SITE INFORMATION

2RP-519

Report Type: Closure Report

General Site Information:		
Site:	East High Lonesome Penrose Unit Tank Battery	
Company:	COG Operating LLC	
Section, Township and Range	Unit H Sec. 14 T-16S S-29E	
Lease Number:	91-008663	
County:	Eddy County	
GPS:	32.92294	104.0391
Surface Owner:	Federal	
Mineral Owner:		
Directions:	In Loco Hill, New Mexcio, go North 7.2 mles on CR 217 (Hagerman Cuttoff Rd), turn left (west) into lease road and go 2.6 mile to Tank Battery	

Release Data:	
Date Released:	6/21/2010
Type Release:	Produced water
Source of Contamination:	Water tank overflow
Fluid Released:	200 bbls
Fluids Recovered:	195 bbls

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

April 16, 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.
East High Lonesome Penrose Unit Tank Battery
Unit H, Section 14, 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 East High Lonesome Penrose Unit Tank Battery, Unit H, Section 14, Township 16 South, Range 29 East, Eddy County, New Mexico. (Site). The spill site coordinates are N 32.92294°, W 104.03910°. 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 June 21, 2010, and released approximately two hundred (200) barrels of produced water due to a burned relay powering the Murphy tank level switch. One hundred and ninety five (195) barrels of standing fluids were recovered from the spill area. The spill was contained inside the facility berm impacting an area measuring approximately 50' x 100'. The initial Form C-141 is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 14. 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 OCD requested a temporary monitor well to be installed.

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 either greater than 220' bgs or suspected absent in the area. The

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

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 August 11, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of six (6) auger holes (AH-1 through AH-6) were installed inside the facility berm 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 sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, all of the submitted samples were below the RRAL for TPH and BTEX. The area of auger holes (AH-3) did not show a significant chloride impact, with chloride concentrations of 727 mg/kg (0-1') and 758 mg/kg (1-1.5'). The remaining auger holes showed elevated chloride concentrations and were not vertically defined.

Tetra Tech supervised the installation of eight (8) boreholes (BH-1 through BH-8) on October 7, 2010. A BLM site inspection indicated the spill was not contained within the facility and fluids breached underneath the facility berm and migrating southwest across the pad and pooled along the edge of the pad's secondary berm. This spill area was also drilled to assess the soils. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 2. The borehole locations are shown on Figure 4.

Referring to Table 1, boreholes BH-2, BH-4 and BH-5 inside the facility dike were all vertically defined. The chloride concentrations declined with depth and showed bottom hole samples of <200 mg/kg at 70.0', 90.0', and 60.0', respectively.

Borehole (BH-3) was not vertically defined and did show elevated chloride concentrations, which declined from 13,800 mg/kg (40.0') to 6,520 mg/kg (50.0'). This data correlates to the other three boreholes inside the facility berm. Chloride concentrations observed in the 60' and 70' sample were consistent with

concentrations observed from above. These samples may have been cross contaminated from the loose sand sloughing from above. Drilling was halted at 70' due to the flowing sands.

The remaining boreholes (BH-1, BH-6, BH-7 and BH-8) on the facility pad appear to have been vertically defined. The chloride concentrations significantly declined at 40.0' (725 mg/kg), 25.0' (603 mg/kg), 40.0' (623 mg/kg) and 40.0' (720 mg/kg), respectively.

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. As requested by the BLM, the impacted soil inside the tank battery was excavated to approximately 1.0' below surface. The remaining impact would be deferred unit abandonment of the facility. The spill area on the pad was excavated to approximately 4.0' below surface. A total of 3,220 cubic yards of soil were excavated and hauled away for proper disposal. The excavation depths are highlighted in Table 1 and shown on Figure 5.

As requested by the BLM, confirmation samples were collected from the excavation sidewalls. The confirmation samples 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

Figures

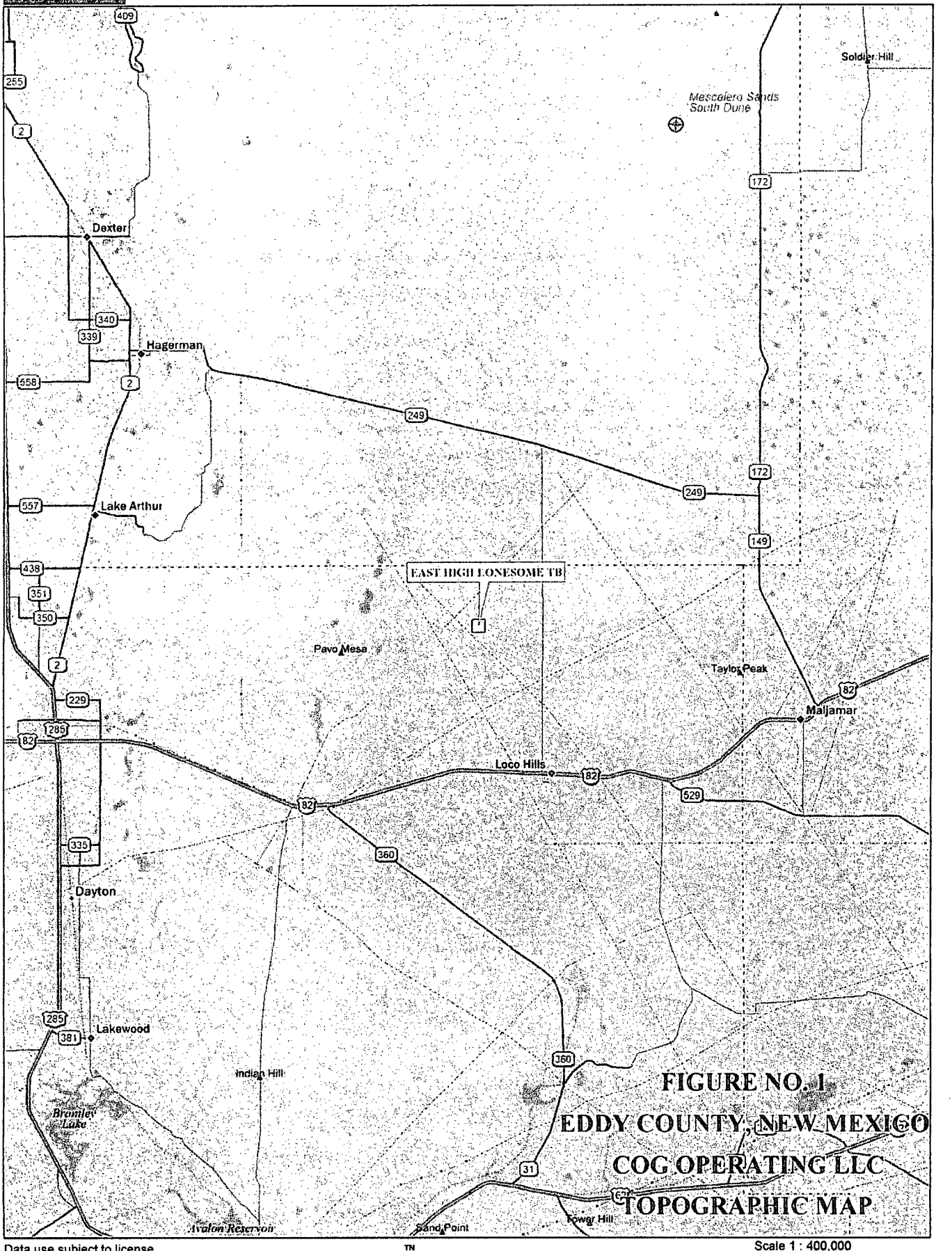


FIGURE NO. 1

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

TOPOGRAPHIC MAP

TN

MN (7.8°E)

Scale 1 : 400,000

1" = 6.31 mi

Data Zoom 9-0

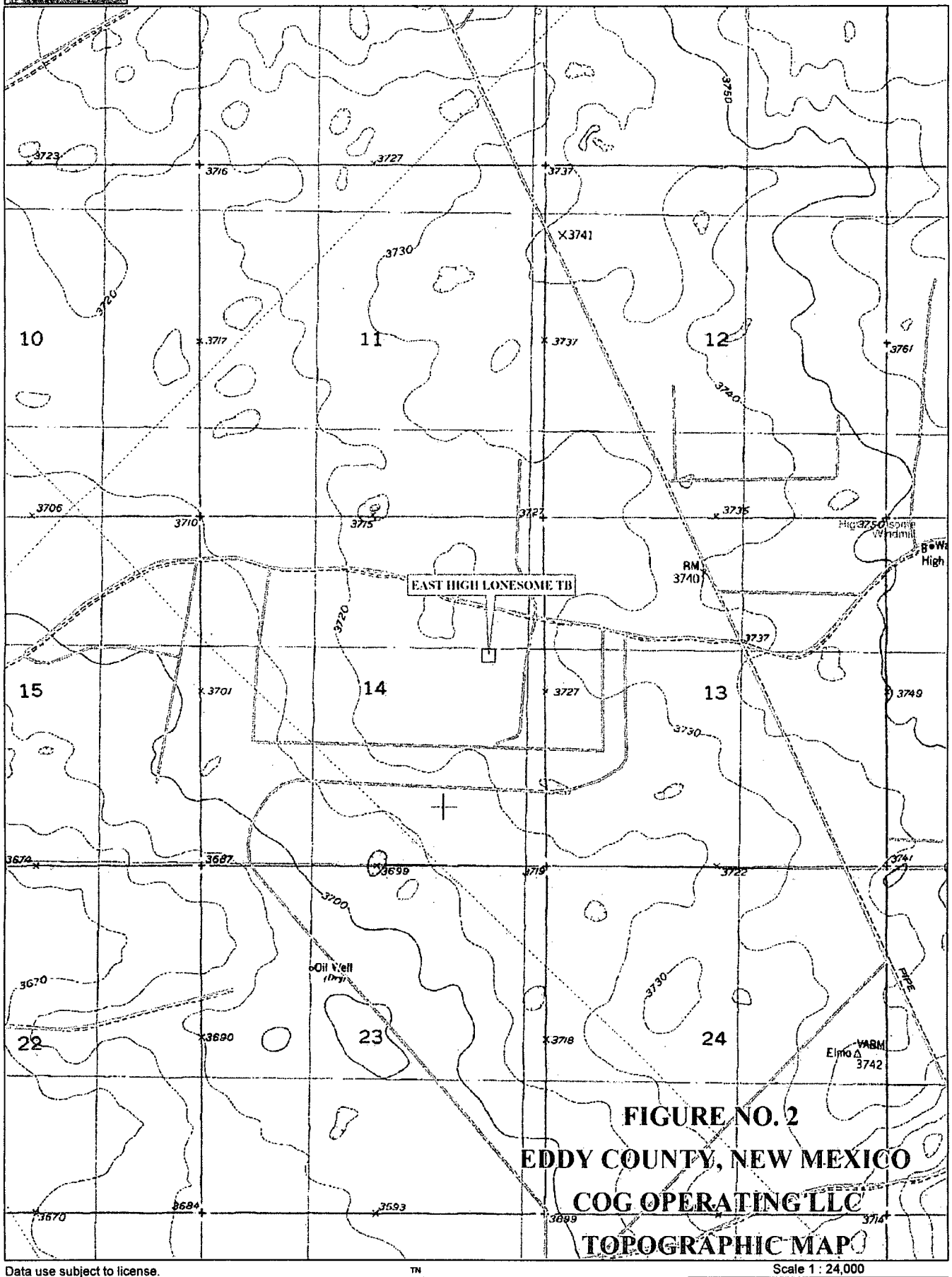


FIGURE NO. 2

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

TOPOGRAPHIC MAP

TN

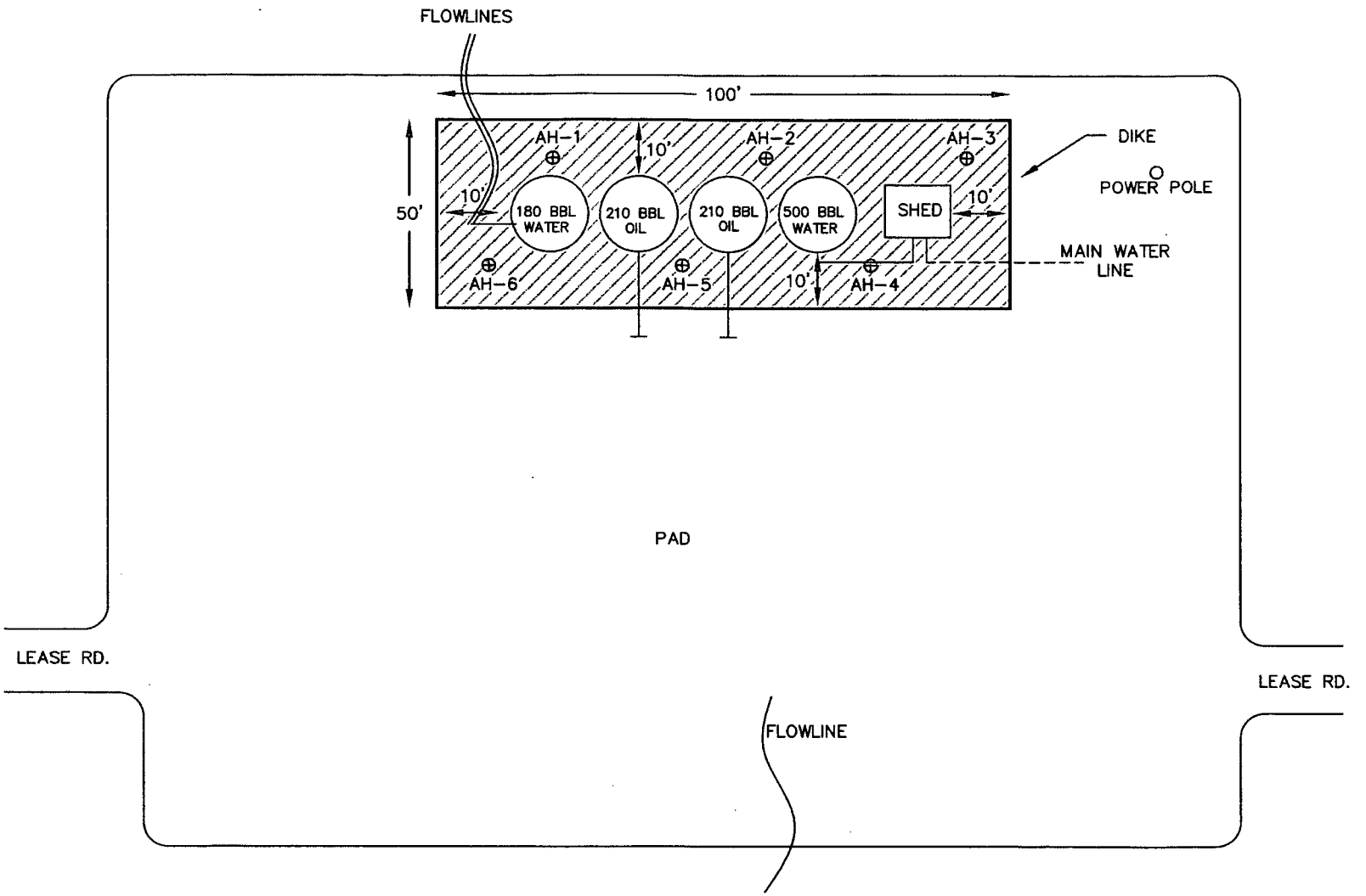
MN (7.8°E)

Scale 1 : 24,000

0 600 1200 1800 2400 3000 ft

0 200 400 600 800 1000 m

1" = 2,000.0 ft Data Zoom 13-0



SPILL AREA
⊕ AUGER HOLE LOCATIONS

NOT TO SCALE

FIGURE NO. 3

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

EAST HIGH LONESOME TB

TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 10/7/10
DWN. BY: JJ
FILE: H:\COG\6400572 EAST HIGH LONESOME

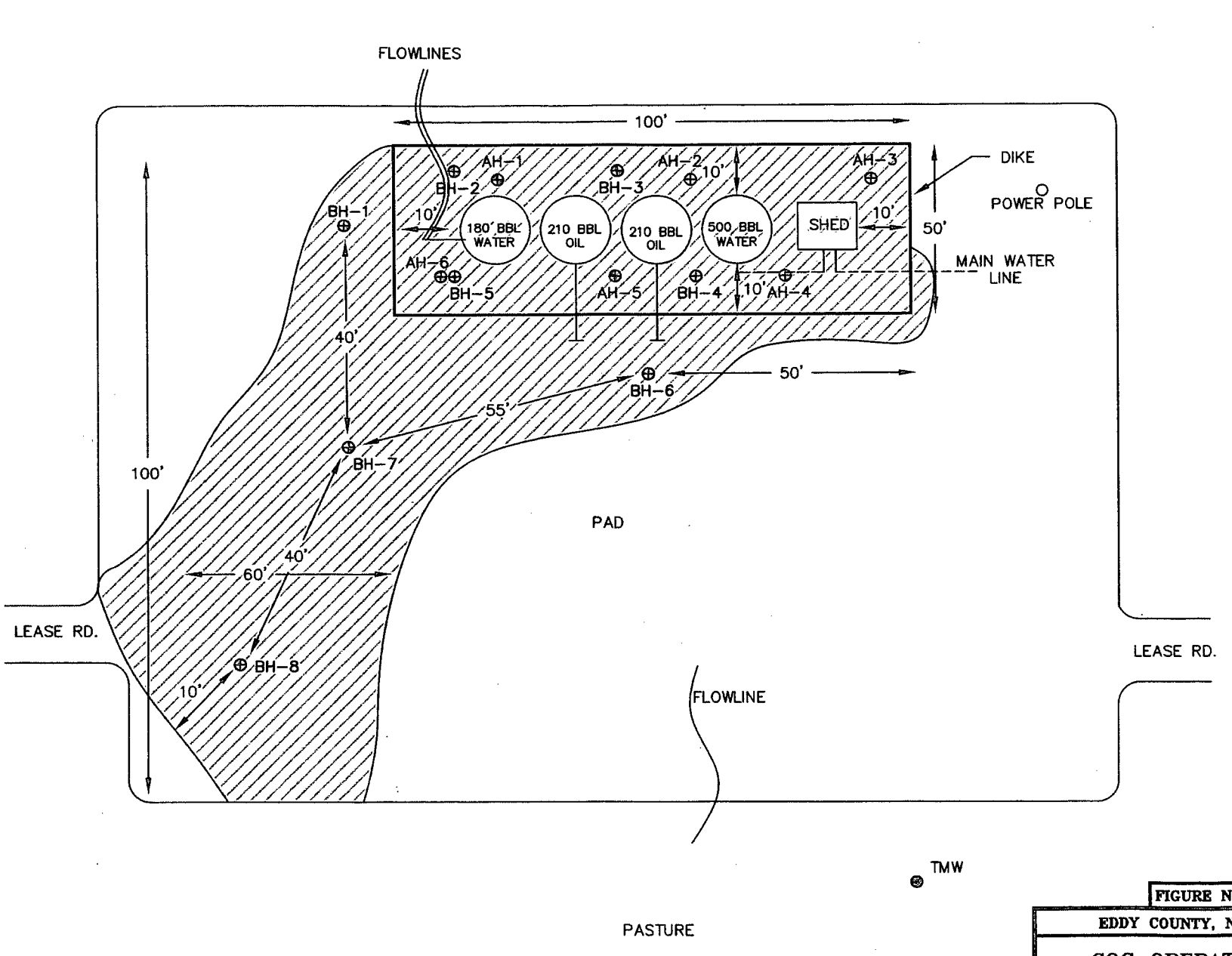


FIGURE NO. 4

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

EAST HIGH LONESOME TB

TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 08/04/11
DWN. BY: IM
FILE: H:\COG\5400572 EAST HIGH LONESOME

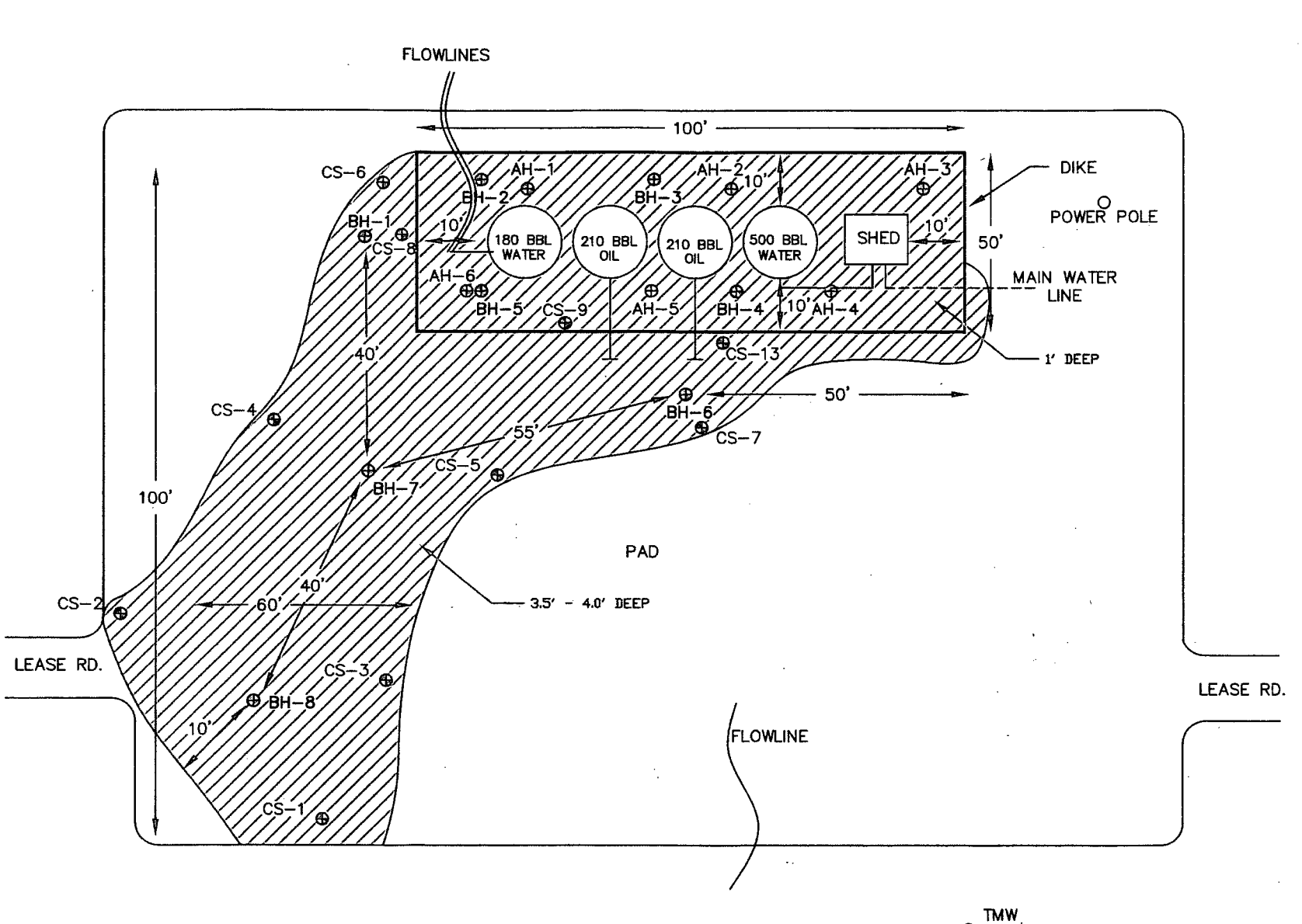


FIGURE NO. 5

EDDY COUNTY, NEW MEXICO

COG OPERATING LLC

EAST HIGH LONESOME TB

EXCAVATED DEPTHS AND CONFIRMATION SAMPLES

DATE: 1/24/2012

DWN. BY: IM

FILE: H:\COG\640572 EAST HIGH LONESOME

TETRA TECH, INC.
MIDLAND, TEXAS

Tables

Table 1
COG Operating LLC.
EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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					
BH-1	10/7/2010	0-1'			X	-	-	-	-	-	-	-	16,100
	10/7/2010	3'			X	-	-	-	-	-	-	-	21,300
	10/7/2010	5'		X		-	-	-	-	-	-	-	13,000
	10/7/2010	7'		X		-	-	-	-	-	-	-	16,200
	10/7/2010	10'		X		-	-	-	-	-	-	-	15,200
	10/7/2010	15'		X		-	-	-	-	-	-	-	10,500
	10/7/2010	20'		X		-	-	-	-	-	-	-	5,430
	10/7/2010	25'		X		-	-	-	-	-	-	-	3,350
	10/7/2010	30'		X		-	-	-	-	-	-	-	5,390
	10/7/2010	40'		X		-	-	-	-	-	-	-	2,070
	10/7/2010	50'		X		-	-	-	-	-	-	-	725
	10/7/2010	60'		X		-	-	-	-	-	-	-	<200
	10/7/2010	70'		X		-	-	-	-	-	-	-	301
CS-6	11/17/2011	Sidewall		X		-	-	-	-	-	-	-	292
CS-8	11/18/2011	Tank Battery Sidewall		X		-	-	-	-	-	-	-	16,900

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EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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	8/11/2010	0-0.5'			X	44.8	4,550	4,594.8	<0.200	<0.200	<0.200	<0.200	12,300
BH-2	10/7/2010	0-1'			X	-	-	-	-	-	-	-	12,000
	10/7/2010	3'			X	-	-	-	-	-	-	-	11,700
	10/7/2010	5'		X		-	-	-	-	-	-	-	19,800
	10/7/2010	7'		X		-	-	-	-	-	-	-	13,700
	10/7/2010	10'		X		-	-	-	-	-	-	-	8,370
	10/7/2010	15'		X		-	-	-	-	-	-	-	5,320
	10/7/2010	20'		X		-	-	-	-	-	-	-	2,680
	10/7/2010	25'		X		-	-	-	-	-	-	-	1,540
	10/7/2010	30'		X		-	-	-	-	-	-	-	2,070
	10/7/2010	40'		X		-	-	-	-	-	-	-	2,260
	10/7/2010	50'		X		-	-	-	-	-	-	-	1,670
	10/7/2010	60'		X		-	-	-	-	-	-	-	383
	10/7/2010	70'		X		-	-	-	-	-	-	-	<200

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EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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-2	8/11/2010	0-1'			X	198	1,770	1,968	<0.200	<0.200	<0.200	1.18	13,700
	8/11/2010	1-1.5'			X	-	-	-	-	-	-	-	7,860
BH-3	10/7/2010	0-1'			X	-	-	-	-	-	-	-	5,280
	10/7/2010	3'			X	-	-	-	-	-	-	-	4,260
	10/7/2010	5'		X		-	-	-	-	-	-	-	3,280
	10/7/2010	7'		X		-	-	-	-	-	-	-	3,900
	10/7/2010	10'		X		-	-	-	-	-	-	-	8,000
	10/7/2010	15'		X		-	-	-	-	-	-	-	13,000
	10/7/2010	20'		X		-	-	-	-	-	-	-	11,300
	10/7/2010	25'		X		-	-	-	-	-	-	-	11,600
	10/7/2010	30'		X		-	-	-	-	-	-	-	12,100
	10/7/2010	40'		X		-	-	-	-	-	-	-	13,800
	10/7/2010	50'		X		-	-	-	-	-	-	-	6,520
	10/7/2010	60'		X		-	-	-	-	-	-	-	11,900
	10/7/2010	70'		X		-	-	-	-	-	-	-	12,500

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EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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	8/11/2010	0-1'		X		<2.00	<500	<500	-	-	-	-	727
	8/11/2010	1-1.5'		X		-	-	-					758
AH-4	8/11/2010	0-1'			X	<2.00	<50.0	<50.0	-	-	-	-	11,900
	8/11/2010	1-1.5'			X	-	-	-					9,020
BH-4	10/8/2010	0-1'			X	-	-	-	-	-	-	-	9,010
	10/8/2010	3'			X	-	-	-	-	-	-	-	18,700
	10/8/2010	5'		X		-	-	-	-	-	-	-	11,300
	10/8/2010	7'		X		-	-	-	-	-	-	-	9,530
	10/8/2010	10'		X		-	-	-	-	-	-	-	7,670
	10/8/2010	15'		X		-	-	-	-	-	-	-	5,530
	10/8/2010	20'		X		-	-	-	-	-	-	-	6,640
	10/8/2010	25'		X		-	-	-	-	-	-	-	6,650
	10/8/2010	30'		X		-	-	-	-	-	-	-	10,900
	10/8/2010	40'		X		-	-	-	-	-	-	-	9,270
	10/8/2010	50'		X		-	-	-	-	-	-	-	5,970
	10/8/2010	60'		X		-	-	-	-	-	-	-	4,080
	10/8/2010	70'		X		-	-	-	-	-	-	-	4,550
	10/8/2010	80'		X		-	-	-	-	-	-	-	2,380
	10/8/2010	90'		X		-	-	-	-	-	-	-	<200

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EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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	8/11/2010	0-0.5'			X	<2.00	124	124	-	-	-	-	11,700
AH-6	8/11/2010	0-0.5'			X	<2.00	<50.0	<50.0	-	-	-	-	4,490
BH-5	10/8/2010	0-1'			X	-	-	-	-	-	-	-	396
	10/8/2010	3'			X	-	-	-	-	-	-	-	1,010
	10/8/2010	5'		X		-	-	-	-	-	-	-	9,350
	10/8/2010	7'		X		-	-	-	-	-	-	-	8,460
	10/8/2010	10'		X		-	-	-	-	-	-	-	12,400
	10/8/2010	15'		X		-	-	-	-	-	-	-	6,930
	10/8/2010	20'		X		-	-	-	-	-	-	-	3,940
	10/8/2010	25'		X		-	-	-	-	-	-	-	3,920
	10/8/2010	30'		X		-	-	-	-	-	-	-	2,640
	10/8/2010	40'		X		-	-	-	-	-	-	-	2,240
	10/8/2010	50'		X		-	-	-	-	-	-	-	232
	10/8/2010	60'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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					
BH-6	10/8/2010	0-1'			X	-	-	-	-	-	-	-	2,810
	10/8/2010	3'			X	-	-		-	-	-	-	5,080
	10/11/2010	5'		X		-	-	-	-	-	-	-	5,950
	10/11/2010	7'		X		-	-	-	-	-	-	-	4,870
	10/11/2010	10'		X		-	-	-	-	-	-	-	4,970
	10/11/2010	15'		X		-	-	-	-	-	-	-	5,240
	10/11/2010	20'		X		-	-	-	-	-	-	-	4,140
	10/11/2010	25'		X		-	-	-	-	-	-	-	603
	10/11/2010	30'		X		-	-	-	-	-	-	-	<200
	10/11/2010	40'		X		-	-	-	-	-	-	-	991
	10/11/2010	50'		X		-	-	-	-	-	-	-	215
CS-7	11/29/2011	Sidewall		X		-	-	-	-	-	-	-	224
CS-9	11/29/2011	Tank Battery Sidewall		X		-	-	-	-	-	-	-	21,200
CS-13	11/28/2011	Sidewall		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (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					
BH-7	10/11/2010	0-1'			X	-	-	-	-	-	-	-	25,600
	10/11/2010	3'			X	-	-	-	-	-	-	-	22,900
	10/11/2010	5'		X		-	-	-	-	-	-	-	10,600
	10/11/2010	7'		X		-	-	-	-	-	-	-	6,150
	10/11/2010	10'		X		-	-	-	-	-	-	-	6,760
	10/11/2010	15'		X		-	-	-	-	-	-	-	5,690
	10/11/2010	20'		X		-	-	-	-	-	-	-	3,700
	10/11/2010	25'		X		-	-	-	-	-	-	-	2,370
	10/11/2010	30'		X		-	-	-	-	-	-	-	2,550
	10/11/2010	40'		X		-	-	-	-	-	-	-	623
	10/11/2010	50'		X		-	-	-	-	-	-	-	<200
CS-4	11/17/2011	Sidewall		X		-	-	-	-	-	-	-	297
CS-5	11/18/2011	Sidewall		X		-	-	-	-	-	-	-	818

Table 1
COG Operating LLC.
EAST HIGH LONESOME TANK BATTERY
EDDY COUNTY, NEW MEXICO

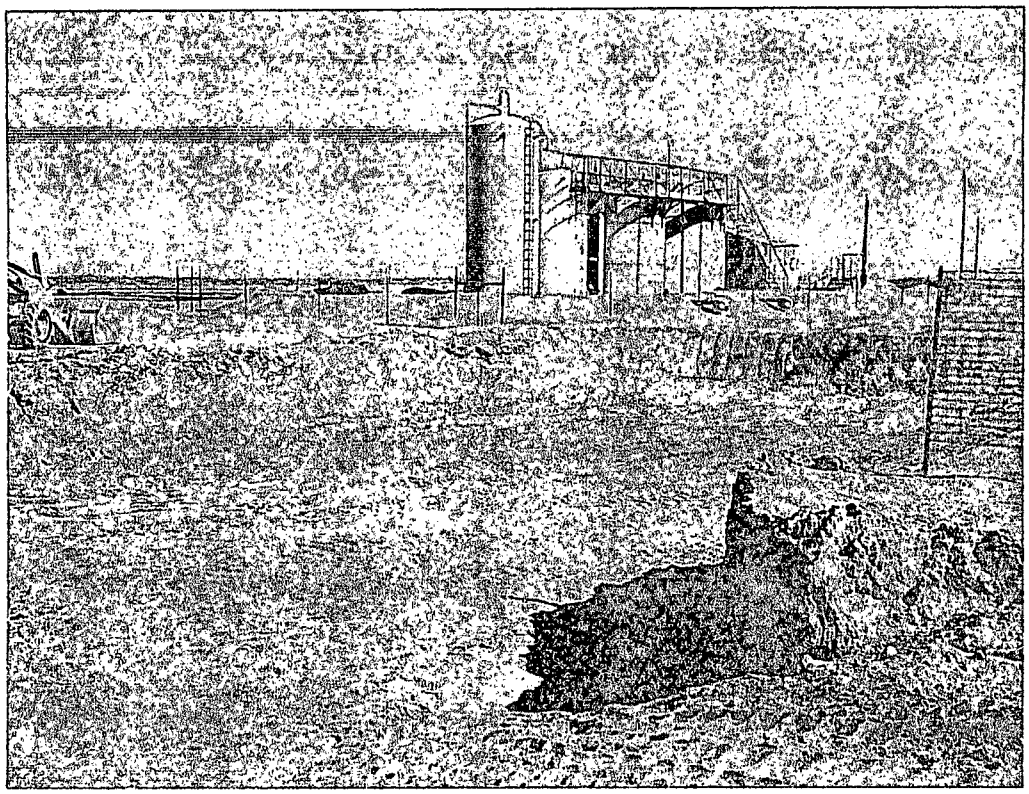
Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
BH-8	10/11/2010	0-1'			X	-	-	-	-	-	-	-	801
	10/11/2010	3'			X	-	-	-	-	-	-	-	1,830
	10/11/2010	5'		X		-	-	-	-	-	-	-	3,390
	10/11/2010	7'		X		-	-	-	-	-	-	-	13,400
	10/11/2010	10'		X		-	-	-	-	-	-	-	11,500
	10/11/2010	15'		X		-	-	-	-	-	-	-	6,350
	10/11/2010	20'		X		-	-	-	-	-	-	-	5,370
	10/11/2010	25'		X		-	-	-	-	-	-	-	4,680
	10/11/2010	30'		X		-	-	-	-	-	-	-	4,580
	10/11/2010	40'		X		-	-	-	-	-	-	-	720
	10/11/2010	50'		X		-	-	-	-	-	-	-	<200
	10/11/2010	60'		X		-	-	-	-	-	-	-	<200
CS-1	11/15/2011	Sidewall		X		-	-	-	-	-	-	-	647
CS-2	11/14/2011	Sidewall		X		-	-	-	-	-	-	-	715
CS-3	11/18/2011	Sidewall		X		-	-	-	-	-	-	-	545

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

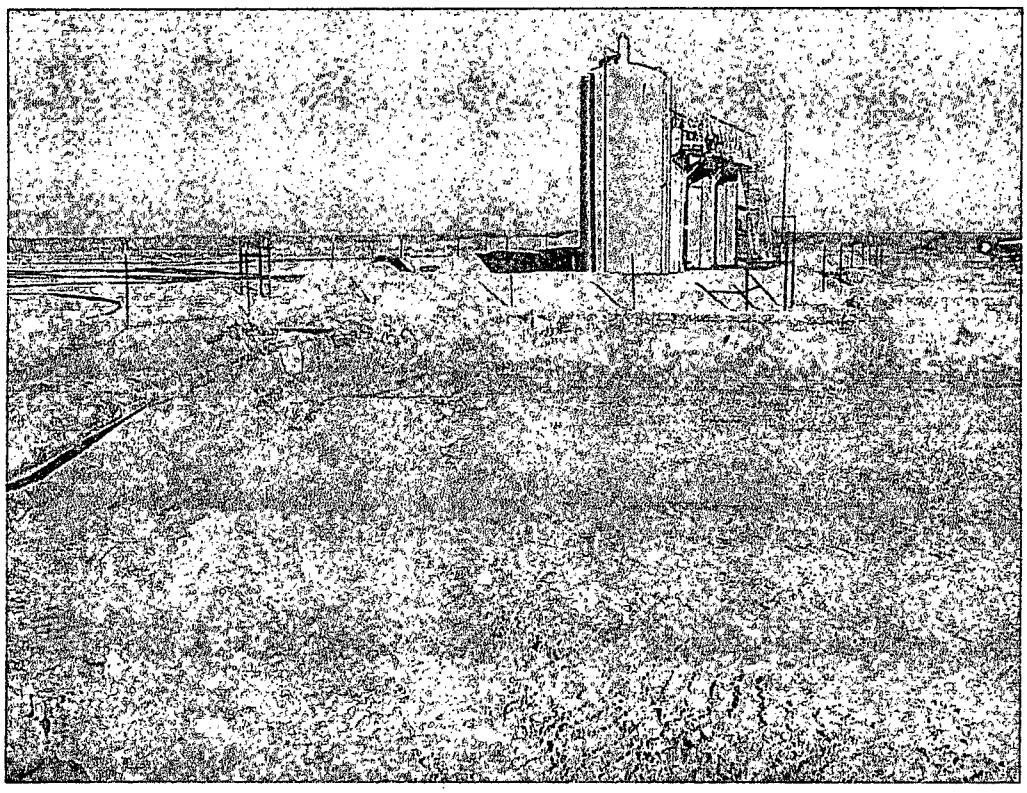
Photos

COG Operating LLC
East High Lonesome
Eddy County, New Mexico

TETRA TECH



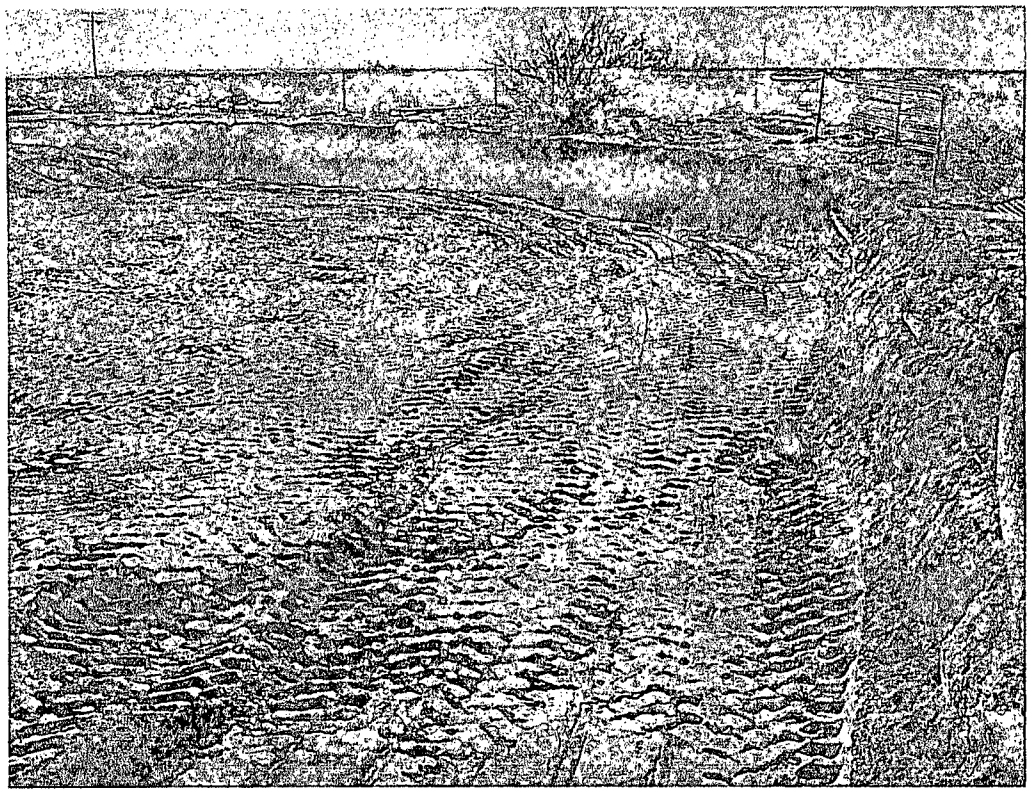
View North East – BH-7



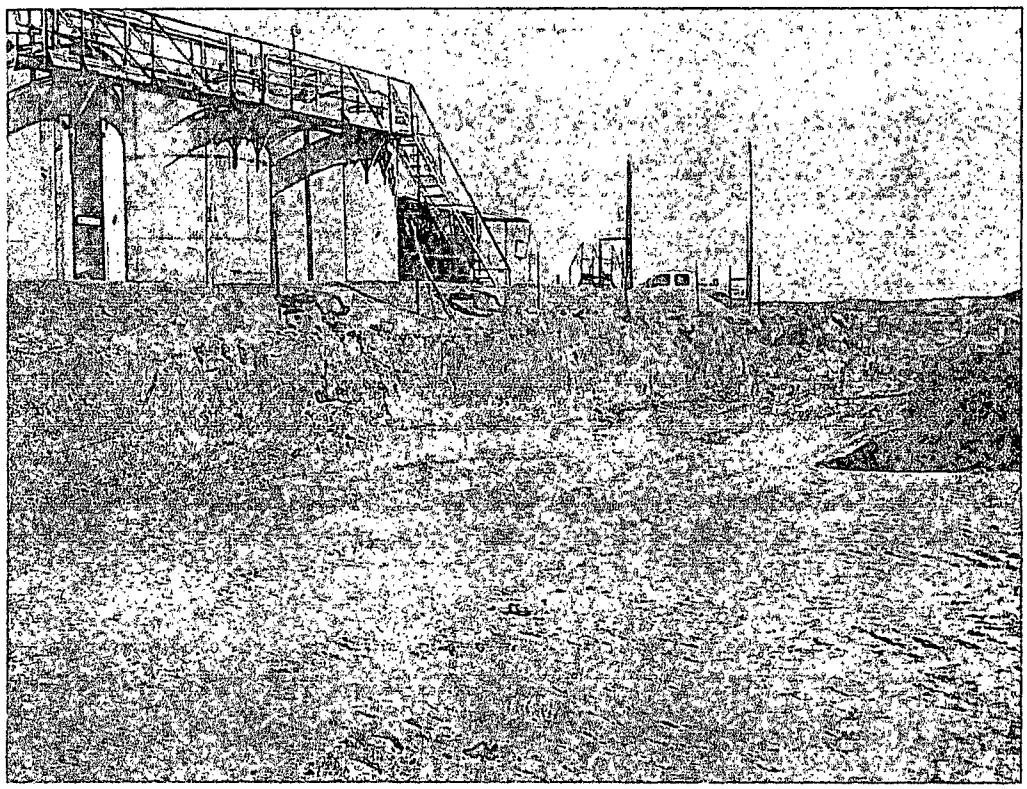
View East – BH-1

COG Operating LLC
East High Lonesome
Eddy County, New Mexico

TETRA TECH



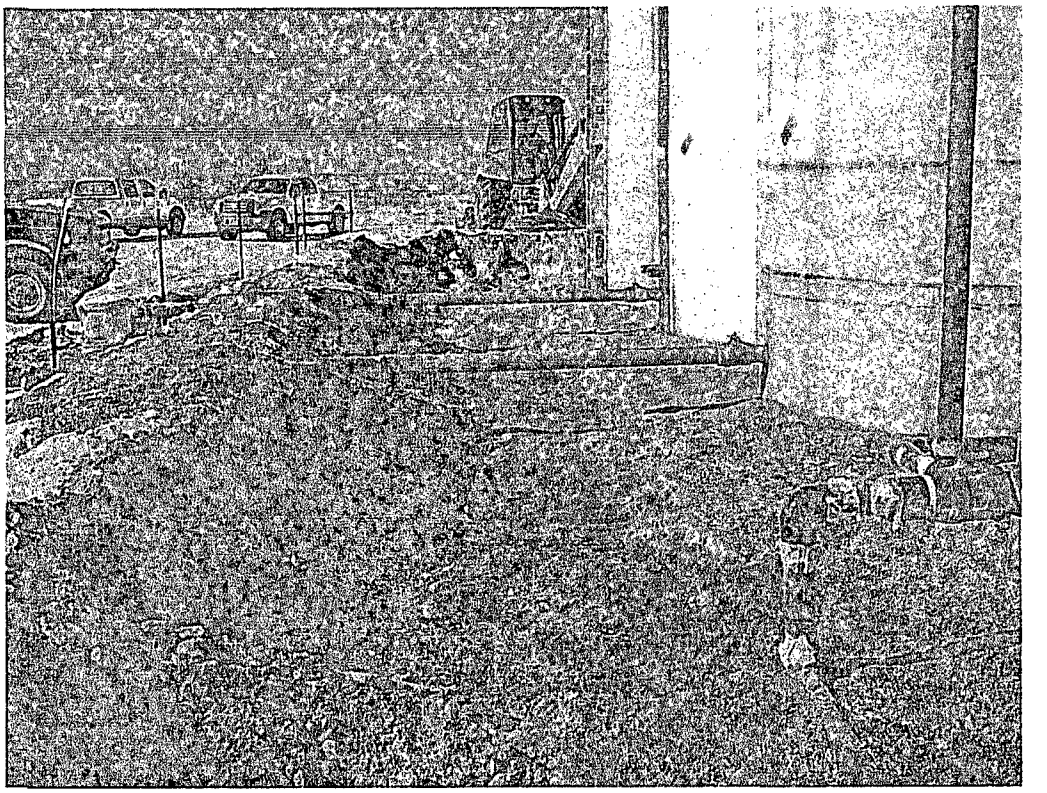
View South – BH-8



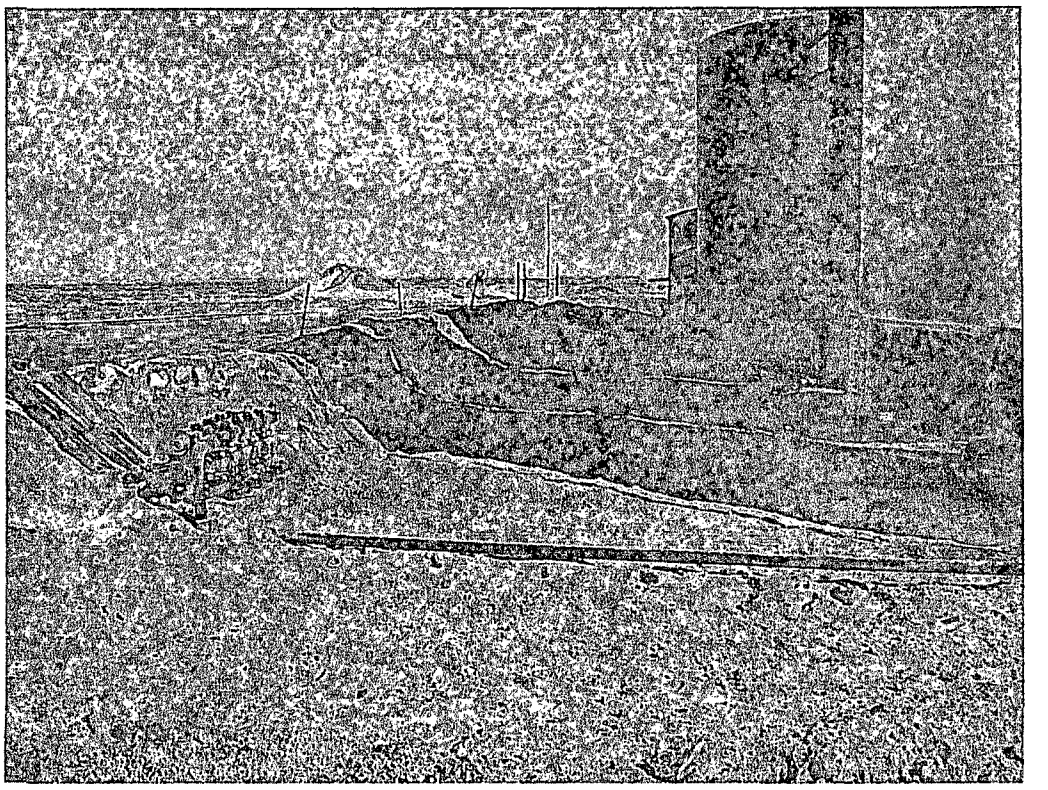
View East – BH-6

COG Operating LLC
East High Lonesome
Eddy County, New Mexico

TETRA TECH



View West – BH-4 and 5

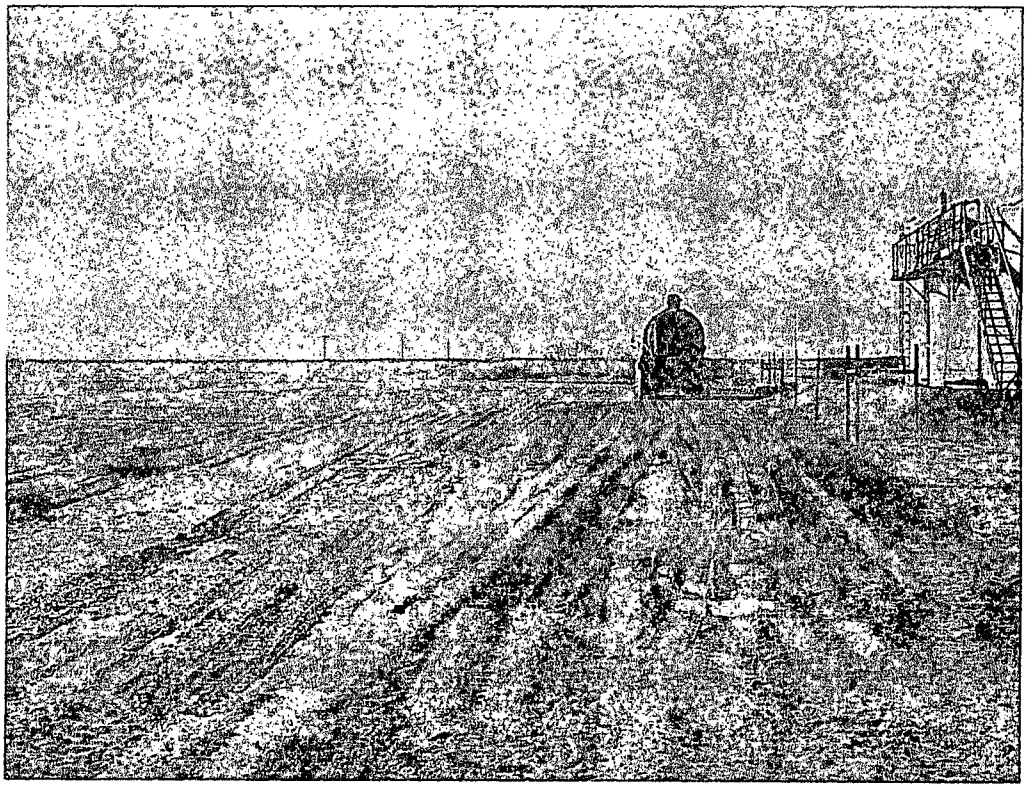


View East – BH-3 and 2

COG Operating LLC
East High Lonesome
Eddy County, New Mexico

TETRA TECH

Backfill



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	East High Lonesome Tank Battery	Facility Type	Tank Battery

Surface Owner Federal	Mineral Owner	Lease No. 91-008663-A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	14	16S	~~28~~ 29E					Eddy

Latitude 32 55.377 **Longitude** 104 02.391

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 200bbls	Volume Recovered 195bbls
Source of Release Water Tank	Date and Hour of Occurrence 06/21/2010	Date and Hour of Discovery 06/21/2010 12:00 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher—OCD	
By Whom? Josh Russo	Date and Hour 06/22/2010 5:23 p.m.	
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.*

The release was caused by a burned relay powering the Murphy tank level switch gauge. The problem was immediately corrected.

Describe Area Affected and Cleanup Action Taken.*

Initially we released 200bbls of produced water from the water tank, inside the unlined dike of the tank battery. All of the fluid from the released was contained within the firewalls. We were able to recover 195bbls with a vacuum truck. (The closest well location to the release is the High Lonesome Federal 26 Com. #1, Unit. A, Sec. 26-T16S-R29E, 660 FNL 1150 FEL, Eddy County, NM, NMNM-118710, API#30-015-31899) Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the BLM / NMOCD for 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:	OIL CONSERVATION DIVISION
Printed Name: Josh Russo	Approved by District Supervisor:
Title: HSE Coordinator	Approval Date: / Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: / Attached ☐
Date: 06/23/2010 Phone: 432-212-2399	

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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 East High Lonesome Penrose Unit Tank Battery	Facility Type **Tank Battery**

Surface Owner: Federal	Mineral Owner	Lease No. 91-008663-A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	14	16S	29E					Eddy

Latitude 32 55.377 **Longitude** 104 02.391

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 200 bbls	Volume Recovered 195 bbls
Source of Release: Water Tank	Date and Hour of Occurrence 06/21/2010	Date and Hour of Discovery 06/21/2010 12:00p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher--OCD	
By Whom? Josh Russo	Date and Hour 06/22/2010 5:23 p.m.	
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.*

The release was caused by a burned relay powering the Murphy tank level switch gauge. The problem was immediately corrected.

Describe Area Affected and Cleanup Action Taken.*

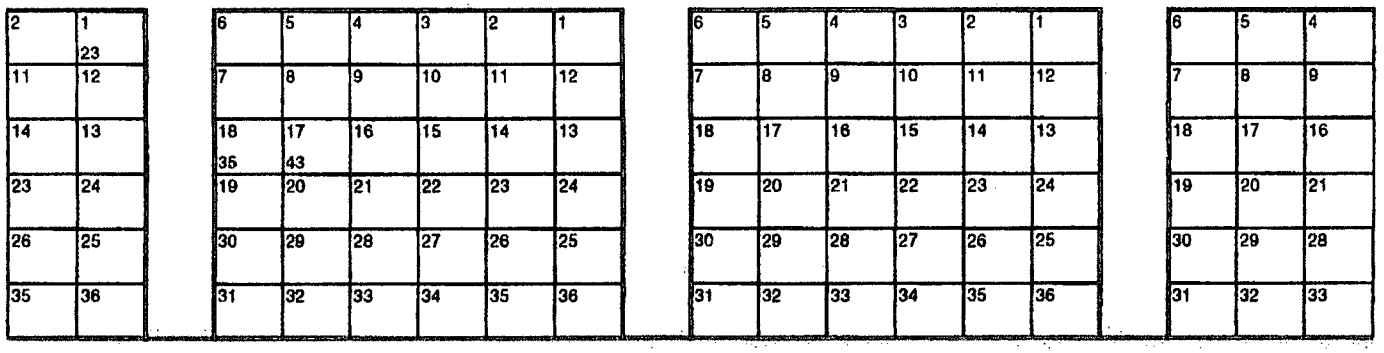
Tetra Tech personal inspected site and collected samples to define the spills extent. The area of the tank battery was excavated 1.0' and the area of the pad was excavated 4.0'. The BLM requested that confirmation samples would be collected to confirm the impact was removed. Soil that exceeded RRAL was removed and hauled away for proper disposal. The site was then brought up to surface grade with clean backfill material. Tetra Tech 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: 4/16/12 Phone: (432) 682-4559	

Appendix B

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



2	1 23	6	5	4	3	2	1	6	5	4	3	2	1	6	5	4
11	12	7	8	9	10	11	12	7	8	9	10	11	12	7	8	9
14	13	18 35	17 43	16	15	14	13	18	17	16	15	14	13	18	17	16
23	24	19	20	21	22	23	24	19	20	21	22	23	24	19	20	21
26	25	30	29	28	27	26	25	30	29	28	27	26	25	30	29	28
35	36	31	32	33	34	35	36	31	32	33	34	35	36	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	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	26	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
- East 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: January 5, 2012

Work Order: 11122918

Project Location: Eddy Co., NM
Project Name: East High Lonesome Penrose
Project Number: 114-6400572

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
285497	CS-1 Sidewall (Near BH-8)	soil	2011-11-15	00:00	2011-12-29
285498	CS-2 Sidewall (Near BH-8)	soil	2011-11-14	00:00	2011-12-29
285499	CS-3 Sidewall (Near BH-8)	soil	2011-11-18	00:00	2011-12-29
285500	CS-4 Sidewall (Near BH-7)	soil	2011-11-17	00:00	2011-12-29
285501	CS-5 Sidewall (Near BH-7)	soil	2011-11-18	00:00	2011-12-29
285502	CS-6 Sidewall (Near BH-1)	soil	2011-11-17	00:00	2011-12-29
285503	CS-7 Sidewall (Near BH-6)	soil	2011-11-29	00:00	2011-12-29
285504	CS-8 Tank Battery Sidewall (Near BH-1)	soil	2011-11-18	00:00	2011-12-29
285505	CS-9 Tank Battery Sidewall (Near BH-6)	soil	2011-11-29	00:00	2011-12-29
285509	CS-13 Sidewall (Near BH-6)	soil	2011-11-28	00:00	2011-12-29

Sample: 285497 - CS-1 Sidewall (Near BH-8)

Param	Flag	Result	Units	RL
Chloride		**647**	mg/Kg	4

Sample: 285498 - CS-2 Sidewall (Near BH-8)

Param	Flag	Result	Units	RL
Chloride		**715**	mg/Kg	4

Sample: 285499 - CS-3 Sidewall (Near BH-8)

Param	Flag	Result	Units	RL
Chloride		**545**	mg/Kg	4

Sample: 285500 - CS-4 Sidewall (Near BH-7)

Param	Flag	Result	Units	RL
Chloride		**297**	mg/Kg	4

Sample: 285501 - CS-5 Sidewall (Near BH-7)

Param	Flag	Result	Units	RL
Chloride		**818**	mg/Kg	4

Sample: 285502 - CS-6 Sidewall (Near BH-1)

Param	Flag	Result	Units	RL
Chloride		**292**	mg/Kg	4

Sample: 285503 - CS-7 Sidewall (Near BH-6)

Param	Flag	Result	Units	RL
Chloride		**224**	mg/Kg	4

Sample: 285504 - CS-8 Tank Battery Sidewall (Near BH-1)

Param	Flag	Result	Units	RL
Chloride		**16900**	mg/Kg	4

Sample: 285505 - CS-9 Tank Battery Sidewall (Near BH-6)

Param	Flag	Result	Units	RL
Chloride		**21200**	mg/Kg	4

Sample: 285509 - CS-13 Sidewall (Near BH-6)

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: January 5, 2012

Work Order: 11122918

Project Location: Eddy Co., NM
Project Name: East High Lonesome Penrose
Project Number: 114-6400572

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
285497	CS-1 Sidewall (Near BH-8)	soil	2011-11-15	00:00	2011-12-29
285498	CS-2 Sidewall (Near BH-8)	soil	2011-11-14	00:00	2011-12-29
285499	CS-3 Sidewall (Near BH-8)	soil	2011-11-18	00:00	2011-12-29
285500	CS-4 Sidewall (Near BH-7)	soil	2011-11-17	00:00	2011-12-29
285501	CS-5 Sidewall (Near BH-7)	soil	2011-11-18	00:00	2011-12-29
285502	CS-6 Sidewall (Near BH-1)	soil	2011-11-17	00:00	2011-12-29
285503	CS-7 Sidewall (Near BH-6)	soil	2011-11-29	00:00	2011-12-29
285504	CS-8 Tank Battery Sidewall (Near BH-1)	soil	2011-11-18	00:00	2011-12-29
285505	CS-9 Tank Battery Sidewall (Near BH-6)	soil	2011-11-29	00:00	2011-12-29
285509	CS-13 Sidewall (Near BH-6)	soil	2011-11-28	00:00	2011-12-29

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.

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

Report Contents

Case Narrative

Samples for project East High Lonesome Penrose were received by TraceAnalysis, Inc. on 2011-12-29 and assigned to work order 11122918. Samples for work order 11122918 were received intact at a temperature of 4.0 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	74350	2012-01-03 at 09:57	87598	2012-01-04 at 13:59
Chloride (Titration)	SM 4500-Cl B	74350	2012-01-03 at 09:57	87599	2012-01-04 at 14:00

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 11122918 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: 285497 - CS-1 Sidewall (Near BH-8)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**647**	mg/Kg	50	4.00

Sample: 285498 - CS-2 Sidewall (Near BH-8)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**715**	mg/Kg	50	4.00

Sample: 285499 - CS-3 Sidewall (Near BH-8)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**545**	mg/Kg	50	4.00

Sample: 285500 - CS-4 Sidewall (Near BH-7)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**297**	mg/Kg	50	4.00

Sample: 285501 - CS-5 Sidewall (Near BH-7)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**818**	mg/Kg	50	4.00

Sample: 285502 - CS-6 Sidewall (Near BH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**292**	mg/Kg	50	4.00

Sample: 285503 - CS-7 Sidewall (Near BH-6)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**224**	mg/Kg	50	4.00

Sample: 285504 - CS-8 Tank Battery Sidewall (Near BH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**16900**	mg/Kg	100	4.00

Sample: 285505 - CS-9 Tank Battery Sidewall (Near BH-6)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**21200**	mg/Kg	100	4.00

Sample: 285509 - CS-13 Sidewall (Near BH-6)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	87599	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	Sample Preparation:	2012-01-03	Prepared By:	AR

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

Method Blanks

Method Blank (1) QC Batch: 87598

QC Batch:	87598	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	QC Preparation:	2012-01-03	Prepared By:	AR

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

Method Blank (1) QC Batch: 87599

QC Batch:	87599	Date Analyzed:	2012-01-04	Analyzed By:	AR
Prep Batch:	74350	QC Preparation:	2012-01-03	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: 87598 | Date Analyzed: 2012-01-04 | Analyzed By: AR
Prep Batch: 74350 | QC Preparation: 2012-01-03 | 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			105	mg/Kg	1	100	<3.85	105	85 - 115	8	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: 87599 | Date Analyzed: 2012-01-04 | Analyzed By: AR
Prep Batch: 74350 | QC Preparation: 2012-01-03 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			95.4	mg/Kg	1	100	<3.85	95	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			102	mg/Kg	1	100	<3.85	102	85 - 115	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: 285505

QC Batch: 87598 | Date Analyzed: 2012-01-04 | Analyzed By: AR
Prep Batch: 74350 | QC Preparation: 2012-01-03 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			31100	mg/Kg	100	10000	21200	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			32400	mg/Kg	100	10000	21200	112	79.4 - 120.6	4	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: 285516

QC Batch: 87599 | Date Analyzed: 2012-01-04 | Analyzed By: AR
Prep Batch: 74350 | QC Preparation: 2012-01-03 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10600	mg/Kg	100	10000	570	100	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			11000	mg/Kg	100	10000	570	104	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: 87598 | Date Analyzed: 2012-01-04 | 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	101	101	85 - 115	2012-01-04

Standard (CCV-1)

QC Batch: 87598 | Date Analyzed: 2012-01-04 | 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	99.5	100	85 - 115	2012-01-04

Standard (ICV-1)

QC Batch: 87599 | Date Analyzed: 2012-01-04 | 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	99.5	100	85 - 115	2012-01-04

Standard (CCV-1)

QC Batch: 87599 | Date Analyzed: 2012-01-04 | 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	2012-01-04

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

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.

111227118

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: | OF: 2

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6400572

PROJECT NAME: East High Lonesome Penrose 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
285497	11/15/11		S		X	CS-1 Sidewall (Near BH-8)	1				X													X				
498	11/14/11		S		X	CS-2 Sidewall (Near BH-8)	1				X													X				
499	11/18/11		S		X	CS-3 Sidewall (Near BH-8)	1				X													X				
500	11/17/11		S		X	CS-4 Sidewall (Near BH-7)	1				X													X				
501	11/18/11		S		X	CS-5 Sidewall (Near BH-7)	1				X													X				
502	11/17/11		S		X	CS-6 Sidewall (Near BH-1)	1				X													X				
503	11/29/11		S		X	CS-7 Sidewall (Near BH-6)	1				X													X				
504	11/28/11 18 DAS		S		X	CS-8 Tank Battery Sidewall (Near BH-1)	1				X													X				
505	11/29/11		S		X	CS-9 Tank Battery Side Wall (Near BH-6)	1				X													X				
506	11/16/11		S		X	CS-10 Bottom hole 4' (Near BH-10)	1				X													X				

Hold

RELINQUISHED BY: (Signature)	Date: 12-1-11 Time: 1359	RECEIVED BY: (Signature)	Date: 12-1-11 Time: 1359
RELINQUISHED BY: (Signature)	Date: 12/29/11 Time: 1330	RECEIVED BY: (Signature)	Date: 12-29-11 Time: 1330
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:

SAMPLED BY: (Print & Initial) Brian Schavee BPS — Date: 12/1/11 Time: 1200

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°C

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.

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: October 20, 2010

Work Order: 10101308

Project Location: Eddy County, NM
Project Name: COG/East High Lonesome TB
Project Number: 114-6400572

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
247345	BH-1 0-1'	soil	2010-10-07	00:00	2010-10-13
247346	BH-1 3'	soil	2010-10-07	00:00	2010-10-13
247347	BH-1 5'	soil	2010-10-07	00:00	2010-10-13
247348	BH-1 7'	soil	2010-10-07	00:00	2010-10-13
247349	BH-1 10'	soil	2010-10-07	00:00	2010-10-13
247350	BH-1 15'	soil	2010-10-07	00:00	2010-10-13
247351	BH-1 20'	soil	2010-10-07	00:00	2010-10-13
247352	BH-1 25'	soil	2010-10-07	00:00	2010-10-13
247353	BH-1 30'	soil	2010-10-07	00:00	2010-10-13
247354	BH-1 40'	soil	2010-10-07	00:00	2010-10-13

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
247355	BH-1 50'	soil	2010-10-07	00:00	2010-10-13
247356	BH-1 60'	soil	2010-10-07	00:00	2010-10-13
247357	BH-1 70'	soil	2010-10-07	00:00	2010-10-13
247358	BH-2 0-1'	soil	2010-10-07	00:00	2010-10-13
247359	BH-2 3'	soil	2010-10-07	00:00	2010-10-13
247360	BH-2 5'	soil	2010-10-07	00:00	2010-10-13
247361	BH-2 7'	soil	2010-10-07	00:00	2010-10-13
247362	BH-2 10'	soil	2010-10-07	00:00	2010-10-13
247363	BH-2 15'	soil	2010-10-07	00:00	2010-10-13
247364	BH-2 20'	soil	2010-10-07	00:00	2010-10-13
247365	BH-2 30'	soil	2010-10-07	00:00	2010-10-13
247366	BH-2 40'	soil	2010-10-07	00:00	2010-10-13
247367	BH-2 50'	soil	2010-10-07	00:00	2010-10-13
247368	BH-2 60'	soil	2010-10-07	00:00	2010-10-13
247369	BH-2 70'	soil	2010-10-07	00:00	2010-10-13
247370	BH-3 0-1'	soil	2010-10-07	00:00	2010-10-13
247371	BH-3 3'	soil	2010-10-07	00:00	2010-10-13
247372	BH-3 5'	soil	2010-10-07	00:00	2010-10-13
247373	BH-3 7'	soil	2010-10-07	00:00	2010-10-13
247374	BH-3 10'	soil	2010-10-07	00:00	2010-10-13
247375	BH-3 15'	soil	2010-10-07	00:00	2010-10-13
247376	BH-3 20'	soil	2010-10-07	00:00	2010-10-13
247377	BH-3 25'	soil	2010-10-07	00:00	2010-10-13
247378	BH-3 30'	soil	2010-10-07	00:00	2010-10-13
247379	BH-3 40'	soil	2010-10-07	00:00	2010-10-13
247380	BH-3 50'	soil	2010-10-07	00:00	2010-10-13
247381	BH-3 60'	soil	2010-10-07	00:00	2010-10-13
247382	BH-3 70'	soil	2010-10-07	00:00	2010-10-13
247385	BH-4 0-1'	soil	2010-10-08	00:00	2010-10-13
247386	BH-4 3'	soil	2010-10-08	00:00	2010-10-13
247387	BH-4 5'	soil	2010-10-08	00:00	2010-10-13
247388	BH-4 7'	soil	2010-10-08	00:00	2010-10-13
247389	BH-4 10'	soil	2010-10-08	00:00	2010-10-13
247390	BH-4 15'	soil	2010-10-08	00:00	2010-10-13
247391	BH-4 20'	soil	2010-10-08	00:00	2010-10-13
247392	BH-4 25'	soil	2010-10-08	00:00	2010-10-13
247393	BH-4 30'	soil	2010-10-08	00:00	2010-10-13
247394	BH-4 40'	soil	2010-10-08	00:00	2010-10-13
247395	BH-4 50'	soil	2010-10-08	00:00	2010-10-13
247396	BH-4 60'	soil	2010-10-08	00:00	2010-10-13
247397	BH-4 70'	soil	2010-10-08	00:00	2010-10-13
247398	BH-4 80'	soil	2010-10-08	00:00	2010-10-13
247399	BH-4 90'	soil	2010-10-08	00:00	2010-10-13
247400	BH-5 0-1'	soil	2010-10-08	00:00	2010-10-13
247401	BH-5 3'	soil	2010-10-08	00:00	2010-10-13
247402	BH-5 5'	soil	2010-10-08	00:00	2010-10-13

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
247403	BH-5 7'	soil	2010-10-08	00:00	2010-10-13
247404	BH-5 10'	soil	2010-10-08	00:00	2010-10-13
247405	BH-5 15'	soil	2010-10-08	00:00	2010-10-13
247406	BH-5 20'	soil	2010-10-08	00:00	2010-10-13
247407	BH-5 25'	soil	2010-10-08	00:00	2010-10-13
247408	BH-5 30'	soil	2010-10-08	00:00	2010-10-13
247409	BH-5 40'	soil	2010-10-08	00:00	2010-10-13
247410	BH-5 50'	soil	2010-10-08	00:00	2010-10-13
247411	BH-5 60'	soil	2010-10-08	00:00	2010-10-13
247412	BH-6 0-1'	soil	2010-10-11	00:00	2010-10-13
247413	BH-6 3'	soil	2010-10-11	00:00	2010-10-13
247414	BH-6 5'	soil	2010-10-11	00:00	2010-10-13
247415	BH-6 7'	soil	2010-10-11	00:00	2010-10-13
247416	BH-6 10'	soil	2010-10-11	00:00	2010-10-13
247417	BH-6 15'	soil	2010-10-11	00:00	2010-10-13
247418	BH-6 20'	soil	2010-10-11	00:00	2010-10-13
247419	BH-6 25'	soil	2010-10-11	00:00	2010-10-13
247420	BH-6 30'	soil	2010-10-11	00:00	2010-10-13
247421	BH-6 40'	soil	2010-10-11	00:00	2010-10-13
247422	BH-6 50'	soil	2010-10-11	00:00	2010-10-13
247424	BH-7 0-1'	soil	2010-10-11	00:00	2010-10-13
247425	BH-7 3'	soil	2010-10-11	00:00	2010-10-13
247426	BH-7 5'	soil	2010-10-11	00:00	2010-10-13
247427	BH-7 7'	soil	2010-10-11	00:00	2010-10-13
247428	BH-7 10'	soil	2010-10-11	00:00	2010-10-13
247429	BH-7 15'	soil	2010-10-11	00:00	2010-10-13
247430	BH-7 20'	soil	2010-10-11	00:00	2010-10-13
247431	BH-7 25'	soil	2010-10-11	00:00	2010-10-13
247432	BH-7 30'	soil	2010-10-11	00:00	2010-10-13
247433	BH-7 40'	soil	2010-10-11	00:00	2010-10-13
247434	BH-7 50'	soil	2010-10-11	00:00	2010-10-13
247436	BH-8 0-1'	soil	2010-10-11	00:00	2010-10-13
247437	BH-8 3'	soil	2010-10-11	00:00	2010-10-13
247438	BH-8 5'	soil	2010-10-11	00:00	2010-10-13
247439	BH-8 7'	soil	2010-10-11	00:00	2010-10-13
247440	BH-8 10'	soil	2010-10-11	00:00	2010-10-13
247441	BH-8 15'	soil	2010-10-11	00:00	2010-10-13
247442	BH-8 20'	soil	2010-10-11	00:00	2010-10-13
247443	BH-8 25'	soil	2010-10-11	00:00	2010-10-13
247444	BH-8 30'	soil	2010-10-11	00:00	2010-10-13
247445	BH-8 40'	soil	2010-10-11	00:00	2010-10-13
247446	BH-8 50'	soil	2010-10-11	00:00	2010-10-13
247447	BH-8 60'	soil	2010-10-11	00:00	2010-10-13
247474	BH-2 25'	soil	2010-10-07	00:00	2010-10-13

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 45 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/East High Lonesome TB were received by TraceAnalysis, Inc. on 2010-10-13 and assigned to work order 10101308. Samples for work order 10101308 were received intact at a temperature of 3.7 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	63838	2010-10-14 at 09:12	74410	2010-10-14 at 15:09
Chloride (Titration)	SM 4500-Cl B	63838	2010-10-14 at 09:12	74461	2010-10-15 at 15:46
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74529	2010-10-19 at 14:26
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74530	2010-10-19 at 14:27
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74532	2010-10-19 at 14:28
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74533	2010-10-19 at 14:29
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74534	2010-10-19 at 14:30
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74535	2010-10-19 at 14:31
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74536	2010-10-19 at 14:32
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74537	2010-10-19 at 14:32
Chloride (Titration)	SM 4500-Cl B	63888	2010-10-18 at 08:26	74538	2010-10-19 at 14:33

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 10101308 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: 247345 - BH-1 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**16100**	mg/Kg	100	4.00

Sample: 247346 - BH-1 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**21300**	mg/Kg	100	4.00

Sample: 247347 - BH-1 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

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

Sample: 247348 - BH-1 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

continued ...

sample 247348 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**16200**	mg/Kg	100	4.00

Sample: 247349 - BH-1 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

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

Sample: 247350 - BH-1 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

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

Sample: 247351 - BH-1 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5430**	mg/Kg	100	4.00

Sample: 247352 - BH-1 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3350**	mg/Kg	100	4.00

Sample: 247353 - BH-1 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5390**	mg/Kg	100	4.00

Sample: 247354 - BH-1 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2070**	mg/Kg	100	4.00

Sample: 247355 - BH-1 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**725**	mg/Kg	50	4.00

Sample: 247356 - BH-1 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

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

Sample: 247357 - BH-1 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**301**	mg/Kg	50	4.00

Sample: 247358 - BH-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12000**	mg/Kg	100	4.00

Sample: 247359 - BH-2 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11700**	mg/Kg	100	4.00

Sample: 247360 - BH-2 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**19800**	mg/Kg	100	4.00

Sample: 247361 - BH-2 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	Sample Preparation:	2010-10-14	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**13700**	mg/Kg	100	4.00

Sample: 247362 - BH-2 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8370**	mg/Kg	100	4.00

Sample: 247363 - BH-2 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5320**	mg/Kg	100	4.00

Sample: 247364 - BH-2 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247365 - BH-2 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2070**	mg/Kg	100	4.00

Sample: 247366 - BH-2 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2260**	mg/Kg	100	4.00

Sample: 247367 - BH-2 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1670**	mg/Kg	100	4.00

Sample: 247368 - BH-2 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**383**		mg/Kg	50	4.00

Sample: 247369 - BH-2 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247370 - BH-3 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247371 - BH-3 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**4260**		mg/Kg	100	4.00

Sample: 247372 - BH-3 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3280**	mg/Kg	100	4.00

Sample: 247373 - BH-3 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3900**	mg/Kg	100	4.00

Sample: 247374 - BH-3 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8000**	mg/Kg	100	4.00

Sample: 247375 - BH-3 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247376 - BH-3 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247377 - BH-3 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**11600**	mg/Kg	100	4.00

Sample: 247378 - BH-3 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**12100**	mg/Kg	100	4.00

Sample: 247379 - BH-3 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**13800**	mg/Kg	100	4.00

Sample: 247380 - BH-3 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6520**	mg/Kg	100	4.00

Sample: 247381 - BH-3 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11900**	mg/Kg	100	4.00

Sample: 247382 - BH-3 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12500**	mg/Kg	100	4.00

Sample: 247385 - BH-4 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9010**	mg/Kg	100	4.00

Sample: 247386 - BH-4 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**18700**	mg/Kg	100	4.00

Sample: 247387 - BH-4 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247388 - BH-4 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9530**	mg/Kg	100	4.00

Sample: 247389 - BH-4 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**7670**	mg/Kg	100	4.00

Sample: 247390 - BH-4 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5530**	mg/Kg	100	4.00

Sample: 247391 - BH-4 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6640**	mg/Kg	100	4.00

Sample: 247392 - BH-4 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6650**	mg/Kg	100	4.00

Sample: 247393 - BH-4 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**10900**	mg/Kg	100	4.00

Sample: 247394 - BH-4 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9270**	mg/Kg	100	4.00

Sample: 247395 - BH-4 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5970**	mg/Kg	100	4.00

Sample: 247396 - BH-4 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247397 - BH-4 70'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4550**	mg/Kg	100	4.00

Sample: 247398 - BH-4 80'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2380**	mg/Kg	100	4.00

Sample: 247399 - BH-4 90'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247400 - BH-5 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**396**	mg/Kg	50	4.00

Sample: 247401 - BH-5 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1010**	mg/Kg	100	4.00

Sample: 247402 - BH-5 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9350**	mg/Kg	100	4.00

Sample: 247403 - BH-5 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**8460**	mg/Kg	100	4.00

Sample: 247404 - BH-5 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247405 - BH-5 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6930**	mg/Kg	100	4.00

Sample: 247406 - BH-5 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3940**	mg/Kg	100	4.00

Sample: 247407 - BH-5 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3920**	mg/Kg	100	4.00

Sample: 247408 - BH-5 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2640**	mg/Kg	100	4.00

Sample: 247409 - BH-5 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2240**	mg/Kg	100	4.00

Sample: 247410 - BH-5 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**232**	mg/Kg	50	4.00

Sample: 247411 - BH-5 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247412 - BH-6 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2810**	mg/Kg	100	4.00

Sample: 247413 - BH-6 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5080**	mg/Kg	100	4.00

Sample: 247414 - BH-6 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5950**	mg/Kg	100	4.00

Sample: 247415 - BH-6 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4870**	mg/Kg	100	4.00

Sample: 247416 - BH-6 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4970**	mg/Kg	100	4.00

Sample: 247417 - BH-6 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5240**	mg/Kg	100	4.00

Sample: 247418 - BH-6 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4140**	mg/Kg	100	4.00

Sample: 247419 - BH-6 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**603**	mg/Kg	50	4.00

Sample: 247420 - BH-6 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247421 - BH-6 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**991**	mg/Kg	100	4.00

Sample: 247422 - BH-6 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**215**	mg/Kg	50	4.00

Sample: 247424 - BH-7 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**25600**	mg/Kg	100	4.00

Sample: 247425 - BH-7 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**22900**	mg/Kg	100	4.00

Sample: 247426 - BH-7 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**10600**	mg/Kg	100	4.00

Sample: 247427 - BH-7 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247428 - BH-7 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6760**	mg/Kg	100	4.00

Sample: 247429 - BH-7 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5690**	mg/Kg	100	4.00

Sample: 247430 - BH-7 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3700**	mg/Kg	100	4.00

Sample: 247431 - BH-7 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2370**	mg/Kg	100	4.00

Sample: 247432 - BH-7 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2550**	mg/Kg	100	4.00

Sample: 247433 - BH-7 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**623**	mg/Kg	50	4.00

Sample: 247434 - BH-7 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247436 - BH-8 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247437 - BH-8 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1830**	mg/Kg	100	4.00

Sample: 247438 - BH-8 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3390**	mg/Kg	100	4.00

Sample: 247439 - BH-8 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**13400**	mg/Kg	100	4.00

Sample: 247440 - BH-8 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**11500**	mg/Kg	100	4.00

Sample: 247441 - BH-8 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**6350**	mg/Kg	100	4.00

Sample: 247442 - BH-8 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5370**	mg/Kg	100	4.00

Sample: 247443 - BH-8 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4680**	mg/Kg	100	4.00

Sample: 247444 - BH-8 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4580**	mg/Kg	100	4.00

Sample: 247445 - BH-8 40'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**720**	mg/Kg	50	4.00

Sample: 247446 - BH-8 50'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74538	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247447 - BH-8 60'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74538	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

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

Sample: 247474 - BH-2 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74538	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	Sample Preparation:	2010-10-18	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1540**	mg/Kg	100	4.00

Method Blank (1) QC Batch: 74410

QC Batch:	74410	Date Analyzed:	2010-10-14	Analyzed By:	AR
Prep Batch:	63838	QC Preparation:	2010-10-14	Prepared By:	AR

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

Method Blank (1) QC Batch: 74461

QC Batch:	74461	Date Analyzed:	2010-10-15	Analyzed By:	AR
Prep Batch:	63838	QC Preparation:	2010-10-14	Prepared By:	AR

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

Method Blank (1) QC Batch: 74529

QC Batch:	74529	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74530

QC Batch:	74530	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74532

QC Batch:	74532	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74533

QC Batch:	74533	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74534

QC Batch:	74534	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74535

QC Batch:	74535	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74536

QC Batch:	74536	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74537

QC Batch:	74537	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Method Blank (1) QC Batch: 74538

QC Batch:	74538	Date Analyzed:	2010-10-19	Analyzed By:	AR
Prep Batch:	63888	QC Preparation:	2010-10-18	Prepared By:	AR

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

Laboratory Control Spike (LCS-1)

QC Batch: 74410 | Date Analyzed: 2010-10-14 | Analyzed By: AR
Prep Batch: 63838 | QC Preparation: 2010-10-14 | 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: 74461 | Date Analyzed: 2010-10-15 | Analyzed By: AR
Prep Batch: 63838 | QC Preparation: 2010-10-14 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.9	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	103	mg/Kg	1	100	<2.18	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: 74529 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.8	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	103	mg/Kg	1	100	<2.18	103	85 - 115	6	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: 74530 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | 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	102	mg/Kg	1	100	<2.18	102	85 - 115	4	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: 74532 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | 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	103	mg/Kg	1	100	<2.18	103	85 - 115	6	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: 74533 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.7	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	103	mg/Kg	1	100	<2.18	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: 74534 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.2	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	102	mg/Kg	1	100	<2.18	102	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: 74535 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.9	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	102	mg/Kg	1	100	<2.18	102	85 - 115	4	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: 74536 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.9	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	103	mg/Kg	1	100	<2.18	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: 74537 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.7	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	103	mg/Kg	1	100	<2.18	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: 74538 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.7	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	103	mg/Kg	1	100	<2.18	103	85 - 115	5	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: 247351

QC Batch: 74410 | Date Analyzed: 2010-10-14 | Analyzed By: AR
Prep Batch: 63838 | QC Preparation: 2010-10-14 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15400	mg/Kg	100	10000	5430	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	15800	mg/Kg	100	10000	5430	104	85 - 115	3	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: 247361

QC Batch: 74461 | Date Analyzed: 2010-10-15 | Analyzed By: AR
Prep Batch: 63838 | QC Preparation: 2010-10-14 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	23500	mg/Kg	100	10000	13700	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	23800	mg/Kg	100	10000	13700	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: 247371

QC Batch: 74529 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15100	mg/Kg	100	10000	4260	108	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	4260	111	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: 247381

QC Batch: 74530 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	21500	mg/Kg	100	10000	11900	96	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	22500	mg/Kg	100	10000	11900	106	85 - 115	4	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: 247393

QC Batch: 74532 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	21300	mg/Kg	100	10000	10900	104	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	21600	mg/Kg	100	10000	10900	107	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: 247403

QC Batch: 74533 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	18600	mg/Kg	100	10000	8460	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	19200	mg/Kg	100	10000	8460	107	85 - 115	3	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: 247413

QC Batch: 74534 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15400	mg/Kg	100	10000	5080	103	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	15700	mg/Kg	100	10000	5080	106	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: 247424

QC Batch: 74535 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	36600	mg/Kg	100	10000	25600	110	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	37000	mg/Kg	100	10000	25600	114	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: 247434

QC Batch: 74536 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9980	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	10200	mg/Kg	100	10000	<218	102	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: 247445

QC Batch: 74537 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10600	mg/Kg	100	10000	720	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	11000	mg/Kg	100	10000	720	103	85 - 115	4	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: 247474

QC Batch: 74538 | Date Analyzed: 2010-10-19 | Analyzed By: AR
Prep Batch: 63888 | QC Preparation: 2010-10-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11800	mg/Kg	100	10000	1540	103	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	12000	mg/Kg	100	10000	1540	105	85 - 115	2	20

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

Standard (ICV-1)

QC Batch: 74410 | Date Analyzed: 2010-10-14 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2010-10-14

Standard (CCV-1)

QC Batch: 74410 | Date Analyzed: 2010-10-14 | 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	2010-10-14

Standard (ICV-1)

QC Batch: 74461 | Date Analyzed: 2010-10-15 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.5	100	85 - 115	2010-10-15

Standard (CCV-1)

QC Batch: 74461 | Date Analyzed: 2010-10-15 | 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	2010-10-15

Standard (ICV-1)

QC Batch: 74529 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74529 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-10-19

Standard (ICV-1)

QC Batch: 74530 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74530 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74532 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2010-10-19

Standard (CCV-1)

QC Batch: 74532 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74533 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74533 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2010-10-19

Standard (ICV-1)

QC Batch: 74534 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2010-10-19

Standard (CCV-1)

QC Batch: 74534 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74535 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74535 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74536 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74536 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74537 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-10-19

Standard (CCV-1)

QC Batch: 74537 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (ICV-1)

QC Batch: 74538 Date Analyzed: 2010-10-19 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	2010-10-19

Standard (CCV-1)

QC Batch: 74538 Date Analyzed: 2010-10-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.0	99	85 - 115	2010-10-19

WO #: 10101308

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 11

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.: 114-6400572

PROJECT NAME: East High Lovesome
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
247345	10/7		S		X	BH-1 0-1'	1				X													X				
346						BH-1 3'																						
347						BH-1 5'																						
348						BH-1 7'																						
349						BH-1 10'																						
350						BH-1 15'																						
351						BH-1 20'																						
352						BH-1 25'																						
353						BH-1 30'																						
354						BH-1 40'																						

RELINQUISHED BY: (Signature) Jessica Kindley — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:23
SAMPLED BY: (Print & Initial) Kim — Date: 10-7-10 — 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:

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: 37° 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 #: 10101308

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: 2 OF: 11

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6400572	East High Lonesome 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
247355	10/7		S		X	BH-1	50'	1				X													X				
356						BH-1	60'																						
357						BH-1	70'																						
358						BH-2	0-1'																						
359						BH-2	3'																						
360						BH-2	5'																						
361						BH-2	7'																						
362						BH-2	10'																						
363						BH-2	15'																						
364	↓		↓		↓	BH-2	20'	↓				↓													↓				

RELINQUISHED BY: (Signature) Jaleen Kindly	Date: October 15, 2010 Time:	RECEIVED BY: (Signature)	Date: 10/13/10 Time: 9:25
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: 10-7-10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 3.7°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.

WO #: 10101308

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:**
114-6400572	East High Lonesome

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
247365	10/7		S		X	BH-2	30'	1				X													X				
366						BH-2	40'																							
367						BH-2	50'																							
368						BH-2	60'																							
369						BH-2	70'																							
370						BH-3	0-1'																							
371						BH-3	3'																							
372						BH-3	5'																							
373						BH-3	7'																							
374						BH-3	10'																							

RELINQUISHED BY: (Signature) Johnny Kimley	Date: October 13, 2010 Time:	RECEIVED BY: (Signature)	Date: 10/13/10 Time: 9:05
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
RECEIVING LABORATORY: Trace		RECEIVED BY: (Signature)	
ADDRESS:			
CITY: Midland STATE: TX ZIP:			
CONTACT: PHONE:		DATE: TIME:	

SAMPLED BY: (Print & Initial) Kim — Date: 10-9-10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.7°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.

WO # 10101308

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 11

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.: 114-6400572

PROJECT NAME: East High Lonesome 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. 808/808	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
247375	10/7		S		X	BH-3 15'	1				X														X				
376						BH-3 20'																							
377						BH-3 25'																							
378						BH-3 30'																							
379						BH-3 40'																							
380						BH-3 50'																							
381						BH-3 60'																							
382						BH-3 70'																							
383						BH-3 80'																							
384						BH-3 90'																							

RELINQUISHED BY: (Signature) Johnny Kimbly — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25
SAMPLED BY: (Print & initial) Kim — Date: 10-7-10 — 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: 3.7°C in tact

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.

WO: 10101308

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.: 114-0400572

PROJECT NAME: COG / East High Lonesome
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
247885	10/8		S		X	BH-4 0-1'	1				X													X				
386	"					BH-4 3'	1				X													X				
387						BH-4 5'	1				X													X				
388						BH-4 7'	1				X													X				
389						BH-4 10'	1				X													X				
390						BH-4 15'	1				X													X				
391						BH-4 20'	1				X													X				
392						BH-4 25'	1				X													X				
393						BH-4 30'	1				X													X				
394						BH-4 40'	1				X													X				

RELINQUISHED BY: (Signature) Kimberly Kimball — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:23

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

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

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

SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.7°C Mack

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.

WO #: 10101308

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.: 114-640 0572

PROJECT NAME: COG / East High Lonesome 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
247395	10/8		S		X	BH-4 50'	1				X													X				
396						BH-4 60'	1				X													X				
397						BH-4 70'	1				X													X				
398						BH-4 80'	1				X													X				
399						BH-4 90'	1				X													X				
400						BH-5 0-1'	1				X													X				
401						BH-5 3'	1				X													X				
402						BH-5 5'	1				X													X				
403						BH-5 7'	1				X													X				
404						BH-5 10'	1				X													X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Jeffrey Kindle — Date: October 13, 2010 — Time:

RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 4:25

SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:

RECEIVING LABORATORY: — RECEIVED BY: (Signature)

ADDRESS: — CITY: — STATE: — ZIP: — CONTACT: — PHONE: — DATE: — TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 37°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.

WO: #1010138

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.: 114640 0572

PROJECT NAME: COG / East High Lonesome
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
247405	10/8		S		X	BH-5 15'	1				X	
406						BH-5 20'	1				X	
407						BH-5 25'	1				X	
408						BH-5 30'	1				X	
409						BH-5 40'	1				X	
410						BH-5 50'	1				X	
411						BH-5 60'	1				X	
412	10/11					BH-6 0-1'	1				X	
413						BH-6 3'	1				X	
414						BH6 5'	1				X	

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; Chloride; Gamma Spec.; Alpha Beta (Air); PLM (Asbestos); Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature) Sallye Kindley — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 4:25

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: 10/11/10 — Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 37° 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.

WO : # 10101308

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: 8 OF: 11

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6410 0572

PROJECT NAME: COG / East High Lonesome 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
247415	10/11		S		X	BH-6 7'	1				X	
416						BH-6 10'	1				X	
417						BH-6 15'	1				X	
418						BH-6 20'	1				X	
419						BH-6 25'	1				X	
420						BH-6 30'	1				X	
421						BH-6 40'	1				X	
422						BH-6 50'	1				X	
423						BH-6 60'	1				X	
424						BH-7 0-1'	1				X	

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	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				

RELINQUISHED BY: (Signature) John Kelly — Date: October 13, 2010 — Time:

RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25

SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RECEIVING LABORATORY: — RECEIVED BY: (Signature)

ADDRESS: — CITY: — STATE: — ZIP:

CONTACT: — PHONE: — DATE: — TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.7°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.

WO: # 10101308

Analysis Request of Chain of Custody Record

PAGE: 9 OF: 11

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.: 114640 0572
PROJECT NAME: COG / East High Lonesome 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
247425	10/11		S		X	BH-7 3'	1				X	
426						BH-7 5'	1				X	
427						BH-7 7'	1				X	
428						BH-7 10'	1				X	
429						BH-7 15'	1				X	
430						BH-7 20'	1				X	
431						BH-7 25'	1				X	
432						BH-7 30'	1				X	
433						BH-7 40'	1				X	
434						BH-7 50'	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	Chlorides	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				

RELINQUISHED BY: (Signature) Ike Tavarez — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10.13.10 — Time: 9:25
SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:
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: 3.7°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.

WO :#10101308

Analysis Request of Chain of Custody Record

PAGE: 10 OF: 1

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.: 114-640 0572

PROJECT NAME: COG / East High Lonesome
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
247435	10/11		S		X	BH-7 60'	1				X													X				
436						BH-8 0-1'	1				X													X				
437						BH-8 3'	1				X													X				
438						BH-8 5'	1				X													X				
439						BH-8 7'	1				X													X				
440						BH-8 10'	1				X													X				
441						BH-8 15'	1				X													X				
442						BH-8 20'	1				X													X				
443						BH-8 25'	1				X													X				
444						BH-8 30'	1				X													X				

RELINQUISHED BY: (Signature) Jillian Kendall — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:23

SAMPLED BY: (Print & Initial) KTM — Date: 10/11/10 — 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:

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: 3.7°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.

WO: # 10101308

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 1

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.: 114-6400572

PROJECT NAME: COG / East High Lonesome
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
247445	10/11		S		X	BH-B 40'	1				X													X				
446	"		"		"	BH-B 50'	1				X													X				
447	"		"		"	BH-B 60'	1				X													X				

RELINQUISHED BY: (Signature) Date: October 13, 2010 Time:
RECEIVED BY: (Signature) Date: 10/13/10 Time: 9:25
SAMPLED BY: (Print & Initial) Kim Date: 10/11/10 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:
ADDRESS:
CITY: STATE: 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: 37° 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.

LCO #: 10101308

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 11

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:
CCG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6402572	East High Lonesome 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
247345	10/7		S		X	Bit-1 0-1'	1				X													X				
346						Bit-1 3'																						
347						Bit-1 5'																						
348						Bit-1 7'																						
349						Bit-1 10'																						
350						Bit-1 15'																						
351						Bit-1 20'																						
352						Bit-1 25'																						
353						Bit-1 30'																						
354			V		V	Bit-1 40'	V				V													V				

RELINQUISHED BY: (Signature) Jeffrey Bradley	Date: October 13, 2010 Time:	RECEIVED BY: (Signature)	Date: 10/13/10 Time: 9:25
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: 10-7-10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 37° intact

REMARKS: All tests - Midland

KK

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 #: 10101308

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 1

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:
114-6400573	East High Lonesome 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
247355	10/7		S		X	Bit-1 50'	1				X													X				
356						Bit-1 60'																						
357						Bit-1 70'																						
358						Bit-2 C-1'																						
359						Bit-2 3'																						
360						Bit-2 5'																						
361						Bit-2 7'																						
362						BH-2 10'																						
363						Bit-2 15'																						
364						Bit-2 20'																						

RELINQUISHED BY: (Signature) Jeffrey Kindley	Date: October 13, 2010 Time:	RECEIVED BY: (Signature)	Date: 10/13/10 Time: 9:25
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: 10-7-10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 3.7°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.

WO #: 10101308

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 11

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.: 114-6400572

PROJECT NAME: East High Lonesome 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
347365	10/4		S		X	BH-2 30'	1				X													X				
366						BH-2 40'																						
367						BH-2 50'																						
368						BH-2 60'																						
369						BH-2 70'																						
370						BH-3 0.1'																						
371						BH-3 3'																						
372						BH-3 5'																						
373						BH-3 7'																						
374	↓		↓		↓	BH-3 10'	↓				↓													↓				

RELINQUISHED BY: (Signature) Kimberly Kimley — Date: October 13, 2010 — Time:

RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:03

SAMPLED BY: (Print & Initial) Kim — Date: 10-7-10 — 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 — RECEIVED BY: (Signature)

ADDRESS: — CITY: Midland — STATE: TX — ZIP:

CONTACT: — PHONE: — DATE: — TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2° 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.

WO # 10101308

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.: 114-6400572

PROJECT NAME: East High Lonesome Eddy Co NM

ANALYSIS REQUEST (Circle or Specify Method No.)

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
247375	10/1		S		X	BH-3 15'	1				X													X				
376						BH-3 20'																						
377						BH-3 25'																						
378						BH-3 30'																						
379						BH-3 40'																						
380						BH-3 50'																						
381						BH-3 60'																						
382						BH-3 70'																						
383						BH-3 80'																						
384						BH-3 90'																						

RELINQUISHED BY: (Signature) Kimley Date: October 13, 2010 Time:
RECEIVED BY: (Signature) Date: 10/13/10 Time: 9:25
SAMPLED BY: (Print & Initial) KW Date: 10-7-10 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: 3.7°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.

WO: 10101308

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:
114-0400572	COG / East High Lonesome, 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
247385	10/8		S		X	BH-4 0-1'	1				X													X				
386						BH-4 3'	1				X													X				
387						BH-4 5'	1				X													X				
388						BH-4 7'	1				X													X				
389						BH-4 10'	1				X													X				
390						BH-4 15'	1				X													X				
391						BH-4 20'	1				X													X				
392						BH-4 25'	1				X													X				
393						BH-4 30'	1				X													X				
394						BH-4 40'	1				X													X				

RELINQUISHED BY: (Signature)	Date: Oct 13, 2010 Time:	RECEIVED BY: (Signature)	Date: 10/13/10 Time: 9:25
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: 10/11/10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 3.7°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.

WO #: 10101308

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: 17

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-640 0572

PROJECT NAME: COG / East High Lonesome
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
247395	10/8 2010		S		X	BH-4 50'	1				X	
396						BH-4 60'	1				X	
397						BH-4 70'	1				X	
398						BH-4 80'	1				X	
399						BH-4 90'	1				X	
400						BH-5 0-1'	1				X	
401						BH-5 3'	1				X	
402						BH-5 5'	1				X	
403						BH-5 7'	1				X	
404						BH-5 10'	1				X	

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	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				

RELINQUISHED BY: (Signature) Sallye Knilley — Date: October 13, 2010 — Time:

RECEIVED BY: (Signature) — Date: 10-13-10 — Time: 1:25

SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:

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: 3.7°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.

WO: #1010138

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.: 114640 0572

PROJECT NAME: COG / East High Lonesome
Eddy Co., NM

ANALYSIS REQUEST (Circle or Specify Method No.)

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
247405	10/8		S		X	BH-5 15'	1				X													X				
406						BH-5 20'	1				X													X				
407						BH-5 25'	1				X													X				
408						BH-5 30'	1				X													X				
409						BH-5 40'	1				X													X				
410						DH-5 50'	1				X													X				
411						BH-5 60'	1				X													X				
412	10/11					BH-6 0-1'	1				X													X				
413						BH-6 3'	1				X													X				
414						DH 6 5'	1				X													X				

RELINQUISHED BY: (Signature) Kelly Kindley — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25

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: 10/11/10 — Time:

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

AIRBILL #:

OTHER:

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: 37° 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.

WO : # 10101308

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.: 114-640 0572

PROJECT NAME: COG / East High Lonesome 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
247415	10/11		S		X	BH-6 7'	1				X	
416						BH-6 10'	1				X	
417						BH-6 15'	1				X	
418						BH-6 20'	1				X	
419						BH-6 25'	1				X	
420						BH-6 30'	1				X	
421						BH-6 40'	1				X	
422						BH-6 50'	1				X	
423						BH-6 60'	1				X	
424						BH-7 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	Past. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				
												X				

RELINQUISHED BY: (Signature) Jolyn Kinsey — Date: October 13, 2010 — Time:

RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25

SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:

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: 3.7°c intact

REMARKS:

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.

LOC: # 10101308

Analysis Request of Chain of Custody Record

PAGE: 9 OF: 11

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.: 114640 0572
PROJECT NAME: COG / East High Lonesome 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
247425	10/11		S		X	BH-7 3'	1				X	
426						BH-7 5'	1				X	
427						BH-7 7'	1				X	
428						BH-7 10'	1				X	
429						BH-7 15'	1				X	
430						BH-7 20'	1				X	
431						BH-7 25'	1				X	
432						BH-7 30'	1				X	
433						BH-7 40'	1				X	
434						BH-7 50'	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				

RELINQUISHED BY: (Signature) Kim Kindley — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25
SAMPLED BY: (Print & Initial) Kim — Date: 10/11/10 — 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:
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: 3.7°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.

WO :#10101308

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.: 114-640 0572
PROJECT NAME: COG / East High Lonesome 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
247435	10/11		S		X	BH-7 60'	1				X	
-436						BH-8 0-1'	1				X	
437						BH-8 3'	1				X	
438						BH-8 5'	1				X	
439						BH-8 7'	1				X	
440						BH-8 10'	1				X	
441						BH-8 15'	1				X	
442						BH-8 20'	1				X	
443						BH-8 25'	1				X	
444						BH-8 30'	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				

RELINQUISHED BY: (Signature) Jeffrey Kindley — Date: October 13, 2010 — Time:
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25
SAMPLED BY: (Print & Initial) KTM — Date: 10/11/10 — 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:
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: 3.7°C iN-ACT
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.

LAB #: 101013058

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 1

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.: 114-6400572

PROJECT NAME: COG / East High Lonesome
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
247445	10/11		S		X	BH-8 40'	1				X	
446	"		1		1	BH-8 50'	1				X	
447	"		1		1	BH-8 60'	1				X	
474	10/7		1		1	BH-2 25' (per Jeff Kindley)					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. 8081/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
												X				
												X				
												X				
												X				

RELINQUISHED BY: (Signature) Jeffrey Kindley — Date: October 13, 2010 — Time: —
RECEIVED BY: (Signature) — Date: 10/13/10 — Time: 9:25

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: 10/11/10 — Time:

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

AIRBILL #:

OTHER:

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: 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: 37° 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.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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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: October 13, 2010

Work Order: 10081607

Project Location: Eddy County, NM
Project Name: COG/East High Lonesome TB
Project Number: 114-6400572

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
241024	AH-1 0-0.5'	soil	2010-08-11	00:00	2010-08-13
241025	AH-2 0-1'	soil	2010-08-11	00:00	2010-08-13
241026	AH-2 1-1.5'	soil	2010-08-11	00:00	2010-08-13
241027	AH-3 0-1'	soil	2010-08-11	00:00	2010-08-13
241028	AH-3 1-1.5'	soil	2010-08-11	00:00	2010-08-13
241029	AH-4 0-1'	soil	2010-08-11	00:00	2010-08-13
241030	AH-4 1-1.5'	soil	2010-08-11	00:00	2010-08-13
241031	AH-5 0-0.5'	soil	2010-08-11	00:00	2010-08-13
241032	AH-6 0-0.5'	soil	2010-08-11	00:00	2010-08-13

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 22 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/East High Lonesome TB were received by TraceAnalysis, Inc. on 2010-08-13 and assigned to work order 10081607. Samples for work order 10081607 were received intact at a temperature of 18.0 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	62328	2010-08-17 at 11:30	72707	2010-08-17 at 15:50
Chloride (Titration)	SM 4500-Cl B	62279	2010-08-16 at 10:08	72661	2010-08-16 at 16:26
TPH DRO - NEW	S 8015 D	62395	2010-08-19 at 10:46	72772	2010-08-19 at 10:46
TPH DRO - NEW	S 8015 D	62397	2010-08-19 at 10:46	72774	2010-08-19 at 10:46
TPH GRO	S 8015 D	62328	2010-08-17 at 11:30	72708	2010-08-17 at 16:37
TPH GRO	S 8015 D	62330	2010-08-18 at 09:15	72770	2010-08-18 at 12:25

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 10081607 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.

Samples received on ice.

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: 241024 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72707	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.200	mg/Kg	10	0.0200
Toluene		<0.200	mg/Kg	10	0.0200
Ethylbenzene		<0.200	mg/Kg	10	0.0200
Xylene		<0.200	mg/Kg	10	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.38	mg/Kg	10	10.0	94	52.8 - 137
4-Bromofluorobenzene (4-BFB)		8.92	mg/Kg	10	10.0	89	38.4 - 157

Sample: 241024 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**12300**	mg/Kg	100	4.00

Sample: 241024 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72772	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62395	Sample Preparation:	2010-08-19	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**4550**	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[1]	754	mg/Kg	10	100	754	70 - 130

Sample: 241024 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72708	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**44.8**	mg/Kg	10	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.5	mg/Kg	10	10.0	105	48.5 - 152
4-Bromofluorobenzene (4-BFB)		10.7	mg/Kg	10	10.0	107	42 - 159

Sample: 241025 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72707	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.200	mg/Kg	10	0.0200
Toluene		<0.200	mg/Kg	10	0.0200
Ethylbenzene		<0.200	mg/Kg	10	0.0200
Xylene		**1.18**	mg/Kg	10	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.82	mg/Kg	10	10.0	98	52.8 - 137
4-Bromofluorobenzene (4-BFB)		9.68	mg/Kg	10	10.0	97	38.4 - 157

Sample: 241025 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

[1] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**13700**	mg/Kg	100	4.00

Sample: 241025 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72772	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62395	Sample Preparation:	2010-08-19	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1770**	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[2]	435	mg/Kg	10	100	435	70 - 130

Sample: 241025 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72708	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**198**	mg/Kg	10	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.8	mg/Kg	10	10.0	108	48.5 - 152
4-Bromofluorobenzene (4-BFB)		10.3	mg/Kg	10	10.0	103	42 - 159

Sample: 241026 - AH-2 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

[2] High surrogate recovery due to peak interference.

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**7860**		mg/Kg	100	4.00

Sample: 241027 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**727**		mg/Kg	50	4.00

Sample: 241027 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72772	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62395	Sample Preparation:	2010-08-19	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<500		mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[3]	233	mg/Kg	10	100	233	70 - 130

Sample: 241027 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72708	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<2.00		mg/Kg	1	2.00

[3]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.36	mg/Kg	1	2.00	68	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.28	mg/Kg	1	2.00	64	42 - 159

Sample: 241028 - AH-3 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**758**	mg/Kg	50	4.00

Sample: 241029 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11900**	mg/Kg	100	4.00

Sample: 241029 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72772	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62395	Sample Preparation:	2010-08-19	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		101	mg/Kg	1	100	101	70 - 130

Sample: 241029 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72708	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.67	mg/Kg	1	2.00	84	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.54	mg/Kg	1	2.00	77	42 - 159

Sample: 241030 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9020**	mg/Kg	100	4.00

Sample: 241031 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11700**	mg/Kg	100	4.00

Sample: 241031 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72772	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62395	Sample Preparation:	2010-08-19	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**124**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		104	mg/Kg	1	100	104	70 - 130

Sample: 241031 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72708	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	Sample Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.95	mg/Kg	1	2.00	98	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.78	mg/Kg	1	2.00	89	42 - 159

Sample: 241032 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4490**	mg/Kg	100	4.00

Sample: 241032 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72774	Date Analyzed:	2010-08-19	Analyzed By:	kg
Prep Batch:	62397	Sample Preparation:	2010-08-19	Prepared By:	kg

continued ...

sample 241032 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

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: 241032 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72770	Date Analyzed:	2010-08-18	Analyzed By:	AG
Prep Batch:	62330	Sample Preparation:	2010-08-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.80	mg/Kg	1	2.00	90	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.60	mg/Kg	1	2.00	80	42 - 159

Method Blank (1) QC Batch: 72661

QC Batch:	72661	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62279	QC Preparation:	2010-08-16	Prepared By:	AR

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

Method Blank (1) QC Batch: 72707

QC Batch:	72707	Date Analyzed:	2010-08-17	Analyzed By:	AG
Prep Batch:	62328	QC Preparation:	2010-08-17	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0150	mg/Kg	0.02
Toluene		<0.00950	mg/Kg	0.02
Ethylbenzene		<0.0106	mg/Kg	0.02
Xylene		<0.00930	mg/Kg	0.02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.82	mg/Kg	1	2.00	91	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.59	mg/Kg	1	2.00	80	55.4 - 132

Method Blank (1) QC Batch: 72708

QC Batch: 72708 | Date Analyzed: 2010-08-17 | Analyzed By: AG
Prep Batch: 62328 | QC Preparation: 2010-08-17 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<1.65	mg/Kg	2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	67.6 - 150
4-Bromofluorobenzene (4-BFB)		1.71	mg/Kg	1	2.00	86	52.4 - 130

Method Blank (1) QC Batch: 72770

QC Batch: 72770 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<1.65	mg/Kg	2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.99	mg/Kg	1	2.00	100	67.6 - 150
4-Bromofluorobenzene (4-BFB)		1.60	mg/Kg	1	2.00	80	52.4 - 130

Method Blank (1) QC Batch: 72772

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg
Prep Batch: 62395 | QC Preparation: 2010-08-19 | Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<14.5	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		88.6	mg/Kg	1	100	89	70 - 130

Method Blank (1) QC Batch: 72774

QC Batch: 72774 Date Analyzed: 2010-08-19 Analyzed By: kg
Prep Batch: 62397 QC Preparation: 2010-08-19 Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<14.5	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		91.6	mg/Kg	1	100	92	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 72661 Date Analyzed: 2010-08-16 Analyzed By: AR
Prep Batch: 62279 QC Preparation: 2010-08-16 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.6	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	102	mg/Kg	1	100	<2.18	102	85 - 115	4	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: 72707 Date Analyzed: 2010-08-17 Analyzed By: AG
Prep Batch: 62328 QC Preparation: 2010-08-17 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.95	mg/Kg	1	2.00	<0.0150	98	81.9 - 108
Toluene	1.90	mg/Kg	1	2.00	<0.00950	95	81.9 - 107
Ethylbenzene	1.76	mg/Kg	1	2.00	<0.0106	88	78.4 - 107
Xylene	5.35	mg/Kg	1	6.00	<0.00930	89	79.1 - 107

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	1.99	mg/Kg	1	2.00	<0.0150	100	81.9 - 108	2	20
Toluene	1.94	mg/Kg	1	2.00	<0.00950	97	81.9 - 107	2	20
Ethylbenzene	1.85	mg/Kg	1	2.00	<0.0106	92	78.4 - 107	5	20
Xylene	5.56	mg/Kg	1	6.00	<0.00930	93	79.1 - 107	4	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)	1.75	1.69	mg/Kg	1	2.00	88	84	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.71	1.64	mg/Kg	1	2.00	86	82	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 72708 | Date Analyzed: 2010-08-17 | Analyzed By: AG
Prep Batch: 62328 | QC Preparation: 2010-08-17 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.3	mg/Kg	1	20.0	<1.65	76	69.9 - 95.4

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
GRO	15.1	mg/Kg	1	20.0	<1.65	76	69.9 - 95.4	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)	1.99	2.07	mg/Kg	1	2.00	100	104	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.79	1.83	mg/Kg	1	2.00	90	92	65.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 72770 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.2	mg/Kg	1	20.0	<1.65	76	69.9 - 95.4

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
GRO	14.4	mg/Kg	1	20.0	<1.65	72	69.9 - 95.4	5	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)	2.00	1.64	mg/Kg	1	2.00	100	82	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.78	1.59	mg/Kg	1	2.00	89	80	65.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg
Prep Batch: 62395 | QC Preparation: 2010-08-19 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	268	mg/Kg	1	250	<14.5	107	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	276	mg/Kg	1	250	<14.5	110	57.4 - 133.4	3	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	96.5	102	mg/Kg	1	100	96	102	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 72774 | Date Analyzed: 2010-08-19 | Analyzed By: kg
Prep Batch: 62397 | QC Preparation: 2010-08-19 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	204	mg/Kg	1	250	<14.5	82	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	215	mg/Kg	1	250	<14.5	86	57.4 - 133.4	5	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	116	103	mg/Kg	1	100	116	103	70 - 130

Matrix Spike (MS-1) Spiked Sample: 241062

QC Batch: 72661 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62279 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	19500	mg/Kg	100	10000	10100	94	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	20200	mg/Kg	100	10000	10100	101	85 - 115	4	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: 240973

QC Batch: 72707 | Date Analyzed: 2010-08-17 | Analyzed By: AG
Prep Batch: 62328 | QC Preparation: 2010-08-17 | Prepared By: AG

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[4]	2.57	mg/Kg	1	2.00	<0.0150	128	80.5 - 112
Toluene	[5]	2.52	mg/Kg	1	2.00	<0.00950	126	82.4 - 113
Ethylbenzene	[6]	2.47	mg/Kg	1	2.00	<0.0106	124	83.9 - 114
Xylene	[7]	7.51	mg/Kg	1	6.00	<0.00930	125	84 - 114

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

continued ...

[4]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene [8]	1.95	mg/Kg	1	2.00	<0.0150	98	80.5 - 112	27	20
Toluene [9]	1.93	mg/Kg	1	2.00	<0.00950	96	82.4 - 113	26	20
Ethylbenzene [10]	1.88	mg/Kg	1	2.00	<0.0106	94	83.9 - 114	27	20
Xylene [11]	5.75	mg/Kg	1	6.00	<0.00930	96	84 - 114	26	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)	1.00	1.70	mg/Kg	1	2	50	85	41.3 - 117
4-Bromofluorobenzene (4-BFB)	1.02	1.70	mg/Kg	1	2	51	85	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 241031

QC Batch: 72708 | Date Analyzed: 2010-08-17 | Analyzed By: AG
Prep Batch: 62328 | QC Preparation: 2010-08-17 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	20.3	mg/Kg	1	20.0	<1.65	102	61.8 - 114

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	19.6	mg/Kg	1	20.0	<1.65	98	61.8 - 114	4	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)	1.74	1.79	mg/Kg	1	2	87	90	50 - 162
4-Bromofluorobenzene (4-BFB)	1.78	1.79	mg/Kg	1	2	89	90	50 - 162

Matrix Spike (MS-1) Spiked Sample: 241299

QC Batch: 72770 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

[8]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[9]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[10]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.
[11]MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	14.6	mg/Kg	1	20.0	<1.65	73	61.8 - 114

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	15.7	mg/Kg	1	20.0	<1.65	78	61.8 - 114	7	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)	1.12	1.23	mg/Kg	1	2	56	62	50 - 162
4-Bromofluorobenzene (4-BFB)	1.16	1.27	mg/Kg	1	2	58	64	50 - 162

Matrix Spike (MS-1) Spiked Sample: 240552

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg
Prep Batch: 62395 | QC Preparation: 2010-08-19 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	158	mg/Kg	1	250	<14.5	63	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	161	mg/Kg	1	250	<14.5	64	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	91.6	91.4	mg/Kg	1	100	92	91	70 - 130

Matrix Spike (MS-1) Spiked Sample: 241291

QC Batch: 72774 | Date Analyzed: 2010-08-19 | Analyzed By: kg
Prep Batch: 62397 | QC Preparation: 2010-08-19 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	220	mg/Kg	1	250	<14.5	88	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	228	mg/Kg	1	250	<14.5	91	35.2 - 167.1	4	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	107	106	mg/Kg	1	100	107	106	70 - 130

Standard (ICV-1)

QC Batch: 72661 Date Analyzed: 2010-08-16 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	2010-08-16

Standard (CCV-1)

QC Batch: 72661 Date Analyzed: 2010-08-16 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.8	99	85 - 115	2010-08-16

Standard (CCV-2)

QC Batch: 72707 Date Analyzed: 2010-08-17 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	0.101	101	80 - 120	2010-08-17
Toluene		mg/Kg	0.100	0.0982	98	80 - 120	2010-08-17
Ethylbenzene		mg/Kg	0.100	0.0918	92	80 - 120	2010-08-17
Xylene		mg/Kg	0.300	0.278	93	80 - 120	2010-08-17

Standard (CCV-3)

QC Batch: 72707 Date Analyzed: 2010-08-17 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	0.101	101	80 - 120	2010-08-17
Toluene		mg/Kg	0.100	0.0968	97	80 - 120	2010-08-17
Ethylbenzene		mg/Kg	0.100	0.0895	90	80 - 120	2010-08-17
Xylene		mg/Kg	0.300	0.271	90	80 - 120	2010-08-17

Standard (CCV-1)

QC Batch: 72708 Date Analyzed: 2010-08-17 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	0.928	93	80 - 120	2010-08-17

Standard (CCV-2)

QC Batch: 72708 Date Analyzed: 2010-08-17 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	1.02	102	80 - 120	2010-08-17

Standard (CCV-3)

QC Batch: 72708 Date Analyzed: 2010-08-17 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	0.912	91	80 - 120	2010-08-17

Standard (CCV-1)

QC Batch: 72770 Date Analyzed: 2010-08-18 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	0.972	97	80 - 120	2010-08-18

Standard (CCV-2)

QC Batch: 72770 | Date Analyzed: 2010-08-18 | 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	1.07	107	80 - 120	2010-08-18

Standard (CCV-1)

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	80 - 120	2010-08-19

Standard (CCV-2)

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	216	86	80 - 120	2010-08-19

Standard (CCV-3)

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	228	91	80 - 120	2010-08-19

Standard (CCV-4)

QC Batch: 72772 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	224	90	80 - 120	2010-08-19

Standard (CCV-1)

QC Batch: 72774 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	215	86	80 - 120	2010-08-19

Standard (CCV-2)

QC Batch: 72774 | Date Analyzed: 2010-08-19 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	233	93	80 - 120	2010-08-19

WO#: 100816007

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 1

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.: 114-6400572

PROJECT NAME: COG / East High Lonesome 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
241024	8/11		S		X	AH-1 0-0.5'	1				X			X											X				
025						AH-2 0-1'								X															
026						AH-2 1'-1.5'																							
027						AH-3 0-1'								X															
028						AH-3 1'-1.5'																							
029						AH-4 0-1'								X															
030						AH-4 1'-1.5'																							
031						AH-5 0-0.5'								X															
032						AH-6 0-0.5'								X															

RELINQUISHED BY: (Signature) — Date: 8/13/10 Time: 1545
RECEIVED BY: (Signature) — Date: 8/13/10 Time: 15:45
SAMPLED BY: (Print & Initial) JT/RG — Date: 8/12/10 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: 18.0°C intact

REMARKS: If Total TPH exceeds 5000 mg/kg run deeper samples

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