SITE INFORMATION 2RP-553

Report Type: Closure Report

General Site Information:		
Site:	**High Lonesome Penrose Unit Tank Battery**	
Company:	**COG Operating LLC**	
Section, Township and Range	**Unit G Sec. 15 T-16S S-29E**	
Lease Number:	**30-015-02728**	
County:	**Eddy County**	
GPS:	**N 32.923067**	**W 104.058967**
Surface Owner:	Federal	
Mineral Owner:		
Directions:	From intersection of Hwy 529 and Hwy 82, Travel 10.6 miles west on Hwy 82, Turn right on Cr-214 (Barnaval Draw) 5.1 miles, turn right 0.2 miles, stay left 1.0 miles, stay left 1.1 miles to location	

Release Data:	
Date Released:	2/2/2010
Type Release:	Produced water
Source of Contamination:	Hole in bottom of water tank
Fluid Released:	20 bbls
Fluids Recovered:	90 bbls (due to recent rains)

Official Communication:			
Name:	Pat Ellis		Ike Tavarez
Company:	COG Operating, LLC		Tetra Tech
Address:	550 W. Texas Ave. Ste. 1300		1910 N. Big Spring
P.O. Box			
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 682-4559
Fax:	(432) 684-7137		
Email:	pellis@conchoresources.com		ike.tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	0	0
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	0	0
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0
Total Ranking Score:	**0**	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	5,000

TETRA TECH

RECEIVED
SEP 06 2012
NMOCD ARTESIA

April 20, 2012

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
1301 West Grand Avenue
Artesia, New Mexico 88210

Re: Closure Report for the COG Operating LLC.
High Lonesome Penrose Unit Tank Battery
Unit G, Section 15, Township 16 South, Range 29 East
Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the High Lonesome Penrose Unit Tank Battery, Unit G, Section 15, Township 16 South, Range 29 East, Eddy County, New Mexico. (Site). The spill site coordinates are N 32.923067°, W 104.058967°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico Oil Conservation Division (NMOCD) Form C-141 Initial Report, the leak was discovered on February 2, 2010, and released approximately twenty (20) barrels of produced water from a water tank. To alleviate the problem, COG personnel removed and replaced the water tank. Ninety (90) barrels of standing fluids (includes rain water) were recovered from the spill area. The spill initiated from the water vessel and migrated south down a lease road affecting a 15' wide by 785' length area. The spill continued south west traveling through a native dry creek for approximately 920'. The initial Form C-141 is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 15. According to the New Mexico Office of the State Engineer database, one well is located in Section 19, with a reported depth to water of 110' below surface. Due to the limited groundwater data, Mike Bratcher of the NMOCD requested a temporary monitor well be installed.

Tetra Tech
1910 North Big Spring, Midland,TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

On March 3, 2011, Tetra Tech personnel oversaw the installation of a temporary monitor well located in Sec 14. On March 23, 2011, Tetra Tech personnel gauged the well and recorded the well as dry with a total depth of 220' bgs. Based on the findings, and as discussed and agreed with Mike Bratcher, groundwater is greater than 220' bgs or suspected absent in the area. The well log and groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On March 10, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of seventeen (17) auger holes (AH-1 through AH-17) were installed using a stainless steel hand auger to assess the impacted soils. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all the submitted samples were below the RRAL for TPH and BTEX. Elevated chloride concentrations were detected for AH-2 through AH-9 ranging from 1,110 mg/kg to 14,300 mg/kg. All remaining auger holes had chloride levels that ranged from <200 mg/kg to 271 mg/kg.

To delineate the chloride impact, Tetra Tech supervised the installation of eight (8) soil boreholes (SB-1 through SB-8) utilizing an air rotary drilling rig on April 30, 2010. Soil samples were collected to a total depth ranging from 15' of 80' below surface and the results are summarized in Table 1.

Referring to Table 1, chloride concentrations declined to 265 mg/kg or less for SB-4 through SB-8 with depth. SB-3 declined from 11,300 mg/kg at 3' bgs to 434 mg/kg at 80' bgs. SB-2 showed a significant decline 20,000 mg/kg at 40' to 1,930 mg/kg at 60'.

The deepest impact was found in the area of SB-2, with elevated chloride concentrations greater than 5,000 extending down to 50' and declining to 1,930

mg/kg at 60' below surface. Chloride concentrations observed in the 70' and 80' sample increased from the concentrations observed in the 60' sample. These samples were likely cross contaminated from the loose sand sloughing from above. Drilling was halted at 80' due to the flowing sands.

Closure Activities

Based on the approved work plan, Tetra Tech personnel supervised the excavation of the site. The final excavation depths of the soil remediation were met and exceeded as stated in the approved work plan. The spill area was excavated to approximately 3.5' to 4.0' below surface. A total of 3,620 cubic yards of soil were excavated and hauled to proper disposal. The excavation depths are highlighted in Table 1 and shown on Figure 4.

As requested by the BLM, confirmation samples were collected from the excavation sidewalls. The confirmation sample results are shown in Table 1. Once excavated to the appropriate depths, the excavation was backfilled with clean soil to grade.

Based on the remedial activities performed, COG request closure of the site. A copy of the C-141 (Final) is included in Appendix A. If you have any questions or comments concerning the remedial activities, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Ike Tavarez
Project Manager

cc: Pat Ellis – COG
cc: Terry Gregston – BLM
cc: Mike Bratcher - OCD

Figures

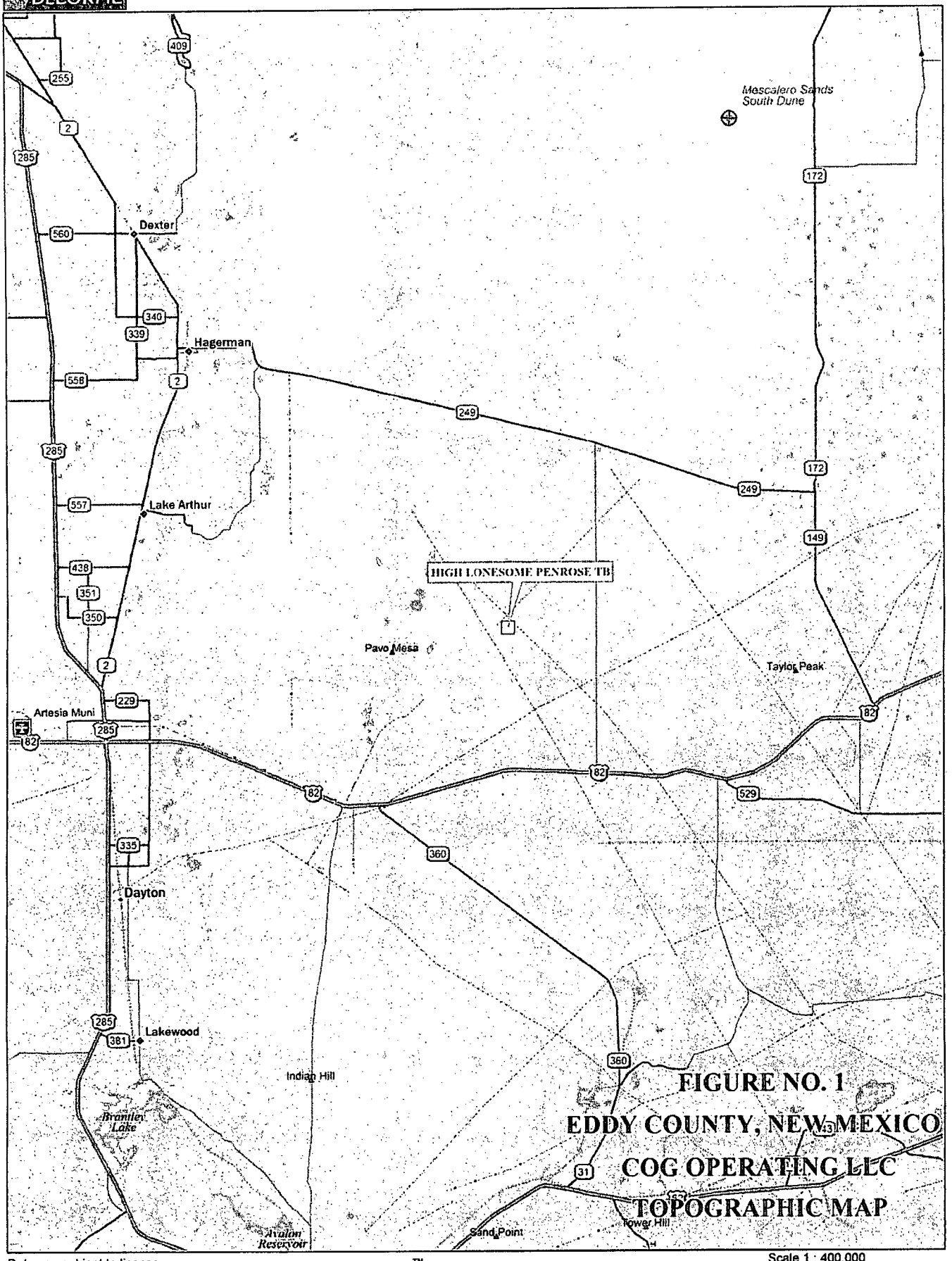


FIGURE NO. 1
EDDY COUNTY, NEW MEXICO
COG OPERATING LLC
TOPOGRAPHIC MAP

Data use subject to license.

© DeLorme. Topo USA® 8.

www.delorme.com

TN

MN (7.8°E)

Scale 1 : 400,000

1" = 6.31 mi

Data Zoom 9-0

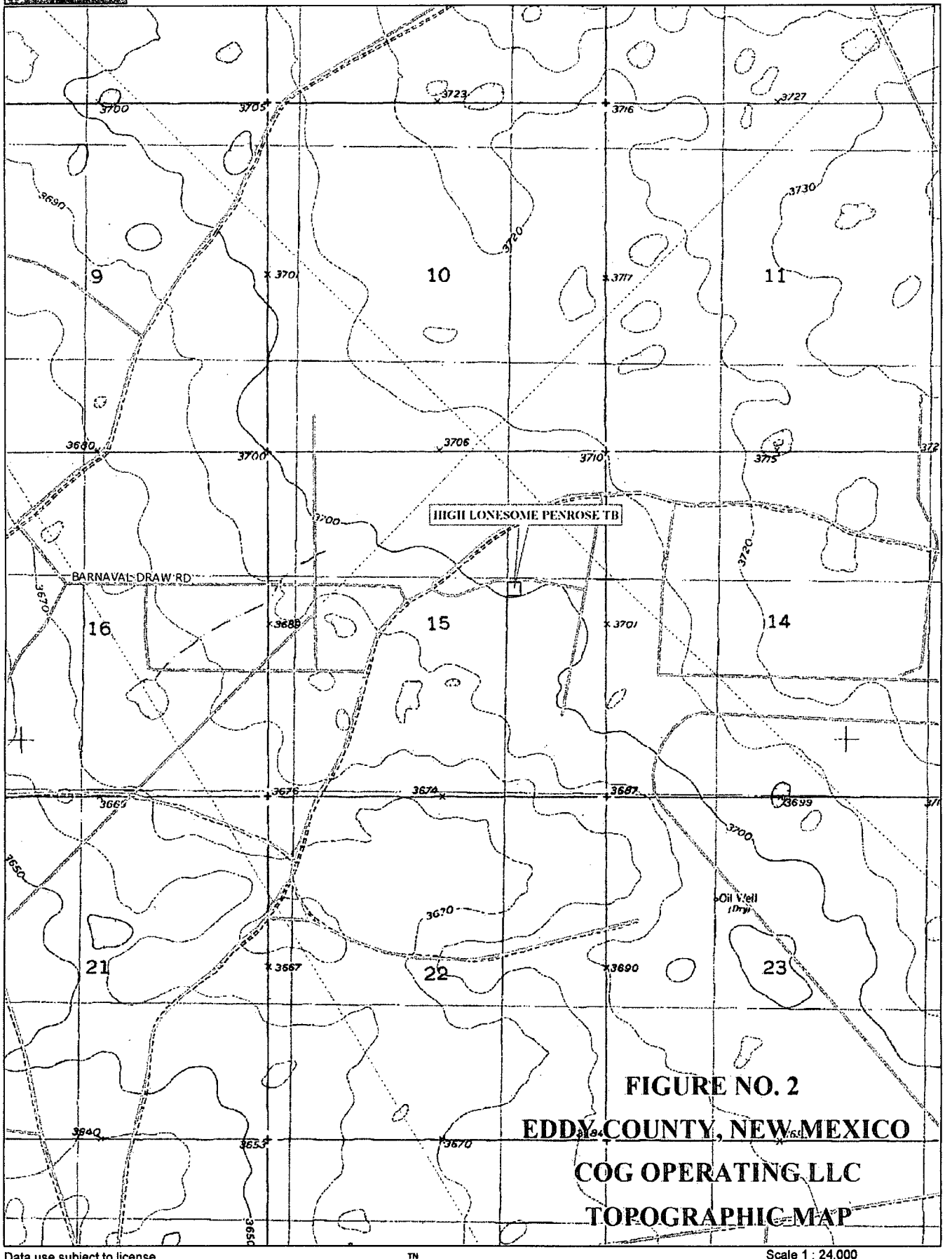


FIGURE NO. 2

EDDY COUNTY, NEW MEXICO

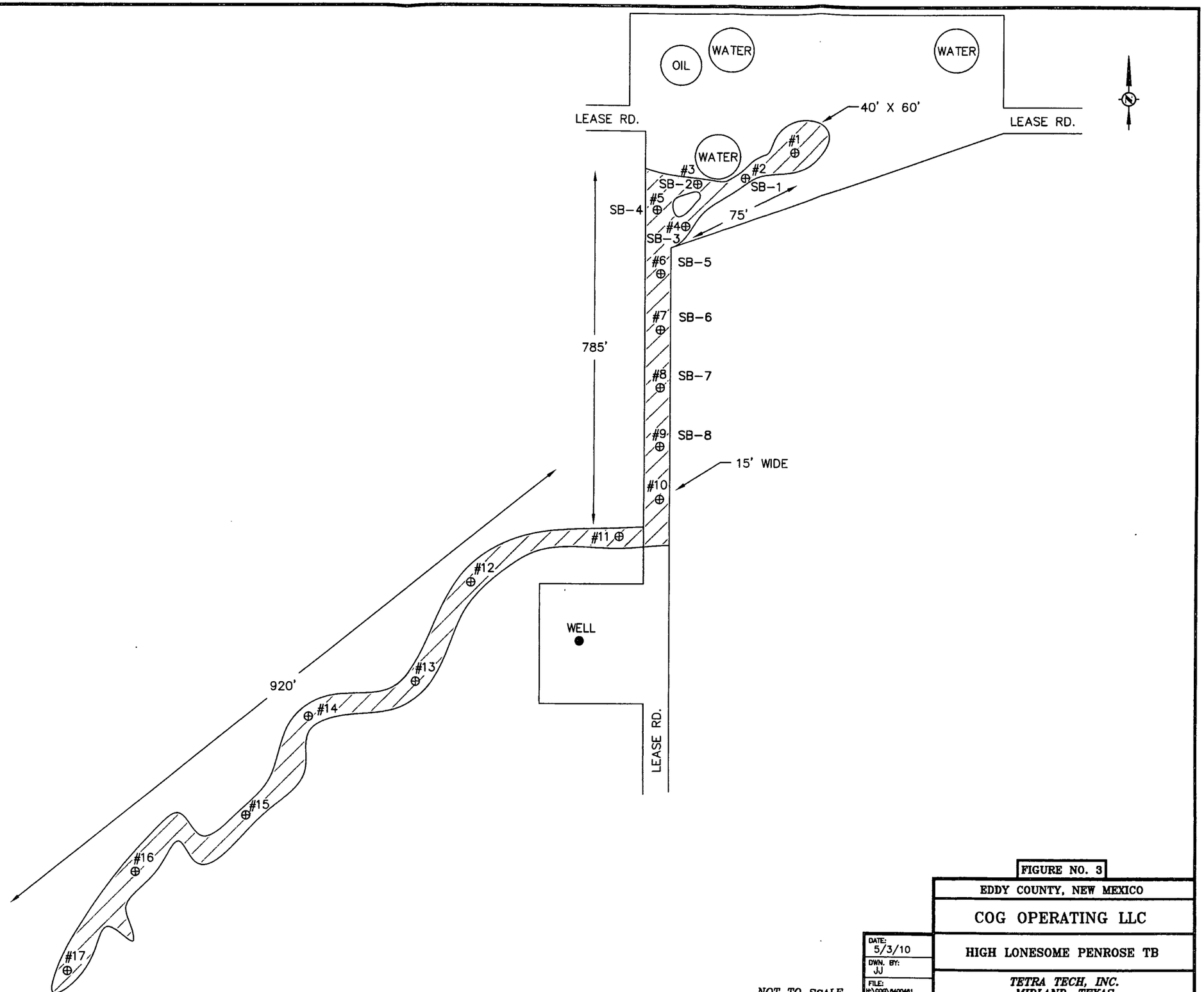
COG OPERATING LLC

TOPOGRAPHIC MAP

Data use subject to license.
© DeLorme. Topo USA® 8.
www.delorme.com

TN
MN (7.8°E)

Scale 1 : 24,000
1" = 2,000.0 ft Data Zoom 13-0



NOT TO SCALE

DATE: 5/3/10
DWN. BY: JJ
FILE: H:\COG\5400461 HIGH LONESOME

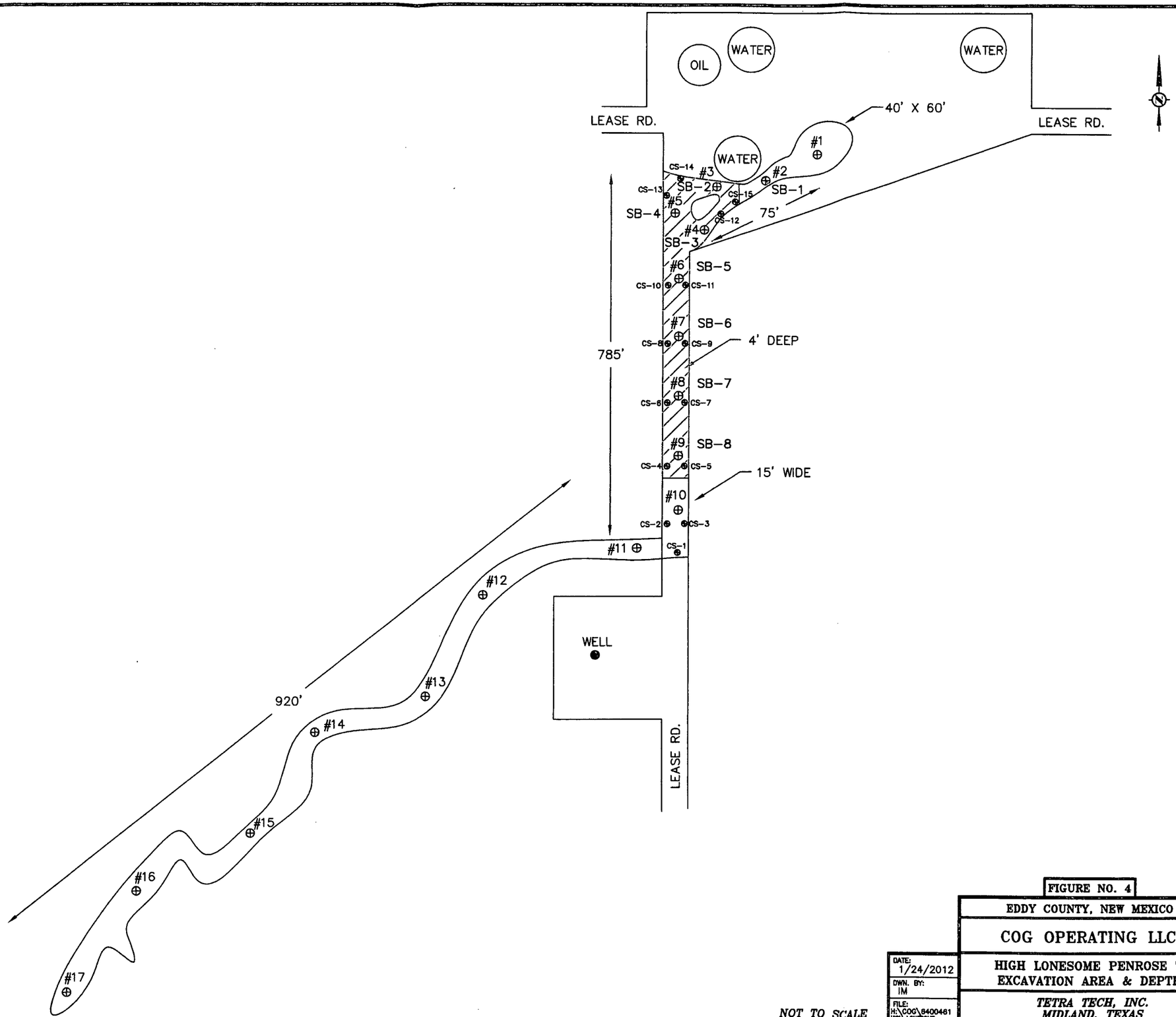
FIGURE NO. 3

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

HIGH LONESOME PENROSE TB

TETRA TECH, INC.
MIDLAND, TEXAS



EXCAVATED DEPTHS
SAMPLE LOCATIONS
SOIL BORING LOCATIONS
CONFIRMATION SAMPLE LOCATIONS

NOT TO SCALE

FIGURE NO. 4

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

HIGH LONESOME PENROSE TB
EXCAVATION AREA & DEPTHS

DATE: 1/24/2012
DWN. BY: IM
FILE: H:\COG\8400461 HIGH LONESOME

TETRA TECH, INC.
MIDLAND, TEXAS

Tables

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-1	3/10/10	0-1'	0.5'	X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	271
		1-1.5'	0.5'	X		-	-	-	-	-	-	-	389
AH-2	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'		X		-	-	-	-	-	-	-	488
		2-2.5'		X		-	-	-	-	-	-	-	1,630
SB-1	4/30/10	1'		X		-	-	-	-	-	-	-	<200
		3'		X		-	-	-	-	-	-	-	890
		5'		X		-	-	-	-	-	-	-	5,150
		7'		X		-	-	-	-	-	-	-	6,240
		10'		X		-	-	-	-	-	-	-	13,000
		15'		X		-	-	-	-	-	-	-	15,700
		20'		X		-	-	-	-	-	-	-	18,400
		30'		X		-	-	-	-	-	-	-	15,000
		40'		X		-	-	-	-	-	-	-	5,650
		50'		X		-	-	-	-	-	-	-	2,210
		60'		X		-	-	-	-	-	-	-	2,680
		70'		X		-	-	-	-	-	-	-	265

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-3	3/10/10	0-1'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'			X	-	-	-	-	-	-	-	340
		2-2.5'			X	-	-	-	-	-	-	-	1,110
SB-2	4/30/10	3'			X	-	-	-	-	-	-	-	2,540
		5'		X		-	-	-	-	-	-	-	8,150
		10'		X		-	-	-	-	-	-	-	5,920
		15'		X		-	-	-	-	-	-	-	6,560
		20'		X		-	-	-	-	-	-	-	15,300
		30'		X		-	-	-	-	-	-	-	12,400
		40'		X		-	-	-	-	-	-	-	20,000
		50'		X		-	-	-	-	-	-	-	7,690
		60'		X		-	-	-	-	-	-	-	1,930
		70'		X		-	-	-	-	-	-	-	3,480
		80'		X		-	-	-	-	-	-	-	4,130
CS-14	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	547
CS-15	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-4	3/10/10	0-1'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	6,150
		1-1.5'			X	-	-	-	-	-	-	-	8,040
		1.5'-2'			X	-	-	-	-	-	-	-	14,300
CS-12	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200
SB-3	4/30/10	3'			X	-	-	-	-	-	-	-	11,300
		5'		X		-	-	-	-	-	-	-	4,080
		10'		X		-	-	-	-	-	-	-	1,520
		15'		X		-	-	-	-	-	-	-	1,020
		20'		X		-	-	-	-	-	-	-	7,260
		30'		X		-	-	-	-	-	-	-	10,400
		40'		X		-	-	-	-	-	-	-	7,080
		50'		X		-	-	-	-	-	-	-	9,940
		60'		X		-	-	-	-	-	-	-	2,340
		70'		X		-	-	-	-	-	-	-	801
		80'		X		-	-	-	-	-	-	-	434

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-5	3/10/10	0-1'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	620
SB-4	4/30/10	1'			X	-	-	-	-	-	-	-	7,120
		3'			X	-	-	-	-	-	-	-	8,590
		5'		X		-	-	-	-	-	-	-	14,400
		7'		X		-	-	-	-	-	-	-	14,800
		10'		X		-	-	-	-	-	-	-	7,570
		20'		X		-	-	-	-	-	-	-	6,580
		25'		X		-	-	-	-	-	-	-	3,070
		30'		X		-	-	-	-	-	-	-	911
		40'		X		-	-	-	-	-	-	-	2,840
		50'		X		-	-	-	-	-	-	-	11,300
		60'		X		-	-	-	-	-	-	-	1,490
		70'		X		-	-	-	-	-	-	-	<200
CS-13	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-6	3/10/10	0-1'			X	8	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	12,900
SB-5	4/30/10	1'			X	-	-	-	-	-	-	-	5,750
		3'			X	-	-	-	-	-	-	-	8,840
		5'		X		-	-	-	-	-	-	-	15,200
		7'		X		-	-	-	-	-	-	-	14,800
		10'		X		-	-	-	-	-	-	-	9,650
		15'		X		-	-	-	-	-	-	-	5,350
		20'		X		-	-	-	-	-	-	-	5,280
		25'		X		-	-	-	-	-	-	-	4,330
		30'		X		-	-	-	-	-	-	-	3,780
		40'		X		-	-	-	-	-	-	-	350
		45'		X		-	-	-	-	-	-	-	1,950
		50'		X		-	-	-	-	-	-	-	10,700
		60'		X		-	-	-	-	-	-	-	1,950
		70'		X		-	-	-	-	-	-	-	<200
CS-10	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200
CS-11	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-7	3/10/10	0-1'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	699
		1-1.5'			X	-	-	-	-	-	-	-	2,180
SB-6	4/30/10	1'			X	-	-	-	-	-	-	-	6,150
		3'			X	-	-	-	-	-	-	-	10,500
		5'		X		-	-	-	-	-	-	-	7,000
		7'		X		-	-	-	-	-	-	-	9,630
		10'		X		-	-	-	-	-	-	-	2,570
		15'		X		-	-	-	-	-	-	-	444
		20'		X		-	-	-	-	-	-	-	<200
		25'		X		-	-	-	-	-	-	-	<200
CS-8	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	309
CS-9	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-8	3/10/10	0-.5'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	3,580
SB-7	4/30/10	1'			X	-	-	-	-	-	-	-	3,320
		3'			X	-	-	-	-	-	-	-	6,230
		5'		X		-	-	-	-	-	-	-	6,270
		7'		X		-	-	-	-	-	-	-	4,130
		10'		X		-	-	-	-	-	-	-	615
		15'		X		-	-	-	-	-	-	-	226
		20'		X		-	-	-	-	-	-	-	<200
CS-6	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	542
CS-7	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	433

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-9	3/10/10	0-1'			X	<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	493
		1-1.5'			X	-	-	-	-	-	-	-	2,180
		2-2.5'			X	-	-	-	-	-	-	-	3,510
		3-3.5'			X	-	-	-	-	-	-	-	6,710
SB-8	4/30/10	3'			X	-	-	-	-	-	-	-	2,050
		5'		X		-	-	-	-	-	-	-	1,710
		7'		X		-	-	-	-	-	-	-	973
		10'		X		-	-	-	-	-	-	-	246
		15'		X		-	-	-	-	-	-	-	<200
CS-4	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200
CS-5	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
High Lonesome Penrose Unit TB
EDDY COUNTY, NEW MEXICO

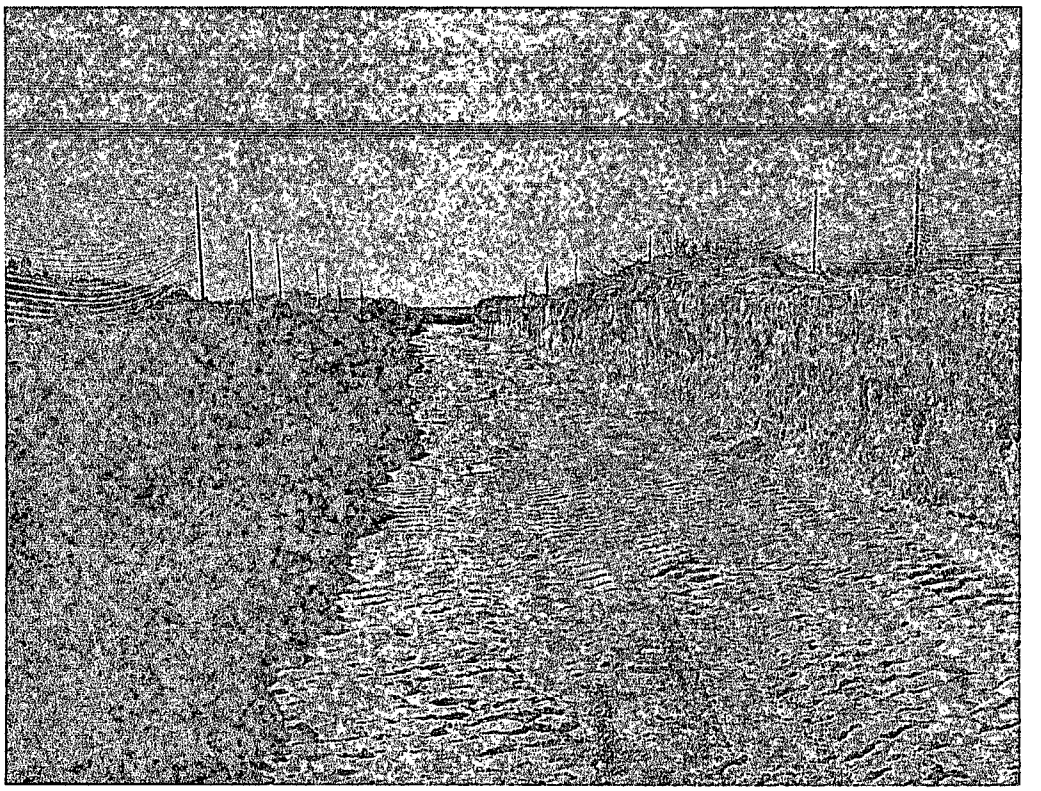
Sample ID	Sample Date	Sample Depth (ft)	BEB	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-10	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	292
CS-1	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	<200
CS-2	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	485
CS-3	11/1/2011	Sidewall		X		-	-	-	-	-	-	-	330
AH-11	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'		X		-	-	-	-	-	-	-	<200
AH-12	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
AH-13	3/10/10	0-.5'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
AH-14	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
		1-1.5'		X		-	-	-	-	-	-	-	<200
		2-2.5'		X		-	-	-	-	-	-	-	<200
AH-15	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
AH-16	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200
AH-17	3/10/10	0-1'		X		<1.00	<50.0	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	<200

BEB Below Excavation Bottom
(--) Not Analyzed
[-] Excavated Depths

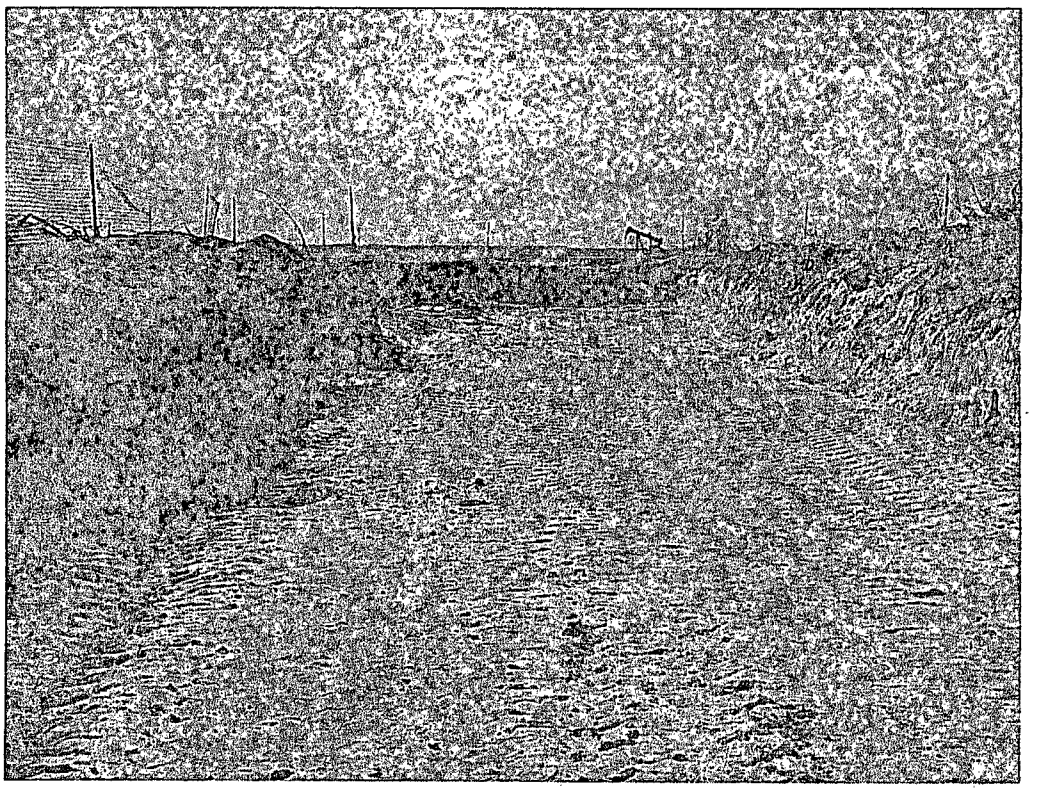
Photos

COG Operating LLC
High Lonesome Penrose
Unit Tank Battery
Eddy County, New Mexico

TETRA TECH



View South -- Excavation

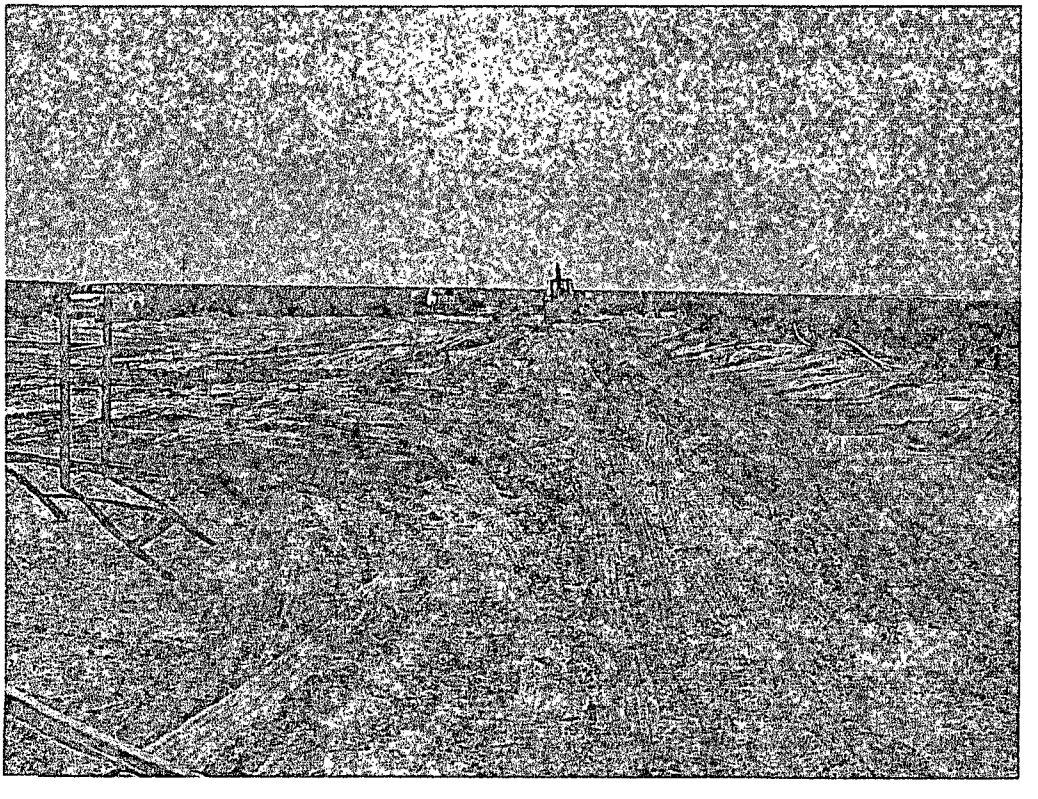


View South -- Excavation

COG Operating LLC
High Lonesome Penrose
Unit Tank Battery
Eddy County, New Mexico

TETRA TECH

View South East -- Excavation



View South -- Backfill

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Repor

Name of Company	COG Operating, LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 100 Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	High Lonesome Penrose Unit Tank Battery	Facility Type	Tank Battery

Surface Owner Federal	Mineral Owner	Lease No. (API#) 30-015-02728

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	15	16S	29E	1980	NORTH	1980	EAST	EDDY

Latitude 32.923067 **Longitude** 104.058967

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 20bbls	Volume Recovered 90bbls
Source of Release Water Tank	Date and Hour of Occurrence 02/02/2010	Date and Hour of Discovery 02/02/2010 8:30 a.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

There was a hole in the bottom of a water tank. The water tank was immediately removed and replaced with a new one.

Describe Area Affected and Cleanup Action Taken.*

The area surrounding the water tank was saturated with 20bbls of produced water that had been released from the water tank, and standing rain water. A vacuum truck recovered 90 bbls of water because of the amount of rain water at the facility. One-call protocol will be made by dirt contractor who will then remove saturated soils prior to soil sampling by Tetra Tech. Tetra Tech will then sample spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for your approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:		
Printed Name: Josh Russo		
Title: HSE Coordinator	Approval Date:	Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval:	Attached ☐
Date: 02/11/2010 Phone: 432-212-2399		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **COG Operating LLC**	Contact **Pat Ellis**
Address **550 W. Texas, Suite 1300 Midland, Texas 79701**	Telephone No. **(432) 230-0077**
Facility Name High Lonesome Penrose Unit Tank Battery	Facility Type **Tank Battery**

Surface Owner: Federal	Mineral Owner	Lease No. (API#) 30-015-02728

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	15	16S	29E	1980	North	1980	East	Eddy

Latitude N 32.923067° **Longitude** W 104.058967°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 20 bbls	Volume Recovered 90 bbls
Source of Release: Water Tank	Date and Hour of Occurrence 02/02/2010	Date and Hour of Discovery 02/02/2010 8:30 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom? Josh Russo	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

There was a hole in the bottom of a water tank. The water tank was immediately removed and replaced with a new one.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech personal inspected site and collected samples to define the spills extent. The areas that exceeded the RRAL were excavated to approximately 3.5-4.0' below surface. The BLM requested that confirmation samples be taken to confirm delineation. The impacted material was removed and hauled away for proper disposal. The site was then brought up to surface grade with clean backfill material. Tetra Tech has prepared a closure report and submitted it to the NMOCD for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:	Attached ☐
Date: 4-26-12 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - High Lonesome Tank Battery
Eddy County, New Mexico

2	1 23				
11	12				
14	13				
23	24				
26	25				
35	36				

6	5	4	3	2	1
7	8	9	10	11	12
18 35	17 43	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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

6	5	4
7	8	9
18	17	16
19	20	21
30	29	28
31	32	33

16 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21 61	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

16 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15 SITE	14 ⊗	13
19 110	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

16 South 30 East

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

17 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22 79	23	24
30	29	28	27	26	25
31	32	33	34 53	35	36

17 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22 80	23	24
30	29 210 208'	28	27	28	25
31	32	33	34	35 153	36

17 South 30 East

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

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- High Lonesome Penrose Unit Tank Battery Site
- ⊗ Tempory monitor well installed by Tetra Tech 3/15/11 - 220' Dry

SAMPLE LOG

Boring/Well:	**TMW-1**
Project Number:	**114-6400572**
Client:	**COG**
Site Location:	**East High Lonesome**
Location:	**Eddy Co., NM**
Legals:	**Township 16-S Range 29-E Sec 14 Unit H**
Total Depth	**220**
Date Installed:	**03/15/11**

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5	--	Loose brown sand
10	--	Soft sandy clay
15	--	Medium stiff clay with some sand
20	--	Medium stiff clay very little sand
25	--	Dense silty sand
30	--	Medium dense silty sand
35	--	Medium dense silty sand
40	--	Medium dense silty sand
45	--	Medium dense silty sand
50	--	Medium stiff silty clay
55	--	Medium stiff silty clay
60	--	Medium stiff silty clay
65	--	Medium stiff silty clay
70	--	Medium stiff silty clay
75	--	Medium stiff silty clay - slightly damp
80	--	Medium stiff silty clay - slightly damp
85	--	Medium dense silty sand
90	--	Medium dense silty sand
95	--	Medium dense silty sand
100	--	Medium dense silty sand
105	--	Medium dense silty sand ~5% 0.5mm gravel
110	--	Medium dense silty sand ~5% 0.5mm gravel
115	--	Medium dense silty sand - gravel layer 0.5-2.5mm gravel
120	--	Medium dense silty sand some gravel
125	--	Loose silty sand
130	--	Loose silty sand
135	--	Loose silty sand
140	--	Loose silty sand
145	--	Stiff silty clay
150	--	Stiff clay
155	--	Stiff clay
160	--	Stiff clay
165	--	Stiff sandy clay
170	--	Coarse sand and gravel mix
175	--	Large gravel and sand 15mm
180	--	Coarse sand and gravel mix with silty clay
185	--	Gravel 10 mm and sandy clay
190	--	Lots of gravel and coarse sand mix
195	--	Gravel and sand
200	--	Gravel and sand mix (tapering off)
205	--	Mostly stiff clay with some sand and 0.5mm gravel
210	--	Stiff red clay
215	--	Stiff red clay
220	--	Stiff red clay

Total Depth 220' **Groundwater was not encountered**

Appendix C

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: November 11, 2011

Work Order: 11110710

Project Location: Eddy Co., NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
281734	CS-1 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281735	CS-2 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281736	CS-3 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281737	CS-4 Sidewall Near AH-9	soil	2011-11-01	00:00	2011-11-04
281738	CS-5 Sidewall Near AH-9	soil	2011-11-01	00:00	2011-11-04
281739	CS-6 Sidewall Near AH-8	soil	2011-11-01	00:00	2011-11-04
281740	CS-7 Sidewall Near AH-8	soil	2011-11-01	00:00	2011-11-04
281741	CS-8 Sidewall Near AH-7	soil	2011-11-01	00:00	2011-11-04
281742	CS-9 Sidewall Near AH-7	soil	2011-11-01	00:00	2011-11-04
281743	CS-10 Sidewall Near AH-6	soil	2011-11-01	00:00	2011-11-04
281744	CS-11Sidewall Near AH-6	soil	2011-11-03	00:00	2011-11-04
281745	CS-12 Sidewall Near AH-4	soil	2011-11-03	00:00	2011-11-04
281746	CS-13 Sidewall Near AH-5	soil	2011-11-03	00:00	2011-11-04
281747	CS-14 Sidewall Near AH-3 Firewall	soil	2011-11-03	00:00	2011-11-04
281748	CS-15 Sidewall Near AH-3	soil	2011-11-03	00:00	2011-11-04

Sample: 281734 - CS-1 Sidewall Near AH-10

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281735 - CS-2 Sidewall Near AH-10

Param	Flag	Result	Units	RL
Chloride		485	mg/Kg	4

Sample: 281736 - CS-3 Sidewall Near AH-10

Param	Flag	Result	Units	RL
Chloride		**330**	mg/Kg	4

Sample: 281737 - CS-4 Sidewall Near AH-9

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281738 - CS-5 Sidewall Near AH-9

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281739 - CS-6 Sidewall Near AH-8

Param	Flag	Result	Units	RL
Chloride		**542**	mg/Kg	4

Sample: 281740 - CS-7 Sidewall Near AH-8

Param	Flag	Result	Units	RL
Chloride		**433**	mg/Kg	4

Sample: 281741 - CS-8 Sidewall Near AH-7

Param	Flag	Result	Units	RL
Chloride		**309**	mg/Kg	4

Sample: 281742 - CS-9 Sidewall Near AH-7

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281743 - CS-10 Sidewall Near AH-6

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281744 - CS-11Sidewall Near AH-6

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281745 - CS-12 Sidewall Near AH-4

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281746 - CS-13 Sidewall Near AH-5

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 281747 - CS-14 Sidewall Near AH-3 Firewall

Param	Flag	Result	Units	RL
Chloride		**547**	mg/Kg	4

Sample: 281748 - CS-15 Sidewall Near AH-3

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 | Lubbock, Texas 79424 | 800•378•1296 | 806•794•1296 | FAX 806•794•1298
200 East Sunset Road, Suite E | El Paso, Texas 79922 | 888•588•3443 | 915•585•3443 | FAX 915•585•4944
5002 Basin Street, Suite A1 | Midland, Texas 79703 | | 432•689•6301 | FAX 432•689•6313
6015 Harris Parkway, Suite 110 | Ft Worth, Texas 76132 | | 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: November 11, 2011

Work Order: 11110710

Project Location: Eddy Co., NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
281734	CS-1 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281735	CS-2 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281736	CS-3 Sidewall Near AH-10	soil	2011-11-01	00:00	2011-11-04
281737	CS-4 Sidewall Near AH-9	soil	2011-11-01	00:00	2011-11-04
281738	CS-5 Sidewall Near AH-9	soil	2011-11-01	00:00	2011-11-04
281739	CS-6 Sidewall Near AH-8	soil	2011-11-01	00:00	2011-11-04
281740	CS-7 Sidewall Near AH-8	soil	2011-11-01	00:00	2011-11-04
281741	CS-8 Sidewall Near AH-7	soil	2011-11-01	00:00	2011-11-04
281742	CS-9 Sidewall Near AH-7	soil	2011-11-01	00:00	2011-11-04
281743	CS-10 Sidewall Near AH-6	soil	2011-11-01	00:00	2011-11-04
281744	CS-11Sidewall Near AH-6	soil	2011-11-03	00:00	2011-11-04
281745	CS-12 Sidewall Near AH-4	soil	2011-11-03	00:00	2011-11-04
281746	CS-13 Sidewall Near AH-5	soil	2011-11-03	00:00	2011-11-04
281747	CS-14 Sidewall Near AH-3 Firewall	soil	2011-11-03	00:00	2011-11-04
281748	CS-15 Sidewall Near AH-3	soil	2011-11-03	00:00	2011-11-04

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project COG/High Lonesome Penrose Unit TB were received by TraceAnalysis, Inc. on 2011-11-04 and assigned to work order 11110710. Samples for work order 11110710 were received intact at a temperature of 3.1 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	73246	2011-11-09 at 12:08	86286	2011-11-10 at 10:47
Chloride (Titration)	SM 4500-Cl B	73246	2011-11-09 at 12:08	86287	2011-11-10 at 10:48

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11110710 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 281734 - CS-1 Sidewall Near AH-10

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281735 - CS-2 Sidewall Near AH-10

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**485**	mg/Kg	50	4.00

Sample: 281736 - CS-3 Sidewall Near AH-10

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**330**	mg/Kg	50	4.00

Sample: 281737 - CS-4 Sidewall Near AH-9

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281738 - CS-5 Sidewall Near AH-9

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281739 - CS-6 Sidewall Near AH-8

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**542**	mg/Kg	50	4.00

Sample: 281740 - CS-7 Sidewall Near AH-8

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**433**	mg/Kg	50	4.00

Sample: 281741 - CS-8 Sidewall Near AH-7

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**309**	mg/Kg	50	4.00

Sample: 281742 - CS-9 Sidewall Near AH-7

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281743 - CS-10 Sidewall Near AH-6

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281744 - CS-11Sidewall Near AH-6

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281745 - CS-12 Sidewall Near AH-4

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281746 - CS-13 Sidewall Near AH-5

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Sample: 281747 - CS-14 Sidewall Near AH-3 Firewall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**547**	mg/Kg	50	4.00

Sample: 281748 - CS-15 Sidewall Near AH-3

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	Sample Preparation:	2011-11-09	Prepared By:	AR

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U	U		<200	mg/Kg	50	4.00

Method Blanks

Method Blank (1) QC Batch: 86286

QC Batch:	86286	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	QC Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 86287

QC Batch:	86287	Date Analyzed:	2011-11-10	Analyzed By:	AR
Prep Batch:	73246	QC Preparation:	2011-11-09	Prepared By:	AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 86286 | Date Analyzed: 2011-11-10 | Analyzed By: AR
Prep Batch: 73246 | QC Preparation: 2011-11-09 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			97.8	mg/Kg	1	100	<3.85	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			103	mg/Kg	1	100	<3.85	103	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 86287 | Date Analyzed: 2011-11-10 | Analyzed By: AR
Prep Batch: 73246 | QC Preparation: 2011-11-09 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			96.5	mg/Kg	1	100	<3.85	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			103	mg/Kg	1	100	<3.85	103	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 281743

QC Batch: 86286 | Date Analyzed: 2011-11-10 | Analyzed By: AR
Prep Batch: 73246 | QC Preparation: 2011-11-09 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10100	mg/Kg	100	10000	<385	101	79.4 - 120.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10800	mg/Kg	100	10000	<385	108	79.4 - 120.6	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 281839

QC Batch: 86287 | Date Analyzed: 2011-11-10 | Analyzed By: AR
Prep Batch: 73246 | QC Preparation: 2011-11-09 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			19600	mg/Kg	100	10000	9670	99	79.4 - 120.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			20300	mg/Kg	100	10000	9670	109	79.4 - 120.6	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Calibration Standards

Standard (ICV-1)

QC Batch: 86286 | Date Analyzed: 2011-11-10 | Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.0	99	85 - 115	2011-11-10

Standard (CCV-1)

QC Batch: 86286 | Date Analyzed: 2011-11-10 | Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2011-11-10

Standard (ICV-1)

QC Batch: 86287 | Date Analyzed: 2011-11-10 | Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.2	99	85 - 115	2011-11-10

Standard (CCV-1)

QC Batch: 86287 | Date Analyzed: 2011-11-10 | Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2011-11-10

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

WO # 1111O710

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-640046

PROJECT NAME: High Lonesome Penrose Unit Tank Battery Eddy County

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
281734	11/1/11	—	S		X	CS-1 Sidewall near AH-10	1				X													X				
735	11/1/11	—	S		X	CS-2 sidewall near AH-10	1				X													X				
736	11/1/11	—	S		X	CS-3 sidewall near AH-10	1				X													X				
737	11/1/11	—	S		X	CS-4 sidewell near AH-9	1				X													X				
738	11/1/11	—	S		X	CS-5 Sidewall near AH-9	1				X													X				
739	11/1/11	—	S		X	CS-6 Sidewall near AH-8	1				X													X				
740	11/1/11	-	S		X	CS-7 Sidewall near AH-8	1				X													X				
741	11/1/11	—	S		X	CS-8 Sidewall near AH-7	1				X													X				
742	11/1/11	—	S		X	CS-9 Sidewall near AH-7	1				X													X				
743	11/1/11	—	S		X	CS-10 sidewall near AH-6	1				X													X				

RELINQUISHED BY: (Signature) Brian Schavee — Date: — Time: —

RECEIVED BY: (Signature) — Date: 11/4/11 — Time: 10:15

SAMPLED BY: (Print & Initial) Brian Schavee BPS — Date: 11/3/11 — Time: 1200

RELINQUISHED BY: (Signature) — Date: — Time: —

RECEIVED BY: (Signature) — Date: — Time: —

SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS — AIRBILL #: — OTHER: —

RELINQUISHED BY: (Signature) — Date: — Time: —

RECEIVED BY: (Signature) — Date: — Time: —

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: —
ADDRESS: —
CITY: — STATE: — ZIP: —
CONTACT: — PHONE: — DATE: — TIME: —
RECEIVED BY: (Signature) —

SAMPLE CONDITION WHEN RECEIVED: 3.1°C intact

REMARKS: All tests Midland

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 111010

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: High Lonesome Penrose Unit Tank Battery Eddy County

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC:MS Vol. 8240/8260/624	GC:MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
26 744	11/3/11	—	S		X	CS-11 sidewall near AH-6	X				X														X				
745	11/3/11	—	S		X	CS-12 sidewall near AH-4	X				X														X				
746	11/3/11	—	S		X	CS-13 sidewall near AH-5	X				X														X				
747	11/3/11	—	S		X	CS-14 sidewall near AH-3 firewall	X				X														X				
748	11/3/11	—	S		X	CS-15 sidewall near AH-3	X				X														X				

RELINQUISHED BY: (Signature) Brian Schavee — Date: 11/4/11 Time: 10:15

RECEIVED BY: (Signature) — Date: 11/4/11 Time: 10:15

SAMPLED BY: (Print & Initial) BRIAN Schavee BPS — Date: 11/3/11 Time: 1200

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.1 C Intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: May 18, 2010

Work Order: 10050422

Project Location: Eddy County, NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230478	SB-1 1'	soil	2010-04-30	00:00	2010-05-03
230479	SB-1 3'	soil	2010-04-30	00:00	2010-05-03
230480	SB-1 5'	soil	2010-04-30	00:00	2010-05-03
230481	SB-1 7'	soil	2010-04-30	00:00	2010-05-03
230482	SB-1 10'	soil	2010-04-30	00:00	2010-05-03
230483	SB-1 15'	soil	2010-04-30	00:00	2010-05-03
230484	SB-1 20'	soil	2010-04-30	00:00	2010-05-03
230485	SB-1 30'	soil	2010-04-30	00:00	2010-05-03
230486	SB-1 40'	soil	2010-04-30	00:00	2010-05-03
230487	SB-1 50'	soil	2010-04-30	00:00	2010-05-03
230488	SB-1 60'	soil	2010-04-30	00:00	2010-05-03
230489	SB-1 70'	soil	2010-04-30	00:00	2010-05-03
230491	SB-2 3'	soil	2010-04-30	00:00	2010-05-03
230492	SB-2 5'	soil	2010-04-30	00:00	2010-05-03
230493	SB-2 10'	soil	2010-04-30	00:00	2010-05-03
230494	SB-2 15'	soil	2010-04-30	00:00	2010-05-03
230495	SB-2 20'	soil	2010-04-30	00:00	2010-05-03
230496	SB-2 30'	soil	2010-04-30	00:00	2010-05-03
230497	SB-2 40'	soil	2010-04-30	00:00	2010-05-03
230498	SB-2 50'	soil	2010-04-30	00:00	2010-05-03
230499	SB-2 60'	soil	2010-04-30	00:00	2010-05-03
230500	SB-2 70'	soil	2010-04-30	00:00	2010-05-03
230501	SB-2 80'	soil	2010-04-30	00:00	2010-05-03
230502	SB-3 3'	soil	2010-04-30	00:00	2010-05-03
230503	SB-3 5'	soil	2010-04-30	00:00	2010-05-03
230504	SB-3 10'	soil	2010-04-30	00:00	2010-05-03
230505	SB-3 15'	soil	2010-04-30	00:00	2010-05-03
230506	SB-3 20'	soil	2010-04-30	00:00	2010-05-03
230507	SB-3 30'	soil	2010-04-30	00:00	2010-05-03
230508	SB-3 40'	soil	2010-04-30	00:00	2010-05-03

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230509	SB-3 50'	soil	2010-04-30	00:00	2010-05-03
230510	SB-3 60'	soil	2010-04-30	00:00	2010-05-03
230511	SB-3 70'	soil	2010-04-30	00:00	2010-05-03
230512	SB-3 80'	soil	2010-04-30	00:00	2010-05-03
230518	SB-4 1'	soil	2010-04-30	00:00	2010-05-03
230519	SB-4 3'	soil	2010-04-30	00:00	2010-05-03
230520	SB-4 5'	soil	2010-04-30	00:00	2010-05-03
230521	SB-4 7'	soil	2010-04-30	00:00	2010-05-03
230522	SB-4 10'	soil	2010-04-30	00:00	2010-05-03
230523	SB-4 20'	soil	2010-04-30	00:00	2010-05-03
230524	SB-4 25'	soil	2010-04-30	00:00	2010-05-03
230525	SB-4 30'	soil	2010-04-30	00:00	2010-05-03
230526	SB-4 40'	soil	2010-04-30	00:00	2010-05-03
230527	SB-4 50'	soil	2010-04-30	00:00	2010-05-03
230528	SB-4 60'	soil	2010-04-30	00:00	2010-05-03
230529	SB-4 70'	soil	2010-04-30	00:00	2010-05-03
230531	SB-5 1'	soil	2010-04-30	00:00	2010-05-03
230532	SB-5 3'	soil	2010-04-30	00:00	2010-05-03
230533	SB-5 5'	soil	2010-04-30	00:00	2010-05-03
230534	SB-5 7'	soil	2010-04-30	00:00	2010-05-03
230535	SB-5 10'	soil	2010-04-30	00:00	2010-05-03
230536	SB-5 15'	soil	2010-04-30	00:00	2010-05-03
230537	SB-5 20'	soil	2010-04-30	00:00	2010-05-03
230538	SB-5 25'	soil	2010-04-30	00:00	2010-05-03
230539	SB-5 30'	soil	2010-04-30	00:00	2010-05-03
230540	SB-5 40'	soil	2010-04-30	00:00	2010-05-03
230541	SB-5 45'	soil	2010-04-30	00:00	2010-05-03
230542	SB-5 50'	soil	2010-04-30	00:00	2010-05-03
230543	SB-5 60'	soil	2010-04-30	00:00	2010-05-03
230544	SB-5 70'	soil	2010-04-30	00:00	2010-05-03
230547	SB-6 1'	soil	2010-04-30	00:00	2010-05-03
230548	SB-6 3'	soil	2010-04-30	00:00	2010-05-03
230549	SB-6 5'	soil	2010-04-30	00:00	2010-05-03
230550	SB-6 7'	soil	2010-04-30	00:00	2010-05-03
230551	SB-6 10'	soil	2010-04-30	00:00	2010-05-03
230552	SB-6 15'	soil	2010-04-30	00:00	2010-05-03
230553	SB-6 20'	soil	2010-04-30	00:00	2010-05-03
230554	SB-6 25'	soil	2010-04-30	00:00	2010-05-03
230555	SB-7 1'	soil	2010-04-30	00:00	2010-05-03
230556	SB-7 3'	soil	2010-04-30	00:00	2010-05-03
230557	SB-7 5'	soil	2010-04-30	00:00	2010-05-03
230558	SB-7 7'	soil	2010-04-30	00:00	2010-05-03
230559	SB-7 10'	soil	2010-04-30	00:00	2010-05-03
230560	SB-7 15'	soil	2010-04-30	00:00	2010-05-03
230561	SB-7 20'	soil	2010-04-30	00:00	2010-05-03
230562	SB-8 3'	soil	2010-04-30	00:00	2010-05-03
230563	SB-8 5'	soil	2010-04-30	00:00	2010-05-03
230564	SB-8 7'	soil	2010-04-30	00:00	2010-05-03
230565	SB-8 10'	soil	2010-04-30	00:00	2010-05-03

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230566	SB-8 15'	soil	2010-04-30	00:00	2010-05-03

Sample: 230478 - SB-1 1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230479 - SB-1 3'

Param	Flag	Result	Units	RL
Chloride		**890**	mg/Kg	4.00

Sample: 230480 - SB-1 5'

Param	Flag	Result	Units	RL
Chloride		**5150**	mg/Kg	4.00

Sample: 230481 - SB-1 7'

Param	Flag	Result	Units	RL
Chloride		**6240**	mg/Kg	4.00

Sample: 230482 - SB-1 10'

Param	Flag	Result	Units	RL
Chloride		**13000**	mg/Kg	4.00

Sample: 230483 - SB-1 15'

Param	Flag	Result	Units	RL
Chloride		**15700**	mg/Kg	4.00

Sample: 230484 - SB-1 20'

Param	Flag	Result	Units	RL
Chloride		**18400**	mg/Kg	4.00

Sample: 230485 - SB-1 30'

Param	Flag	Result	Units	RL
Chloride		**15000**	mg/Kg	4.00

Sample: 230486 - SB-1 40'

Param	Flag	Result	Units	RL
Chloride		**5650**	mg/Kg	4.00

Sample: 230487 - SB-1 50'

Param	Flag	Result	Units	RL
Chloride		**2210**	mg/Kg	4.00

Sample: 230488 - SB-1 60'

Param	Flag	Result	Units	RL
Chloride		**2680**	mg/Kg	4.00

Sample: 230489 - SB-1 70'

Param	Flag	Result	Units	RL
Chloride		**265**	mg/Kg	4.00

Sample: 230491 - SB-2 3'

Param	Flag	Result	Units	RL
Chloride		**2540**	mg/Kg	4.00

Sample: 230492 - SB-2 5'

Param	Flag	Result	Units	RL
Chloride		**8150**	mg/Kg	4.00

Sample: 230493 - SB-2 10'

Param	Flag	Result	Units	RL
Chloride		**5920**	mg/Kg	4.00

Sample: 230494 - SB-2 15'

Param	Flag	Result	Units	RL
Chloride		**6560**	mg/Kg	4.00

Sample: 230495 - SB-2 20'

Param	Flag	Result	Units	RL
Chloride		**15300**	mg/Kg	4.00

Sample: 230496 - SB-2 30'

Param	Flag	Result	Units	RL
Chloride		**12400**	mg/Kg	4.00

Sample: 230497 - SB-2 40'

Param	Flag	Result	Units	RL
Chloride		**20000**	mg/Kg	4.00

Sample: 230498 - SB-2 50'

Param	Flag	Result	Units	RL
Chloride		**7690**	mg/Kg	4.00

Sample: 230499 - SB-2 60'

Param	Flag	Result	Units	RL
Chloride		**1930**	mg/Kg	4.00

Sample: 230500 - SB-2 70'

Param	Flag	Result	Units	RL
Chloride		**3480**	mg/Kg	4.00

Sample: 230501 - SB-2 80'

Param	Flag	Result	Units	RL
Chloride		**4130**	mg/Kg	4.00

Sample: 230502 - SB-3 3'

Param	Flag	Result	Units	RL
Chloride		**11300**	mg/Kg	4.00

Sample: 230503 - SB-3 5'

Param	Flag	Result	Units	RL
Chloride		**4080**	mg/Kg	4.00

Sample: 230504 - SB-3 10'

Param	Flag	Result	Units	RL
Chloride		**1520**	mg/Kg	4.00

Sample: 230505 - SB-3 15'

Param	Flag	Result	Units	RL
Chloride		**1020**	mg/Kg	4.00

Sample: 230506 - SB-3 20'

Param	Flag	Result	Units	RL
Chloride		**7260**	mg/Kg	4.00

Sample: 230507 - SB-3 30'

Param	Flag	Result	Units	RL
Chloride		**10400**	mg/Kg	4.00

Sample: 230508 - SB-3 40'

Param	Flag	Result	Units	RL
Chloride		**7080**	mg/Kg	4.00

Sample: 230509 - SB-3 50'

Param	Flag	Result	Units	RL
Chloride		**9940**	mg/Kg	4.00

Sample: 230510 - SB-3 60'

Param	Flag	Result	Units	RL
Chloride		**2340**	mg/Kg	4.00

Sample: 230511 - SB-3 70'

Param	Flag	Result	Units	RL
Chloride		**801**	mg/Kg	4.00

Sample: 230512 - SB-3 80'

Param	Flag	Result	Units	RL
Chloride		**434**	mg/Kg	4.00

Sample: 230518 - SB-4 1'

Param	Flag	Result	Units	RL
Chloride		**7120**	mg/Kg	4.00

Sample: 230519 - SB-4 3'

Param	Flag	Result	Units	RL
Chloride		**8590**	mg/Kg	4.00

Sample: 230520 - SB-4 5'

Param	Flag	Result	Units	RL
Chloride		**14400**	mg/Kg	4.00

Sample: 230521 - SB-4 7'

Param	Flag	Result	Units	RL
Chloride		**14800**	mg/Kg	4.00

Sample: 230522 - SB-4 10'

Param	Flag	Result	Units	RL
Chloride		**7570**	mg/Kg	4.00

Sample: 230523 - SB-4 20'

Param	Flag	Result	Units	RL
Chloride		**6580**	mg/Kg	4.00

Sample: 230524 - SB-4 25'

Param	Flag	Result	Units	RL
Chloride		**3070**	mg/Kg	4.00

Sample: 230525 - SB-4 30'

Param	Flag	Result	Units	RL
Chloride		**911**	mg/Kg	4.00

Sample: 230526 - SB-4 40'

Param	Flag	Result	Units	RL
Chloride		**2840**	mg/Kg	4.00

Sample: 230527 - SB-4 50'

Param	Flag	Result	Units	RL
Chloride		**11300**	mg/Kg	4.00

Sample: 230528 - SB-4 60'

Param	Flag	Result	Units	RL
Chloride		**1490**	mg/Kg	4.00

Sample: 230529 - SB-4 70'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230531 - SB-5 1'

Param	Flag	Result	Units	RL
Chloride		**5750**	mg/Kg	4.00

Sample: 230532 - SB-5 3'

Param	Flag	Result	Units	RL
Chloride		**8840**	mg/Kg	4.00

Sample: 230533 - SB-5 5'

Param	Flag	Result	Units	RL
Chloride		**15200**	mg/Kg	4.00

Sample: 230534 - SB-5 7'

Param	Flag	Result	Units	RL
Chloride		**14800**	mg/Kg	4.00

Sample: 230535 - SB-5 10'

Param	Flag	Result	Units	RL
Chloride		**9650**	mg/Kg	4.00

Sample: 230536 - SB-5 15'

Param	Flag	Result	Units	RL
Chloride		**5350**	mg/Kg	4.00

Sample: 230537 - SB-5 20'

Param	Flag	Result	Units	RL
Chloride		**5280**	mg/Kg	4.00

Sample: 230538 - SB-5 25'

Param	Flag	Result	Units	RL
Chloride		**4330**	mg/Kg	4.00

Sample: 230539 - SB-5 30'

Param	Flag	Result	Units	RL
Chloride		**3780**	mg/Kg	4.00

Sample: 230540 - SB-5 40'

Param	Flag	Result	Units	RL
Chloride		**350**	mg/Kg	4.00

Sample: 230541 - SB-5 45'

Param	Flag	Result	Units	RL
Chloride		**1950**	mg/Kg	4.00

Sample: 230542 - SB-5 50'

Param	Flag	Result	Units	RL
Chloride		**10700**	mg/Kg	4.00

Sample: 230543 - SB-5 60'

Param	Flag	Result	Units	RL
Chloride		**1950**	mg/Kg	4.00

Sample: 230544 - SB-5 70'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230547 - SB-6 1'

Param	Flag	Result	Units	RL
Chloride		**6150**	mg/Kg	4.00

Sample: 230548 - SB-6 3'

Param	Flag	Result	Units	RL
Chloride		**10500**	mg/Kg	4.00

Sample: 230549 - SB-6 5'

Param	Flag	Result	Units	RL
Chloride		**7000**	mg/Kg	4.00

Sample: 230550 - SB-6 7'

Param	Flag	Result	Units	RL
Chloride		**9630**	mg/Kg	4.00

Sample: 230551 - SB-6 10'

Param	Flag	Result	Units	RL
Chloride		**2570**	mg/Kg	4.00

Sample: 230552 - SB-6 15'

Param	Flag	Result	Units	RL
Chloride		**444**	mg/Kg	4.00

Sample: 230553 - SB-6 20'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230554 - SB-6 25'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230555 - SB-7 1'

Param	Flag	Result	Units	RL
Chloride		**3320**	mg/Kg	4.00

Sample: 230556 - SB-7 3'

Param	Flag	Result	Units	RL
Chloride		**6230**	mg/Kg	4.00

Sample: 230557 - SB-7 5'

Param	Flag	Result	Units	RL
Chloride		**6270**	mg/Kg	4.00

Sample: 230558 - SB-7 7'

Param	Flag	Result	Units	RL
Chloride		**4130**	mg/Kg	4.00

Sample: 230559 - SB-7 10'

Param	Flag	Result	Units	RL
Chloride		**615**	mg/Kg	4.00

Sample: 230560 - SB-7 15'

Param	Flag	Result	Units	RL
Chloride		**226**	mg/Kg	4.00

Sample: 230561 - SB-7 20'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 230562 - SB-8 3'

Param	Flag	Result	Units	RL
Chloride		**2050**	mg/Kg	4.00

Sample: 230563 - SB-8 5'

Param	Flag	Result	Units	RL
Chloride		**1710**	mg/Kg	4.00

Sample: 230564 - SB-8 7'

Param	Flag	Result	Units	RL
Chloride		**973**	mg/Kg	4.00

Sample: 230565 - SB-8 10'

Param	Flag	Result	Units	RL
Chloride		**246**	mg/Kg	4.00

Sample: 230566 - SB-8 15'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 18, 2010

Work Order: 10050422

Project Location: Eddy County, NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

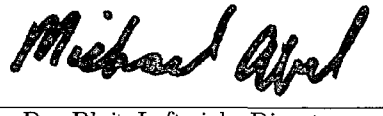
Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230478	SB-1 1'	soil	2010-04-30	00:00	2010-05-03
230479	SB-1 3'	soil	2010-04-30	00:00	2010-05-03
230480	SB-1 5'	soil	2010-04-30	00:00	2010-05-03
230481	SB-1 7'	soil	2010-04-30	00:00	2010-05-03
230482	SB-1 10'	soil	2010-04-30	00:00	2010-05-03
230483	SB-1 15'	soil	2010-04-30	00:00	2010-05-03
230484	SB-1 20'	soil	2010-04-30	00:00	2010-05-03
230485	SB-1 30'	soil	2010-04-30	00:00	2010-05-03
230486	SB-1 40'	soil	2010-04-30	00:00	2010-05-03
230487	SB-1 50'	soil	2010-04-30	00:00	2010-05-03

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230488	SB-1 60'	soil	2010-04-30	00:00	2010-05-03
230489	SB-1 70'	soil	2010-04-30	00:00	2010-05-03
230491	SB-2 3'	soil	2010-04-30	00:00	2010-05-03
230492	SB-2 5'	soil	2010-04-30	00:00	2010-05-03
230493	SB-2 10'	soil	2010-04-30	00:00	2010-05-03
230494	SB-2 15'	soil	2010-04-30	00:00	2010-05-03
230495	SB-2 20'	soil	2010-04-30	00:00	2010-05-03
230496	SB-2 30'	soil	2010-04-30	00:00	2010-05-03
230497	SB-2 40'	soil	2010-04-30	00:00	2010-05-03
230498	SB-2 50'	soil	2010-04-30	00:00	2010-05-03
230499	SB-2 60'	soil	2010-04-30	00:00	2010-05-03
230500	SB-2 70'	soil	2010-04-30	00:00	2010-05-03
230501	SB-2 80'	soil	2010-04-30	00:00	2010-05-03
230502	SB-3 3'	soil	2010-04-30	00:00	2010-05-03
230503	SB-3 5'	soil	2010-04-30	00:00	2010-05-03
230504	SB-3 10'	soil	2010-04-30	00:00	2010-05-03
230505	SB-3 15'	soil	2010-04-30	00:00	2010-05-03
230506	SB-3 20'	soil	2010-04-30	00:00	2010-05-03
230507	SB-3 30'	soil	2010-04-30	00:00	2010-05-03
230508	SB-3 40'	soil	2010-04-30	00:00	2010-05-03
230509	SB-3 50'	soil	2010-04-30	00:00	2010-05-03
230510	SB-3 60'	soil	2010-04-30	00:00	2010-05-03
230511	SB-3 70'	soil	2010-04-30	00:00	2010-05-03
230512	SB-3 80'	soil	2010-04-30	00:00	2010-05-03
230518	SB-4 1'	soil	2010-04-30	00:00	2010-05-03
230519	SB-4 3'	soil	2010-04-30	00:00	2010-05-03
230520	SB-4 5'	soil	2010-04-30	00:00	2010-05-03
230521	SB-4 7'	soil	2010-04-30	00:00	2010-05-03
230522	SB-4 10'	soil	2010-04-30	00:00	2010-05-03
230523	SB-4 20'	soil	2010-04-30	00:00	2010-05-03
230524	SB-4 25'	soil	2010-04-30	00:00	2010-05-03
230525	SB-4 30'	soil	2010-04-30	00:00	2010-05-03
230526	SB-4 40'	soil	2010-04-30	00:00	2010-05-03
230527	SB-4 50'	soil	2010-04-30	00:00	2010-05-03
230528	SB-4 60'	soil	2010-04-30	00:00	2010-05-03
230529	SB-4 70'	soil	2010-04-30	00:00	2010-05-03
230531	SB-5 1'	soil	2010-04-30	00:00	2010-05-03
230532	SB-5 3'	soil	2010-04-30	00:00	2010-05-03
230533	SB-5 5'	soil	2010-04-30	00:00	2010-05-03
230534	SB-5 7'	soil	2010-04-30	00:00	2010-05-03
230535	SB-5 10'	soil	2010-04-30	00:00	2010-05-03
230536	SB-5 15'	soil	2010-04-30	00:00	2010-05-03
230537	SB-5 20'	soil	2010-04-30	00:00	2010-05-03
230538	SB-5 25'	soil	2010-04-30	00:00	2010-05-03
230539	SB-5 30'	soil	2010-04-30	00:00	2010-05-03
230540	SB-5 40'	soil	2010-04-30	00:00	2010-05-03

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
230541	SB-5 45'	soil	2010-04-30	00:00	2010-05-03
230542	SB-5 50'	soil	2010-04-30	00:00	2010-05-03
230543	SB-5 60'	soil	2010-04-30	00:00	2010-05-03
230544	SB-5 70'	soil	2010-04-30	00:00	2010-05-03
230547	SB-6 1'	soil	2010-04-30	00:00	2010-05-03
230548	SB-6 3'	soil	2010-04-30	00:00	2010-05-03
230549	SB-6 5'	soil	2010-04-30	00:00	2010-05-03
230550	SB-6 7'	soil	2010-04-30	00:00	2010-05-03
230551	SB-6 10'	soil	2010-04-30	00:00	2010-05-03
230552	SB-6 15'	soil	2010-04-30	00:00	2010-05-03
230553	SB-6 20'	soil	2010-04-30	00:00	2010-05-03
230554	SB-6 25'	soil	2010-04-30	00:00	2010-05-03
230555	SB-7 1'	soil	2010-04-30	00:00	2010-05-03
230556	SB-7 3'	soil	2010-04-30	00:00	2010-05-03
230557	SB-7 5'	soil	2010-04-30	00:00	2010-05-03
230558	SB-7 7'	soil	2010-04-30	00:00	2010-05-03
230559	SB-7 10'	soil	2010-04-30	00:00	2010-05-03
230560	SB-7 15'	soil	2010-04-30	00:00	2010-05-03
230561	SB-7 20'	soil	2010-04-30	00:00	2010-05-03
230562	SB-8 3'	soil	2010-04-30	00:00	2010-05-03
230563	SB-8 5'	soil	2010-04-30	00:00	2010-05-03
230564	SB-8 7'	soil	2010-04-30	00:00	2010-05-03
230565	SB-8 10'	soil	2010-04-30	00:00	2010-05-03
230566	SB-8 15'	soil	2010-04-30	00:00	2010-05-03

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 37 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/High Lonesome Penrose Unit TB were received by TraceAnalysis, Inc. on 2010-05-03 and assigned to work order 10050422. Samples for work order 10050422 were received intact at a temperature of 9.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	59904	2010-05-06 at 09:47	70006	2010-05-13 at 16:17
Chloride (Titration)	SM 4500-Cl B	59905	2010-05-06 at 09:49	70007	2010-05-13 at 16:18
Chloride (Titration)	SM 4500-Cl B	59906	2010-05-06 at 09:49	70008	2010-05-13 at 16:19
Chloride (Titration)	SM 4500-Cl B	59907	2010-05-06 at 09:50	70054	2010-05-14 at 12:45
Chloride (Titration)	SM 4500-Cl B	59923	2010-05-13 at 12:02	70055	2010-05-14 at 12:46
Chloride (Titration)	SM 4500-Cl B	59924	2010-05-13 at 12:05	70056	2010-05-14 at 12:47
Chloride (Titration)	SM 4500-Cl B	59925	2010-05-13 at 12:06	70057	2010-05-14 at 12:48
Chloride (Titration)	SM 4500-Cl B	59926	2010-05-13 at 12:08	70108	2010-05-17 at 16:46
Chloride (Titration)	SM 4500-Cl B	59927	2010-05-13 at 12:09	70110	2010-05-17 at 16:53

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10050422 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 230478 - SB-1 1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70006	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59904	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230479 - SB-1 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70006	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59904	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**890**	mg/Kg	50	4.00

Sample: 230480 - SB-1 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70006	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59904	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5150**	mg/Kg	100	4.00

Sample: 230481 - SB-1 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

continued ...

sample 230481 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6240**	mg/Kg	100	4.00

Sample: 230482 - SB-1 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**13000**	mg/Kg	100	4.00

Sample: 230483 - SB-1 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**15700**	mg/Kg	100	4.00

Sample: 230484 - SB-1 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**18400**	mg/Kg	100	4.00

Sample: 230485 - SB-1 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**15000**	mg/Kg	100	4.00

Sample: 230486 - SB-1 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5650**	mg/Kg	100	4.00

Sample: 230487 - SB-1 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2210**	mg/Kg	100	4.00

Sample: 230488 - SB-1 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2680**	mg/Kg	100	4.00

Sample: 230489 - SB-1 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**265**	mg/Kg	50	4.00

Sample: 230491 - SB-2 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2540**	mg/Kg	100	4.00

Sample: 230492 - SB-2 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**8150**	mg/Kg	100	4.00

Sample: 230493 - SB-2 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5920**	mg/Kg	100	4.00

Sample: 230494 - SB-2 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6560**	mg/Kg	100	4.00

Sample: 230495 - SB-2 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**15300**	mg/Kg	100	4.00

Sample: 230496 - SB-2 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12400**	mg/Kg	100	4.00

Sample: 230497 - SB-2 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**20000**	mg/Kg	100	4.00

Sample: 230498 - SB-2 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7690**	mg/Kg	100	4.00

Sample: 230499 - SB-2 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1930**	mg/Kg	50	4.00

Sample: 230500 - SB-2 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3480**	mg/Kg	100	4.00

Sample: 230501 - SB-2 80'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4130**	mg/Kg	100	4.00

Sample: 230502 - SB-3 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11300**	mg/Kg	100	4.00

Sample: 230503 - SB-3 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4080**	mg/Kg	100	4.00

Sample: 230504 - SB-3 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1520**	mg/Kg	50	4.00

Sample: 230505 - SB-3 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1020**	mg/Kg	50	4.00

Sample: 230506 - SB-3 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**7260**	mg/Kg	100	4.00

Sample: 230507 - SB-3 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**10400**	mg/Kg	100	4.00

Sample: 230508 - SB-3 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**7080**	mg/Kg	100	4.00

Sample: 230509 - SB-3 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9940**	mg/Kg	100	4.00

Sample: 230510 - SB-3 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2340**		mg/Kg	100	4.00

Sample: 230511 - SB-3 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	Sample Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**801**		mg/Kg	50	4.00

Sample: 230512 - SB-3 80'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**434**		mg/Kg	50	4.00

Sample: 230518 - SB-4 1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**7120**		mg/Kg	100	4.00

Sample: 230519 - SB-4 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8590**		mg/Kg	100	4.00

Sample: 230520 - SB-4 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**14400**		mg/Kg	100	4.00

Sample: 230521 - SB-4 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**14800**		mg/Kg	100	4.00

Sample: 230522 - SB-4 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**7570**		mg/Kg	100	4.00

Sample: 230523 - SB-4 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**6580**		mg/Kg	100	4.00

Sample: 230524 - SB-4 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3070**		mg/Kg	100	4.00

Sample: 230525 - SB-4 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**911**		mg/Kg	50	4.00

Sample: 230526 - SB-4 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2840**		mg/Kg	100	4.00

Sample: 230527 - SB-4 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**11300**	mg/Kg	100	4.00

Sample: 230528 - SB-4 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1490**	mg/Kg	50	4.00

Sample: 230529 - SB-4 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230531 - SB-5 1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5750**	mg/Kg	100	4.00

Sample: 230532 - SB-5 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**8840**	mg/Kg	100	4.00

Sample: 230533 - SB-5 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**15200**	mg/Kg	100	4.00

Sample: 230534 - SB-5 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**14800**	mg/Kg	100	4.00

Sample: 230535 - SB-5 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9650**	mg/Kg	100	4.00

Sample: 230536 - SB-5 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**5350**		mg/Kg	100	4.00

Sample: 230537 - SB-5 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**5280**		mg/Kg	100	4.00

Sample: 230538 - SB-5 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**4330**		mg/Kg	100	4.00

Sample: 230539 - SB-5 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3780**		mg/Kg	100	4.00

Sample: 230540 - SB-5 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**350**	mg/Kg	50	4.00

Sample: 230541 - SB-5 45'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1950**	mg/Kg	100	4.00

Sample: 230542 - SB-5 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**10700**	mg/Kg	100	4.00

Sample: 230543 - SB-5 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1950**	mg/Kg	100	4.00

Sample: 230544 - SB-5 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230547 - SB-6 1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6150**	mg/Kg	100	4.00

Sample: 230548 - SB-6 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**10500**	mg/Kg	100	4.00

Sample: 230549 - SB-6 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7000**	mg/Kg	100	4.00

Sample: 230550 - SB-6 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9630**	mg/Kg	100	4.00

Sample: 230551 - SB-6 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2570**	mg/Kg	100	4.00

Sample: 230552 - SB-6 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**444**	mg/Kg	50	4.00

Sample: 230553 - SB-6 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230554 - SB-6 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230555 - SB-7 1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3320**	mg/Kg	100	4.00

Sample: 230556 - SB-7 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6230**	mg/Kg	100	4.00

Sample: 230557 - SB-7 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6270**	mg/Kg	100	4.00

Sample: 230558 - SB-7 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4130**	mg/Kg	100	4.00

Sample: 230559 - SB-7 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70108	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59926	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**615**	mg/Kg	50	4.00

Sample: 230560 - SB-7 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**226**	mg/Kg	50	4.00

Sample: 230561 - SB-7 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 230562 - SB-8 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2050**	mg/Kg	100	4.00

Sample: 230563 - SB-8 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1710**	mg/Kg	100	4.00

Sample: 230564 - SB-8 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**973**	mg/Kg	50	4.00

Sample: 230565 - SB-8 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**246**	mg/Kg	50	4.00

Sample: 230566 - SB-8 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	70110	Date Analyzed:	2010-05-17	Analyzed By:	AR
Prep Batch:	59927	Sample Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Method Blank (1) QC Batch: 70006

QC Batch:	70006	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59904	QC Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70007

QC Batch:	70007	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59905	QC Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70008

QC Batch:	70008	Date Analyzed:	2010-05-13	Analyzed By:	AR
Prep Batch:	59906	QC Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70054

QC Batch:	70054	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59907	QC Preparation:	2010-05-06	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70055

QC Batch:	70055	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59923	QC Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70056

QC Batch:	70056	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59924	QC Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70057

QC Batch:	70057	Date Analyzed:	2010-05-14	Analyzed By:	AR
Prep Batch:	59925	QC Preparation:	2010-05-13	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70108

QC Batch: 70108 | Date Analyzed: 2010-05-17 | Analyzed By: AR
Prep Batch: 59926 | QC Preparation: 2010-05-13 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 70110

QC Batch: 70110 | Date Analyzed: 2010-05-17 | Analyzed By: AR
Prep Batch: 59927 | QC Preparation: 2010-05-13 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 70006 | Date Analyzed: 2010-05-13 | Analyzed By: AR
Prep Batch: 59904 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70007 | Date Analyzed: 2010-05-13 | Analyzed By: AR
Prep Batch: 59905 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.7	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70008 | Date Analyzed: 2010-05-13 | Analyzed By: AR
Prep Batch: 59906 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.6	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.9	mg/Kg	1	100	<2.18	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70054 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59907 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70055 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59923 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.3	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.8	mg/Kg	1	100	<2.18	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70056 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59924 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.8	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.3	mg/Kg	1	100	<2.18	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70057 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59925 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.7	mg/Kg	1	100	<2.18	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	98.2	mg/Kg	1	100	<2.18	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70108 | Date Analyzed: 2010-05-17 | Analyzed By: AR
Prep Batch: 59926 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.2	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 70110 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 59927 QC Preparation: 2010-05-13 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.2	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230480

QC Batch: 70006 Date Analyzed: 2010-05-13 Analyzed By: AR
Prep Batch: 59904 QC Preparation: 2010-05-06 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14900	mg/Kg	100	10000	5150	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15000	mg/Kg	100	10000	5150	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230491

QC Batch: 70007 Date Analyzed: 2010-05-13 Analyzed By: AR
Prep Batch: 59905 QC Preparation: 2010-05-06 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12600	mg/Kg	100	10000	2540	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12800	mg/Kg	100	10000	2540	103	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230501

QC Batch: 70008 | Date Analyzed: 2010-05-13 | Analyzed By: AR
Prep Batch: 59906 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14300	mg/Kg	100	10000	4130	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14400	mg/Kg	100	10000	4130	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230511

QC Batch: 70054 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59907 | QC Preparation: 2010-05-06 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10000	mg/Kg	100	10000	801	92	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10200	mg/Kg	100	10000	801	94	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230526

QC Batch: 70055 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59923 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	13000	mg/Kg	100	10000	2840	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13100	mg/Kg	100	10000	2840	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230537

QC Batch: 70056 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59924 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15300	mg/Kg	100	10000	5280	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15400	mg/Kg	100	10000	5280	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230549

QC Batch: 70057 | Date Analyzed: 2010-05-14 | Analyzed By: AR
Prep Batch: 59925 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	16700	mg/Kg	100	10000	7000	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	16800	mg/Kg	100	10000	7000	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230559

QC Batch: 70108 | Date Analyzed: 2010-05-17 | Analyzed By: AR
Prep Batch: 59926 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10500	mg/Kg	100	10000	615	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10600	mg/Kg	100	10000	615	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 230421

QC Batch: 70110 | Date Analyzed: 2010-05-17 | Analyzed By: AR
Prep Batch: 59927 | QC Preparation: 2010-05-13 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9960	mg/Kg	100	10000	<218	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 70006 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-05-13

Standard (CCV-1)

QC Batch: 70006 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-05-13

Standard (ICV-1)

QC Batch: 70007 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.4	99	85 - 115	2010-05-13

Standard (CCV-1)

QC Batch: 70007 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-13

Standard (ICV-1)

QC Batch: 70008 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-13

Standard (CCV-1)

QC Batch: 70008 | Date Analyzed: 2010-05-13 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.4	99	85 - 115	2010-05-13

Standard (ICV-1)

QC Batch: 70054 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2010-05-14

Standard (CCV-1)

QC Batch: 70054 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-05-14

Standard (ICV-1)

QC Batch: 70055 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-05-14

Standard (CCV-1)

QC Batch: 70055 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2010-05-14

Standard (ICV-1)

QC Batch: 70056 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	95.3	95	85 - 115	2010-05-14

Standard (CCV-1)

QC Batch: 70056 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	105	105	85 - 115	2010-05-14

Standard (ICV-1)

QC Batch: 70057 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-05-14

Standard (CCV-1)

QC Batch: 70057 | Date Analyzed: 2010-05-14 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.6	98	85 - 115	2010-05-14

Standard (ICV-1)

QC Batch: 70108 | Date Analyzed: 2010-05-17 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-05-17

Standard (CCV-1)

QC Batch: 70108 | Date Analyzed: 2010-05-17 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.9	98	85 - 115	2010-05-17

Standard (ICV-1)

QC Batch: 70110 | Date Analyzed: 2010-05-17 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.8	99	85 - 115	2010-05-17

Standard (CCV-1)

QC Batch: 70110 | Date Analyzed: 2010-05-17 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-17

Order #: 100504 22

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 9

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG | High Lonesome Penrose JB Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC:MS Vol. 8240/8260/624	GC:MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230478	4/30		S		X	SB-1 1'	1																	X				
479						SB-1 3'																		X				
480						SB-1 5'																		X				
481						SB-1 7'																		X				
482						SB-1 10'																		X				
483						SB-1 15'																		X				
484						SB-1 20'																		X				
485						SB-1 30'																		X				
486						SB-1 40'																		X				
487			↓		↓	SB-1 50'	↓																	X				

RELINQUISHED BY: (Signature) Date: 3/31/10 Time: 1510

RECEIVED BY: (Signature) Date: 3/31/10 Time: 15:30

SAMPLED BY: (Print & Initial) Kim Date: 4-30-10 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: Test America

ADDRESS:

CITY: Midland STATE: Tx ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact

REMARKS: All tests Midland

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 1050422

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG / High Lonesome Penrose TB Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230488	4/30		S		X	SB-1 60'	1																	X				
489						SB-1 70'																		X				
490						SB-1 80'																						
491						SB-2 3'																		X				
492						SB-2 5'																		X				
493						SB-2 10'																		X				
494						SB-2 15'																		X				
495						SB-2 20'																		X				
496						SB-2 30'																		X				
497						SB-2 40'																		X				

RELINQUISHED BY: (Signature) Date: 5/3/10 Time: 15:10
RECEIVED BY: (Signature) Date: 5/3/10 Time: 15:10
SAMPLED BY: (Print & Initial) Kim Date: 4-30-10 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS
AIRBILL #:
OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 1005042

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG / High Lonesome Penrose TB
Eddy Co. NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230498	4/30		S		X	SB-2	50'	1																		X				
499						SB-2	60'																			X				
500						SB-2	70'																			X				
501						SB-2	80'																			X				
502						SB-3	3'																			X				
503						SB-3	5'																			X				
504						SB-3	10'																			X				
505						SB-3	15'																			X				
006						SB-3	20'																			X				
507			↓		↓	SB-3	30'	↓																		X				

RELINQUISHED BY: (Signature) Date: 5/3/10 Time: 1530
RECEIVED BY: (Signature) Date: 5/3/10 Time: 1530
SAMPLED BY: (Print & Initial) Kim Date: 4-30-10 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS
AIRBILL #:
OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact
REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 100504122

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6400461	COG / High Lonesome Penrose TB Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
230508	4/30		S		X	SB-3 40'	1					
509						SB-3 50'						
510						SB-3 60'						
511						SB-3 70'						
512						SB-3 80'						
513	2		2		2	-NONE- See page 5	2					
514	2		2		2	-NONE-	2					
515	2		2		2	-NONE-	2					
516	2		2		2	-NONE-	2					
517	2		2		2	-NONE-	2					

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chlorides	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				
												X				
												X				
												X				
												X				

RELINQUISHED BY: (Signature)	Date: 5/3/10 Time: 1530	RECEIVED BY: (Signature)	Date: 5/3/10 Time: 15:52
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:

SAMPLED BY: (Print & Initial) Kim — Date: 4-29-10 Time:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS
HAND DELIVERED UPS

AIRBILL #:

OTHER:

RECEIVING LABORATORY: Trace	RECEIVED BY: (Signature)
ADDRESS:	
CITY: Midland STATE: Tx ZIP:	
CONTACT: PHONE:	DATE: TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 10050422

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 9

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG / High Lonesome Penrose TB
Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230518	4/30		S		X	SB-4 1'	1																	X				
519						SB-4 3'																		X				
520						SB-4 5'																		X				
521						SB-4 7'																		X				
522						SB-4 10'																		X				
523						SB-4 20'																		X				
524						SB-4 25'																		X				
525						SB-4 30'																		X				
526						SB-4 40'																		X				
527			↓		↓	SB-4 50	↓																	X				

RELINQUISHED BY: (Signature) Date: 5/3/10 Time: 1510
RECEIVED BY: (Signature) Date: 5/3/10 Time: 1530
SAMPLED BY: (Print & Initial) Kim Date: 4-29-10 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX HAND DELIVERED BUS UPS
AIRBILL #:
OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 10050422

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: 6 OF: 9

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG / High Lonesome Penrose TB
Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230528	4/30		S		X	SB-4 60'	1																		X				
529						SB-4 70'																			X				
530						SB-4 80'																							
531						SB-5 1'																			X				
532						SB-5 3'																			X				
533						SB-5 5'																			X				
534						SB-5 7'																			X				
535						SB-5 10'																			X				
536						SB-5 15'																			X				
537						SB-5 20'																			X				

RELINQUISHED BY: (Signature) Date: 5/3/10 Time: 1500
RECEIVED BY: (Signature) Date: 5/3/10 Time: 15:30
SAMPLED BY: (Print & Initial) Kim Date: 4-29-10 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS
AIRBILL #:
OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 100584722

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6400461	COG High Lonesome Penrose TB Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
230538	4/30		S		X	SB-5 25'	1																	X				
539						SB-5 30'	1																	X				
540						SB-5 40'																		X				
541						SB-5 45'																		X				
542						SB-5 50'																		X				
543						SB-5 60'																		X				
544						SB-5 70'																		X				
545						SB-5 75'																						
546						SB-5 80'																						
547						SB-6 1'																		X				

RELINQUISHED BY: (Signature)	Date: 5/12/10 Time: 1520	RECEIVED BY: (Signature)	Date: 5/13/10 Time: 15:30
SAMPLED BY: (Print & Initial) Kim	Date: 4-29-10 Time:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS	AIRBILL #: OTHER:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez	Results by:		
RECEIVING LABORATORY: Trace ADDRESS: CITY: Midland STATE: TX ZIP: CONTACT: PHONE:	RECEIVED BY: (Signature) DATE: TIME:		RUSH Charges Authorized: Yes No
SAMPLE CONDITION WHEN RECEIVED: 9.0°C intact	REMARKS:		

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: March 23, 2010

Work Order: 10031516

Project Location: Eddy County, NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225686	AH-1 0-1' 0.5' BEB	soil	2010-03-10	00:00	2010-03-12
225687	AH-1 1-1.5' 0.5' BEB	soil	2010-03-10	00:00	2010-03-12
225688	AH-2 0-1'	soil	2010-03-10	00:00	2010-03-12
225689	AH-2 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225690	AH-2 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225691	AH-3 0-1'	soil	2010-03-10	00:00	2010-03-12
225692	AH-3 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225693	AH-3 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225694	AH-4 0-1'	soil	2010-03-10	00:00	2010-03-12
225695	AH-4 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225696	AH-4 1.5-2'	soil	2010-03-10	00:00	2010-03-12
225697	AH-5 0-1'	soil	2010-03-10	00:00	2010-03-12
225698	AH-6 0-1'	soil	2010-03-10	00:00	2010-03-12
225699	AH-7 0-1'	soil	2010-03-10	00:00	2010-03-12
225700	AH-7 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225701	AH-8 0-.5'	soil	2010-03-10	00:00	2010-03-12
225702	AH-9 0-1'	soil	2010-03-10	00:00	2010-03-12
225703	AH-9 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225704	AH-9 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225705	AH-9 3-3.5'	soil	2010-03-10	00:00	2010-03-12
225706	AH-10 0-1'	soil	2010-03-10	00:00	2010-03-12
225707	AH-11 0-1'	soil	2010-03-11	00:00	2010-03-12
225708	AH-11 1-1.5'	soil	2010-03-11	00:00	2010-03-12
225709	AH-12 0-1'	soil	2010-03-11	00:00	2010-03-12
225710	AH-13 0-.5'	soil	2010-03-11	00:00	2010-03-12
225711	AH-14 0-1'	soil	2010-03-11	00:00	2010-03-12
225712	AH-14 1-1.5'	soil	2010-03-11	00:00	2010-03-12
225713	AH-14 2-2.5'	soil	2010-03-11	00:00	2010-03-12
225714	AH-15 0-1'	soil	2010-03-11	00:00	2010-03-12
225715	AH-16 0-1'	soil	2010-03-11	00:00	2010-03-12

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225716	AH-17 0-1'	soil	2010-03-11	00:00	2010-03-12

Sample - Field Code	BTEX Benzene (mg/Kg)	BTEX Toluene (mg/Kg)	BTEX Ethylbenzene (mg/Kg)	BTEX Xylene (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
225686 - AH-1 0-1' 0.5' BEB	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225688 - AH-2 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225691 - AH-3 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225694 - AH-4 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225697 - AH-5 0-1'					<50.0	<1.00
225698 - AH-6 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	**8.07**
225699 - AH-7 0-1'					<50.0	<1.00
225701 - AH-8 0-.5'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225702 - AH-9 0-1'					<50.0	<1.00
225706 - AH-10 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225707 - AH-11 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225709 - AH-12 0-1'					<50.0	<1.00
225710 - AH-13 0-.5'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225711 - AH-14 0-1'					<50.0	<1.00
225714 - AH-15 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
225715 - AH-16 0-1'					<50.0	<1.00
225716 - AH-17 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00

Sample: 225686 - AH-1 0-1' 0.5' BEB

Param	Flag	Result	Units	RL
Chloride		**271**	mg/Kg	4.00

Sample: 225687 - AH-1 1-1.5' 0.5' BEB

Param	Flag	Result	Units	RL
Chloride		**389**	mg/Kg	4.00

Sample: 225688 - AH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225689 - AH-2 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**488**	mg/Kg	4.00

Sample: 225690 - AH-2 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**1630**	mg/Kg	4.00

Sample: 225691 - AH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225692 - AH-3 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**340**	mg/Kg	4.00

Sample: 225693 - AH-3 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**1110**	mg/Kg	4.00

Sample: 225694 - AH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		**6150**	mg/Kg	4.00

Sample: 225695 - AH-4 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**8040**	mg/Kg	4.00

Sample: 225696 - AH-4 1.5-2'

Param	Flag	Result	Units	RL
Chloride		**14300**	mg/Kg	4.00

Sample: 225697 - AH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		**620**	mg/Kg	4.00

Sample: 225698 - AH-6 0-1'

Param	Flag	Result	Units	RL
Chloride		**12900**	mg/Kg	4.00

Sample: 225699 - AH-7 0-1'

Param	Flag	Result	Units	RL
Chloride		**699**	mg/Kg	4.00

Sample: 225700 - AH-7 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**2180**	mg/Kg	4.00

Sample: 225701 - AH-8 0-.5'

Param	Flag	Result	Units	RL
Chloride		**3580**	mg/Kg	4.00

Sample: 225702 - AH-9 0-1'

Param	Flag	Result	Units	RL
Chloride		**493**	mg/Kg	4.00

Sample: 225703 - AH-9 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**2180**	mg/Kg	4.00

Sample: 225704 - AH-9 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**3510**	mg/Kg	4.00

Sample: 225705 - AH-9 3-3.5'

Param	Flag	Result	Units	RL
Chloride		**6710**	mg/Kg	4.00

Sample: 225706 - AH-10 0-1'

Param	Flag	Result	Units	RL
Chloride		**292**	mg/Kg	4.00

Sample: 225707 - AH-11 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225708 - AH-11 1-1.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225709 - AH-12 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225710 - AH-13 0-.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225711 - AH-14 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225712 - AH-14 1-1.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225713 - AH-14 2-2.5'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225714 - AH-15 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225715 - AH-16 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 225716 - AH-17 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: March 23, 2010

Work Order: 10031516

Project Location: Eddy County, NM
Project Name: COG/High Lonesome Penrose Unit TB
Project Number: 114-6400461

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225686	AH-1 0-1' 0.5' BEB	soil	2010-03-10	00:00	2010-03-12
225687	AH-1 1-1.5' 0.5' BEB	soil	2010-03-10	00:00	2010-03-12
225688	AH-2 0-1'	soil	2010-03-10	00:00	2010-03-12
225689	AH-2 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225690	AH-2 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225691	AH-3 0-1'	soil	2010-03-10	00:00	2010-03-12
225692	AH-3 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225693	AH-3 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225694	AH-4 0-1'	soil	2010-03-10	00:00	2010-03-12
225695	AH-4 1-1.5'	soil	2010-03-10	00:00	2010-03-12

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
225696	AH-4 1.5-2'	soil	2010-03-10	00:00	2010-03-12
225697	AH-5 0-1'	soil	2010-03-10	00:00	2010-03-12
225698	AH-6 0-1'	soil	2010-03-10	00:00	2010-03-12
225699	AH-7 0-1'	soil	2010-03-10	00:00	2010-03-12
225700	AH-7 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225701	AH-8 0-.5'	soil	2010-03-10	00:00	2010-03-12
225702	AH-9 0-1'	soil	2010-03-10	00:00	2010-03-12
225703	AH-9 1-1.5'	soil	2010-03-10	00:00	2010-03-12
225704	AH-9 2-2.5'	soil	2010-03-10	00:00	2010-03-12
225705	AH-9 3-3.5'	soil	2010-03-10	00:00	2010-03-12
225706	AH-10 0-1'	soil	2010-03-10	00:00	2010-03-12
225707	AH-11 0-1'	soil	2010-03-11	00:00	2010-03-12
225708	AH-11 1-1.5'	soil	2010-03-11	00:00	2010-03-12
225709	AH-12 0-1'	soil	2010-03-11	00:00	2010-03-12
225710	AH-13 0-.5'	soil	2010-03-11	00:00	2010-03-12
225711	AH-14 0-1'	soil	2010-03-11	00:00	2010-03-12
225712	AH-14 1-1.5'	soil	2010-03-11	00:00	2010-03-12
225713	AH-14 2-2.5'	soil	2010-03-11	00:00	2010-03-12
225714	AH-15 0-1'	soil	2010-03-11	00:00	2010-03-12
225715	AH-16 0-1'	soil	2010-03-11	00:00	2010-03-12
225716	AH-17 0-1'	soil	2010-03-11	00:00	2010-03-12

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 44 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/High Lonesome Penrose Unit TB were received by TraceAnalysis, Inc. on 2010-03-12 and assigned to work order 10031516. Samples for work order 10031516 were received intact at a temperature of 6.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	58507	2010-03-17 at 11:00	68370	2010-03-17 at 13:22
BTEX	S 8021B	58512	2010-03-18 at 15:30	68400	2010-03-18 at 19:36
Chloride (Titration)	SM 4500-Cl B	58453	2010-03-16 at 12:47	68450	2010-03-22 at 11:08
Chloride (Titration)	SM 4500-Cl B	58481	2010-03-17 at 12:46	68452	2010-03-22 at 11:08
Chloride (Titration)	SM 4500-Cl B	58482	2010-03-17 at 12:47	68453	2010-03-22 at 11:09
Chloride (Titration)	SM 4500-Cl B	58483	2010-03-17 at 12:47	68455	2010-03-22 at 11:10
TPH DRO - NEW	Mod. 8015B	58454	2010-03-16 at 15:15	68314	2010-03-16 at 15:15
TPH GRO	S 8015B	58507	2010-03-17 at 11:00	68371	2010-03-17 at 13:51
TPH GRO	S 8015B	58512	2010-03-18 at 15:30	68401	2010-03-18 at 20:05

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10031516 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 225686 - AH-1 0-1' 0.5' BEB

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.23	mg/Kg	1	2.00	112	43.1 - 158.4

Sample: 225686 - AH-1 0-1' 0.5' BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**271**	mg/Kg	50	4.00

Sample: 225686 - AH-1 0-1' 0.5' BEB

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		92.9	mg/Kg	1	100	93	70 - 130

Sample: 225686 - AH-1 0-1' 0.5' BEB

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.03	mg/Kg	1	2.00	152	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[1]	2.81	mg/Kg	1	2.00	140	61.7 - 131.1

Sample: 225687 - AH-1 1-1.5' 0.5' BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**389**	mg/Kg	50	4.00

Sample: 225688 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

[1] High surrogate recovery. Sample non-detect, result bias high.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.84	mg/Kg	1	2.00	92	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.04	mg/Kg	1	2.00	102	43.1 - 158.4

Sample: 225688 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225688 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		90.8	mg/Kg	1	100	91	70 - 130

Sample: 225688 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.76	mg/Kg	1	2.00	138	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.57	mg/Kg	1	2.00	128	61.7 - 131.1

Sample: 225689 - AH-2 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**488**	mg/Kg	50	4.00

Sample: 225690 - AH-2 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1630**	mg/Kg	50	4.00

Sample: 225691 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	Result	RL Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.84	mg/Kg	1	2.00	92	60.4 - 141.2

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		2.04	mg/Kg	1	2.00	102	43.1 - 158.4

Sample: 225691 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225691 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		89.0	mg/Kg	1	100	89	70 - 130

Sample: 225691 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.76	mg/Kg	1	2.00	138	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.56	mg/Kg	1	2.00	128	61.7 - 131.1

Sample: 225692 - AH-3 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**340**	mg/Kg	50	4.00

Sample: 225693 - AH-3 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1110**	mg/Kg	50	4.00

Sample: 225694 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	60.4 - 141.2

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		2.18	mg/Kg	1	2.00	109	43.1 - 158.4

Sample: 225694 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68450	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58453	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6150**	mg/Kg	100	4.00

Sample: 225694 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	Result	RL Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		96.4	mg/Kg	1	100	96	70 - 130

Sample: 225694 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	Result	RL Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.95	mg/Kg	1	2.00	148	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[2]	2.72	mg/Kg	1	2.00	136	61.7 - 131.1

Sample: 225695 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8040**		mg/Kg	100	4.00

Sample: 225696 - AH-4 1.5-2'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**14300**		mg/Kg	100	4.00

Sample: 225697 - AH-5 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**620**		mg/Kg	50	4.00

[2] High surrogate recovery due to peak interference.

Sample: 225697 - AH-5 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		94.7	mg/Kg	1	100	95	70 - 130

Sample: 225697 - AH-5 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.86	mg/Kg	1	2.00	93	65.3 - 155
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	1	2.00	87	61.7 - 131.1

Sample: 225698 - AH-6 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.95	mg/Kg	1	2.00	98	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.21	mg/Kg	1	2.00	110	43.1 - 158.4

Sample: 225698 - AH-6 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12900**	mg/Kg	100	4.00

Sample: 225698 - AH-6 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		99.5	mg/Kg	1	100	100	70 - 130

Sample: 225698 - AH-6 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**8.07**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.91	mg/Kg	1	2.00	146	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[3]	2.78	mg/Kg	1	2.00	139	61.7 - 131.1

Sample: 225699 - AH-7 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**699**	mg/Kg	50	4.00

Sample: 225699 - AH-7 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		96.6	mg/Kg	1	100	97	70 - 130

Sample: 225699 - AH-7 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

[3]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	65.3 - 155
4-Bromofluorobenzene (4-BFB)		1.96	mg/Kg	1	2.00	98	61.7 - 131.1

Sample: 225700 - AH-7 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2180**	mg/Kg	100	4.00

Sample: 225701 - AH-8 0-.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.24	mg/Kg	1	2.00	62	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.38	mg/Kg	1	2.00	69	43.1 - 158.4

Sample: 225701 - AH-8 0-.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3580**	mg/Kg	100	4.00

Sample: 225701 - AH-8 0-.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		96.2	mg/Kg	1	100	96	70 - 130

Sample: 225701 - AH-8 0-.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.83	mg/Kg	1	2.00	92	65.3 - 155
4-Bromofluorobenzene (4-BFB)		1.77	mg/Kg	1	2.00	88	61.7 - 131.1

Sample: 225702 - AH-9 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

continued ...

sample 225702 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**493**	mg/Kg	50	4.00

Sample: 225702 - AH-9 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		106	mg/Kg	1	100	106	70 - 130

Sample: 225702 - AH-9 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.79	mg/Kg	1	2.00	140	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[4]	2.64	mg/Kg	1	2.00	132	61.7 - 131.1

[4] High surrogate recovery. Sample non-detect, result bias high.

Sample: 225703 - AH-9 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2180**	mg/Kg	100	4.00

Sample: 225704 - AH-9 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68452	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58481	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3510**	mg/Kg	100	4.00

Sample: 225705 - AH-9 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6710**	mg/Kg	100	4.00

Sample: 225706 - AH-10 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68370	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	Result	RL Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100

continued ...

sample 225706 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.57	mg/Kg	1	2.00	78	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.79	mg/Kg	1	2.00	90	43.1 - 158.4

Sample: 225706 - AH-10 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**292**	mg/Kg	50	4.00

Sample: 225706 - AH-10 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		98.3	mg/Kg	1	100	98	70 - 130

Sample: 225706 - AH-10 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68371	Date Analyzed:	2010-03-17	Analyzed By:	AG
Prep Batch:	58507	Sample Preparation:	2010-03-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.38	mg/Kg	1	2.00	119	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.26	mg/Kg	1	2.00	113	61.7 - 131.1

Sample: 225707 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68400	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.80	mg/Kg	1	2.00	90	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.98	mg/Kg	1	2.00	99	43.1 - 158.4

Sample: 225707 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225707 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		102	mg/Kg	1	100	102	70 - 130

Sample: 225707 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.74	mg/Kg	1	2.00	137	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.53	mg/Kg	1	2.00	126	61.7 - 131.1

Sample: 225708 - AH-11 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<200		mg/Kg	50	4.00

Sample: 225709 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225709 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		100	mg/Kg	1	100	100	70 - 130

Sample: 225709 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.84	mg/Kg	1	2.00	142	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.61	mg/Kg	1	2.00	130	61.7 - 131.1

Sample: 225710 - AH-13 0-.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68400	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	1	0.0100
Toluene		<0.0100		mg/Kg	1	0.0100
Ethylbenzene		<0.0100		mg/Kg	1	0.0100
Xylene		<0.0100		mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.17	mg/Kg	1	2.00	108	43.1 - 158.4

Sample: 225710 - AH-13 0-.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<200		mg/Kg	50	4.00

Sample: 225710 - AH-13 0-.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		102	mg/Kg	1	100	102	70 - 130

Sample: 225710 - AH-13 0-.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.01	mg/Kg	1	2.00	150	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[5]	2.76	mg/Kg	1	2.00	138	61.7 - 131.1

Sample: 225711 - AH-14 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<200		mg/Kg	50	4.00

Sample: 225711 - AH-14 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		92.8	mg/Kg	1	100	93	70 - 130

[5] High surrogate recovery. Sample non-detect, result bias high.

Sample: 225711 - AH-14 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.21	mg/Kg	1	2.00	110	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.04	mg/Kg	1	2.00	102	61.7 - 131.1

Sample: 225712 - AH-14 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225713 - AH-14 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225714 - AH-15 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68400	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.95	mg/Kg	1	2.00	98	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.13	mg/Kg	1	2.00	106	43.1 - 158.4

Sample: 225714 - AH-15 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68453	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58482	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225714 - AH-15 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		93.7	mg/Kg	1	100	94	70 - 130

Sample: 225714 - AH-15 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.95	mg/Kg	1	2.00	148	65.3 - 155
4-Bromofluorobenzene (4-BFB)	[6]	2.71	mg/Kg	1	2.00	136	61.7 - 131.1

Sample: 225715 - AH-16 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68455	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58483	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225715 - AH-16 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		92.5	mg/Kg	1	100	92	70 - 130

Sample: 225715 - AH-16 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

continued ...

[6] High surrogate recovery. Sample non-detect, result bias high.

sample 225715 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.56	mg/Kg	1	2.00	128	65.3 - 155
4-Bromofluorobenzene (4-BFB)		2.36	mg/Kg	1	2.00	118	61.7 - 131.1

Sample: 225716 - AH-17 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	68400	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.28	mg/Kg	1	2.00	64	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.39	mg/Kg	1	2.00	70	43.1 - 158.4

Sample: 225716 - AH-17 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	68455	Date Analyzed:	2010-03-22	Analyzed By:	AR
Prep Batch:	58483	Sample Preparation:	2010-03-17	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 225716 - AH-17 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	Sample Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		94.5	mg/Kg	1	100	94	70 - 130

Sample: 225716 - AH-17 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	68401	Date Analyzed:	2010-03-18	Analyzed By:	AG
Prep Batch:	58512	Sample Preparation:	2010-03-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.96	mg/Kg	1	2.00	98	65.3 - 155
4-Bromofluorobenzene (4-BFB)		1.81	mg/Kg	1	2.00	90	61.7 - 131.1

Method Blank (1) QC Batch: 68314

QC Batch:	68314	Date Analyzed:	2010-03-16	Analyzed By:	kg
Prep Batch:	58454	QC Preparation:	2010-03-16	Prepared By:	kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		71.9	mg/Kg	1	100	72	70 - 130

Method Blank (1) QC Batch: 68370

QC Batch: 68370 | Date Analyzed: 2010-03-17 | Analyzed By: AG
Prep Batch: 58507 | QC Preparation: 2010-03-17 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.79	mg/Kg	1	2.00	90	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	1	2.00	87	43.9 - 141.9

Method Blank (1) QC Batch: 68371

QC Batch: 68371 | Date Analyzed: 2010-03-17 | Analyzed By: AG
Prep Batch: 58507 | QC Preparation: 2010-03-17 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.67	mg/Kg	1	2.00	134	66.2 - 145
4-Bromofluorobenzene (4-BFB)		2.22	mg/Kg	1	2.00	111	62 - 120.5

Method Blank (1) QC Batch: 68400

QC Batch: 68400 | Date Analyzed: 2010-03-18 | Analyzed By: AG
Prep Batch: 58512 | QC Preparation: 2010-03-18 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.66	mg/Kg	1	2.00	83	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.62	mg/Kg	1	2.00	81	43.9 - 141.9

Method Blank (1) QC Batch: 68401

QC Batch: 68401 Date Analyzed: 2010-03-18 Analyzed By: AG
Prep Batch: 58512 QC Preparation: 2010-03-18 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.56	mg/Kg	1	2.00	128	66.2 - 145
4-Bromofluorobenzene (4-BFB)		2.09	mg/Kg	1	2.00	104	62 - 120.5

Method Blank (1) QC Batch: 68450

QC Batch: 68450 Date Analyzed: 2010-03-22 Analyzed By: AR
Prep Batch: 58453 QC Preparation: 2010-03-16 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68452

QC Batch: 68452 Date Analyzed: 2010-03-22 Analyzed By: AR
Prep Batch: 58481 QC Preparation: 2010-03-17 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68453

QC Batch: 68453 Date Analyzed: 2010-03-22 Analyzed By: AR
Prep Batch: 58482 QC Preparation: 2010-03-17 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68455

QC Batch: 68455 Date Analyzed: 2010-03-22 Analyzed By: AR
Prep Batch: 58483 QC Preparation: 2010-03-17 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 68314 Date Analyzed: 2010-03-16 Analyzed By: kg
Prep Batch: 58454 QC Preparation: 2010-03-16 Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	239	mg/Kg	1	250	<5.86	96	57.4 - 133.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	221	mg/Kg	1	250	<5.86	88	57.4 - 133.4	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	108	100	mg/Kg	1	100	108	100	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 68370 Date Analyzed: 2010-03-17 Analyzed By: AG
Prep Batch: 58507 QC Preparation: 2010-03-17 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.87	mg/Kg	1	2.00	<0.00410	94	75.4 - 115.7
Toluene	1.88	mg/Kg	1	2.00	<0.00310	94	78.4 - 113.6
Ethylbenzene	1.89	mg/Kg	1	2.00	<0.00240	94	76 - 114.2

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Xylene	5.67	mg/Kg	1	6.00	<0.00650	94	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.88	mg/Kg	1	2.00	<0.00410	94	75.4 - 115.7	0	20
Toluene	1.88	mg/Kg	1	2.00	<0.00310	94	78.4 - 113.6	0	20
Ethylbenzene	1.87	mg/Kg	1	2.00	<0.00240	94	76 - 114.2	1	20
Xylene	5.66	mg/Kg	1	6.00	<0.00650	94	76.9 - 113.6	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.73	1.77	mg/Kg	1	2.00	86	88	65 - 142.9
4-Bromofluorobenzene (4-BFB)	2.00	2.05	mg/Kg	1	2.00	100	102	43.8 - 144.9

Laboratory Control Spike (LCS-1)

QC Batch: 68371 | Date Analyzed: 2010-03-17 | Analyzed By: AG
Prep Batch: 58507 | QC Preparation: 2010-03-17 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.0	mg/Kg	1	20.0	<0.396	90	52.5 - 114.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	17.6	mg/Kg	1	20.0	<0.396	88	52.5 - 114.3	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.45	2.36	mg/Kg	1	2.00	122	118	66.2 - 148.7
4-Bromofluorobenzene (4-BFB)	2.30	2.20	mg/Kg	1	2.00	115	110	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 68400 | Date Analyzed: 2010-03-18 | Analyzed By: AG
Prep Batch: 58512 | QC Preparation: 2010-03-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.84	mg/Kg	1	2.00	<0.00410	92	75.4 - 115.7
Toluene	1.82	mg/Kg	1	2.00	<0.00310	91	78.4 - 113.6
Ethylbenzene	1.81	mg/Kg	1	2.00	<0.00240	90	76 - 114.2
Xylene	5.43	mg/Kg	1	6.00	<0.00650	90	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.79	mg/Kg	1	2.00	<0.00410	90	75.4 - 115.7	3	20
Toluene	1.79	mg/Kg	1	2.00	<0.00310	90	78.4 - 113.6	2	20
Ethylbenzene	1.78	mg/Kg	1	2.00	<0.00240	89	76 - 114.2	2	20
Xylene	5.33	mg/Kg	1	6.00	<0.00650	89	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.56	1.47	mg/Kg	1	2.00	78	74	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.88	1.75	mg/Kg	1	2.00	94	88	43.8 - 144.9

Laboratory Control Spike (LCS-1)

QC Batch: 68401 | Date Analyzed: 2010-03-18 | Analyzed By: AG
Prep Batch: 58512 | QC Preparation: 2010-03-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.2	mg/Kg	1	20.0	<0.396	76	52.5 - 114.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.4	mg/Kg	1	20.0	<0.396	77	52.5 - 114.3	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.30	2.32	mg/Kg	1	2.00	115	116	66.2 - 148.7
4-Bromofluorobenzene (4-BFB)	2.18	2.17	mg/Kg	1	2.00	109	108	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 68450 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58453 | QC Preparation: 2010-03-16 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.9	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 68452 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58481 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.4	mg/Kg	1	100	<2.18	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.0	mg/Kg	1	100	<2.18	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 68453 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58482 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.1	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.3	mg/Kg	1	100	<2.18	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 68455 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58483 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.2	mg/Kg	1	100	<2.18	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 225699

QC Batch: 68314 | Date Analyzed: 2010-03-16 | Analyzed By: kg
Prep Batch: 58454 | QC Preparation: 2010-03-16 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	203	mg/Kg	1	250	<5.86	81	35.2 - 167.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	200	mg/Kg	1	250	<5.86	80	35.2 - 167.1	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	103	105	mg/Kg	1	100	103	105	70 - 130

Matrix Spike (MS-1) Spiked Sample: 225641

QC Batch: 68370 | Date Analyzed: 2010-03-17 | Analyzed By: AG
Prep Batch: 58507 | QC Preparation: 2010-03-17 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.84	mg/Kg	1	2.00	<0.00410	92	57.7 - 140.7
Toluene	1.87	mg/Kg	1	2.00	<0.00310	94	53.4 - 146.6
Ethylbenzene	1.89	mg/Kg	1	2.00	<0.00240	94	62.1 - 141.6
Xylene	5.65	mg/Kg	1	6.00	<0.00650	94	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.86	mg/Kg	1	2.00	<0.00410	93	57.7 - 140.7	1	20
Toluene	1.90	mg/Kg	1	2.00	<0.00310	95	53.4 - 146.6	2	20
Ethylbenzene	1.92	mg/Kg	1	2.00	<0.00240	96	62.1 - 141.6	2	20
Xylene	5.76	mg/Kg	1	6.00	<0.00650	96	61.2 - 142.7	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.47	1.40	mg/Kg	1	2	74	70	61.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.62	1.56	mg/Kg	1	2	81	78	49.6 - 146.7

Matrix Spike (MS-1) Spiked Sample: 225701

QC Batch: 68371 | Date Analyzed: 2010-03-17 | Analyzed By: AG
Prep Batch: 58507 | QC Preparation: 2010-03-17 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	19.1	mg/Kg	1	20.0	<0.396	96	10 - 198.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	19.4	mg/Kg	1	20.0	<0.396	97	10 - 198.3	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	2.05	mg/Kg	1	2	100	102	65.5 - 143
4-Bromofluorobenzene (4-BFB)	2.07	2.15	mg/Kg	1	2	104	108	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 225738

QC Batch: 68400 | Date Analyzed: 2010-03-18 | Analyzed By: AG
Prep Batch: 58512 | QC Preparation: 2010-03-18 | Prepared By: AG

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00410	100	57.7 - 140.7
Toluene	2.06	mg/Kg	1	2.00	<0.00310	103	53.4 - 146.6
Ethylbenzene	2.09	mg/Kg	1	2.00	<0.00240	104	62.1 - 141.6
Xylene	6.25	mg/Kg	1	6.00	<0.00650	104	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.91	mg/Kg	1	2.00	<0.00410	96	57.7 - 140.7	5	20
Toluene	1.95	mg/Kg	1	2.00	<0.00310	98	53.4 - 146.6	6	20
Ethylbenzene	1.96	mg/Kg	1	2.00	<0.00240	98	62.1 - 141.6	6	20
Xylene	5.91	mg/Kg	1	6.00	<0.00650	98	61.2 - 142.7	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.27	1.76	mg/Kg	1	2	64	88	61.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.40	1.98	mg/Kg	1	2	70	99	49.6 - 146.7

Matrix Spike (MS-1) Spiked Sample: 225716

QC Batch: 68401 | Date Analyzed: 2010-03-18 | Analyzed By: AG
Prep Batch: 58512 | QC Preparation: 2010-03-18 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.4	mg/Kg	1	20.0	<0.396	92	10 - 198.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	20.3	mg/Kg	1	20.0	<0.396	102	10 - 198.3	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.64	2.35	mg/Kg	1	2	132	118	65.5 - 143
4-Bromofluorobenzene (4-BFB)	2.54	2.38	mg/Kg	1	2	127	119	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 225694

QC Batch: 68450 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58453 | QC Preparation: 2010-03-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	16000	mg/Kg	100	10000	6150	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	16200	mg/Kg	100	10000	6150	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 225704

QC Batch: 68452 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58481 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14200	mg/Kg	100	10000	3510	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14400	mg/Kg	100	10000	3510	109	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 225714

QC Batch: 68453 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58482 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9820	mg/Kg	100	10000	<218	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	9920	mg/Kg	100	10000	<218	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 225823

QC Batch: 68455 | Date Analyzed: 2010-03-22 | Analyzed By: AR
Prep Batch: 58483 | QC Preparation: 2010-03-17 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10200	mg/Kg	100	10000	<218	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (CCV-1)

QC Batch: 68314 | Date Analyzed: 2010-03-16 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	80 - 120	2010-03-16

Standard (CCV-2)

QC Batch: 68314 | Date Analyzed: 2010-03-16 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	206	82	80 - 120	2010-03-16

Standard (CCV-3)

QC Batch: 68314 | Date Analyzed: 2010-03-16 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	231	92	80 - 120	2010-03-16

Standard (CCV-4)

QC Batch: 68314 | Date Analyzed: 2010-03-16 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	95	80 - 120	2010-03-16

Standard (CCV-2)

QC Batch: 68370 Date Analyzed: 2010-03-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0925	92	80 - 120	2010-03-17
Toluene		mg/Kg	0.100	0.0919	92	80 - 120	2010-03-17
Ethylbenzene		mg/Kg	0.100	0.0902	90	80 - 120	2010-03-17
Xylene		mg/Kg	0.300	0.272	91	80 - 120	2010-03-17

Standard (CCV-3)

QC Batch: 68370 Date Analyzed: 2010-03-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0910	91	80 - 120	2010-03-17
Toluene		mg/Kg	0.100	0.0903	90	80 - 120	2010-03-17
Ethylbenzene		mg/Kg	0.100	0.0877	88	80 - 120	2010-03-17
Xylene		mg/Kg	0.300	0.266	89	80 - 120	2010-03-17

Standard (CCV-2)

QC Batch: 68371 Date Analyzed: 2010-03-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.10	110	80 - 120	2010-03-17

Standard (CCV-3)

QC Batch: 68371 Date Analyzed: 2010-03-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.08	108	80 - 120	2010-03-17

Standard (CCV-1)

QC Batch: 68400 Date Analyzed: 2010-03-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0923	92	80 - 120	2010-03-18
Toluene		mg/Kg	0.100	0.0920	92	80 - 120	2010-03-18
Ethylbenzene		mg/Kg	0.100	0.0889	89	80 - 120	2010-03-18
Xylene		mg/Kg	0.300	0.269	90	80 - 120	2010-03-18

Standard (CCV-2)

QC Batch: 68400 Date Analyzed: 2010-03-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0933	93	80 - 120	2010-03-18
Toluene		mg/Kg	0.100	0.0930	93	80 - 120	2010-03-18
Ethylbenzene		mg/Kg	0.100	0.0922	92	80 - 120	2010-03-18
Xylene		mg/Kg	0.300	0.276	92	80 - 120	2010-03-18

Standard (CCV-1)

QC Batch: 68401 Date Analyzed: 2010-03-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.00	100	80 - 120	2010-03-18

Standard (CCV-2)

QC Batch: 68401 Date Analyzed: 2010-03-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.02	102	80 - 120	2010-03-18

Standard (ICV-1)

QC Batch: 68450 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2010-03-22

Standard (CCV-1)

QC Batch: 68450 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.7	97	85 - 115	2010-03-22

Standard (ICV-1)

QC Batch: 68452 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	95.9	96	85 - 115	2010-03-22

Standard (CCV-1)

QC Batch: 68452 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	104	104	85 - 115	2010-03-22

Standard (ICV-1)

QC Batch: 68453 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.7	99	85 - 115	2010-03-22

Standard (CCV-1)

QC Batch: 68453 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-03-22

Standard (ICV-1)

QC Batch: 68455 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-03-22

Standard (CCV-1)

QC Batch: 68455 Date Analyzed: 2010-03-22 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.0	98	85 - 115	2010-03-22

Order #: 10031516

Analysis Request of Chain of Custody Record

PAGE: 1 of: 34

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: COG
SITE MANAGER: Ike Tavarez
PROJECT NO.: 114-6400461
PROJECT NAME: COG / High Lonesome Penrose Unit TB Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
226686	3/10		S		X	AH-1 0-1' 0.5' BEB	1				X			X											X				
687	↓		↓		↓	AH-1 1'-1.5' 0.5' BEB	↓				↓														X				
688						AH-2 0-1'								X											X				
689						AH-2 1'-1.5'																			X				
690						AH-2 2'-2.5'																			X				
691						AH-3 0-1'								X											X				
692						AH-3 1'-1.5'																			X				
693						AH-3 2'-2.5'																			X				
694						AH-4 0-1'								X											X				
695						AH-4 1'-1.5'																			X				

RELINQUISHED BY: (Signature) [signature] Date: 3/12/10 Time: 15:25
RECEIVED BY: (Signature) [signature] Date: 3/12/10 Time: 15:25
SAMPLED BY: (Print & Initial) Thomas K Franklin TRF Date: 3/10/10 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: (HAND DELIVERED) UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: Trace
RECEIVED BY: (Signature)
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: Mark PHONE: DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 6.0°C intact

REMARKS: Run deeper samples if TPH exceed 1,000 mg/kg.

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

..(?) RTFV on highest TPH concentrations.

Order #: 100315116

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6400461	COG / High Lonesome Penrose Unit T13 Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
225696	3/10		S		X	AH-4 1.5'-2'	1				X														X				
697						AH-5 0-1'								X											X				
698						AH-6 0-1'								X											X				
699						AH-7 0-1'								X											X				
700						AH-7 1'-1.5'																			X				
701						AH-8 0-.5'								X											X				
702						AH-9 0-1'								X											X				
703						AH-9 1'-1.5'																			X				
704						AH-9 2'-2.5'																			X				
705						AH-9 3'-3.5'																			X				

RELINQUISHED BY: (Signature)	Date: 3/12/10 Time: 15:25	RECEIVED BY: (Signature)	Date: 3/10/10 Time: 15:25
SAMPLED BY: (Print & Initial) Thomas K Franklin TKF	Date: 3/10/10 Time:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS	AIRBILL #: OTHER:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez	Results by: RUSH Charges Authorized: Yes No		
RECEIVING LABORATORY: Xenco ADDRESS: CITY: Midland STATE: Tx ZIP: CONTACT: Mandy PHONE:	RECEIVED BY: (Signature) DATE: TIME:		
SAMPLE CONDITION WHEN RECEIVED: 6.0°C intact	REMARKS:		

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 1003156

Analysis Request of Chain of Custody Record

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-4420461	COG / High Lonesome Penrose Unit TB Eddy Co NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
225706	3/10/2010		S		X	AH-10 0-1'	1				X	

BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
	X											X				

RELINQUISHED BY: (Signature)	Date: 3/12/10 Time: 15:25	RECEIVED BY: (Signature) Date: 3/12/10 Time: 15:25
SAMPLED BY: (Print & Initial) Thomas K Franklin TKF	Date: 3/10/10 Time:	
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS	AIRBILL #: OTHER:	
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez	Results by: RUSH Charges Authorized: Yes No	
RECEIVING LABORATORY: Trace ADDRESS: CITY: Midland STATE: TX ZIP: CONTACT: Monde PHONE: DATE: TIME:	RECEIVED BY: (Signature)	
SAMPLE CONDITION WHEN RECEIVED: 6.0°C intact	REMARKS:	

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Order #: 10031516

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 4

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400461

PROJECT NAME: COG / High Lonesome Penrose Unit 713 Eddy Co NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8280/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
225707	3/11		S		X	AH-11 0-1'	1				X			X											X				
708						AH-11 1-1.5'																			X				
709						AH-12 0-1'								X											X				
710						AH-13 0-.5'								X											X				
711						AH-14 0-1'								X											X				
712						AH-14 1-1.5'																			X				
713						AH-14 2-2.5'																			X				
714						AH-15 0-1'								X											X				
715						AH-16 0-1'								X											X				
716			↓	↓	↓	AH-17 0-1'	↓				↓			X											X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 3/12/10 Time: 15:25

RECEIVED BY: (Signature) Date: 3/12/10 Time: 15:25

SAMPLED BY: (Print & Initial) Thomas K Franklin TKF Date: 3/11/10 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS AIRBILL #: OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace

ADDRESS:

CITY: Midland STATE: Tx ZIP:

CONTACT: Mandy PHONE: DATE: TIME:

RECEIVED BY: (Signature)

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 6.0°C intact

REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.