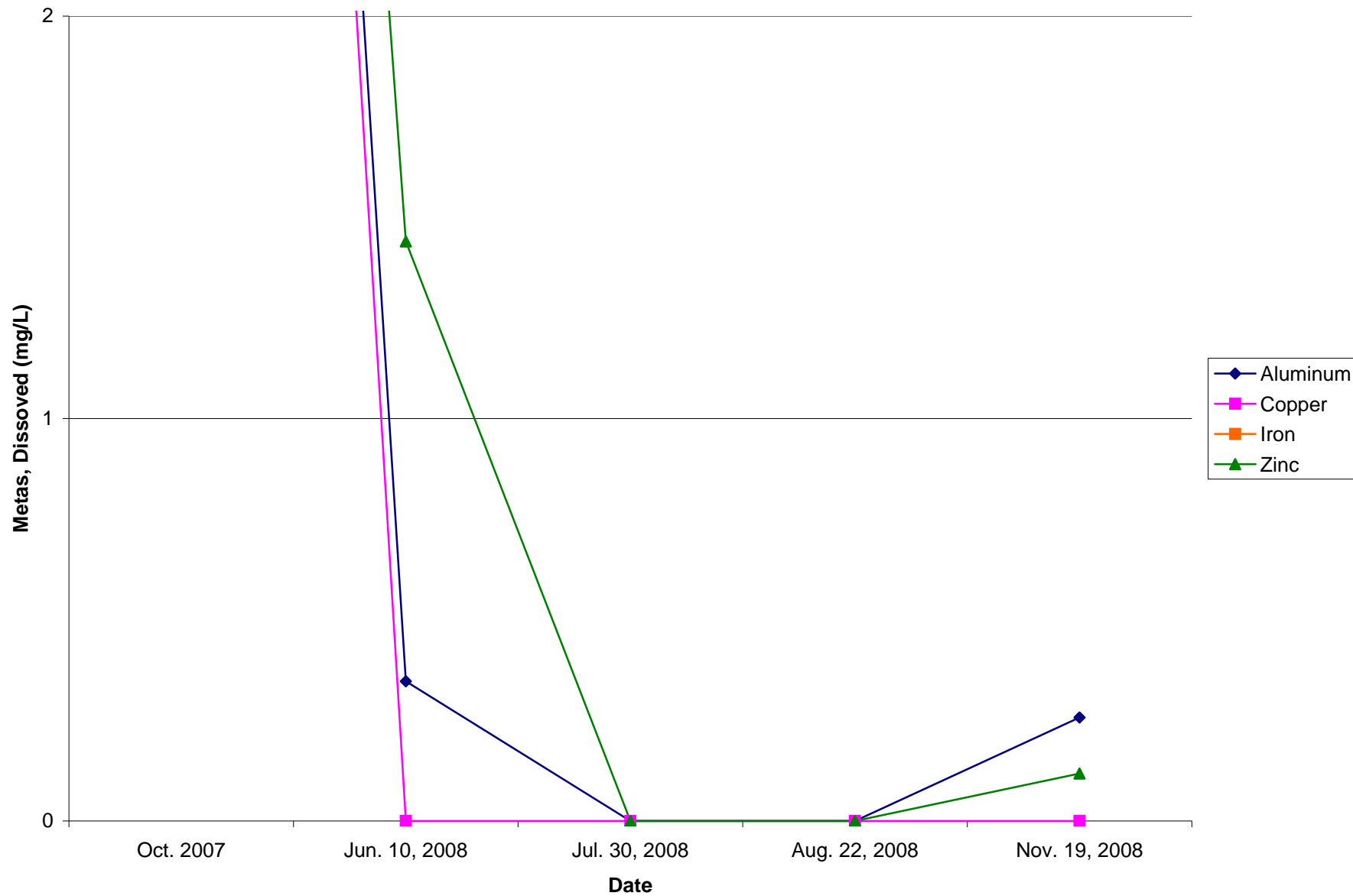
**Red** - Exceeds all criteria (both Human Health Standard and SCDHEC WQC)

**Graph 1**  
**Pit Lake Surface Comparison**

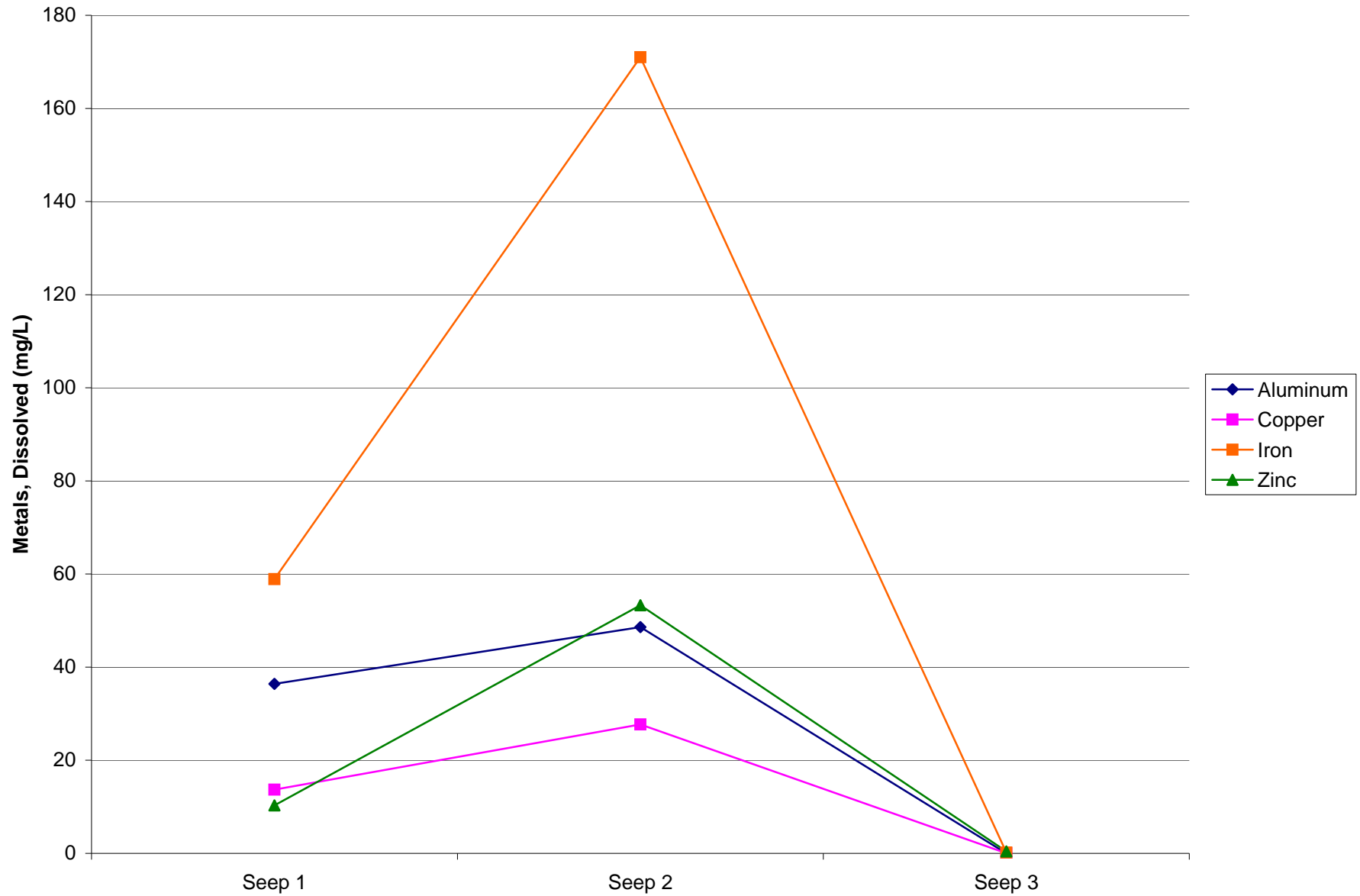




Graph 2  
Pit Lake Surface Comparison Detailed



**Graph 3**  
**Seep Comparison for 11/19/2008**





**ATTACHMENT C**  
**ANALYTICAL DATA**



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 26, 2008

Russell Henderson  
TN and Associates  
1220 Kennestone Circle  
Suite D  
Marietta, GA 30066

TEL: (678) 355-5550

FAX (678) 355-5707

RE: Barite Hills Removal

Dear Russell Henderson:

Order No.: 0811E05

Analytical Environmental Services, Inc. received 5 samples on 11/21/2008 2:50:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.

-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 28 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

James Forrest  
Project Manager

081605

## CHAIN-OF-CUSTODY RECORD

COC NUMBER:

PROJECT NAME:		PROJECT NUMBER:		LAB NAME AND CONTACT:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company):		RECIPIENT 1 (Address, Tel No., and Fax No.):	
Barite Hills Removal		TNA-05-001-0042				Russell Henderson / RHenderson@tnainc.com T N& Associates		1220 Kennestone Circle, Suite D, Marietta, GA 30066 678-355-5550 ext. 5703 / 770-528-0167	
PROJECT PHASE/SITE/TASK:		TO OR DO NUMBER:		LAB PO NUMBER:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company):		RECIPIENT 2 (Address, Tel No., and Fax No.):	
2005148-1116									
PROJECT CONTACT:		PROJECT TEL NO AND FAX NO:		LAB TEL NO AND FAX NO:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company):		RECIPIENT 3 (Address, Tel No., and Fax No.):	
Russell Henderson		678-355-5550 ext. 5707							

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	ANALYSES REQUIRED (Include Method Numbers)										SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)		
								Sulfate (EPA 300)	TOC (SW8000)	Dissolved Metals (6010)	Total Metals (6010)	Perchlorate Ion speciation	pH									
1	BHR-PIT-001	Water/Barite Hills	W	11/19/08	14:20	II	2	X		X					X					SW		
2	BHR-PIT-002	Water/Barite Hills	W	11/19/08	13:55	II	2	X		X					X					SW		
3	BHR-PIT-003	Water/Barite Hills	W	11/19/08	13:37	II	2	X		X					X					SW		
4	BHR-MPB-001	Water/Barite Hills	W	11/19/08	12:58	II	2	X	X	X	X	X								SW		
5	BHR-MPS-001	Water/Barite Hills	W	11/19/08	13:00	II	2	X	X	X	X	X								SW	needs to be filtered for dissolved metal analysis	
6																						
7																						
8																						
9																						
10																						

SAMPLER(S) AND COMPANY: (please print)		COURIER AND SHIPPING NUMBER:		SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):	
Jorge Sanchez - TNA		drop-off			

APPROVAL/NOTES		DATE		TIME		APPROVAL/NOTES		DATE		TIME	
Printed Name and Signature:		11/21/2008				Printed Name and Signature:		11/21/2008		2:50	
Leland Meadows						Theresa					
Printed Name and Signature:						Printed Name and Signature:					
Printed Name and Signature:						Printed Name and Signature:					

Distribution: | 1 Original - Laboratory (To be returned with Analytical Report); | 1 Copy 1 - Project File; | 1 Copy 2 - PMO

CL 10

001

TN &amp; ASSOC.

11/21/08 15:03 FAX 678 355 5545





Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client TWA Assoc

Work Order Number 0111605

Checklist completed by mlh 11/21/18  
Signature Date

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☒ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? (4°C±2)\* Yes ☒ No ☐

Cooler #1 3.1° Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☐ No ☒

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☒ Not Applicable ☐

Adjusted? mlh Checked by mlh

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

\* Samples do not have to comply with the given range for certain parameters.

\\Quality Assurance\\Checklists Procedures Sign-Off Templates\\Checklists\\Sample Receipt Checklists\\Sample\_Cooler\_Receipt\_Checklist

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab Order:** 0811E05

**CASE NARRATIVE**

**pH Analysis by Method 150.1:**

Samples for pH analysis by Method 150.1 were received and analyzed outside holding time requirement of "immediate or 15 minutes".

Samples were received outside of method designated holding time for ferrous/ferric iron. Proceed with analysis per Russell Henderson on 11/24/08.

**Metals Analysis by Method 6010B:**

Due to sample matrix, samples 0811E05-001A, 002C, 003C, 004C, and 005E required dilution for thallium during analysis resulting in elevated reporting limits.

**Ferrous Iron vs. Total Iron Values:**

Please note that the Ferrous Iron value for 0811E05-004D is higher than the Total Iron values reported. This is the result of normal differences between the two methods used, and the data as reported indicates that all iron present is Ferrous Iron. Due to holding times, samples cannot be reanalyzed.

## pH Adjustment Sheet

\* Number of Pellets when adding NaOH

**Analytical Environmental Services, Inc.**

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-001

**Client Sample ID:** BHR-PIT-001  
**Collection Date:** 11/19/2008 2:20:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	959	10.0		mg/L		10	Analyst: GAR 11/24/2008 6:03 PM
<b>METALS, DISSOLVED</b>							
			<b>E300</b>				
Aluminum	36.4	0.200		mg/L	106950	1	Analyst: DJ 11/24/2008 3:35 PM
Antimony	BRL	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
Arsenic	BRL	0.0500		mg/L	106950	1	11/24/2008 3:35 PM
Barium	0.0403	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
Beryllium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Cadmium	0.353	0.0050		mg/L	106950	1	11/24/2008 3:35 PM
Calcium	90.5	0.100		mg/L	106950	1	11/24/2008 3:35 PM
Chromium	0.0136	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Cobalt	0.488	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
Copper	13.7	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Iron	58.9	0.100		mg/L	106950	1	11/24/2008 3:35 PM
Lead	0.0432	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Magnesium	27.2	0.100		mg/L	106950	1	11/24/2008 3:35 PM
Manganese	13.4	0.0150		mg/L	106950	1	11/24/2008 3:35 PM
Nickel	0.0851	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
Potassium	3.49	0.500		mg/L	106950	1	11/24/2008 3:35 PM
Selenium	0.0286	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
Silver	BRL	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Sodium	21.6	1.00		mg/L	106950	1	11/24/2008 3:35 PM
Thallium	BRL	0.0400		mg/L	106950	2	11/25/2008 11:50 AM
Vanadium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:35 PM
Zinc	10.3	0.0200		mg/L	106950	1	11/24/2008 3:35 PM
<b>MERCURY, DISSOLVED</b>							
			<b>SW7470A</b>				
Mercury	BRL	0.00020		mg/L	106955	1	Analyst: MAW 11/24/2008 5:52 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
			<b>E150.1</b>				
pH	3.00	0.01	H	pH Units		1	Analyst: CG 11/21/2008 7:10 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated Method Blank
- > Greater than Result value

- E Estimated (Value above quantitation range)
- S Surrogate Recovery outside accepted recovery limits
- Narr See Case Narrative
- NC Not Confirmed
- < Less than Result value



# Analytical Environmental Services, Inc.

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-002

**Client Sample ID:** BHR-PIT-002  
**Collection Date:** 11/19/2008 1:55:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	1410	20.0	E300	mg/L		20	Analyst: GAR 11/24/2008 7:20 PM
<b>METALS, DISSOLVED</b>							
			SW6010B	(SAMP_FILT)			Analyst: DJ
Aluminum	34.0	0.200		mg/L	106950	1	11/24/2008 3:39 PM
Antimony	BRL	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
Arsenic	BRL	0.0500		mg/L	106950	1	11/24/2008 3:39 PM
Barium	0.0437	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
Beryllium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Cadmium	0.305	0.0050		mg/L	106950	1	11/24/2008 3:39 PM
Calcium	80.3	0.100		mg/L	106950	1	11/24/2008 3:39 PM
Chromium	0.0129	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Cobalt	0.431	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
Copper	12.3	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Iron	36.6	0.100		mg/L	106950	1	11/24/2008 3:39 PM
Lead	0.0353	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Magnesium	25.1	0.100		mg/L	106950	1	11/24/2008 3:39 PM
Manganese	12.2	0.0150		mg/L	106950	1	11/24/2008 3:39 PM
Nickel	0.0753	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
Potassium	3.06	0.500		mg/L	106950	1	11/24/2008 3:39 PM
Selenium	0.0276	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
Silver	BRL	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Sodium	19.6	1.00		mg/L	106950	1	11/24/2008 3:39 PM
Thallium	BRL	0.0400		mg/L	106950	2	11/25/2008 11:54 AM
Vanadium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:39 PM
Zinc	8.95	0.0200		mg/L	106950	1	11/24/2008 3:39 PM
<b>MERCURY, DISSOLVED</b>							
			SW7470A	(SW7470)			Analyst: MAW
Mercury	BRL	0.00020		mg/L	106955	1	11/24/2008 5:54 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
			E150.1				Analyst: CG
pH	3.13	0.01	H	pH Units		1	11/21/2008 7:15 PM

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
	BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
	H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
	N	Analyte not NELAC certified	NC	Not Confirmed
	B	Analyte detected in the associated Method Blank	<	Less than Result value
	>	Greater than Result value		

# Analytical Environmental Services, Inc.

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-003

**Client Sample ID:** BHR-PIT-003  
**Collection Date:** 11/19/2008 1:37:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	1330	20.0	E300	mg/L		20	Analyst: GAR 11/24/2008 6:32 PM
<b>METALS, DISSOLVED</b>							
			SW6010B	(SAMP_FILT)			Analyst: DJ
Aluminum	27.8	0.200		mg/L	106950	1	11/24/2008 3:42 PM
Antimony	BRL	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
Arsenic	BRL	0.0500		mg/L	106950	1	11/24/2008 3:42 PM
Barium	0.0493	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
Beryllium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Cadmium	0.249	0.0050		mg/L	106950	1	11/24/2008 3:42 PM
Calcium	66.1	0.100		mg/L	106950	1	11/24/2008 3:42 PM
Chromium	0.0107	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Cobalt	0.364	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
Copper	10.2	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Iron	23.7	0.100		mg/L	106950	1	11/24/2008 3:42 PM
Lead	0.0288	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Magnesium	21.0	0.100		mg/L	106950	1	11/24/2008 3:42 PM
Manganese	10.8	0.0150		mg/L	106950	1	11/24/2008 3:42 PM
Nickel	0.0620	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
Potassium	2.82	0.500		mg/L	106950	1	11/24/2008 3:42 PM
Selenium	0.0219	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
Silver	BRL	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Sodium	16.7	1.00		mg/L	106950	1	11/24/2008 3:42 PM
Thallium	BRL	0.0400		mg/L	106950	2	11/25/2008 11:58 AM
Vanadium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:42 PM
Zinc	7.22	0.0200		mg/L	106950	1	11/24/2008 3:42 PM
<b>MERCURY, DISSOLVED</b>							
Mercury	BRL	0.00020	SW7470A	(SW7470)	106955	1	Analyst: MAW 11/24/2008 5:36 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
pH	3.28	0.01	E150.1	H pH Units		1	Analyst: CG 11/21/2008 7:20 PM

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
	BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
	H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
	N	Analyte not NELAC certified	NC	Not Confirmed
	B	Analyte detected in the associated Method Blank	<	Less than Result value
	>	Greater than Result value		

# Analytical Environmental Services, Inc.

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-004

**Client Sample ID:** BHR-MPB-001  
**Collection Date:** 11/19/2008 12:58:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	2810	100	E300	mg/L		100	Analyst: GAR 11/25/2008 9:46 AM
<b>TOTAL ORGANIC CARBON (TOC)</b>							
Organic Carbon, Total	107	5.00	SW9060	mg/L		5	Analyst: GAR 11/25/2008 1:17 PM
<b>METALS, DISSOLVED</b>							
			SW6010B	(SAMP_FILT)			Analyst: DJ
Aluminum	0.293	0.200		mg/L	106950	1	11/24/2008 3:46 PM
Antimony	BRL	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
Arsenic	BRL	0.0500		mg/L	106950	1	11/24/2008 3:46 PM
Barium	0.0576	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
Beryllium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Cadmium	BRL	0.0050		mg/L	106950	1	11/24/2008 3:46 PM
Calcium	623	0.200		mg/L	106950	2	11/25/2008 12:03 PM
Chromium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Cobalt	0.0244	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
Copper	BRL	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Iron	210	0.500		mg/L	106950	5	11/25/2008 2:02 PM
Lead	0.0419	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Magnesium	76.4	0.100		mg/L	106950	1	11/24/2008 3:46 PM
Manganese	9.82	0.0150		mg/L	106950	1	11/24/2008 3:46 PM
Nickel	BRL	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
Potassium	43.0	0.500		mg/L	106950	1	11/24/2008 3:46 PM
Selenium	0.0279	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
Silver	BRL	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Sodium	81.7	1.00		mg/L	106950	1	11/24/2008 3:46 PM
Thallium	BRL	0.0400		mg/L	106950	2	11/25/2008 12:03 PM
Vanadium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:46 PM
Zinc	0.0984	0.0200		mg/L	106950	1	11/24/2008 3:46 PM
<b>METALS, TOTAL</b>							
			SW6010B	(SW3010A)			Analyst: DJ
Aluminum	0.923	0.200		mg/L	106949	1	11/25/2008 3:43 PM
Antimony	BRL	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
Arsenic	BRL	0.0500		mg/L	106949	1	11/25/2008 3:43 PM
Barium	0.0825	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
Beryllium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:43 PM
Cadmium	0.0169	0.0050		mg/L	106949	1	11/25/2008 3:43 PM
Calcium	822	0.500		mg/L	106949	5	11/25/2008 3:51 PM
Chromium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:43 PM
Cobalt	0.0427	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
Copper	0.0777	0.0100		mg/L	106949	1	11/25/2008 3:43 PM
Iron	289	0.500		mg/L	106949	5	11/25/2008 3:51 PM
Lead	0.0608	0.0100		mg/L	106949	1	11/25/2008 3:43 PM

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level	E Estimated (Value above quantitation range)
	BRL Below Reporting Limit	S Surrogate Recovery outside accepted recovery limits
	H Holding times for preparation or analysis exceeded	Narr See Case Narrative
	N Analyte not NELAC certified	NC Not Confirmed
	B Analyte detected in the associated Method Blank	< Less than Result value
	> Greater than Result value	

**Analytical Environmental Services, Inc.**

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-004

**Client Sample ID:** BHR-MPB-001  
**Collection Date:** 11/19/2008 12:58:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>METALS, TOTAL</b>							
			<b>SW6010B</b>		<b>(SW3010A)</b>		<b>Analyst: DJ</b>
Magnesium	100	0.100		mg/L	106949	1	11/25/2008 3:43 PM
Manganese	12.0	0.0150		mg/L	106949	1	11/25/2008 3:43 PM
Nickel	BRL	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
Potassium	55.0	0.500		mg/L	106949	1	11/25/2008 3:43 PM
Selenium	0.0306	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
Silver	BRL	0.0100		mg/L	106949	1	11/25/2008 3:43 PM
Sodium	109	1.00		mg/L	106949	1	11/25/2008 3:43 PM
Thallium	BRL	0.100		mg/L	106949	5	11/25/2008 3:51 PM
Vanadium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:43 PM
Zinc	0.314	0.0200		mg/L	106949	1	11/25/2008 3:43 PM
<b>MERCURY, DISSOLVED</b>							
			<b>SW7470A</b>		<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	106955	1	11/24/2008 5:48 PM
<b>MERCURY, TOTAL</b>							
			<b>SW7470A</b>		<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	106953	1	11/24/2008 5:11 PM
<b>FERROUS IRON</b>							
			<b>SM3500-FE-D</b>				<b>Analyst: CG</b>
Iron, as Ferric (Fe+3)	BRL	0.10	H	mg/L		1	11/21/2008 7:30 PM
Iron, as Ferrous (Fe+2)	304	20.0	H	mg/L		200	11/21/2008 7:30 PM

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
	BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
	H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
	N	Analyte not NELAC certified	NC	Not Confirmed
	B	Analyte detected in the associated Method Blank	<	Less than Result value
	>	Greater than Result value		



# Analytical Environmental Services, Inc.

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-005

**Client Sample ID:** BHR-MPS-001  
**Collection Date:** 11/19/2008 1:00:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	2750	100	E300	mg/L		100	Analyst: GAR 11/25/2008 10:01 AM
<b>TOTAL ORGANIC CARBON (TOC)</b>							
Organic Carbon, Total	91.6	1.00	SW9060	mg/L		1	Analyst: GAR 11/25/2008 11:30 AM
<b>METALS, DISSOLVED</b>							
			SW6010B	(SAMP_FILT)			Analyst: DJ
Aluminum	0.257	0.200		mg/L	106950	1	11/24/2008 3:50 PM
Antimony	BRL	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
Arsenic	BRL	0.0500		mg/L	106950	1	11/24/2008 3:50 PM
Barium	0.0565	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
Beryllium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Cadmium	BRL	0.0050		mg/L	106950	1	11/24/2008 3:50 PM
Calcium	600	0.200		mg/L	106950	2	11/25/2008 12:07 PM
Chromium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Cobalt	0.0366	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
Copper	BRL	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Iron	169	0.200		mg/L	106950	2	11/25/2008 12:07 PM
Lead	0.0353	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Magnesium	72.1	0.100		mg/L	106950	1	11/24/2008 3:50 PM
Manganese	9.33	0.0150		mg/L	106950	1	11/24/2008 3:50 PM
Nickel	BRL	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
Potassium	41.3	0.500		mg/L	106950	1	11/24/2008 3:50 PM
Selenium	BRL	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
Silver	BRL	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Sodium	81.8	1.00		mg/L	106950	1	11/24/2008 3:50 PM
Thallium	BRL	0.0400		mg/L	106950	2	11/25/2008 12:07 PM
Vanadium	BRL	0.0100		mg/L	106950	1	11/24/2008 3:50 PM
Zinc	0.118	0.0200		mg/L	106950	1	11/24/2008 3:50 PM
<b>METALS, TOTAL</b>							
			SW6010B	(SW3010A)			Analyst: DJ
Aluminum	0.686	0.200		mg/L	106949	1	11/25/2008 3:47 PM
Antimony	BRL	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
Arsenic	BRL	0.0500		mg/L	106949	1	11/25/2008 3:47 PM
Barium	0.0732	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
Beryllium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:47 PM
Cadmium	0.0068	0.0050		mg/L	106949	1	11/25/2008 3:47 PM
Calcium	688	0.500		mg/L	106949	5	11/25/2008 4:04 PM
Chromium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:47 PM
Cobalt	0.0472	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
Copper	0.0435	0.0100		mg/L	106949	1	11/25/2008 3:47 PM
Iron	228	0.500		mg/L	106949	5	11/25/2008 4:04 PM
Lead	0.0535	0.0100		mg/L	106949	1	11/25/2008 3:47 PM

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level	E Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr See Case Narrative
N	Analyte not NELAC certified	NC Not Confirmed
B	Analyte detected in the associated Method Blank	< Less than Result value
>	Greater than Result value	

**Analytical Environmental Services, Inc.**

Date: 26-Nov-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811E05-005

**Client Sample ID:** BHR-MPS-001  
**Collection Date:** 11/19/2008 1:00:00 PM  
**Matrix:** SURFACE WATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>METALS, TOTAL</b>							
			<b>SW6010B</b>		<b>(SW3010A)</b>		<b>Analyst: DJ</b>
Magnesium	95.8	0.100		mg/L	106949	1	11/25/2008 3:47 PM
Manganese	11.2	0.0150		mg/L	106949	1	11/25/2008 3:47 PM
Nickel	BRL	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
Potassium	51.8	0.500		mg/L	106949	1	11/25/2008 3:47 PM
Selenium	0.0294	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
Silver	BRL	0.0100		mg/L	106949	1	11/25/2008 3:47 PM
Sodium	103	1.00		mg/L	106949	1	11/25/2008 3:47 PM
Thallium	BRL	0.100		mg/L	106949	5	11/25/2008 4:04 PM
Vanadium	BRL	0.0100		mg/L	106949	1	11/25/2008 3:47 PM
Zinc	0.210	0.0200		mg/L	106949	1	11/25/2008 3:47 PM
<b>MERCURY, DISSOLVED</b>							
			<b>SW7470A</b>		<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	106955	1	11/24/2008 5:50 PM
<b>MERCURY, TOTAL</b>							
			<b>SW7470A</b>		<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	106953	1	11/24/2008 5:13 PM
<b>FERROUS IRON</b>							
			<b>SM3500-FE-D</b>				<b>Analyst: CG</b>
Iron, as Ferric (Fe+3)	37.2	0.10	H	mg/L		1	11/21/2008 7:30 PM
Iron, as Ferrous (Fe+2)	191	20.0	H	mg/L		200	11/21/2008 7:30 PM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
BRL Below Reporting Limit  
H Holding times for preparation or analysis exceeded  
N Analyte not NELAC certified  
B Analyte detected in the associated Method Blank  
> Greater than Result value

E Estimated (Value above quantitation range)  
S Surrogate Recovery outside accepted recovery limits  
Narr See Case Narrative  
NC Not Confirmed  
< Less than Result value

Lab Order: 0811E05  
 Client: TN and Associates  
 Project: Barite Hills Removal

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0811E05-001A	BHR-PIT-001	11/19/2008 2:20:00 PM	Surface Water	DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-001B				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-002A	BHR-PIT-002	11/19/2008 1:55:00 PM		Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-002B				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-002C				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-003A	BHR-PIT-003	11/19/2008 1:37:00 PM		Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-003B				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-003C				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-004A	BHR-MPB-001	11/19/2008 12:58:00 PM		TOTAL MERCURY		11/24/2008	11/24/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
0811E05-004B				Total Organic Carbon (TOC)			11/25/2008
				Total Organic Carbon (TOC)			11/25/2008
0811E05-004C				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				Inorganic Anions by IC			11/24/2008

Lab Order: 0811E05  
 Client: TN and Associates  
 Project: Barite Hills Removal

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0811E05-004C	BHR-MPB-001	11/19/2008 12:58:00 PM	Surface Water	Inorganic Anions by IC			11/25/2008
				Inorganic Anions by IC			11/24/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-004D				Ferrous Iron			11/21/2008
				Ferrous Iron			11/21/2008
0811E05-005A	BHR-MPS-001	11/19/2008 1:00:00 PM		TOTAL MERCURY		11/24/2008	11/24/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
0811E05-005B				Total Organic Carbon (TOC)			11/25/2008
0811E05-005C				Inorganic Anions by IC			11/25/2008
				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-005D				Ferrous Iron			11/21/2008
				Ferrous Iron			11/21/2008
0811E05-005E				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008



CLIENT: TN and Associates  
Work Order: 0811E05  
Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 150.1

Sample ID: LCS-R137654	SampType: LCS	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137654						
Client ID:	Batch ID: R137654	TestNo: E150.1		Analysis Date: 11/21/2008	SeqNo: 2818755						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

pH	7	0.0100	7	0	100	90	110	0	0		
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Sample ID: 0811D32-001ADUP	SampType: DUP	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137654						
Client ID:	Batch ID: R137654	TestNo: E150.1		Analysis Date: 11/21/2008	SeqNo: 2818766						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

pH	7.78	0.0100	0	0	0	0	0	7.74	0.515	10	H
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Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 300\_NO SHORTHOLD

Sample ID: MB-R137749	SampType: MBLK	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820844						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	BRL	1.00	0	0	0	0	0	0	0		
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Sample ID: LCS-R137749	SampType: LCS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820843						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.03	1.00	25	0.088	104	90	110	0	0		
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Sample ID: 0811E38-002AMS	SampType: MS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820847						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.47	1.00	25	0.2324	105	90	110	0	0		
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Sample ID: 0811E38-002AMSD	SampType: MSD	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820848						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.03	1.00	25	0.2324	103	90	110	26.47	1.70	20	
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<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_D

Sample ID: MB-106950	SampType: MBLK	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819898						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	BRL	0.200	0	0	0	0	0	0	0		
Antimony	BRL	0.0200	0	0	0	0	0	0	0		
Arsenic	BRL	0.0500	0	0	0	0	0	0	0		
Barium	BRL	0.0200	0	0	0	0	0	0	0		
Beryllium	BRL	0.0100	0	0	0	0	0	0	0		
Cadmium	BRL	0.00500	0	0	0	0	0	0	0		
Calcium	BRL	0.100	0	0	0	0	0	0	0		
Chromium	BRL	0.0100	0	0	0	0	0	0	0		
Cobalt	BRL	0.0200	0	0	0	0	0	0	0		
Copper	BRL	0.0100	0	0	0	0	0	0	0		
Iron	BRL	0.100	0	0	0	0	0	0	0		
Lead	BRL	0.0100	0	0	0	0	0	0	0		
Magnesium	BRL	0.100	0	0	0	0	0	0	0		
Manganese	BRL	0.0150	0	0	0	0	0	0	0		
Nickel	BRL	0.0200	0	0	0	0	0	0	0		
Potassium	BRL	0.500	0	0	0	0	0	0	0		
Selenium	BRL	0.0200	0	0	0	0	0	0	0		
Silver	BRL	0.0100	0	0	0	0	0	0	0		
Sodium	BRL	1.00	0	0	0	0	0	0	0		
Thallium	BRL	0.0200	0	0	0	0	0	0	0		
Vanadium	BRL	0.0100	0	0	0	0	0	0	0		
Zinc	BRL	0.0200	0	0	0	0	0	0	0		

Sample ID: LCS-106950	SampType: LCS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819890						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.377	0.200	10	0	93.8	80	120	0	0		
Antimony	0.9733	0.0200	1	0	97.3	80	120	0	0		

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_D

Sample ID: LCS-106950		SampType: LCS	TestCode: 6010B_TAL_		Units: mg/L	Prep Date: 11/24/2008		RunNo: 137707			
Client ID:		Batch ID: 106950	TestNo: SW6010B			Analysis Date: 11/24/2008		SeqNo: 2819890			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9574	0.0500	1	0	95.7	80	120	0	0		
Barium	0.9648	0.0200	1	0	96.5	80	120	0	0		
Beryllium	0.9684	0.0100	1	0	96.8	80	120	0	0		
Cadmium	0.9552	0.00500	1	0	95.5	80	120	0	0		
Calcium	9.073	0.100	10	0	90.7	80	120	0	0		
Chromium	0.9556	0.0100	1	0	95.6	80	120	0	0		
Cobalt	0.9605	0.0200	1	0	96	80	120	0	0		
Copper	0.9414	0.0100	1	0	94.1	80	120	0	0		
Iron	9.38	0.100	10	0.04026	93.4	80	120	0	0		
Lead	0.9779	0.0100	1	0	97.8	80	120	0	0		
Magnesium	9.705	0.100	10	0	97.1	80	120	0	0		
Manganese	0.9594	0.0150	1	0	95.9	80	120	0	0		
Nickel	0.964	0.0200	1	0	96.4	80	120	0	0		
Potassium	9.405	0.500	10	0	94.1	80	120	0	0		
Selenium	0.9899	0.0200	1	0	99	80	120	0	0		
Silver	0.09526	0.0100	0.1	0	95.3	80	120	0	0		
Sodium	9.25	1.00	10	0.06956	91.8	80	120	0	0		
Thallium	0.9642	0.0200	1	0	96.4	80	120	0	0		
Vanadium	0.9678	0.0100	1	0	96.8	80	120	0	0		
Zinc	0.9839	0.0200	1	0	98.4	80	120	0	0		

Sample ID: 0811E47-001DMS		SampType: MS	TestCode: 6010B_TAL_		Units: mg/L	Prep Date: 11/24/2008		RunNo: 137707			
Client ID:		Batch ID: 106950	TestNo: SW6010B			Analysis Date: 11/24/2008		SeqNo: 2819904			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.27	0.200	10	0.1064	91.6	75	125	0	0		
Antimony	0.9229	0.0200	1	0	92.3	75	125	0	0		
Arsenic	0.916	0.0500	1	0	91.6	75	125	0	0		
Barium	0.8972	0.0200	1	0.005578	89.2	75	125	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_D

Sample ID: 0811E47-001DMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819904						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.9306	0.0100	1	0	93.1	75	125	0	0		
Cadmium	0.9068	0.00500	1	0	90.7	75	125	0	0		
Calcium	13.59	0.100	10	4.732	88.6	75	125	0	0		
Chromium	0.9021	0.0100	1	0	90.2	75	125	0	0		
Cobalt	0.8912	0.0200	1	0	89.1	75	125	0	0		
Copper	0.9367	0.0100	1	0.003435	93.3	75	125	0	0		
Iron	9.704	0.100	10	0.8732	88.3	75	125	0	0		
Lead	0.889	0.0100	1	0	88.9	75	125	0	0		
Magnesium	11.35	0.100	10	2.386	89.6	75	125	0	0		
Manganese	0.9415	0.0150	1	0.04952	89.2	75	125	0	0		
Nickel	0.8869	0.0200	1	0	88.7	75	125	0	0		
Potassium	11.12	0.500	10	1.566	95.6	75	125	0	0		
Selenium	1.007	0.0200	1	0.04317	96.4	75	125	0	0		
Silver	0.09074	0.0100	0.1	0	90.7	75	125	0	0		
Sodium	389	1.00	10	407.6	-186	75	125	0	0		S
Thallium	0.8446	0.0200	1	0	84.5	75	125	0	0		
Vanadium	0.9314	0.0100	1	0	93.1	75	125	0	0		
Zinc	0.9483	0.0200	1	0.01492	93.3	75	125	0	0		

Sample ID: 0811E47-001DMSD	SampType: MSD	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819906						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.221	0.200	10	0.1064	91.2	75	125	9.27	0.522	20	
Antimony	0.917	0.0200	1	0	91.7	75	125	0.9229	0.638	20	
Arsenic	0.9105	0.0500	1	0	91.1	75	125	0.916	0.594	20	
Barium	0.9312	0.0200	1	0.005578	92.6	75	125	0.8972	3.72	20	
Beryllium	0.9351	0.0100	1	0	93.5	75	125	0.9306	0.483	20	
Cadmium	0.9402	0.00500	1	0	94	75	125	0.9068	3.61	20	

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



081605

## CHAIN-OF-CUSTODY RECORD

COC NUMBER:

PROJECT NAME:		PROJECT NUMBER:		LAB NAME AND CONTACT:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company):		RECIPIENT 1 (Address, Tel No., and Fax No.):	
Barite Hills Removal		TNA-05-001-0042				Russell Henderson / RHenderson@tnainc.com T N& Associates		1220 Kennestone Circle, Suite D, Marietta, GA 30066 678-355-5550 ext. 5703 / 770-528-0167	
PROJECT PHASE/SITE/TASK:		TO OR DO NUMBER:		LAB PO NUMBER:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company):		RECIPIENT 2 (Address, Tel No., and Fax No.):	
2005148-1116									
PROJECT CONTACT:		PROJECT TEL NO AND FAX NO:		LAB TEL NO AND FAX NO:		FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company):		RECIPIENT 3 (Address, Tel No., and Fax No.):	
Russell Henderson		678-355-5550 ext. 5707							

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on SOP)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on SOP)	TAT (calendar days)	ANALYSES REQUIRED (Include Method Numbers)										SAMPLE TYPE (see codes on SOP)	COMMENTS/ SCREENING READINGS	LAB ID (for lab's use)		
								Sulfate (EPA 300)	TOC (SW8000)	Dissolved Metals (6010)	Total Metals (6010)	Perchlorate Ion speciation	pH									
1	BHR-PIT-001	Water/Barite Hills	W	11/19/08	14:20	II	2	X		X					X					SW		
2	BHR-PIT-002	Water/Barite Hills	W	11/19/08	13:55	II	2	X		X					X					SW		
3	BHR-PIT-003	Water/Barite Hills	W	11/19/08	13:37	II	2	X		X					X					SW		
4	BHR-MPB-001	Water/Barite Hills	W	11/19/08	12:58	II	2	X	X	X	X	X								SW		
5	BHR-MPS-001	Water/Barite Hills	W	11/19/08	13:00	II	2	X	X	X	X	X								SW	needs to be filtered for dissolved metal analysis	
6																						
7																						
8																						
9																						
10																						

SAMPLER(S) AND COMPANY: (please print)		COURIER AND SHIPPING NUMBER:		SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):	
Jorge Sanchez - TNA		drop-off			

APPROVAL/NOTATION DT		DATE		TIME		APPROVAL/NOTATION DT		DATE		TIME	
Printed Name and Signature:		Printed Name and Signature:		Printed Name and Signature:		Printed Name and Signature:		Printed Name and Signature:		Printed Name and Signature:	
Leland Meadows		11/21/2008				11/21/08 2:50		11/21/2008			

Distribution: | 1 Original - Laboratory (To be returned with Analytical Report); | 1 Copy 1 - Project File; | 1 Copy 2 - PMO

CL 30

001

TN &amp; ASSOC.

11/21/08 15:03 FAX 678 355 5545



## pH Adjustment Sheet

\* Number of Pellets when adding NaOH

Lab Order: 0811E05  
 Client: TN and Associates  
 Project: Barite Hills Removal

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0811E05-001A	BHR-PIT-001	11/19/2008 2:20:00 PM	Surface Water	DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-001B				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-002A	BHR-PIT-002	11/19/2008 1:55:00 PM		Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-002B				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-002C				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-003A	BHR-PIT-003	11/19/2008 1:37:00 PM		Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-003B				Laboratory Hydrogen Ion (pH)			11/21/2008
0811E05-003C				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-004A	BHR-MPB-001	11/19/2008 12:58:00 PM		TOTAL MERCURY		11/24/2008	11/24/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
0811E05-004B				Total Organic Carbon (TOC)			11/25/2008
				Total Organic Carbon (TOC)			11/25/2008
0811E05-004C				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				Inorganic Anions by IC			11/24/2008

Lab Order: 0811E05  
 Client: TN and Associates  
 Project: Barite Hills Removal

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0811E05-004C	BHR-MPB-001	11/19/2008 12:58:00 PM	Surface Water	Inorganic Anions by IC			11/25/2008
				Inorganic Anions by IC			11/24/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008
0811E05-004D				Ferrous Iron			11/21/2008
				Ferrous Iron			11/21/2008
0811E05-005A	BHR-MPS-001	11/19/2008 1:00:00 PM		TOTAL MERCURY		11/24/2008	11/24/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
				TOTAL METALS BY ICP		11/24/2008	11/25/2008
0811E05-005B				Total Organic Carbon (TOC)			11/25/2008
0811E05-005C				Inorganic Anions by IC			11/25/2008
				Inorganic Anions by IC			11/24/2008
				Inorganic Anions by IC			11/24/2008
0811E05-005D				Ferrous Iron			11/21/2008
				Ferrous Iron			11/21/2008
0811E05-005E				DISSOLVED METALS BY ICP		11/24/2008	11/24/2008
				DISSOLVED METALS BY ICP		11/24/2008	11/25/2008
				MERCURY, DISSOLVED		11/24/2008	11/24/2008

CLIENT: TN and Associates  
Work Order: 0811E05  
Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 150.1

Sample ID: LCS-R137654	SampType: LCS	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137654						
Client ID:	Batch ID: R137654	TestNo: E150.1		Analysis Date: 11/21/2008	SeqNo: 2818755						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

pH	7	0.0100	7	0	100	90	110	0	0		
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Sample ID: 0811D32-001ADUP	SampType: DUP	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137654						
Client ID:	Batch ID: R137654	TestNo: E150.1		Analysis Date: 11/21/2008	SeqNo: 2818766						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

pH	7.78	0.0100	0	0	0	0	0	7.74	0.515	10	H
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Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 300\_NO SHORTHOLD

Sample ID: MB-R137749	SampType: MBLK	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820844						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	BRL	1.00	0	0	0	0	0	0	0		
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Sample ID: LCS-R137749	SampType: LCS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820843						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.03	1.00	25	0.088	104	90	110	0	0		
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Sample ID: 0811E38-002AMS	SampType: MS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820847						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.47	1.00	25	0.2324	105	90	110	0	0		
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Sample ID: 0811E38-002AMSD	SampType: MSD	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137749						
Client ID:	Batch ID: R137749	TestNo: E300		Analysis Date: 11/24/2008	SeqNo: 2820848						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sulfate	26.03	1.00	25	0.2324	103	90	110	26.47	1.70	20	
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<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: MB-106950		SampType: MBLK		TestCode: 6010B_TAL_ Units: mg/L		Prep Date: 11/24/2008			RunNo: 137707		
Client ID:		Batch ID: 106950		TestNo: SW6010B		Analysis Date: 11/24/2008			SeqNo: 2819898		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	BRL	0.200	0	0	0	0	0	0	0		
Antimony	BRL	0.0200	0	0	0	0	0	0	0		
Arsenic	BRL	0.0500	0	0	0	0	0	0	0		
Barium	BRL	0.0200	0	0	0	0	0	0	0		
Beryllium	BRL	0.0100	0	0	0	0	0	0	0		
Cadmium	BRL	0.00500	0	0	0	0	0	0	0		
Calcium	BRL	0.100	0	0	0	0	0	0	0		
Chromium	BRL	0.0100	0	0	0	0	0	0	0		
Cobalt	BRL	0.0200	0	0	0	0	0	0	0		
Copper	BRL	0.0100	0	0	0	0	0	0	0		
Iron	BRL	0.100	0	0	0	0	0	0	0		
Lead	BRL	0.0100	0	0	0	0	0	0	0		
Magnesium	BRL	0.100	0	0	0	0	0	0	0		
Manganese	BRL	0.0150	0	0	0	0	0	0	0		
Nickel	BRL	0.0200	0	0	0	0	0	0	0		
Potassium	BRL	0.500	0	0	0	0	0	0	0		
Selenium	BRL	0.0200	0	0	0	0	0	0	0		
Silver	BRL	0.0100	0	0	0	0	0	0	0		
Sodium	BRL	1.00	0	0	0	0	0	0	0		
Thallium	BRL	0.0200	0	0	0	0	0	0	0		
Vanadium	BRL	0.0100	0	0	0	0	0	0	0		
Zinc	BRL	0.0200	0	0	0	0	0	0	0		

Sample ID: LCS-106950	SampType: LCS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819890						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.377	0.200	10	0	93.8	80	120	0	0		
Antimony	0.9733	0.0200	1	0	97.3	80	120	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_D

Sample ID: LCS-106950		SampType: LCS		TestCode: 6010B_TAL_ Units: mg/L		Prep Date: 11/24/2008		RunNo: 137707			
Client ID:		Batch ID: 106950		TestNo: SW6010B		Analysis Date: 11/24/2008		SeqNo: 2819890			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9574	0.0500	1	0	95.7	80	120	0	0		
Barium	0.9648	0.0200	1	0	96.5	80	120	0	0		
Beryllium	0.9684	0.0100	1	0	96.8	80	120	0	0		
Cadmium	0.9552	0.00500	1	0	95.5	80	120	0	0		
Calcium	9.073	0.100	10	0	90.7	80	120	0	0		
Chromium	0.9556	0.0100	1	0	95.6	80	120	0	0		
Cobalt	0.9605	0.0200	1	0	96	80	120	0	0		
Copper	0.9414	0.0100	1	0	94.1	80	120	0	0		
Iron	9.38	0.100	10	0.04026	93.4	80	120	0	0		
Lead	0.9779	0.0100	1	0	97.8	80	120	0	0		
Magnesium	9.705	0.100	10	0	97.1	80	120	0	0		
Manganese	0.9594	0.0150	1	0	95.9	80	120	0	0		
Nickel	0.964	0.0200	1	0	96.4	80	120	0	0		
Potassium	9.405	0.500	10	0	94.1	80	120	0	0		
Selenium	0.9899	0.0200	1	0	99	80	120	0	0		
Silver	0.09526	0.0100	0.1	0	95.3	80	120	0	0		
Sodium	9.25	1.00	10	0.06956	91.8	80	120	0	0		
Thallium	0.9642	0.0200	1	0	96.4	80	120	0	0		
Vanadium	0.9678	0.0100	1	0	96.8	80	120	0	0		
Zinc	0.9839	0.0200	1	0	98.4	80	120	0	0		

Sample ID: 0811E47-001DMS		SampType: MS		TestCode: 6010B_TAL_ Units: mg/L		Prep Date: 11/24/2008		RunNo: 137707			
Client ID:		Batch ID: 106950		TestNo: SW6010B		Analysis Date: 11/24/2008		SeqNo: 2819904			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.27	0.200	10	0.1064	91.6	75	125	0	0		
Antimony	0.9229	0.0200	1	0	92.3	75	125	0	0		
Arsenic	0.916	0.0500	1	0	91.6	75	125	0	0		
Barium	0.8972	0.0200	1	0.005578	89.2	75	125	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_D

Sample ID: 0811E47-001DMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819904						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.9306	0.0100	1	0	93.1	75	125	0	0		
Cadmium	0.9068	0.00500	1	0	90.7	75	125	0	0		
Calcium	13.59	0.100	10	4.732	88.6	75	125	0	0		
Chromium	0.9021	0.0100	1	0	90.2	75	125	0	0		
Cobalt	0.8912	0.0200	1	0	89.1	75	125	0	0		
Copper	0.9367	0.0100	1	0.003435	93.3	75	125	0	0		
Iron	9.704	0.100	10	0.8732	88.3	75	125	0	0		
Lead	0.889	0.0100	1	0	88.9	75	125	0	0		
Magnesium	11.35	0.100	10	2.386	89.6	75	125	0	0		
Manganese	0.9415	0.0150	1	0.04952	89.2	75	125	0	0		
Nickel	0.8869	0.0200	1	0	88.7	75	125	0	0		
Potassium	11.12	0.500	10	1.566	95.6	75	125	0	0		
Selenium	1.007	0.0200	1	0.04317	96.4	75	125	0	0		
Silver	0.09074	0.0100	0.1	0	90.7	75	125	0	0		
Sodium	389	1.00	10	407.6	-186	75	125	0	0		S
Thallium	0.8446	0.0200	1	0	84.5	75	125	0	0		
Vanadium	0.9314	0.0100	1	0	93.1	75	125	0	0		
Zinc	0.9483	0.0200	1	0.01492	93.3	75	125	0	0		

Sample ID: 0811E47-001DMSD	SampType: MSD	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137707						
Client ID:	Batch ID: 106950	TestNo: SW6010B		Analysis Date: 11/24/2008	SeqNo: 2819906						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.221	0.200	10	0.1064	91.2	75	125	9.27	0.522	20	
Antimony	0.917	0.0200	1	0	91.7	75	125	0.9229	0.638	20	
Arsenic	0.9105	0.0500	1	0	91.1	75	125	0.916	0.594	20	
Barium	0.9312	0.0200	1	0.005578	92.6	75	125	0.8972	3.72	20	
Beryllium	0.9351	0.0100	1	0	93.5	75	125	0.9306	0.483	20	
Cadmium	0.9402	0.00500	1	0	94	75	125	0.9068	3.61	20	

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: 0811E47-001DMSD		SampType: MSD	TestCode: 6010B_TAL_		Units: mg/L	Prep Date: 11/24/2008		RunNo: 137707			
Client ID:		Batch ID: 106950	TestNo: SW6010B			Analysis Date: 11/24/2008		SeqNo: 2819906			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	13.27	0.100	10	4.732	85.4	75	125	13.59	2.38	20	
Chromium	0.9335	0.0100	1	0	93.3	75	125	0.9021	3.42	20	
Cobalt	0.9256	0.0200	1	0	92.6	75	125	0.8912	3.79	20	
Copper	0.9749	0.0100	1	0.003435	97.1	75	125	0.9367	3.99	20	
Iron	9.65	0.100	10	0.8732	87.8	75	125	9.704	0.565	20	
Lead	0.8847	0.0100	1	0	88.5	75	125	0.889	0.474	20	
Magnesium	11.27	0.100	10	2.386	88.8	75	125	11.35	0.711	20	
Manganese	0.9755	0.0150	1	0.04952	92.6	75	125	0.9415	3.55	20	
Nickel	0.9144	0.0200	1	0	91.4	75	125	0.8869	3.05	20	
Potassium	10.89	0.500	10	1.566	93.3	75	125	11.12	2.08	20	
Selenium	1.004	0.0200	1	0.04317	96.1	75	125	1.007	0.281	20	
Silver	0.09476	0.0100	0.1	0	94.8	75	125	0.09074	4.33	20	
Sodium	384.3	1.00	10	407.6	-234	75	125	389	1.23	20	S
Thallium	0.8452	0.0200	1	0	84.5	75	125	0.8446	0.0732	20	
Vanadium	0.9624	0.0100	1	0	96.2	75	125	0.9314	3.27	20	
Zinc	0.9783	0.0200	1	0.01492	96.3	75	125	0.9483	3.12	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_T

Sample ID: MB-106949		SampType: MBLK	TestCode: 6010B_TAL_ Units: mg/L			Prep Date: 11/24/2008		RunNo: 137746			
Client ID:		Batch ID: 106949	TestNo: SW6010B			Analysis Date: 11/25/2008		SeqNo: 2821666			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	BRL	0.200	0	0	0	0	0	0	0		
Antimony	BRL	0.0200	0	0	0	0	0	0	0		
Arsenic	BRL	0.0500	0	0	0	0	0	0	0		
Barium	BRL	0.0200	0	0	0	0	0	0	0		
Beryllium	BRL	0.0100	0	0	0	0	0	0	0		
Cadmium	BRL	0.00500	0	0	0	0	0	0	0		
Calcium	BRL	0.100	0	0	0	0	0	0	0		
Chromium	BRL	0.0100	0	0	0	0	0	0	0		
Cobalt	BRL	0.0200	0	0	0	0	0	0	0		
Copper	BRL	0.0100	0	0	0	0	0	0	0		
Iron	BRL	0.100	0	0	0	0	0	0	0		
Lead	BRL	0.0100	0	0	0	0	0	0	0		
Magnesium	BRL	0.100	0	0	0	0	0	0	0		
Manganese	BRL	0.0150	0	0	0	0	0	0	0		
Nickel	BRL	0.0200	0	0	0	0	0	0	0		
Potassium	BRL	0.500	0	0	0	0	0	0	0		
Selenium	BRL	0.0200	0	0	0	0	0	0	0		
Silver	BRL	0.0100	0	0	0	0	0	0	0		
Sodium	BRL	1.00	0	0	0	0	0	0	0		
Thallium	BRL	0.0200	0	0	0	0	0	0	0		
Vanadium	BRL	0.0100	0	0	0	0	0	0	0		
Zinc	BRL	0.0200	0	0	0	0	0	0	0		

Sample ID: LCS-106949		SampType: LCS	TestCode: 6010B_TAL_ Units: mg/L			Prep Date: 11/24/2008		RunNo: 137746			
Client ID:		Batch ID: 106949	TestNo: SW6010B			Analysis Date: 11/25/2008		SeqNo: 2821664			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10.92	0.200	10	0.02646	109	85	115	0	0		
Antimony	1.085	0.0200	1	0	108	85	115	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_T

Sample ID: LCS-106949	SampType: LCS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137746						
Client ID:	Batch ID: 106949	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2821664						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.098	0.0500	1	0	110	85	115	0	0		
Barium	1.063	0.0200	1	0.003469	106	85	115	0	0		
Beryllium	1.051	0.0100	1	0	105	85	115	0	0		
Cadmium	1.05	0.00500	1	0	105	85	115	0	0		
Calcium	11.07	0.100	10	0	111	85	115	0	0		
Chromium	1.06	0.0100	1	0	106	85	115	0	0		
Cobalt	1.065	0.0200	1	0	106	85	115	0	0		
Copper	1.039	0.0100	1	0.001814	104	85	115	0	0		
Iron	10.94	0.100	10	0	109	85	115	0	0		
Lead	1.082	0.0100	1	0	108	85	115	0	0		
Magnesium	10.91	0.100	10	0	109	85	115	0	0		
Manganese	1.057	0.0150	1	0	106	85	115	0	0		
Nickel	1.057	0.0200	1	0	106	85	115	0	0		
Potassium	11.11	0.500	10	0	111	85	115	0	0		
Selenium	1.088	0.0200	1	0	109	85	115	0	0		
Silver	0.1062	0.0100	0.1	0	106	85	115	0	0		
Sodium	11.26	1.00	10	0.04723	112	85	115	0	0		
Thallium	1.064	0.0200	1	0	106	85	115	0	0		
Vanadium	1.045	0.0100	1	0	105	85	115	0	0		
Zinc	1.07	0.0200	1	0	107	85	115	0	0		

Sample ID: 0811D37-008AMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137746						
Client ID:	Batch ID: 106949	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2821671						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10.94	0.200	10	0.02678	109	75	125	0	0		
Antimony	1.083	0.0200	1	0	108	75	125	0	0		
Arsenic	1.095	0.0500	1	0	110	75	125	0	0		
Barium	1.038	0.0200	1	0.001833	104	75	125	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_T

Sample ID: 0811D37-008AMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137746						
Client ID:	Batch ID: 106949	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2821671						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Beryllium	1.06	0.0100	1	0	106	75	125	0	0		
Cadmium	1.02	0.00500	1	0	102	75	125	0	0		
Calcium	11.45	0.100	10	0.0206	114	75	125	0	0		
Chromium	1.03	0.0100	1	0	103	75	125	0	0		
Cobalt	1.037	0.0200	1	0	104	75	125	0	0		
Copper	1.014	0.0100	1	0	101	75	125	0	0		
Iron	11.03	0.100	10	0	110	75	125	0	0		
Lead	1.082	0.0100	1	0	108	75	125	0	0		
Magnesium	11.11	0.100	10	0	111	75	125	0	0		
Manganese	1.031	0.0150	1	0	103	75	125	0	0		
Nickel	1.026	0.0200	1	0	103	75	125	0	0		
Potassium	11.18	0.500	10	0.03707	111	75	125	0	0		
Selenium	1.088	0.0200	1	0	109	75	125	0	0		
Silver	0.1033	0.0100	0.1	0	103	75	125	0	0		
Sodium	11.31	1.00	10	0.02468	113	75	125	0	0		
Thallium	1.067	0.0200	1	0	107	75	125	0	0		
Vanadium	1.015	0.0100	1	0	102	75	125	0	0		
Zinc	1.04	0.0200	1	0.00699	103	75	125	0	0		

Sample ID: 0811D37-008AMSD	SampType: MSD	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137746						
Client ID:	Batch ID: 106949	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2821680						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum	10.96	0.200	10	0.02678	109	75	125	10.94	0.187	20	
Antimony	1.085	0.0200	1	0	109	75	125	1.083	0.171	20	
Arsenic	1.098	0.0500	1	0	110	75	125	1.095	0.195	20	
Barium	1.058	0.0200	1	0.001833	106	75	125	1.038	1.90	20	
Beryllium	1.058	0.0100	1	0	106	75	125	1.06	0.213	20	
Cadmium	1.049	0.00500	1	0	105	75	125	1.02	2.73	20	

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811E05  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_T

Sample ID: 0811D37-008AMSD		SampType: MSD	TestCode: 6010B_TAL_		Units: mg/L	Prep Date: 11/24/2008		RunNo: 137746			
Client ID:		Batch ID: 106949	TestNo: SW6010B			Analysis Date: 11/25/2008		SeqNo: 2821680			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	11.25	0.100	10	0.0206	112	75	125	11.45	1.75	20	
Chromium	1.056	0.0100	1	0	106	75	125	1.03	2.47	20	
Cobalt	1.057	0.0200	1	0	106	75	125	1.037	1.94	20	
Copper	1.049	0.0100	1	0	105	75	125	1.014	3.43	20	
Iron	10.97	0.100	10	0	110	75	125	11.03	0.522	20	
Lead	1.081	0.0100	1	0	108	75	125	1.082	0.0890	20	
Magnesium	11.07	0.100	10	0	111	75	125	11.11	0.389	20	
Manganese	1.054	0.0150	1	0	105	75	125	1.031	2.19	20	
Nickel	1.053	0.0200	1	0	105	75	125	1.026	2.62	20	
Potassium	11.11	0.500	10	0.03707	111	75	125	11.18	0.646	20	
Selenium	1.086	0.0200	1	0	109	75	125	1.088	0.183	20	
Silver	0.1065	0.0100	0.1	0	106	75	125	0.1033	3.00	20	
Sodium	11.2	1.00	10	0.02468	112	75	125	11.31	1.03	20	
Thallium	1.071	0.0200	1	0	107	75	125	1.067	0.356	20	
Vanadium	1.044	0.0100	1	0	104	75	125	1.015	2.80	20	
Zinc	1.065	0.0200	1	0.00699	106	75	125	1.04	2.39	20	

<b>Qualifiers:</b>		<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL		Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J		Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim		Reporting Limit	S	Spike Recovery outside limits due to matrix		



**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7470A\_W\_D**

Sample ID: MB-106955	SampType: MBLK	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137704						
Client ID:	Batch ID: 106955	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2820101						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.000200	0	0	0	0	0	0	0		
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Sample ID: LCS-106955	SampType: LCS	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137704						
Client ID:	Batch ID: 106955	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2820102						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.005186	0.000200	0.005	0.00004134	103	85	115	0	0		
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Sample ID: 0811E05-003CMS	SampType: MS	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137704						
Client ID: BHR-PIT-003	Batch ID: 106955	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2820106						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.004893	0.000200	0.005	0.00005568	96.7	70	130	0	0		
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Sample ID: 0811E05-003CMSD	SampType: MSD	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137704						
Client ID: BHR-PIT-003	Batch ID: 106955	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2820107						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.00481	0.000200	0.005	0.00005568	95.1	70	130	0.004893	1.70	20	
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<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 7470A\_W\_T

Sample ID: MB-106953	SampType: MBLK	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137702						
Client ID:	Batch ID: 106953	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2819975						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	BRL	0.000200	0	0	0	0	0	0	0		
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Sample ID: LCS-106953	SampType: LCS	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137702						
Client ID:	Batch ID: 106953	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2819976						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.005014	0.000200	0.005	0.00003382	99.6	85	115	0	0		
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Sample ID: 0811C53-002BMS	SampType: MS	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137702						
Client ID:	Batch ID: 106953	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2819978						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.005401	0.000200	0.005	0.00004651	107	70	130	0	0		
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Sample ID: 0811C53-002BMSD	SampType: MSD	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/24/2008	RunNo: 137702						
Client ID:	Batch ID: 106953	TestNo: SW7470A		Analysis Date: 11/24/2008	SeqNo: 2819979						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury	0.005425	0.000200	0.005	0.00004651	108	70	130	0.005401	0.440	20	
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<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 9060\_W

Sample ID: MB-R137764	SampType: MBLK	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060		Analysis Date: 11/25/2008	SeqNo: 2821345						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Organic Carbon, Total	BRL	1.00	0	0	0	0	0	0	0	0	
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Sample ID: LCS-R137764	SampType: LCS	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060		Analysis Date: 11/25/2008	SeqNo: 2821338						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Organic Carbon, Total	22.77	1.00	25	0	91.1	90	110	0	0		
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Sample ID: 0811E05-004BMS	SampType: MS	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID: BHR-MPB-001	Batch ID: R137764	TestNo: SW9060		Analysis Date: 11/25/2008	SeqNo: 2821373						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Organic Carbon, Total	226.9	5.00	125	107.4	95.6	80	120	0	0		
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Sample ID: 0811E05-004BMSD	SampType: MSD	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID: BHR-MPB-001	Batch ID: R137764	TestNo: SW9060		Analysis Date: 11/25/2008	SeqNo: 2821374						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Organic Carbon, Total	222.7	5.00	125	107.4	92.2	80	120	226.9	1.87	20	
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<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811E05  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** SM3500-FE D

Sample ID: MB-R137748	SampType: MBLK	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 137748						
Client ID:	Batch ID: R137748	TestNo: SM3500-Fe-D		Analysis Date: 11/21/2008	SeqNo: 2820811						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) BRL 0.100

Sample ID: LCS-R137748	SampType: LCS	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 137748						
Client ID:	Batch ID: R137748	TestNo: SM3500-Fe-D		Analysis Date: 11/21/2008	SeqNo: 2820812						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 0.504 0.100 0.5 0 101 85 115 0 0

Sample ID: 0811E05-005DMS	SampType: MS	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 137748						
Client ID: BHR-MPS-001	Batch ID: R137748	TestNo: SM3500-Fe-D		Analysis Date: 11/21/2008	SeqNo: 2820819						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 289.2 20.0 100 190.7 98.5 80 120 0 0 H

Sample ID: 0811E05-005DMSD	SampType: MSD	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 137748						
Client ID: BHR-MPS-001	Batch ID: R137748	TestNo: SM3500-Fe-D		Analysis Date: 11/21/2008	SeqNo: 2820822						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 287.4 20.0 100 190.7 96.7 80 120 289.2 0.624 30 H

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 02, 2008

Russell Henderson  
TN and Associates  
1220 Kennestone Circle  
Suite D  
Marietta, GA 30066

TEL: (678) 355-5550

FAX: (678) 355-5707

RE: Barite Hills Removal

Order No.: 0811F37

Dear Russell Henderson:

Analytical Environmental Services, Inc. received 3 samples on 11/24/2008 4:45:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/08-06/30/09.

-AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 08/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains 24 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,





*for Mirzeta Karanic*  
James Forrest  
Project Manager

<sup>1</sup> COC NUMBER:

<sup>2</sup> PROJECT NAME:	<sup>3</sup> PROJECT NUMBER:	<sup>4</sup> LAB NAME AND CONTACT:	<sup>11</sup> FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company):	<sup>14</sup> RECIPIENT 1 (Address, Tel No. , and Fax No.):
<b>Barite Hills Removal</b>		<b>AES/James Forrest</b>		
<sup>5</sup> PROJECT PHASE/SITE/TASK:	<sup>6</sup> CTO OR DO NUMBER:	<sup>7</sup> LAB PO NUMBER:	<sup>12</sup> FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company):	<sup>15</sup> RECIPIENT 2 (Address, Tel No. , and Fax No.):
<b>2005148-1116</b>				
<sup>8</sup> PROJECT CONTACT:	<sup>9</sup> PROJECT TEL NO AND FAX NO:	<sup>10</sup> LAB TEL NO AND FAX NO:	<sup>13</sup> FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company):	<sup>16</sup> RECIPIENT 3 (Address, Tel No. , and Fax No.):
<b>Russell Henderson</b>				

[illegible]

<p><sup>29</sup> SAMPLER(S) AND COMPANY: (please print)</p> <p>Russell Henington TUNASS.</p>	<p><sup>30</sup> COURIER AND SHIPPING NUMBER:</p>	<p><sup>31</sup> SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT (for lab's use):</p>
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" RELINQUISHED BY		DATE	TIME	" RECEIVED BY		DATE	TIME
Printed Name and Signature:		11/24/08	16:01	Printed Name and Signature:		11/24/08 11/24/2008	16:01 16:00
Printed Name and Signature:		11/24/08	16:45	Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client TN and Associates

Work Order Number 0811F37

Checklist completed by M.D. 11/24/08  
Signature Date

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☒ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? (4°C±2)\* Yes ☒ No ☐

Cooler #1 4.2°C Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☐ No ☒

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☒ No ☒ Not Applicable ☐

Adjusted? M.D. Checked by M.D.

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

\* Samples do not have to comply with the given range for certain parameters.

\\Quality Assurance\\Checklists Procedures Sign-Off Templates\\Checklists\\Sample Receipt Checklists\\Sample\_Cooler\_Receipt\_Checklist



# pH Adjustment Sheet

\* Number of Pellets when adding NaOH

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab Order:** 0811F37

**CASE NARRATIVE**

**Sample Receiving Nonconformance:**

All samples for pH analysis by Method 150.1 were received and analyzed outside Method specified holding time of "immediate or 15 minutes".

Sample 0811F37-003D for Fer Iron was received and analyzed outside Method specified holding time of 24 hours.

At client request, sample 0811F37-004E, was split from sample 0811F37-004D for analysis after receipt at the laboratory. Chemical preservatives were added to meet method specified pH requirements for the requested test methods.

**Metals Analysis by Method 6010B:**

Due to sample matrix, samples 0811F37-001A and 003A required dilution for thallium during analysis resulting in elevated reporting limits.

**Ferrous Iron vs. Total Iron Values:**

Please note that the Ferrous Iron value for 081F37-003D is higher than the Total Iron values reported. This is the result of normal differences between the two methods used, and the data as reported indicates that all iron present is Ferrous Iron.

**Analytical Environmental Services, Inc.**

Date: 02-Dec-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811F37-001

**Client Sample ID:** BHR-P2-005  
**Collection Date:** 11/21/2008 10:34:00 AM  
**Matrix:** AQUEOUS

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	2430	100		mg/L		100	Analyst: GAR 11/28/2008 11:17 AM
<b>METALS, DISSOLVED</b>							
			E300				
Aluminum	48.6	0.200		mg/L	107037	1	Analyst: DJ 12/1/2008 12:45 PM
Antimony	BRL	0.0200		mg/L	107037	1	12/1/2008 12:45 PM
Arsenic	BRL	0.0500		mg/L	107037	1	12/1/2008 12:45 PM
Barium	BRL	0.0200		mg/L	107037	1	12/1/2008 12:45 PM
Beryllium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Cadmium	0.894	0.0050		mg/L	107037	1	12/1/2008 12:45 PM
Calcium	264	1.00		mg/L	107037	10	12/1/2008 1:10 PM
Chromium	0.0130	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Cobalt	2.13	0.0200		mg/L	107037	1	12/1/2008 12:45 PM
Copper	27.7	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Iron	171	1.00		mg/L	107037	10	12/1/2008 1:10 PM
Lead	0.0323	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Magnesium	64.8	0.100		mg/L	107037	1	12/1/2008 12:45 PM
Manganese	53.3	0.150		mg/L	107037	10	12/1/2008 1:10 PM
Nickel	0.215	0.0200		mg/L	107037	1	12/1/2008 12:45 PM
Potassium	6.12	0.500		mg/L	107037	1	12/1/2008 12:45 PM
Selenium	0.0562	0.0200		mg/L	107037	1	12/1/2008 12:45 PM
Silver	BRL	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Sodium	41.5	1.00		mg/L	107037	1	12/1/2008 12:45 PM
Thallium	BRL	0.100		mg/L	107037	5	12/2/2008 12:22 PM
Vanadium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:45 PM
Zinc	31.2	0.200		mg/L	107037	10	12/1/2008 1:10 PM
<b>MERCURY, DISSOLVED</b>							
			SW7470A				
Mercury	BRL	0.00020		mg/L	107110	1	Analyst: MAW 11/28/2008 2:17 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
			E150.1				
pH	3.01	0.01	H	pH Units		1	Analyst: CG 11/25/2008 7:30 AM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 B Analyte detected in the associated Method Blank  
 > Greater than Result value

E Estimated (Value above quantitation range)  
 S Surrogate Recovery outside accepted recovery limits  
 Narr See Case Narrative  
 NC Not Confirmed  
 < Less than Result value

**Analytical Environmental Services, Inc.**

Date: 02-Dec-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811F37-002

**Client Sample ID:** BHR-P3-005  
**Collection Date:** 11/21/2008 11:11:00 AM  
**Matrix:** AQUEOUS

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	147	10.0		mg/L		10	Analyst: GAR 11/28/2008 11:02 AM
<b>METALS, DISSOLVED</b>							
			<b>SW6010B</b>		<b>(SAMP_FILT)</b>		Analyst: DJ
Aluminum	BRL	0.200		mg/L	107037	1	12/1/2008 12:49 PM
Antimony	BRL	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Arsenic	BRL	0.0500		mg/L	107037	1	12/1/2008 12:49 PM
Barium	0.193	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Beryllium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Cadmium	BRL	0.0050		mg/L	107037	1	12/1/2008 12:49 PM
Calcium	28.1	0.100		mg/L	107037	1	12/1/2008 12:49 PM
Chromium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Cobalt	BRL	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Copper	0.0192	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Iron	0.172	0.100		mg/L	107037	1	12/1/2008 12:49 PM
Lead	BRL	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Magnesium	13.3	0.100		mg/L	107037	1	12/1/2008 12:49 PM
Manganese	0.414	0.0150		mg/L	107037	1	12/1/2008 12:49 PM
Nickel	BRL	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Potassium	1.21	0.500		mg/L	107037	1	12/1/2008 12:49 PM
Selenium	BRL	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Silver	BRL	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Sodium	11.9	1.00		mg/L	107037	1	12/1/2008 12:49 PM
Thallium	BRL	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
Vanadium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:49 PM
Zinc	0.349	0.0200		mg/L	107037	1	12/1/2008 12:49 PM
<b>MERCURY, DISSOLVED</b>							
			<b>SW7470A</b>		<b>(SW7470)</b>		Analyst: MAW
Mercury	BRL	0.00020		mg/L	107110	1	11/28/2008 2:19 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
			<b>E150.1</b>				Analyst: CG
pH	5.80	0.01	H	pH Units		1	11/25/2008 7:35 AM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 B Analyte detected in the associated Method Blank  
 > Greater than Result value

E Estimated (Value above quantitation range)  
 S Surrogate Recovery outside accepted recovery limits  
 Narr See Case Narrative  
 NC Not Confirmed  
 < Less than Result value

# Analytical Environmental Services, Inc.

Date: 02-Dec-08

CLIENT: TN and Associates  
Project: Barite Hills Removal  
Lab ID: 0811F37-003

Client Sample ID: BHR-MPS-007  
Collection Date: 11/21/2008 1:10:00 PM  
Matrix: AQUEOUS

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>INORGANIC ANIONS BY IC</b>							
Sulfate	2820	100		mg/L		100	Analyst: GAR 11/28/2008 11:32 AM
<b>TOTAL ORGANIC CARBON (TOC)</b>							
Organic Carbon, Total	107	5.00		mg/L		5	Analyst: GAR 11/25/2008 2:02 PM
<b>METALS, DISSOLVED</b>							
			SW6010B	(SAMP_FILT)			Analyst: DJ
Aluminum	0.233	0.200		mg/L	107037	1	12/1/2008 12:53 PM
Antimony	BRL	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Arsenic	BRL	0.0500		mg/L	107037	1	12/1/2008 12:53 PM
Barium	0.0673	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Beryllium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Cadmium	BRL	0.0050		mg/L	107037	1	12/1/2008 12:53 PM
Calcium	594	1.00		mg/L	107037	10	12/1/2008 1:17 PM
Chromium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Cobalt	0.0402	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Copper	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Iron	185	1.00		mg/L	107037	10	12/1/2008 1:17 PM
Lead	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Magnesium	79.1	0.100		mg/L	107037	1	12/1/2008 12:53 PM
Manganese	11.1	0.0150		mg/L	107037	1	12/1/2008 12:53 PM
Nickel	BRL	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Potassium	54.2	0.500		mg/L	107037	1	12/1/2008 12:53 PM
Selenium	BRL	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Silver	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Sodium	90.1	10.0		mg/L	107037	10	12/1/2008 1:17 PM
Thallium	BRL	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
Vanadium	BRL	0.0100		mg/L	107037	1	12/1/2008 12:53 PM
Zinc	0.102	0.0200		mg/L	107037	1	12/1/2008 12:53 PM
<b>METALS, TOTAL</b>							
			SW6010B	(SW3010A)			Analyst: TAA
Aluminum	0.746	0.200		mg/L	107030	1	11/25/2008 6:59 PM
Antimony	BRL	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
Arsenic	BRL	0.0500		mg/L	107030	1	11/25/2008 6:59 PM
Barium	0.0867	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
Beryllium	BRL	0.0100		mg/L	107030	1	11/25/2008 6:59 PM
Cadmium	0.0130	0.0050		mg/L	107030	1	11/25/2008 6:59 PM
Calcium	694	1.00		mg/L	107030	10	11/26/2008 11:41 AM
Chromium	BRL	0.0100		mg/L	107030	1	11/25/2008 6:59 PM
Cobalt	0.0628	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
Copper	0.0709	0.0100		mg/L	107030	1	11/25/2008 6:59 PM
Iron	261	1.00		mg/L	107030	10	11/26/2008 11:41 AM
Lead	BRL	0.0100		mg/L	107030	1	11/25/2008 6:59 PM

Qualifiers: \* Value exceeds Maximum Contaminant Level  
BRL Below Reporting Limit  
H Holding times for preparation or analysis exceeded  
N Analyte not NELAC certified  
B Analyte detected in the associated Method Blank  
> Greater than Result value

E Estimated (Value above quantitation range)  
S Surrogate Recovery outside accepted recovery limits  
Narr See Case Narrative  
NC Not Confirmed  
< Less than Result value

**Analytical Environmental Services, Inc.**

Date: 02-Dec-08

**CLIENT:** TN and Associates  
**Project:** Barite Hills Removal  
**Lab ID:** 0811F37-003

**Client Sample ID:** BHR-MPS-007  
**Collection Date:** 11/21/2008 1:10:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
<b>METALS, TOTAL</b>							
		<b>SW6010B</b>			<b>(SW3010A)</b>		<b>Analyst: TAA</b>
Magnesium	88.8	0.100		mg/L	107030	1	11/25/2008 6:59 PM
Manganese	12.4	0.0150		mg/L	107030	1	11/25/2008 6:59 PM
Nickel	BRL	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
Potassium	48.2	0.500		mg/L	107030	1	11/25/2008 6:59 PM
Selenium	BRL	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
Silver	BRL	0.0100		mg/L	107030	1	11/25/2008 6:59 PM
Sodium	95.1	5.00		mg/L	107030	5	11/26/2008 11:37 AM
Thallium	BRL	0.100		mg/L	107030	5	11/26/2008 11:37 AM
Vanadium	BRL	0.0100		mg/L	107030	1	11/25/2008 6:59 PM
Zinc	0.323	0.0200		mg/L	107030	1	11/25/2008 6:59 PM
<b>MERCURY, DISSOLVED</b>							
		<b>SW7470A</b>			<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	107110	1	11/28/2008 2:21 PM
<b>MERCURY, TOTAL</b>							
		<b>SW7470A</b>			<b>(SW7470)</b>		<b>Analyst: MAW</b>
Mercury	BRL	0.00020		mg/L	107109	1	11/28/2008 2:50 PM
<b>HYDROGEN ION (PH)(150.1/SM4500 H+ B)</b>							
		<b>E150.1</b>					<b>Analyst: CG</b>
pH	5.31	0.01	H	pH Units		1	11/25/2008 7:40 AM
<b>FERROUS IRON</b>							
		<b>SM3500-FE-D</b>					<b>Analyst: CG</b>
Iron, as Ferric (Fe+3)	BRL	0.10	H	mg/L		1	11/25/2008 10:00 AM
Iron, as Ferrous (Fe+2)	294	20.0	H	mg/L		200	11/25/2008 10:00 AM

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
	BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
	H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
	N	Analyte not NELAC certified	NC	Not Confirmed
	B	Analyte detected in the associated Method Blank	<	Less than Result value
	>	Greater than Result value		

Lab Order: 0811F37  
 Client: TN and Associates  
 Project: Barite Hills Removal

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0811F37-001A	BHR-P2-005	11/21/2008 10:34:00 AM	Aqueous	DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				DISSOLVED METALS BY ICP		11/25/2008	12/2/2008
				DISSOLVED METALS BY ICP		11/25/2008	12/2/2008
				MERCURY, DISSOLVED		11/28/2008	11/28/2008
0811F37-001B				Inorganic Anions by IC			11/28/2008
				Inorganic Anions by IC			11/25/2008
				Laboratory Hydrogen Ion (pH)			11/25/2008
0811F37-002A	BHR-P3-005	11/21/2008 11:11:00 AM		DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				MERCURY, DISSOLVED		11/28/2008	11/28/2008
0811F37-002B				Inorganic Anions by IC			11/25/2008
				Inorganic Anions by IC			11/28/2008
				Laboratory Hydrogen Ion (pH)			11/25/2008
0811F37-003A	BHR-MPS-007	11/21/2008 1:10:00 PM		TOTAL MERCURY		11/28/2008	11/28/2008
				TOTAL METALS BY ICP		11/25/2008	11/25/2008
				TOTAL METALS BY ICP		11/25/2008	11/26/2008
				TOTAL METALS BY ICP		11/25/2008	11/26/2008
0811F37-003B				DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				DISSOLVED METALS BY ICP		11/25/2008	12/1/2008
				MERCURY, DISSOLVED		11/28/2008	11/28/2008
0811F37-003C				Inorganic Anions by IC			11/28/2008
				Inorganic Anions by IC			11/25/2008
				Laboratory Hydrogen Ion (pH)			11/25/2008
0811F37-003D				Ferrous Iron			11/25/2008
				Ferrous Iron			11/25/2008
0811F37-003E				Total Organic Carbon (TOC)			11/25/2008
				Total Organic Carbon (TOC)			11/25/2008

CLIENT: TN and Associates  
Work Order: 0811F37  
Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 150.1

Sample ID: LCS-R137802	SampType: LCS	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137802						
Client ID:	Batch ID: R137802	TestNo: E150.1		Analysis Date: 11/24/2008	SeqNo: 2822360						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7	0.0100	7	0	100	90	110	0	0		

Sample ID: 0811E79-001ADUP	SampType: DUP	TestCode: 150.1	Units: pH Units	Prep Date:	RunNo: 137802						
Client ID:	Batch ID: R137802	TestNo: E150.1		Analysis Date: 11/24/2008	SeqNo: 2822372						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.87	0.0100	0	0	0	0	0	7.83	0.510	10	H

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 300\_NO SHORTHOLD

Sample ID: MB-R137946	SampType: MBLK	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137946						
Client ID:	Batch ID: R137946	TestNo: E300		Analysis Date: 11/25/2008	SeqNo: 2825730						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	BRL	1.00	0	0	0	0	0	0	0		

Sample ID: LCS-R137946	SampType: LCS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137946						
Client ID:	Batch ID: R137946	TestNo: E300		Analysis Date: 11/25/2008	SeqNo: 2825729						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	25.11	1.00	25	0	100	90	110	0	0		

Sample ID: 0811G27-003AMS	SampType: MS	TestCode: 300_NO SHO	Units: mg/L	Prep Date:	RunNo: 137946						
Client ID:	Batch ID: R137946	TestNo: E300		Analysis Date: 11/25/2008	SeqNo: 2825732						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	32.45	1.00	25	5.688	107	90	110	0	0		

Sample ID: 0811F38-009DMS		SampType: MS	TestCode: 300_NO SHO		Units: mg/L	Prep Date:			RunNo: 137946		
Client ID:		Batch ID: R137946	TestNo: E300			Analysis Date: 11/26/2008			SeqNo: 2825748		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	37.84	1.00	25	12.79	100	90	110	0	0		

Sample ID: 0811G27-003AMSD		SampType: MSD		TestCode: 300_NO SHO		Units: mg/L		Prep Date:		RunNo: 137946	
Client ID:		Batch ID: R137946		TestNo: E300				Analysis Date: 11/25/2008		SeqNo: 2825733	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	32.18	1.00	25	5.688	106	90	110	32.45	0.838	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: MB-107037		SampType: MBLK		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 138015	
Client ID:		Batch ID: 107037		TestNo: SW6010B		Analysis Date: 12/1/2008		SeqNo: 2827116			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	BRL	0.200	0	0	0	0	0	0	0		
Antimony	BRL	0.0200	0	0	0	0	0	0	0		
Arsenic	BRL	0.0500	0	0	0	0	0	0	0		
Barium	BRL	0.0200	0	0	0	0	0	0	0		
Beryllium	BRL	0.0100	0	0	0	0	0	0	0		
Cadmium	BRL	0.00500	0	0	0	0	0	0	0		
Calcium	BRL	0.100	0	0	0	0	0	0	0		
Chromium	BRL	0.0100	0	0	0	0	0	0	0		
Cobalt	BRL	0.0200	0	0	0	0	0	0	0		
Copper	BRL	0.0100	0	0	0	0	0	0	0		
Iron	BRL	0.100	0	0	0	0	0	0	0		
Lead	BRL	0.0100	0	0	0	0	0	0	0		
Magnesium	BRL	0.100	0	0	0	0	0	0	0		
Manganese	BRL	0.0150	0	0	0	0	0	0	0		
Nickel	BRL	0.0200	0	0	0	0	0	0	0		
Potassium	BRL	0.500	0	0	0	0	0	0	0		
Selenium	BRL	0.0200	0	0	0	0	0	0	0		
Silver	BRL	0.0100	0	0	0	0	0	0	0		
Sodium	BRL	1.00	0	0	0	0	0	0	0		
Thallium	BRL	0.0200	0	0	0	0	0	0	0		
Vanadium	BRL	0.0100	0	0	0	0	0	0	0		
Zinc	BRL	0.0200	0	0	0	0	0	0	0		

Sample ID: LCS-107037		SampType: LCS		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 138015	
Client ID:		Batch ID: 107037		TestNo: SW6010B		Analysis Date: 12/1/2008		SeqNo: 2827113			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.495	0.200	10	0	94.9	80	120	0	0		
Antimony	0.9519	0.0200	1	0	95.2	80	120	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: LCS-107037		SampType: LCS		TestCode: 6010B_TAL_ Units: mg/L		Prep Date: 11/25/2008		RunNo: 138015			
Client ID:		Batch ID: 107037		TestNo: SW6010B		Analysis Date: 12/1/2008		SeqNo: 2827113			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9499	0.0500	1	0	95	80	120	0	0		
Barium	0.9524	0.0200	1	0	95.2	80	120	0	0		
Beryllium	0.948	0.0100	1	0	94.8	80	120	0	0		
Cadmium	0.9531	0.00500	1	0	95.3	80	120	0	0		
Calcium	9.482	0.100	10	0	94.8	80	120	0	0		
Chromium	0.9749	0.0100	1	0	97.5	80	120	0	0		
Cobalt	0.946	0.0200	1	0	94.6	80	120	0	0		
Copper	0.9413	0.0100	1	0	94.1	80	120	0	0		
Iron	9.505	0.100	10	0	95	80	120	0	0		
Lead	0.9372	0.0100	1	0	93.7	80	120	0	0		
Magnesium	9.336	0.100	10	0	93.4	80	120	0	0		
Manganese	0.9464	0.0150	1	0	94.6	80	120	0	0		
Nickel	0.9396	0.0200	1	0	94	80	120	0	0		
Potassium	9.988	0.500	10	0	99.9	80	120	0	0		
Selenium	0.947	0.0200	1	0	94.7	80	120	0	0		
Silver	0.09444	0.0100	0.1	0	94.4	80	120	0	0		
Sodium	9.399	1.00	10	0	94	80	120	0	0		
Thallium	0.9564	0.0200	1	0.009966	94.6	80	120	0	0		
Vanadium	0.9512	0.0100	1	0	95.1	80	120	0	0		
Zinc	0.9267	0.0200	1	0	92.7	80	120	0	0		

Sample ID: 0811H44-012CMS		SampType: MS		TestCode: 6010B_TAL_ Units: mg/L		Prep Date: 11/25/2008		RunNo: 138015			
Client ID:		Batch ID: 107037		TestNo: SW6010B		Analysis Date: 12/1/2008		SeqNo: 2827123			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.067	0.200	10	0	90.7	75	125	0	0		
Antimony	0.9193	0.0200	1	0	91.9	75	125	0	0		
Arsenic	0.9243	0.0500	1	0	92.4	75	125	0	0		
Barium	0.9505	0.0200	1	0.02963	92.1	75	125	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: 0811H44-012CMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 138015						
Client ID:	Batch ID: 107037	TestNo: SW6010B		Analysis Date: 12/1/2008	SeqNo: 2827123						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Beryllium	0.9185	0.0100	1	0	91.9	75	125	0	0		
Cadmium	0.925	0.00500	1	0.004068	92.1	75	125	0	0		
Calcium	16.13	0.100	10	7.768	83.6	75	125	0	0		
Chromium	0.9517	0.0100	1	0	95.2	75	125	0	0		
Cobalt	0.9169	0.0200	1	0.002531	91.4	75	125	0	0		
Copper	0.9136	0.0100	1	0.003072	91.1	75	125	0	0		
Iron	9.68	0.100	10	0.5003	91.8	75	125	0	0		
Lead	0.8988	0.0100	1	0	89.9	75	125	0	0		
Magnesium	10.11	0.100	10	1.152	89.6	75	125	0	0		
Manganese	1.283	0.0150	1	0.3759	90.7	75	125	0	0		
Nickel	0.9112	0.0200	1	0.003883	90.7	75	125	0	0		
Potassium	11.51	0.500	10	1.694	98.2	75	125	0	0		
Selenium	0.9355	0.0200	1	0	93.6	75	125	0	0		
Silver	0.09137	0.0100	0.1	0	91.4	75	125	0	0		
Sodium	12.21	1.00	10	3.798	84.1	75	125	0	0		
Thallium	0.9185	0.0200	1	0.004921	91.4	75	125	0	0		
Vanadium	0.92	0.0100	1	0	92	75	125	0	0		
Zinc	0.9676	0.0200	1	0.07451	89.3	75	125	0	0		

Sample ID: 0811H44-012CMSD	SampType: MSD	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 138015						
Client ID:	Batch ID: 107037	TestNo: SW6010B		Analysis Date: 12/1/2008	SeqNo: 2827127						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum	9.184	0.200	10	0	91.8	75	125	9.067	1.28	20	
Antimony	0.9299	0.0200	1	0	93	75	125	0.9193	1.14	20	
Arsenic	0.9338	0.0500	1	0	93.4	75	125	0.9243	1.03	20	
Barium	0.9649	0.0200	1	0.02963	93.5	75	125	0.9505	1.50	20	
Beryllium	0.9339	0.0100	1	0	93.4	75	125	0.9185	1.66	20	
Cadmium	0.9346	0.00500	1	0.004068	93.1	75	125	0.925	1.03	20	

<b>Qualifiers:</b> < Less than Result value BRL Below Reporting Limit J Estimated value detected below Reporting Limit Rpt Lim Reporting Limit	> Greater than Result value E Estimated value above quantitation range N Analyte not NELAC certified S Spike Recovery outside limits due to matrix	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded R RPD outside limits due to matrix
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**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_D

Sample ID: 0811H44-012CMSD		SampType: MSD		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 138015	
Client ID:		Batch ID: 107037		TestNo: SW6010B		Analysis Date: 12/1/2008		SeqNo: 2827127			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	16.27	0.100	10	7.768	85	75	125	16.13	0.872	20	
Chromium	0.9636	0.0100	1	0	96.4	75	125	0.9517	1.25	20	
Cobalt	0.9276	0.0200	1	0.002531	92.5	75	125	0.9169	1.17	20	
Copper	0.9257	0.0100	1	0.003072	92.3	75	125	0.9136	1.31	20	
Iron	9.809	0.100	10	0.5003	93.1	75	125	9.68	1.33	20	
Lead	0.9147	0.0100	1	0	91.5	75	125	0.8988	1.75	20	
Magnesium	10.21	0.100	10	1.152	90.6	75	125	10.11	1.00	20	
Manganese	1.297	0.0150	1	0.3759	92.1	75	125	1.283	1.09	20	
Nickel	0.9257	0.0200	1	0.003883	92.2	75	125	0.9112	1.58	20	
Potassium	11.69	0.500	10	1.694	99.9	75	125	11.51	1.52	20	
Selenium	0.9527	0.0200	1	0	95.3	75	125	0.9355	1.82	20	
Silver	0.09236	0.0100	0.1	0	92.4	75	125	0.09137	1.08	20	
Sodium	12.37	1.00	10	3.798	85.7	75	125	12.21	1.25	20	
Thallium	0.9337	0.0200	1	0.004921	92.9	75	125	0.9185	1.65	20	
Vanadium	0.9315	0.0100	1	0	93.1	75	125	0.92	1.24	20	
Zinc	0.9798	0.0200	1	0.07451	90.5	75	125	0.9676	1.25	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_T

Sample ID: MB-107030		SampType: MBLK		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 137794	
Client ID:		Batch ID: 107030		TestNo: SW6010B		Analysis Date: 11/25/2008		SeqNo: 2822095			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	BRL	0.200	0	0	0	0	0	0	0		
Antimony	BRL	0.0200	0	0	0	0	0	0	0		
Arsenic	BRL	0.0500	0	0	0	0	0	0	0		
Barium	BRL	0.0200	0	0	0	0	0	0	0		
Beryllium	BRL	0.0100	0	0	0	0	0	0	0		
Cadmium	BRL	0.00500	0	0	0	0	0	0	0		
Calcium	BRL	0.100	0	0	0	0	0	0	0		
Chromium	BRL	0.0100	0	0	0	0	0	0	0		
Cobalt	BRL	0.0200	0	0	0	0	0	0	0		
Copper	BRL	0.0100	0	0	0	0	0	0	0		
Iron	BRL	0.100	0	0	0	0	0	0	0		
Lead	BRL	0.0100	0	0	0	0	0	0	0		
Magnesium	BRL	0.100	0	0	0	0	0	0	0		
Manganese	BRL	0.0150	0	0	0	0	0	0	0		
Nickel	BRL	0.0200	0	0	0	0	0	0	0		
Potassium	BRL	0.500	0	0	0	0	0	0	0		
Selenium	BRL	0.0200	0	0	0	0	0	0	0		
Silver	BRL	0.0100	0	0	0	0	0	0	0		
Sodium	BRL	1.00	0	0	0	0	0	0	0		
Thallium	BRL	0.0200	0	0	0	0	0	0	0		
Vanadium	BRL	0.0100	0	0	0	0	0	0	0		
Zinc	BRL	0.0200	0	0	0	0	0	0	0		

Sample ID: LCS-107030		SampType: LCS		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 137794	
Client ID:		Batch ID: 107030		TestNo: SW6010B		Analysis Date: 11/25/2008		SeqNo: 2822094			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.977	0.200	10	0	99.8	85	115	0	0		
Antimony	1.026	0.0200	1	0	103	85	115	0	0		

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811F37  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_TAL\_W\_T

Sample ID: LCS-107030	SampType: LCS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 137794						
Client ID:	Batch ID: 107030	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2822094						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.044	0.0500	1	0	104	85	115	0	0		
Barium	1.017	0.0200	1	0.002106	101	85	115	0	0		
Beryllium	1.018	0.0100	1	0	102	85	115	0	0		
Cadmium	1.024	0.00500	1	0	102	85	115	0	0		
Calcium	10.05	0.100	10	0	100	85	115	0	0		
Chromium	1.023	0.0100	1	0	102	85	115	0	0		
Cobalt	1.025	0.0200	1	0	103	85	115	0	0		
Copper	1.01	0.0100	1	0	101	85	115	0	0		
Iron	10.26	0.100	10	0	103	85	115	0	0		
Lead	1.031	0.0100	1	0	103	85	115	0	0		
Magnesium	10.21	0.100	10	0	102	85	115	0	0		
Manganese	1.022	0.0150	1	0	102	85	115	0	0		
Nickel	1.028	0.0200	1	0	103	85	115	0	0		
Potassium	10.33	0.500	10	0	103	85	115	0	0		
Selenium	1.038	0.0200	1	0	104	85	115	0	0		
Silver	0.103	0.0100	0.1	0	103	85	115	0	0		
Sodium	10.14	1.00	10	0	101	85	115	0	0		
Thallium	1.004	0.0200	1	0.006212	99.8	85	115	0	0		
Vanadium	1.02	0.0100	1	0	102	85	115	0	0		
Zinc	1.03	0.0200	1	0	103	85	115	0	0		

Sample ID: 0811E58-001BMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 137794						
Client ID:	Batch ID: 107030	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2822097						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.657	0.200	10	0.1277	95.3	75	125	0	0		
Antimony	1.007	0.0200	1	0	101	75	125	0	0		
Arsenic	1.015	0.0500	1	0	101	75	125	0	0		
Barium	1.017	0.0200	1	0.03413	98.3	75	125	0	0		

Qualifiers:	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_T

Sample ID: 0811E58-001BMS	SampType: MS	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 137794
Client ID:	Batch ID: 107030	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2822097

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.9892	0.0100	1	0	98.9	75	125	0	0		
Cadmium	0.9906	0.00500	1	0	99.1	75	125	0	0		
Calcium	17.53	0.100	10	8.18	93.5	75	125	0	0		
Chromium	1.044	0.0100	1	0	104	75	125	0	0		
Cobalt	1.008	0.0200	1	0.009889	99.8	75	125	0	0		
Copper	0.9832	0.0100	1	0.004238	97.9	75	125	0	0		
Iron	10.42	0.100	10	0.4495	99.8	75	125	0	0		
Lead	0.9898	0.0100	1	0	99	75	125	0	0		
Magnesium	11.51	0.100	10	1.644	98.7	75	125	0	0		
Manganese	1.261	0.0150	1	0.2758	98.5	75	125	0	0		
Nickel	1.004	0.0200	1	0.006921	99.7	75	125	0	0		
Potassium	12.05	0.500	10	2.379	96.7	75	125	0	0		
Selenium	0.9976	0.0200	1	0	99.8	75	125	0	0		
Silver	0.09954	0.0100	0.1	0	99.5	75	125	0	0		
Sodium	14.97	1.00	10	4.962	100	75	125	0	0		
Thallium	0.9667	0.0200	1	0.005919	96.1	75	125	0	0		
Vanadium	0.9938	0.0100	1	0	99.4	75	125	0	0		
Zinc	1.037	0.0200	1	0.04497	99.2	75	125	0	0		

Sample ID: 0811E58-001BMSD	SampType: MSD	TestCode: 6010B_TAL_	Units: mg/L	Prep Date: 11/25/2008	RunNo: 137794
Client ID:	Batch ID: 107030	TestNo: SW6010B		Analysis Date: 11/25/2008	SeqNo: 2822098

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9.615	0.200	10	0.1277	94.9	75	125	9.657	0.434	20	
Antimony	1.004	0.0200	1	0	100	75	125	1.007	0.359	20	
Arsenic	1.014	0.0500	1	0	101	75	125	1.015	0.139	20	
Barium	1.011	0.0200	1	0.03413	97.7	75	125	1.017	0.577	20	
Beryllium	0.9843	0.0100	1	0	98.4	75	125	0.9892	0.488	20	
Cadmium	0.9888	0.00500	1	0	98.9	75	125	0.9906	0.184	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_TAL\_W\_T

Sample ID: 0811E58-001BMSD		SampType: MSD		TestCode: 6010B_TAL_		Units: mg/L		Prep Date: 11/25/2008		RunNo: 137794	
Client ID:		Batch ID: 107030		TestNo: SW6010B		Analysis Date: 11/25/2008		SeqNo: 2822098			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	17.43	0.100	10	8.18	92.5	75	125	17.53	0.580	20	
Chromium	1.041	0.0100	1	0	104	75	125	1.044	0.319	20	
Cobalt	1.004	0.0200	1	0.009889	99.4	75	125	1.008	0.402	20	
Copper	0.9796	0.0100	1	0.004238	97.5	75	125	0.9832	0.366	20	
Iron	10.37	0.100	10	0.4495	99.2	75	125	10.42	0.501	20	
Lead	0.9882	0.0100	1	0	98.8	75	125	0.9898	0.155	20	
Magnesium	11.47	0.100	10	1.644	98.3	75	125	11.51	0.351	20	
Manganese	1.253	0.0150	1	0.2758	97.7	75	125	1.261	0.617	20	
Nickel	1.002	0.0200	1	0.006921	99.5	75	125	1.004	0.248	20	
Potassium	12.02	0.500	10	2.379	96.4	75	125	12.05	0.257	20	
Selenium	0.9991	0.0200	1	0	99.9	75	125	0.9976	0.146	20	
Silver	0.09911	0.0100	0.1	0	99.1	75	125	0.09954	0.438	20	
Sodium	14.87	1.00	10	4.962	99	75	125	14.97	0.695	20	
Thallium	0.9632	0.0200	1	0.005919	95.7	75	125	0.9667	0.370	20	
Vanadium	0.9905	0.0100	1	0	99	75	125	0.9938	0.333	20	
Zinc	1.035	0.0200	1	0.04497	99	75	125	1.037	0.194	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 7470A\_W\_D

Sample ID: MB-107110	SampType: MBLK	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137934						
Client ID:	Batch ID: 107110	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825248						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	BRL	0.000200	0	0	0	0	0	0	0		

Sample ID: LCS-107110	SampType: LCS	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137934						
Client ID:	Batch ID: 107110	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825249						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005046	0.000200	0.005	0.00001781	101	85	115	0	0		

Sample ID: 0811H44-010CMS	SampType: MS	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137934						
Client ID:	Batch ID: 107110	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825251						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004532	0.000200	0.005	0.00002493	90.1	70	130	0	0		

Sample ID: 0811H44-010CMSD	SampType: MSD	TestCode: 7470A_W_D	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137934						
Client ID:	Batch ID: 107110	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825252						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004561	0.000200	0.005	0.00002493	90.7	70	130	0.004532	0.626	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 7470A\_W\_T

Sample ID: MB-107109	SampType: MBLK	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137937						
Client ID:	Batch ID: 107109	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825333						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	BRL	0.000200	0	0	0	0	0	0	0		

Sample ID: LCS-107109		SampType: LCS		TestCode: 7470A_W_T		Units: mg/L		Prep Date: 11/28/2008		RunNo: 137937	
Client ID:		Batch ID: 107109		TestNo: SW7470A				Analysis Date: 11/28/2008		SeqNo: 2825334	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004922	0.000200	0.005	0.00001373	98.2	85	115	0	0		

Sample ID: 0811D57-001CMS	SampType: MS	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137937						
Client ID:	Batch ID: 107109	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825336						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004998	0.000200	0.005	0.00002267	99.5	70	130	0	0		

Sample ID: 0811D57-001CMSD	SampType: MSD	TestCode: 7470A_W_T	Units: mg/L	Prep Date: 11/28/2008	RunNo: 137937						
Client ID:	Batch ID: 107109	TestNo: SW7470A		Analysis Date: 11/28/2008	SeqNo: 2825337						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005054	0.000200	0.005	0.00002267	101	70	130	0.004998	1.11	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: TN and Associates  
 Work Order: 0811F37  
 Project: Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

TestCode: 9060\_W

Sample ID: MB-R137764	SampType: MBLK	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060	Analysis Date: 11/25/2008	SeqNo: 2821345							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	BRL	1.00	0	0	0	0	0	0	0		

Sample ID: LCS-R137764	SampType: LCS	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060	Analysis Date: 11/25/2008	SeqNo: 2821338							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	22.77	1.00	25	0	91.1	90	110	0	0		

Sample ID: 0811E05-004BMS	SampType: MS	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060	Analysis Date: 11/25/2008	SeqNo: 2821373							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	226.9	5.00	125	107.4	95.6	80	120	0	0		

Sample ID: 0811E05-004BMSD	SampType: MSD	TestCode: 9060_W	Units: mg/L	Prep Date:	RunNo: 137764						
Client ID:	Batch ID: R137764	TestNo: SW9060	Analysis Date: 11/25/2008	SeqNo: 2821374							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	222.7	5.00	125	107.4	92.2	80	120	226.9	1.87	20	

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**CLIENT:** TN and Associates  
**Work Order:** 0811F37  
**Project:** Barite Hills Removal

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** SM3500-FE D

Sample ID: <b>MB-R138081</b>	SampType: <b>MBLK</b>	TestCode: <b>SM3500-FE D</b>	Units: <b>mg/L</b>	Prep Date:	RunNo: <b>138081</b>						
Client ID:	Batch ID: <b>R138081</b>	TestNo: <b>SM3500-Fe-D</b>		Analysis Date: <b>11/25/2008</b>	SeqNo: <b>2828484</b>						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) BRL 0.100

Sample ID: <b>LCS-R138081</b>	SampType: <b>LCS</b>	TestCode: <b>SM3500-FE D</b>	Units: <b>mg/L</b>	Prep Date:	RunNo: <b>138081</b>						
Client ID:	Batch ID: <b>R138081</b>	TestNo: <b>SM3500-Fe-D</b>	Analysis Date: <b>11/25/2008</b>	SeqNo: <b>2828485</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 0.5097 0.100 0.5 0 102 85 115 0 0

Sample ID: 0811F37-003DMS	SampType: MS	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 138081						
Client ID: BHR-MPS-007	Batch ID: R138081	TestNo: SM3500-Fe-D		Analysis Date: 11/25/2008	SeqNo: 2828487						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 379.6 20.0 100 293.6 86 80 120 0 0 H

Sample ID: 0811F37-003DMSD	SampType: MSD	TestCode: SM3500-FE D	Units: mg/L	Prep Date:	RunNo: 138081						
Client ID: BHR-MPS-007	Batch ID: R138081	TestNo: SM3500-Fe-D		Analysis Date: 11/25/2008	SeqNo: 2828488						
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Iron, as Ferrous (Fe+2) 380.8 20.0 100 293.6 87.2 80 120 379.6 0.316 30 H

<b>Qualifiers:</b>	<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**ATTACHMENT D**  
**HASP**

HEALTH AND SAFETY PLAN FORM		This document is for the exclusive use of TN&Associates its subcontractors, and EPA.		TN & ASSOCIATES			
TN&Associates Health and Safety Program				Site Name: Barite Hill Nevada Goldfields			
PROJECT NAME:	Barite Hill Nevada Goldfields	DATE:	6/10/2008				
PROJECT#:	2005148						
LOCATION:	McCormick, South Carolina	CLIENT:	EPA				
		EPA CONTACT/PHONE #:	Leo Francendese, 404-562-8772				
		LOCAL/SITE CONTACT PHONE #:					
INCIDENT DESCRIPTION:		SOURCE OF PRELIMINARY INFORMATION:					
The OSC tasked START with conducting water sampling of the main pit lake and the creek to monitor metal concentrations and water quality parameters.		ER Action Memo/ initial POLREP from epaosc.net website					
ANTICIPATED TASKS:		TYPE: Check as many as applicable					
(e.g. collect surface soil samples):							
Take water quality measurements and samples of the liquid in the main pit and creek.		Active	( )	Landfill	( )	Spill	( )
		Inactive	(X)	Uncontrolled	( )	Fire	( )
		Secure	(X)	Industrial	( )	Military	( )
		Unsecure	( )	Recovery	(X)	Unknown	( )
		Enclosed space	( )	Well Field	( )	Other (specify)	( )
DESCRIPTION AND FEATURES:		Include principal operations and unusual features (containers, buildings, dikes, power lines, hillslopes, rivers, etc.)					
The Barite Hill Nevada Goldfields site is located approximately 3 miles south of McCormick, SC between US 378 and US 221 on the northern side of Road 30 in McCormick County, SC. The mine site is relatively remote; there are no buildings, homes, or commercial buildings within 0.5 miles of the boundary. The site actively mined gold from 1991 to 1995. The site is located along a topographic high ridge area forming the headwaters of an unnamed tributary to Hawes Creek. The topography of the area consists of rolling hills with ridgelines at an elevation of about 500 feet. Within the site, the ridgeline comprising the site has a high point of about 510 feet and an average elevation of approximately 480 feet. Storm water run on and runoff are not controlled at the site. The Main Pit from the mining operations remains. The pit contains approximately 60 million gallons of water with an historic low pH of 2 and high dissolved metal content.							
SURROUNDING POPULATION:		( ) Residential	( ) Industrial	( ) Commercial	(X) Rural	( ) Urban	( ) Other:

<b>HEALTH AND SAFETY PLAN FORM</b> <b>TN &amp; Associates Health and Safety Program</b>		<i>This document is for the exclusive use of TN&amp;Associates its subcontractors, and EPA.</i>	<b>TN &amp; ASSOCIATES</b> <b>Site Name: Barite Hill Nevada Goldfields</b>
<p><b>HISTORY:</b>      <i>Summarize conditions that relate to hazard. Include citizen complaints, spills, previous investigations or agency actions, known injuries, etc.</i></p> <p>The site actively mined gold from 1991 to 1995. From 1995 until Nevada Goldfields filed for Chapter 7 Bankruptcy in 1999, the reclamation of the site was being addressed by Nevada Goldfields. On July 7, 1999 Nevada Goldfields handed the facility's keys to SCDHEC and abandoned the site. The facility used a cyanide solution in a heap leach process to extract gold from ore. There are 7 processing ponds onsite containing an unknown amount of free-liquids. Three large, multi-acre, waste rock piles contaminated with cyanide are left onsite. Each waste rock pile has the potential for producing acid. Storm water run on and runoff are not controlled at the site. The Main Pit from the mining operations remains. The pit contains approximately 60 million gallons of water with a pH of 2 ~ 2.2 and a high dissolved metal content. Seeps from the main pit containing acidic water with high dissolved metal content are being released to the northern unnamed tributaries of Hawes Creek which borders the pit. □</p>			
<b>WASTE TYPES:</b> <input checked="" type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Gas <input type="checkbox"/> Unknown <input type="checkbox"/> Other: _____			
<b>WASTE CHARACTERISTICS:</b> <i>Check as many as applicable.</i>  <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input checked="" type="checkbox"/> Corrosive      <input type="checkbox"/> Flammable      <input type="checkbox"/> Radioactive   <input checked="" type="checkbox"/> Toxic            <input type="checkbox"/> Volatile          <input checked="" type="checkbox"/> Reactive   <input type="checkbox"/> Inert Gas        <input type="checkbox"/> Unknown        <input type="checkbox"/> Other, Specify: _____         </div> <div style="width: 65%;"></div> </div>		<b>WORK ZONES:</b> <i>Describe the Exclusion, Contamination Reduction, and Support Zones in terms on-site personnel will recognize</i>	
<b>HAZARDS OF CONCERN:</b>  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> Heat Stress      <i>attach guidelines</i>  <input checked="" type="checkbox"/> Cold Stress      <i>attach guidelines</i>  <input type="checkbox"/> Explosive/Flammable  <input type="checkbox"/> Oxygen Deficient  <input type="checkbox"/> Radiological  <input type="checkbox"/> Biological  <input type="checkbox"/> Other, Specify: _____         </div> <div style="width: 50%;"> <input type="checkbox"/> Noise  <input checked="" type="checkbox"/> Inorganic Chemicals  <input type="checkbox"/> Organic Chemicals  <input type="checkbox"/> Motorized Traffic  <input type="checkbox"/> Heavy Machinery  <input checked="" type="checkbox"/> Slips, Trips, &amp; Falls         </div> </div>		<b>FACILITY'S PAST AND PRESENT DISPOSAL METHODS AND PRACTICES:</b> None found	



<b>HEALTH AND SAFETY PLAN FORM</b>		<i>This document is for the exclusive</i>		<b>TN &amp; ASSOCIATES</b>	
<b>TN&amp;Associates Health and Safety Program</b>		<i>use of TN&amp;Associates its subcontractors, and EPA.</i>		<b>Site Name: Barite Hill Nevada Goldfields</b>	
<b>HAZARDOUS MATERIAL SUMMARY:</b> <i>Circle waste type and estimate amounts by category.</i>					
<b>CHEMICALS:</b> <i>Amount/Units:</i>	<b>SOLIDS:</b> <i>Amount/Units:</i>  Metals unknown	<b>SLUDGES:</b> <i>Amount/Units:</i>  Inorganic unknown	<b>SOLVENTS:</b> <i>Amount/Units:</i>	<b>OILS:</b> <i>Amount/Units:</i>	<b>OTHER:</b> <i>Amount/Units:</i>
<b>OVERALL HAZARD EVALUATION:</b> <input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Unknown <b>JUSTIFICATION:</b> Stabilization of Main Pit lake for pyrite contact with liquid.					
<b>FIRE/EXPLOSION POTENTIAL:</b> <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input checked="" type="checkbox"/> Unknown					
<b>INFORMATION COMPLETE:</b> <input type="checkbox"/> Complete <input type="checkbox"/> Incomplete <input checked="" type="checkbox"/> Best Available at Current Time					

HEALTH AND SAFETY PLAN FORM				This document is for the exclusive use of TN&Associates its subcontractors, and EPA.		TN & ASSOCIATES	
TN & Associates Health and Safety Program				Site Name: Barite Hill Nevada Goldfields			
KNOWN CONTAMINANTS	NIOSH REL (ST if Available) ppm or mg/m3 (specify)	OSHA PEL (ST if Available) ppm or mg/m3 (specify)	IDLH ppm or mg/m3 (specify)	SYMPTOMS & EFFECTS OF ACUTE EXPOSURE	PHOTO IONIZATION POTENTIAL		
NA = Not Available		NE = None Established		U = Unknown			
S = Soil		SW = Surface Water		T = Tailings			
A = Air		GW = Ground Water		SL = Sludge			
		W = Waste		SD = Sediment			
		D = Drums		OFF = Off-Site			
Attach, to this plan, an MSDS for each chemical you will use at the site.							

HEALTH AND SAFETY PLAN FORM		This document is for the exclusive use of TN&Associates its subcontractors, and EPA.		TN & ASSOCIATES Site Name: Barite Hill Nevada Goldfields	
Task Description / PPE / Personnel & Responsibilities (attach additional sheets as necessary)					
<b>Task 1 Description</b>	Site liquid sampling/In-situ monitoring			<b>Type</b> Intrusive	<b>Hazard Schedule</b> High
<b>Primary Level</b> Modified D	Respiratory: APR                      combo Eyewear: Safety Glasses Hard Hat Boots: Steel-Toe              Latex Bootie Gloves: Inner: Nitrile    Outer:	<b>Contingency Level</b> Modified D To C	Respiratory: APR                      combo Eyewear: Safety Glasses Hard Hat Boots: Steel-Toe              Latex Bootie Gloves: Inner: Nitrile    Outer:		
<b>PPE:</b>	Clothing: Tyvek Coverall	<b>PPE:</b>	Clothing: Tyvek Coverall		
<b>Task 2 Description</b>				<b>Type</b>	<b>Hazard Schedule</b>
<b>Primary Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____	<b>Contingency Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____		
<b>PPE:</b>	Clothing: _____	<b>PPE:</b>	Clothing: _____		
<b>Task 3 Description</b>				<b>Type</b>	<b>Hazard Schedule</b>
<b>Primary Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____	<b>Contingency Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____		
<b>PPE:</b>	Clothing: _____	<b>PPE:</b>	Clothing: _____		
<b>Task 4 Description</b>				<b>Type</b>	<b>Hazard Schedule</b>
<b>Primary Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____	<b>Contingency Level</b>	Respiratory: _____ Eyewear: _____ Boots: _____ Gloves: _____		
<b>PPE:</b>	Clothing: _____	<b>PPE:</b>	Clothing: _____		
<b>PERSONNEL AND RESPONSIBILITIES</b>					
<b>Name</b>	<b>Company/Agency</b>	<b>Training</b>	<b>Responsibilities</b>		
Jorge Sanchez	TN&A	OSHA	Safety and Health		
Russell Henderson	TN&A	OSHA	Safety and Health		
Dannena Bowman	TN&A	OSHA	Safety and Health		

<b>HEALTH AND SAFETY PLAN FORM</b>		<i>This document is for the exclusive use of TN&amp;Associates its subcontractors, and EPA</i>		<b>TN &amp; ASSOCIATES</b>
<b>TN &amp; Associates Health and Safety Program</b>		<b>Site Name: Barite Hill Nevada Goldfields</b>		
<b>Monitoring Equipment:</b>		Specify by task. Indicate type as necessary. Attach additional sheets if needed.		
<b>Tasks:</b> 1	<b>Instrument:</b> pH Meter	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
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<b>HEALTH AND SAFETY PLAN FORM</b>		<i>This document is for the exclusive use of TN&amp;Associates its subcontractors, and EPA.</i>		<b>TN &amp; ASSOCIATES</b>																																											
<b>TN&amp;Associates Health and Safety Program</b>				<b>Site Name: Barite Hill Nevada Goldfields</b>																																											
<b>EMERGENCY CONTACTS</b>  Site Telephone _____ EPA Release Report # _____ TN&Assoc 24-Hr Emergency #                      678-255-5538 Facility Management _____ Other (specify) _____ CHEMTREC Emergency #:                      1-800-424-9300		<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; width: 60%;"><b>EMERGENCY CONTACTS</b></th> <th style="text-align: left; width: 20%;"><b>NAME</b></th> <th style="text-align: left; width: 20%;"><b>PHONE</b></th> </tr> <tr> <td>Health and Safety Manager</td> <td>Bill Fink</td> <td>414-234-7845</td> </tr> <tr> <td>Project Manager</td> <td>Russell Henderson</td> <td>678-255-6156</td> </tr> <tr> <td>Site Safety Coordinator</td> <td>Jorge Sanchez</td> <td>678-255-5538</td> </tr> <tr> <td>Client Contact (EPA RPM)</td> <td></td> <td></td> </tr> <tr> <td>Other (EPA HRS coordinator)</td> <td></td> <td></td> </tr> <tr> <td>State Agency</td> <td></td> <td></td> </tr> <tr> <td>State Spill Number</td> <td></td> <td></td> </tr> <tr> <td>Fire Department</td> <td></td> <td>911</td> </tr> <tr> <td>Police Department</td> <td></td> <td>911</td> </tr> <tr> <td>State Police</td> <td></td> <td>911</td> </tr> <tr> <td>Health Department</td> <td></td> <td></td> </tr> <tr> <td>Poison Control Center</td> <td></td> <td>800-848-6946</td> </tr> <tr> <td>Occupational Physician</td> <td>Dr. Jerry Berke, Health Resources</td> <td>800-350-4511</td> </tr> </table>				<b>EMERGENCY CONTACTS</b>	<b>NAME</b>	<b>PHONE</b>	Health and Safety Manager	Bill Fink	414-234-7845	Project Manager	Russell Henderson	678-255-6156	Site Safety Coordinator	Jorge Sanchez	678-255-5538	Client Contact (EPA RPM)			Other (EPA HRS coordinator)			State Agency			State Spill Number			Fire Department		911	Police Department		911	State Police		911	Health Department			Poison Control Center		800-848-6946	Occupational Physician	Dr. Jerry Berke, Health Resources	800-350-4511
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Fire Department		911																																													
Police Department		911																																													
State Police		911																																													
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Poison Control Center		800-848-6946																																													
Occupational Physician	Dr. Jerry Berke, Health Resources	800-350-4511																																													
<b>CONTINGENCY PLANS:</b> <i>Summarize below</i> Contact corporate Health and Safety officer, William Fink, at 414-234-7845		<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; width: 80%;"><b>MEDICAL EMERGENCY</b></th> <th style="text-align: left; width: 20%;"><b>PHONE</b></th> </tr> <tr> <td>Hospital Name:</td> <td></td> </tr> <tr> <td>Hospital Address</td> <td></td> </tr> <tr> <td>Name of Contact at Hospital:</td> <td></td> </tr> <tr> <td>Name of 24-Hour Ambulance:</td> <td></td> </tr> <tr> <td>Route to Hospital:</td> <td>(see attached sheet)</td> </tr> </table>				<b>MEDICAL EMERGENCY</b>	<b>PHONE</b>	Hospital Name:		Hospital Address		Name of Contact at Hospital:		Name of 24-Hour Ambulance:		Route to Hospital:	(see attached sheet)																														
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<b>HEALTH AND SAFETY PLAN APPROVALS</b>  Prepared by _____ Date _____ DHSC Signature _____ Date _____ HSM Signature _____ Date _____		Distance to Hospital _____																																													

## HEALTH AND SAFETY PLAN SIGNATURE FORM

### TN & Associates Health and Safety Program

All site personnel must sign this form indicating receipt of the H&SP. Keep this original on site. It becomes part of the permanent project files. Send a copy to the Health and Safety Manager (HSM).

**SITE NAME/NUMBER:** Barite Hill Nevada Goldfields / 2005148

**DIVISION/LOCATION:** T N & Associates, Marietta, GA.

**DATE:** \_\_\_\_\_

I understand, and agree to comply with, the provisions of the above referenced H&SP for work activities on this project. I agree to report any injuries, illnesses or exposure incidents to the site Health and Safety Coordinator (SHSC). I agree to inform the SHSC about any drugs (legal and illegal) that I take within three days of site work.

PRINTED NAME	SIGNATURE	DATE