HOBBS OCD

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

MAY 0 3 2012

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

RECEIVED

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) 685-4332**
Facility Name Pronghorn 8" Main SWD Line	Facility Type **8" SWD Line**

Surface Owner: Federal	Mineral Owner	Lease No. API 30-025-32735

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	14	18S	32E					Lea

Latitude N 32 74087° **Longitude** W 103 73528°

NATURE OF RELEASE

Type of Release: Produced Fluids	Volume of Release 400 bbls	Volume Recovered 75 bbls
Source of Release. 8" main SWD line at valve box	Date and Hour of Occurrence 8/4/2010	Date and Hour of Discovery 8/4/2010
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **Larry Johnson, Geoffery Leking – OCD Paul Evans - BLM**	
By Whom? Josh Russo	Date and Hour 8/4/10 6:17 pm	
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 8" PVC line ruptured inside the valve box. The line was replaced and put back in service.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil with elevated chloride concentration was removed and hauled away for proper disposal. A 40 mil liner was installed and then the site was brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to 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 Agent for COG	Approved by ~~District Supervisor~~ ENV SPECIALIST: Geoffrey Leking
Title: Project Manager	Approval Date: 05/03/12 Expiration Date: —
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval: — Attached ☐ IRP-5-12-2804
Date: 5-15-12 Phone: (432) 682-4559	

Attach Additional Sheets If Necessary

MAY 03 2012

SITE INFORMATION

Report Type: CLOSURE REPORT

General Site Information:		
Site:	**Pronghorn 8" Main SWD line**	
Company:	**COG Operating LLC**	
Section, Township and Range	**Unit O - Sec. 14 Township-18S Range-32E**	
Lease Number:	**30-025-32735**	
County:	**Eddy County**	
GPS:	**32.74087° N**	**103.73528° W**
Surface Owner:	**Federal**	
Mineral Owner:		
Directions:	From 529 and CR-126, travel south on 126 1.7 miles, left .9, turn left 4.6 miles to location on right	

Release Data:	
Date Released:	8/4/2010
Type Release:	Produced fluid
Source of Contamination:	Flowline failure
Fluid Released:	400 bbls
Fluids Recovered:	75 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@tetrtech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	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

March 19, 2012

Mr. Geoffrey Leking
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Request for the COG Operating LLC., Pronghorn 8" Main SWD Line Leak, Unit O, Section 14, Township 18 South, Range 32 East, Lea County, New Mexico.

Mr. Leking:

Tetra Tech Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill at the Pronghorn 8" Main SWD Line Leak located in Unit O, Section 14, Township 18 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.74087°, W 103.73528°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak on the main SWD line was discovered on August 4, 2010. Approximately 400 barrels of produced water was released from the 8" SWD PVC line ruptured inside the valve box. Vacuum trucks were utilized to recover 75 barrels of standing fluids. The spill migrated west and impacted area in the pasture measuring length of approximately 325', with a width of 20' to 40'. COG immediately excavated the spill area approximately 3.0' below surface and hauled the soil to proper disposal. The initial C-141 is included in Appendix A.

Groundwater

The United States Geological Survey (USGS) database did showed wells in Section 7 and 16, Township 18 South, Range 32 East, with a reported depth to water of approximately 82' and 84', respectively. The New Mexico State Engineer Well Reports showed wells with reported depths of 65' (Section 4) and 460' (Section 7). The NMOCD groundwater map shows also shows wells in Section 20, 22 and 34, with a depth to groundwater at approximately 164', 429'

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

and 117', respectively. Based on the groundwater map, the depth to groundwater for the Site appears to be greater than 100' bgs. The well report data and average depth to water map are shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (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 Results

The produced water impacted an area west of the valve box in the pasture. The foot print of the spill measured approximately 325' in length and a width of 20' to 40'. Recently, COG has installed a new SWD line (poly line) to replace the old SWD (PVC) line. The new line was installed west of the old SWD line, approximately 10' to 15'. Prior installation of the line, the area of SB-7 was excavated down to 4.0' to 5.0' below surface and hauled the soil to proper disposal. The excavated area measured approximately 40' x 60'. The bottom of the excavation was lined with a 40 mil liner and new SWD poly line was then laid top of the liner and backfilled with clean soil.

Soil Borings

From August 27 through 31, 2010, Tetra Tech personnel supervised the installation of twelve (12) soil borings (SB-1 through SB-12) utilizing an air rotary rig. The area north of the excavation was not assessed due to an active line running east and west of the area. The soil borings were extended to a maximum depth of 120 feet below surface, with samples collected at 2 to 3 foot intervals for the first 10 feet and 5 foot intervals to 30' and 10' intervals thereafter. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The soil boring locations are shown on Figure 3.

Referring to Table 1, none of the selected samples for TPH and BTEX exceeded the RRAL. The analytical results indicate the maximum extent of chloride impact greater than 1,000 mg/kg extended from 7' to 10' (SB-5, SB-10 and SB-12) and 20' to 30' (SB-2, SB-9 and SB-11). The deepest impact was found at (SB-7 and SB-8), which extended down to 80' to 100', respectively. The perimeter soil borings (SB-1, SB-3, SB-4 and SB-6) did not show a chloride impact to the subsurface soils. All samples had chloride concentrations that decreased with depth, with the exception of SB-7. The sand formation in the deeper soils were collapsing and not allow the hole to remain open and possibly the deeper samples may have been cross contaminated with the upper soils.

Based on the data, Figure 5 (Cross-Section A-A') was developed to evaluate distribution of the chloride impact in the subsurface soils. As shown in the A-A' Cross Section, the deepest chloride impact were encountered near the source area at SB-7, SB-8 and SB-9, with chloride concentrations significantly decline around 80', 70' and 30', respectively. The remaining soil borings (SB-1, SB-2, SB-10, SB-11 and SB-12) showed chlorides declining at approximately 10.0' to 20.0' below surface.

Remedial Work and Closure Request

On March 15, 2011, Tetra Tech and COG met with Geoffrey Leking with NMOCD to discuss and review the results of the investigation. Based on groundwater depth and results, Mr. Leking approved the removal of 5.0' of the impacted soil and capped the remaining impact with a 40 mil liner.

From April 12, 2011 through April 18, 2011, Tetra Tech personnel supervised the excavation of the site as outlined in the approved work plan. As approved, the impacted soil was excavated to a depth of 5.0' below surface. Approximately 2,300 yards^3 of impacted material was hauled to CRI for proper disposal. The excavation area, depth and liner installation are highlighted in Table 1 and shown on Figures 5 (Cross-Section A-A') and Figure 6. The final depth of the soil remediation for the entire spill met or exceeded the depths of the approved work plan.

During the excavation, Tetra Tech field screened the soils (chlorides) to capture the spill foot print (horizontal extents). Confirmation samples (SW-1 through SW-9) were collected from the excavation sidewalls. The sampling results are summarized in Table 2. The sample locations are shown on Figure 6. Referring to Table 2, the area of SW-1 did show elevated chlorides in the soils and the impacted soils were excavated to the edge of the lease road. The sample on the southside of the lease road showed a chloride of 229 mg/kg. Once completed, a 40 mil liner was installed at a depth of 5.0' below surface and the excavation backfilled with clean soil to grade.

TETRA TECH

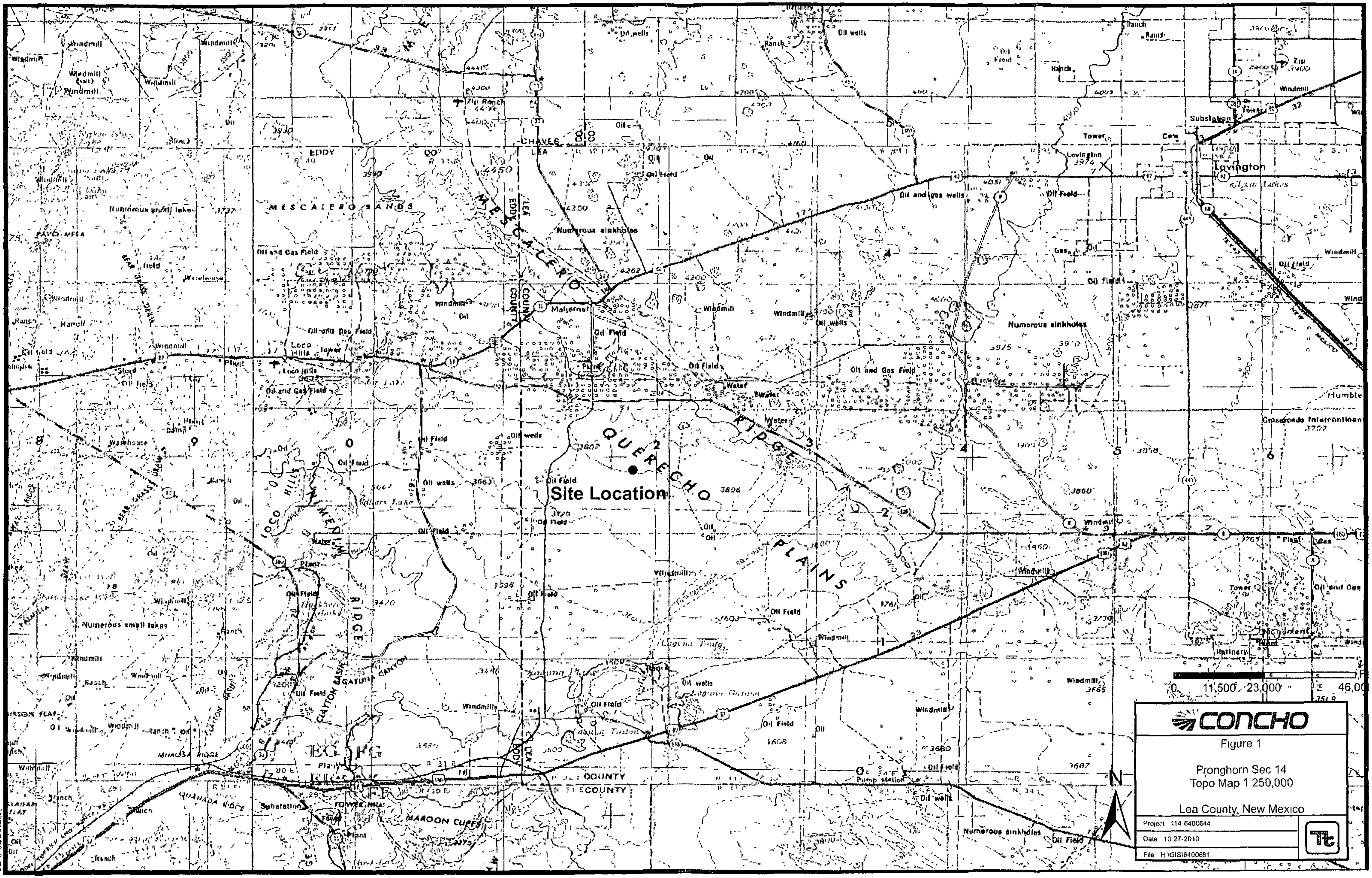
Based on the remedial activities performed at this site, COG requests closure of this site. A copy of the C-141 (Final) is included in Appendix A. If you require any additional information or have any questions or comments concerning this report, please call at (432) 682-4559.

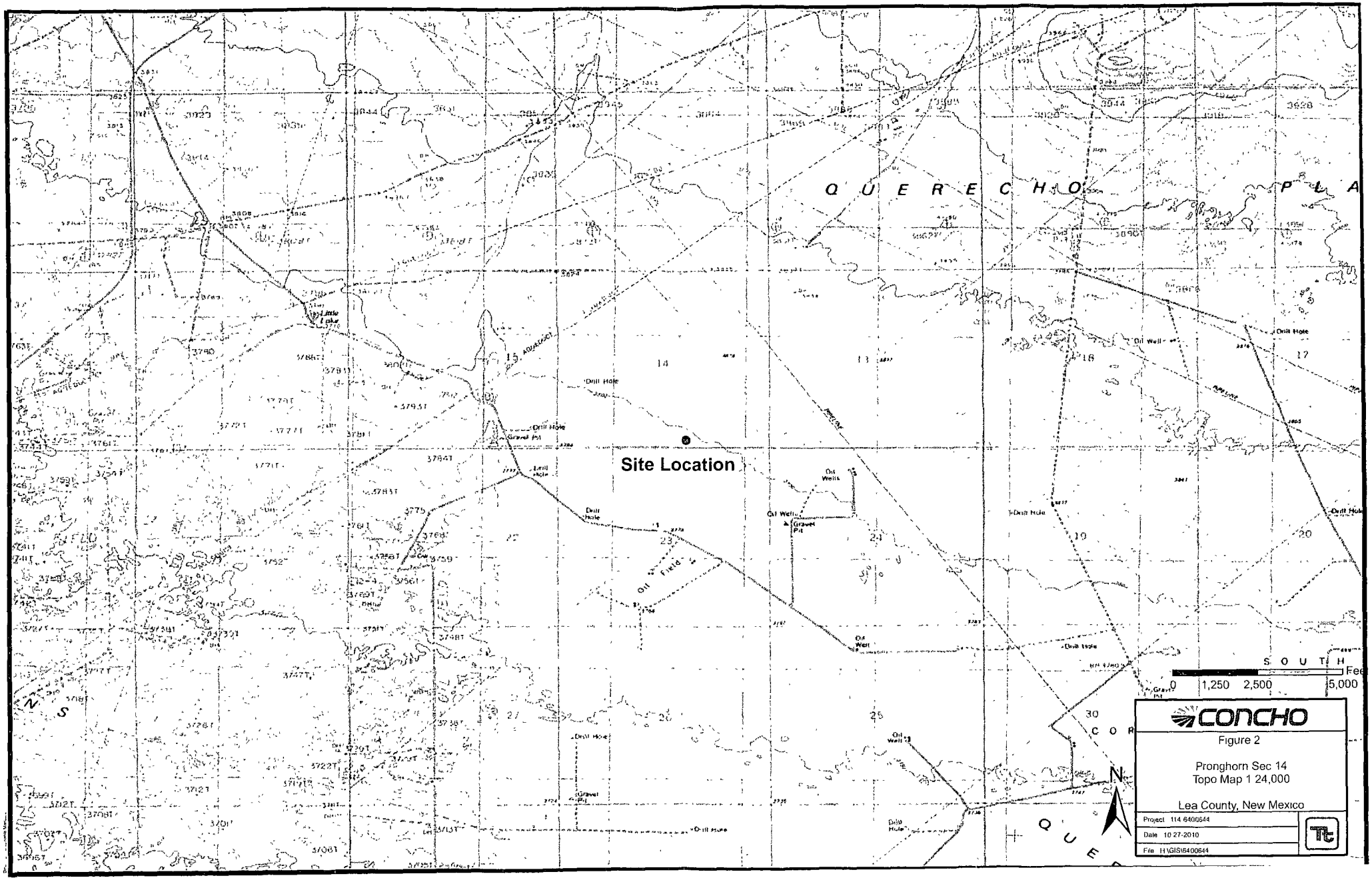
Respectfully submitted,
TETRA TECH

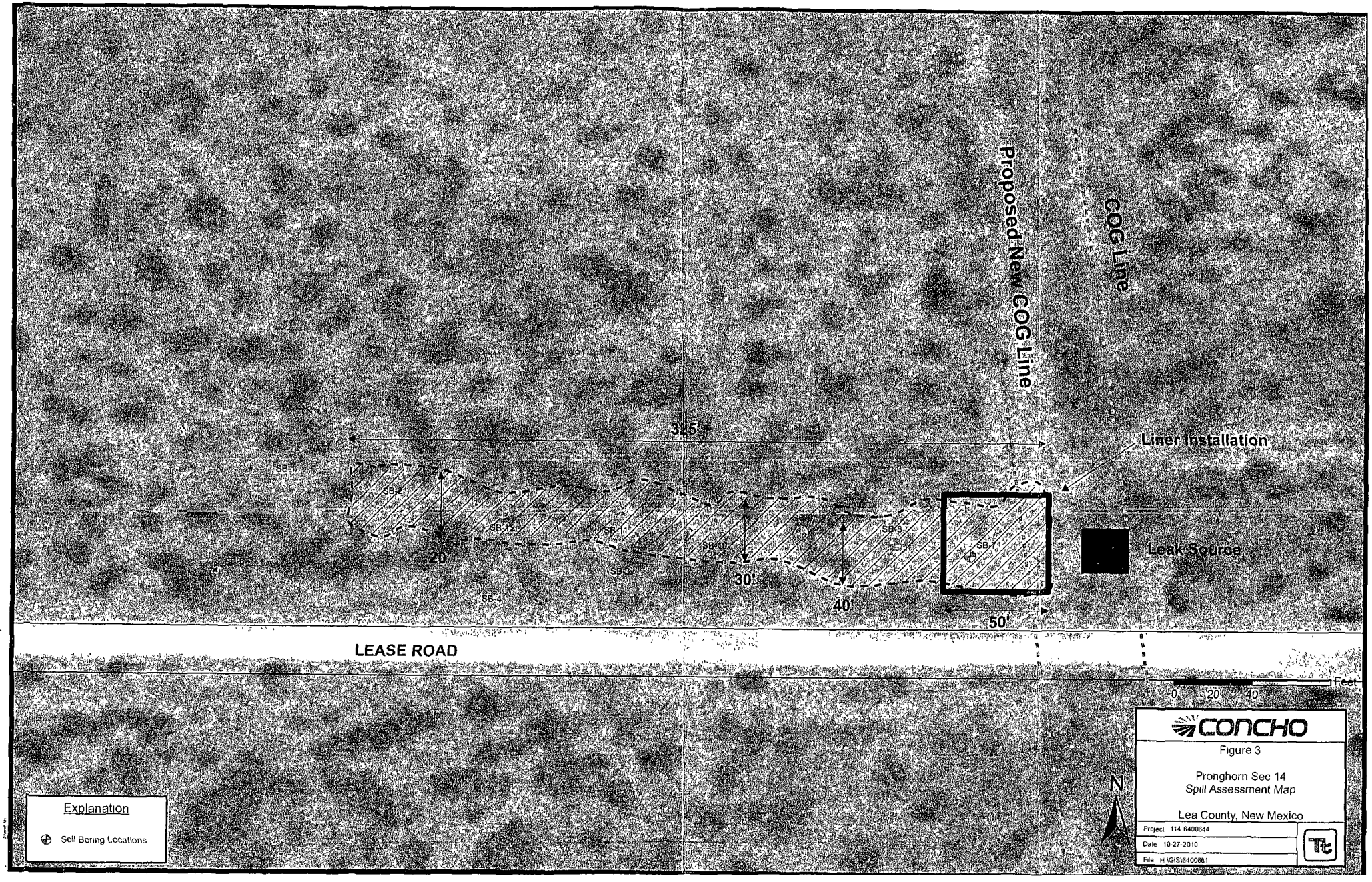
Ike Tavarez, P.G.
Senior Project Manager

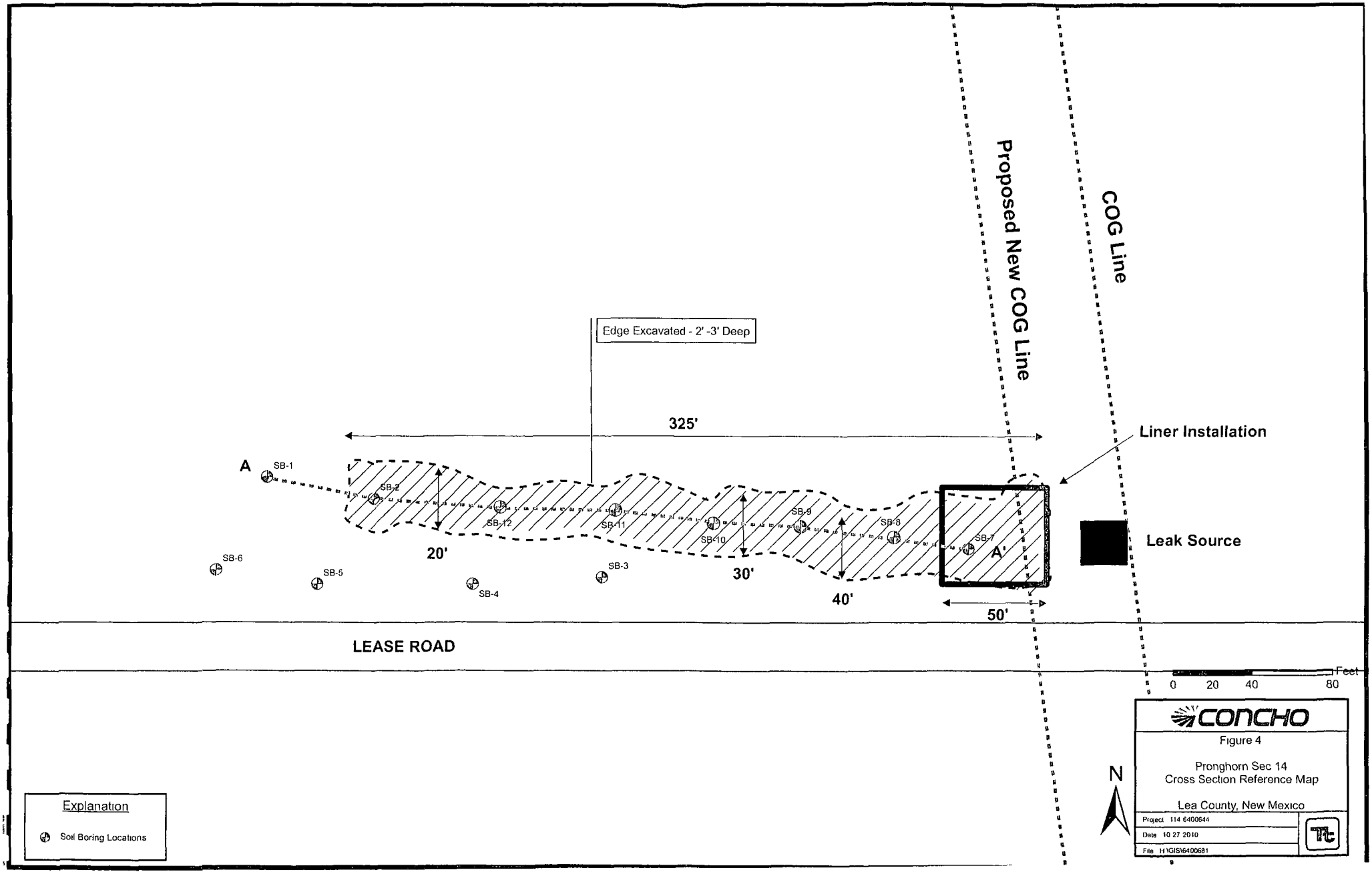
cc: Pat Ellis – COG
James Amos - BLM
Paul Evans - BLM

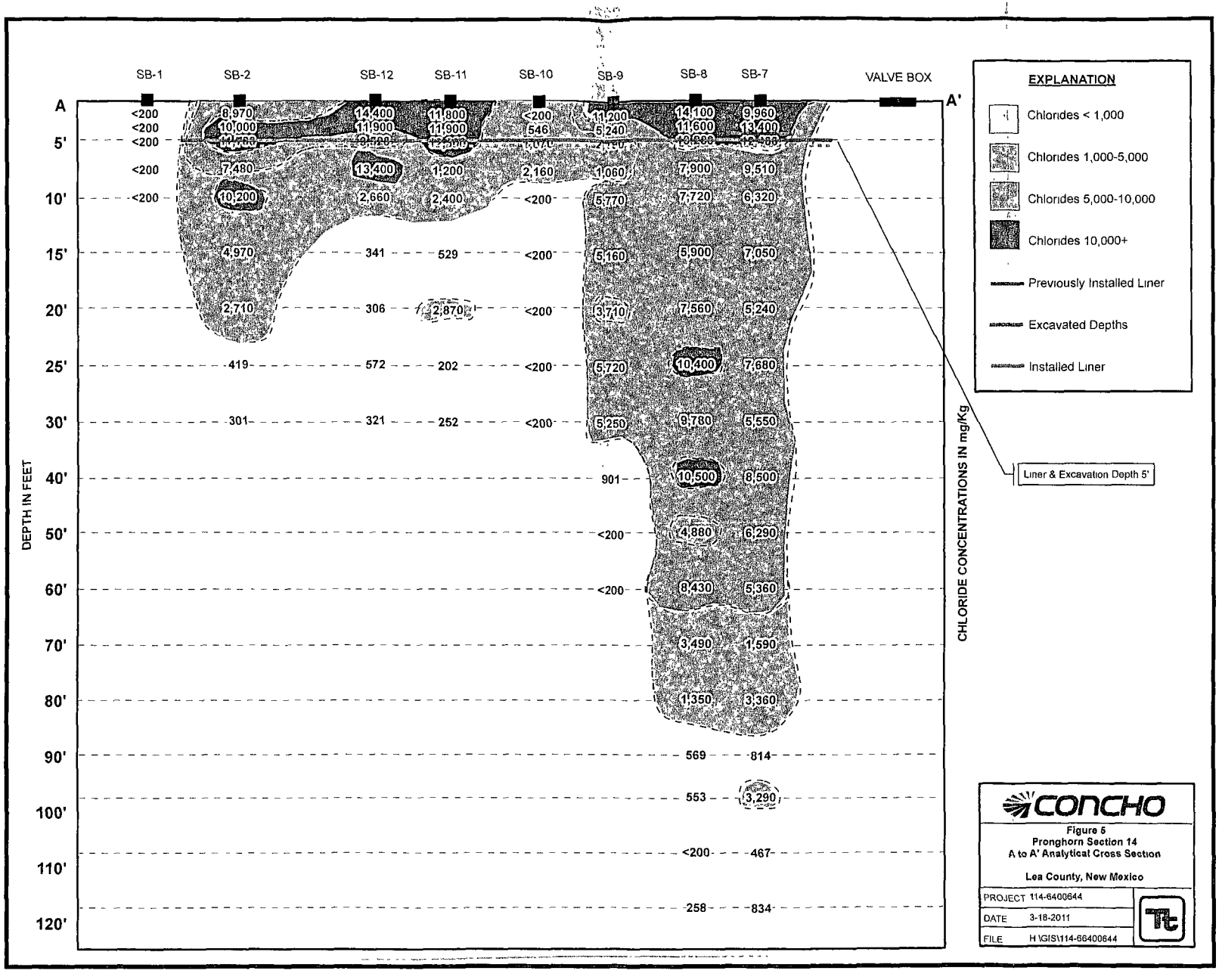
Figures


Site Location
QUERECHO PLAINS
MESCALERO SANDS
MESCALERO RIDGE
Maljamar
Loco Hills
Lovington
EDDY
CHAVES
LEA
MAROON CLIFFS
0 11,500 23,000 46,00
CONCHO
Figure 1
Pronghorn Sec 14
Topo Map 1 250,000
Lea County, New Mexico
Project 114 6400644
Date 10 27-2010
File H:\GIS\6400681
N


Site Location
QUERECHO PLA
SOUTH
0 1,250 2,500 5,000
CONCHO
Figure 2
Pronghorn Sec 14
Topo Map 1 24,000
Lea County, New Mexico
Project 114 6400644
Date 10 27-2010
File H:\GIS\6400644


Proposed New COG Line
COG Line
345'
Liner Installation
Leak Source
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
20'
30'
40'
50'
LEASE ROAD
Explanation
Soil Boring Locations
0 20 40 Feet
N
CONCHO
Figure 3
Pronghorn Sec 14
Spill Assessment Map
Lea County, New Mexico
Project 114 6400644
Date 10-27-2010
File H:\GIS\6400661


Proposed New COG Line
COG Line
Edge Excavated - 2' -3' Deep
325'
Liner Installation
A
A'
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
20'
30'
40'
50'
Leak Source
LEASE ROAD
Feet
0 20 40 80
N
Explanation
Soil Boring Locations
CONCHO
Figure 4
Pronghorn Sec 14
Cross Section Reference Map
Lea County, New Mexico
Project 114 6400644
Date 10 27 2010
File H:\GIS\6400681

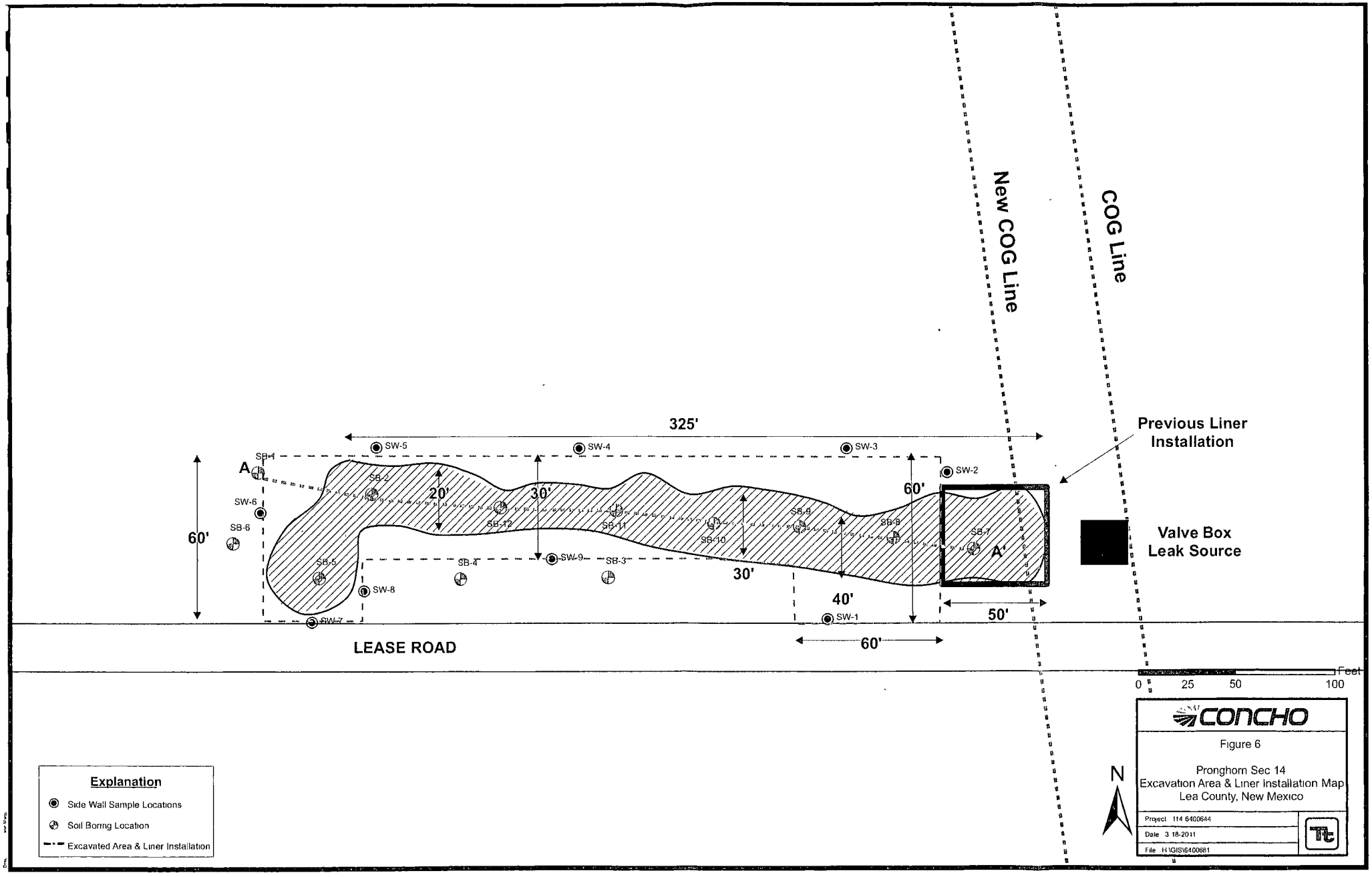


CONCHO

Figure 5
Pronghorn Section 14
A to A' Analytical Cross Section

Lea County, New Mexico

PROJECT	114-6400644
DATE	3-18-2011
FILE	H:\GIS\114-66400644


New COG Line
COG Line
325'
Previous Liner Installation
Valve Box
Leak Source
SW-5
SW-4
SW-3
SW-2
SW-1
SW-6
SW-7
SW-8
SW-9
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
A
A'
60'
20'
30'
30'
60'
40'
50'
60'
LEASE ROAD
Explanation
Side Wall Sample Locations
Soil Boring Location
Excavated Area & Liner Installation
N
0
25
50
100
Feet
CONCHO
Figure 6
Pronghorn Sec 14
Excavation Area & Liner Installation Map
Lea County, New Mexico
Project 114 6400644
Date 3-18-2011
File H:\GIS\6400681

Tables

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-1	8/27/2010	0-1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	<200
	"	7'		X		-	-	-	-	-	-	-	<200
	"	10'		X		-	-	-	-	-	-	-	<200
SB-2	8/27/2010	0-1'			X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	8,970
	"	3'			X	-	-	-	-	-	-	-	10,000
	"	5'			X	-	-	-	-	-	-	-	11,700
	"	7'		X		-	-	-	-	-	-	-	7,480
	"	10'		X		-	-	-	-	-	-	-	10,200
	"	15'		X		-	-	-	-	-	-	-	4,970
	"	20'		X		-	-	-	-	-	-	-	2,710
	"	25'		X		-	-	-	-	-	-	-	419
	"	30'		X		-	-	-	-	-	-	-	301

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-3	8/27/2010	0-1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	<200
	"	7'		X		-	-	-	-	-	-	-	<200
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	<200
SB-4	8/27/2010	0-1'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	<200
	"	7'		X		-	-	-	-	-	-	-	222
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-5	8/27/2010	0-1'			X	<2.00	<50.0	<50.0	-	-	-	-	4,160
	"	3'			X	-	-	-	-	-	-	-	11,900
	"	5'			X	-	-	-	-	-	-	-	10,400
	"	7'		X		-	-	-	-	-	-	-	7,830
	"	10'		X		-	-	-	-	-	-	-	473
	"	15'		X		-	-	-	-	-	-	-	737
	"	20'		X		-	-	-	-	-	-	-	380
	"	25'		X		-	-	-	-	-	-	-	312
SB-6	8/27/2010	0-1'		X		<2.00	<50.0	<50.0	-	-	-	-	<200
	"	3'		X		-	-	-	-	-	-	-	<200
	"	5'		X		-	-	-	-	-	-	-	210
	"	7'		X		-	-	-	-	-	-	-	224
	"	10'		X		-	-	-	-	-	-	-	371
	"	15'		X		-	-	-	-	-	-	-	391

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-7	8/27/2010	0-1'	3' BEB		X	<2.00	<50.0	<50.0	-	-	-	-	9,960
	"	3'			X	-	-	-	-	-	-	-	13,400
	"	5'			X	-	-	-	-	-	-	-	12,400
	"	7'		X		-	-	-	-	-	-	-	9,510
	"	10'		X		-	-	-	-	-	-	-	6,320
	"	15'		X		-	-	-	-	-	-	-	7,050
	"	20'		X		-	-	-	-	-	-	-	5,240
	"	25'		X		-	-	-	-	-	-	-	7,680
	"	30'		X		-	-	-	-	-	-	-	5,550
	"	40'		X		-	-	-	-	-	-	-	8,500
	"	50'		X		-	-	-	-	-	-	-	6,290
	"	60'		X		-	-	-	-	-	-	-	5,360
	"	70'		X		-	-	-	-	-	-	-	1,590
		80'		X		-	-	-	-	-	-	-	3,360
	"	90'		X		-	-	-	-	-	-	-	814
	"	100'		X		-	-	-	-	-	-	-	3,290
	"	110'		X		-	-	-	-	-	-	-	467
	"	120'		X		-	-	-	-	-	-	-	834

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-8	3/30/2010	1'	3' BEB		X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	14,100
	"	3'			X	-	-	-	-	-	-	-	11,600
	"	5'			X	-	-	-	-	-	-	-	13,200
	"	7'		X		-	-	-	-	-	-	-	7,900
	"	10'		X		-	-	-	-	-	-	-	7,720
	"	15'		X		-	-	-	-	-	-	-	5,900
	"	20'		X		-	-	-	-	-	-	-	7,560
	"	25'		X		-	-	-	-	-	-	-	10,400
	"	30'		X		-	-	-	-	-	-	-	9,780
	"	40'		X		-	-	-	-	-	-	-	10,500
	"	50'		X		-	-	-	-	-	-	-	4,880
	"	60'		X		-	-	-	-	-	-	-	8,430
	"	70'		X		-	-	-	-	-	-	-	3,490
	"	80'		X		-	-	-	-	-	-	-	1,350
	"	90'		X		-	-	-	-	-	-	-	569
	"	100'		X		-	-	-	-	-	-	-	553
	"	110'		X		-	-	-	-	-	-	-	<200
	"	120'		X		-	-	-	-	-	-	-	258

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-9	8/30/2010	1'	3' BEB		X	<2.00	<50.0	<50.0	-	-	-	-	11,200
	"	3'			X	-	-	-	-	-	-	-	5,240
	"	5'			X	-	-	-	-	-	-	-	2,190
	"	7'		X		-	-	-	-	-	-	-	1,060
	"	10'		X		-	-	-	-	-	-	-	5,770
	"	15'		X		-	-	-	-	-	-	-	5,160
	"	20'		X		-	-	-	-	-	-	-	3,710
	"	25'		X		-	-	-	-	-	-	-	5,720
	"	30'		X		-	-	-	-	-	-	-	5,250
	"	40'		X		-	-	-	-	-	-	-	901
	"	50'		X		-	-	-	-	-	-	-	<200
	"	60'		X		-	-	-	-	-	-	-	<200
SB-10	8/31/2010	1'	3' BEB		X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
	"	3'			X	-	-	-	-	-	-	-	546
	"	5'			X	-	-	-	-	-	-	-	1,070
	"	7'		X		-	-	-	-	-	-	-	2,160
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	<200
	"	20'		X		-	-	-	-	-	-	-	<200
	"	25'		X		-	-	-	-	-	-	-	<200
	"	30'		X		-	-	-	-	-	-	-	<200

Table 1
COG Operating LLC.
PRONGHORN 8 IN. SEC. 14
Lea 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					
SB-11	8/31/2010	1'	3' BEB	X	X	<2.00	<50.0	<50.0	-	-	-	-	11,800
	"	3'		X	X	-	-	-	-	-	-	-	11,900
	"	5'		X	X	-	-	-	-	-	-	-	12,300
	"	7'		X		-	-	-	-	-	-	-	1,200
	"	10'		X		-	-	-	-	-	-	-	2,400
	"	15'		X		-	-	-	-	-	-	-	529
	"	20'		X		-	-	-	-	-	-	-	2,870
	"	25'		X		-	-	-	-	-	-	-	202
	"	30'		X		-	-	-	-	-	-	-	252
SB-12	8/31/2010	1'	3' BEB		X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	14,400
	"	3'			X	-	-	-	-	-	-	-	11,900
	"	5'			X	-	-	-	-	-	-	-	9,520
	"	7'		X		-	-	-	-	-	-	-	13,400
	"	10'		X		-	-	-	-	-	-	-	2,660
	"	15'		X		-	-	-	-	-	-	-	341
	"	20'		X		-	-	-	-	-	-	-	306
	"	25'		X		-	-	-	-	-	-	-	572
	"	30'		X		-	-	-	-	-	-	-	321

(--) Not Analyzed

BEB Below Excavation Bottom

Excavated Depths

Liner Installation

Table 2
COG Operating LLC.
PRONGHORN 8 in. MAIN SWD LINE LEAK
Lea County, New Mexico

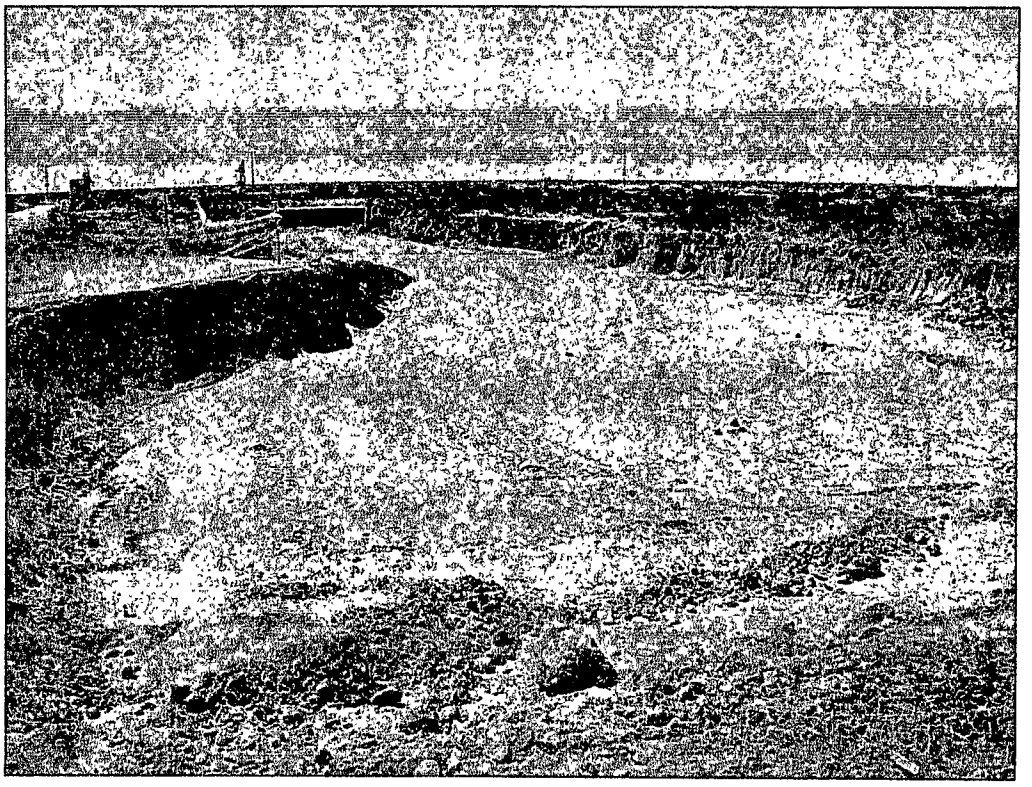
Sample ID	Sample Date	Soil Status		Chloride (mg/kg)
		In-Situ	Removed	
SW-1	4/18/2011		X	11,400
SW-1 North Side of Road	"		X	9,430
SW-1 South Side of Road	"	X		229
SW-2	4/18/2011	X		<200
SW-3	4/18/2011	X		225
SW-4	4/18/2011	X		514
SW-5	4/18/2011	X		367
SW-6	4/18/2011	X		<200
SW-7	4/18/2011	X		225
SW-8	4/18/2011	X		<200
SW-9	4/18/2011	X		229

(-) = Not Analyzed

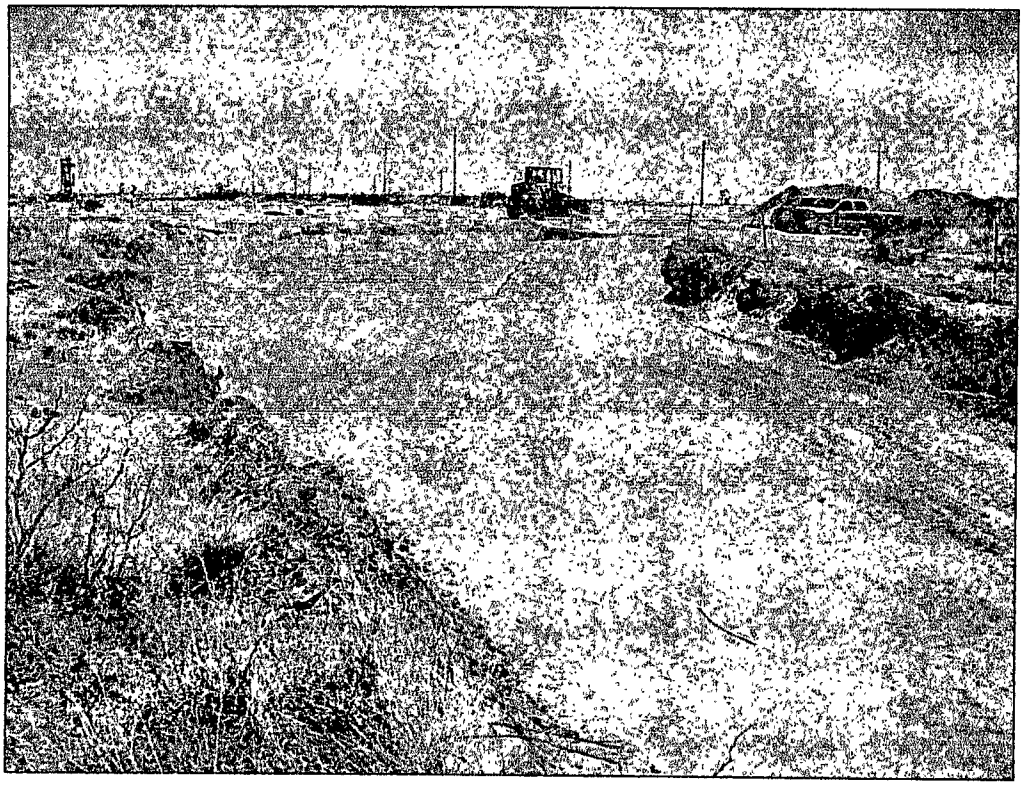
Photos

COG Operating LLC
Pronghorn 8" Line Sec. 14
Lea County, New Mexico
Site Excavation: April 12-18, 2011

TETRA TECH



View west – Near valve box (source)

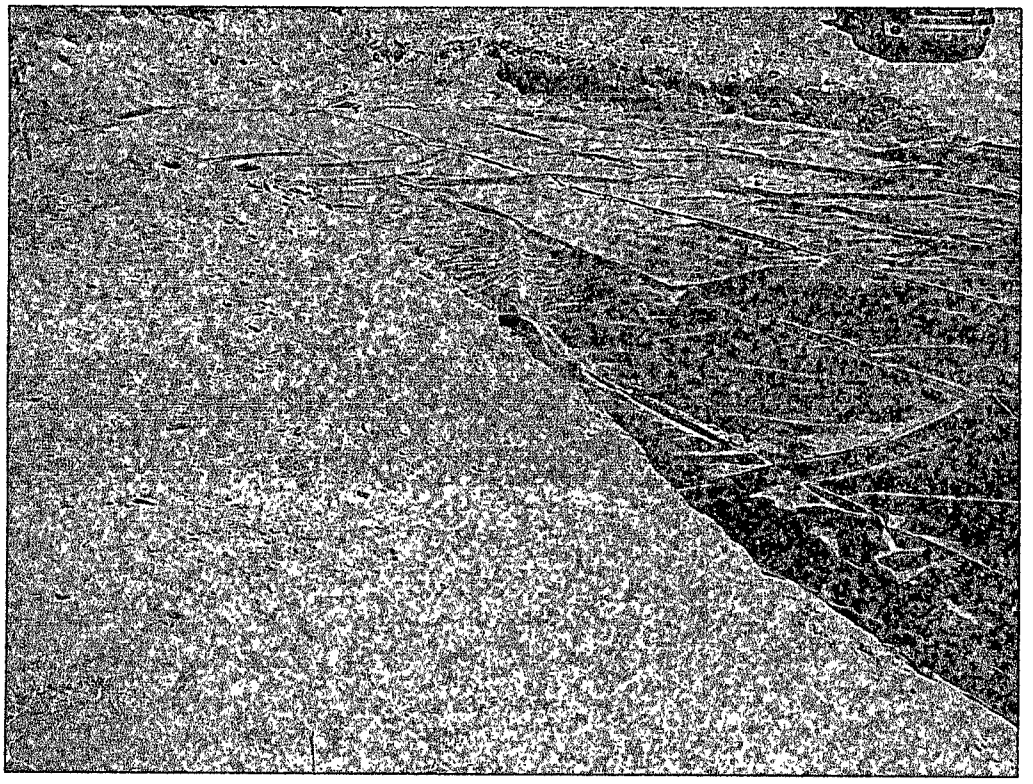


View east – Near SB-10 view across excavation

COG Operating LLC
Pronghorn 8" Line Sec. 14
Lea County, New Mexico
Site Excavation: April 12-18, 2011

TETRA TECH

40 mil liner installed – View west



40 mil liner installed – View east

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

Unit O Sec 14

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	Pronghorn 8" main SWD line	Facility Type	8" SWD line

Surface Owner Federal	Mineral Owner	Lease No. API# 30-025-32735

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	14	18S	32E					Lea

Latitude 32 44.456 **Longitude** 103 44.114

NATURE OF RELEASE

Type of Release Produced fluid	Volume of Release 400bbls	Volume Recovered 75bbls
Source of Release 8" main SWD line at valve box	Date and Hour of Occurrence 08/04/2010	Date and Hour of Discovery 08/04/2010 8:00 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson—OCD, Geoffrey Leking—OCD, Paul Evans—BLM	
By Whom? Josh Russo	Date and Hour 08/04/2010 6:17 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 8" PVC line ruptured inside the valve box due. The ruptured section has been replaced and the line has been put back into service.

Describe Area Affected and Cleanup Action Taken.*

Initially we released 400bbls of produced fluid out main 8" SWD line inside the valve box and we were able to recover 75bbls with a vacuum truck. The fluid flowed to the west down a nearby lease road with the dimensions of 1 yard x 170 yards. The lease road has been scraped and returned to its original condition. The fluid also flowed in the pasture west from the valve box with the dimensions of 30 yards x 125 yards. Also, while draining the line for repairs, we recovered 300bbls of produced water from inside the valve box. The chloride concentration in this area is 135,000 mg/l. (The closest well location to this release is the Mewbourne Oil Company QPBSSU 12A-1, NM OCD Order # R-9985, Unit O, 660' FSL 1980' FEL, Sec.14-T18S-R32E, Lea Co., NM, GPS 32 44.463 – 103 44.019). 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 NMOCD/BLM 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: 08/13/2010 Phone: 432-212-2399		

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **COG Operating LLC**	Contact **Pat Ellis**
Address **550 W. Texas, Suite 1300 Midland, Texas 79701**	Telephone No. **(432) 685-4332**
Facility Name Pronghorn 8" Main SWD Line	Facility Type **8" SWD Line**

Surface Owner: Federal	Mineral Owner	Lease No. API 30-025-32735

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	14	18S	32E					Lea

Latitude N 32 74087° **Longitude** W 103 73528°

NATURE OF RELEASE

Type of Release: Produced Fluids	Volume of Release 400 bbls	Volume Recovered 75 bbls
Source of Release: 8" main SWD line at valve box	Date and Hour of Occurrence 8/4/2010	Date and Hour of Discovery 8/4/2010
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **Larry Johnson, Geoffery Leking – OCD Paul Evans - BLM**	
By Whom? Josh Russo	Date and Hour 8/4/10 6:17 pm	
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 8" PVC line ruptured inside the valve box. The line was replaced and put back in service.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil with elevated chloride concentration was removed and hauled away for proper disposal. A 40 mil liner was installed and then the site was brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to 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 Agent for COG	Approved by ~~District Supervisor~~: ENV SPECIALIST Geoffrey Leking	
Title: Project Manager	Approval Date: 05/03/12	Expiration Date: —
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval: —	Attached ☐ IRP-5-12-2804
Date: 3-15-12 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Pronghorn Section 14
Lea County, New Mexico

17 South 31 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 **271**	35	36 **SITE**

17 South 32 East

6	5	4 **82** Maljamar	3 **175**	2 **60**	1 **225**
7	8	9	10	11 **70** **88**	12 **120**
18	17	16	15	14	13
19	20	21	22	23	24
30 180 dry	29	28	27	26	25
31	32	33	34	35	36

17 South 33 East

6 **90**	5	4	3 **155**	2 **158**	1 **150**
7 **167**	8 **173**	9 **161**	10	11	12
18 **188**	17 **180**	16	15	14	13 **165**
19	20 **190**	21	22	23 **115**	24
30 **69**	29 **60**	28	27	26	25
31	32	33 **120**	34	35 **155**	36

18 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 **400**
18	17	16	15	14 **317**	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 **261**	36

18 South 32 East

6	5	4 **65**	3	2	1
7 **460** **82**	8	9	10	11	12
18	17	16 **84**	15	14	13
19	20 **164**	21	22 **429**	23	24
30	29	28	27	26	25
31	32	33	34 **117**	35	36

18 South 33 East

6	5	4	3 **60**	2	1
7	8 **100**	9	10 **62**	11 **46**	12 **143** **140**
18	17 **85**	16	15	14 **36**	13 **60**
19 **>140**	20	21	22	23	24 **195**
30 **35**	29	28	27	26	25
31	32	33 **177**	34	35	36

19 South 31 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 **180**	27	26	25
31	32	33 **101**	34	35	36 **130**

19 South 32 East

6	5	4	3	2	1
7	8 **365**	9	10	11	12
18	17	16	15	14	13 135 dry
19 **102**	20 **345**	21	22	23	24
30	29	28	27	26	25
31	32	33	34 **250**	35	36

19 South 33 East

6	5	4	3	2	1
7	8	9	10	11	12
18 **340**	17 **116**	16	15	14	13
19	20	21	22	23	24
30	29	28 130 dry	27	26 **92** **85**	25
31	32 **185**	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

Appendix C

Summary Report

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

Report Date: September 7, 2010

Work Order: 10083111

Project Location: Lea Co., NM
Project Name: COG/Pronghorn 8 in. Sec. 14
Project Number: 114-6400644

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243017	SB-1 0-1'	soil	2010-08-27	00:00	2010-08-30
243018	SB-1 3'	soil	2010-08-27	00:00	2010-08-30
243019	SB-1 5'	soil	2010-08-27	00:00	2010-08-30
243020	SB-1 7'	soil	2010-08-27	00:00	2010-08-30
243021	SB-1 10'	soil	2010-08-27	00:00	2010-08-30
243024	SB-2 0-1'	soil	2010-08-27	00:00	2010-08-30
243025	SB-2 3'	soil	2010-08-27	00:00	2010-08-30
243026	SB-2 5'	soil	2010-08-27	00:00	2010-08-30
243027	SB-2 7'	soil	2010-08-27	00:00	2010-08-30
243028	SB-2 10'	soil	2010-08-27	00:00	2010-08-30
243029	SB-2 15'	soil	2010-08-27	00:00	2010-08-30
243030	SB-2 20'	soil	2010-08-27	00:00	2010-08-30
243031	SB-2 25'	soil	2010-08-27	00:00	2010-08-30
243032	SB-2 30'	soil	2010-08-27	00:00	2010-08-30
243034	SB-3 0-1'	soil	2010-08-27	00:00	2010-08-30
243035	SB-3 3'	soil	2010-08-27	00:00	2010-08-30
243036	SB-3 5'	soil	2010-08-27	00:00	2010-08-30
243037	SB-3 7'	soil	2010-08-27	00:00	2010-08-30
243038	SB-3 10'	soil	2010-08-27	00:00	2010-08-30
243039	SB-3 15'	soil	2010-08-27	00:00	2010-08-30
243041	SB-4 0-1'	soil	2010-08-27	00:00	2010-08-30
243042	SB-4 3'	soil	2010-08-27	00:00	2010-08-30
243043	SB-4 5'	soil	2010-08-27	00:00	2010-08-30
243044	SB-4 7'	soil	2010-08-27	00:00	2010-08-30
243045	SB-4 10'	soil	2010-08-27	00:00	2010-08-30
243046	SB-4 15'	soil	2010-08-27	00:00	2010-08-30
243048	SB-5 0-1'	soil	2010-08-27	00:00	2010-08-30
243049	SB-5 3'	soil	2010-08-27	00:00	2010-08-30
243050	SB-5 5'	soil	2010-08-27	00:00	2010-08-30
243051	SB-5 7'	soil	2010-08-27	00:00	2010-08-30

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243052	SB-5 10'	soil	2010-08-27	00:00	2010-08-30
243053	SB-5 15'	soil	2010-08-27	00:00	2010-08-30
243054	SB-5 20'	soil	2010-08-27	00:00	2010-08-30
243055	SB-5 25'	soil	2010-08-27	00:00	2010-08-30
243058	SB-6 0-1'	soil	2010-08-27	00:00	2010-08-30
243059	SB-6 3'	soil	2010-08-27	00:00	2010-08-30
243060	SB-6 5'	soil	2010-08-27	00:00	2010-08-30
243061	SB-6 7'	soil	2010-08-27	00:00	2010-08-30
243062	SB-6 10'	soil	2010-08-27	00:00	2010-08-30
243063	SB-6 15'	soil	2010-08-27	00:00	2010-08-30
243065	SB-7 0-1' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243066	SB-7 3' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243067	SB-7 5' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243068	SB-7 7' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243069	SB-7 10' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243070	SB-7 15' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243071	SB-7 20' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243072	SB-7 25' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243073	SB-7 30' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243074	SB-7 40' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243075	SB-7 50' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243076	SB-7 60' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243077	SB-7 70' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243078	SB-7 80' (3' BEB)	soil	2010-08-27	00:00	2010-08-30

	BTEX				TPH DRO - NEW	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
243017 - SB-1 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243024 - SB-2 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243034 - SB-3 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243041 - SB-4 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243048 - SB-5 0-1'					<50.0	<2.00
243058 - SB-6 0-1'					<50.0	<2.00
243065 - SB-7 0-1' (3' BEB)					<50.0	<2.00

Sample: 243017 - SB-1 0-1'

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

Sample: 243018 - SB-1 3'

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

Sample: 243019 - SB-1 5'

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

Sample: 243020 - SB-1 7'

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

Sample: 243021 - SB-1 10'

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

Sample: 243024 - SB-2 0-1'

Param	Flag	Result	Units	RL
Chloride		**8970**	mg/Kg	4.00

Sample: 243025 - SB-2 3'

Param	Flag	Result	Units	RL
Chloride		**10000**	mg/Kg	4.00

Sample: 243026 - SB-2 5'

Param	Flag	Result	Units	RL
Chloride		**11700**	mg/Kg	4.00

Sample: 243027 - SB-2 7'

Param	Flag	Result	Units	RL
Chloride		**7480**	mg/Kg	4.00

Sample: 243028 - SB-2 10'

Param	Flag	Result	Units	RL
Chloride		**10200**	mg/Kg	4.00

Sample: 243029 - SB-2 15'

Param	Flag	Result	Units	RL
Chloride		**4970**	mg/Kg	4.00

Sample: 243030 - SB-2 20'

Param	Flag	Result	Units	RL
Chloride		**2710**	mg/Kg	4.00

Sample: 243031 - SB-2 25'

Param	Flag	Result	Units	RL
Chloride		**419**	mg/Kg	4.00

Sample: 243032 - SB-2 30'

Param	Flag	Result	Units	RL
Chloride		**301**	mg/Kg	4.00

Sample: 243034 - SB-3 0-1'

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

Sample: 243035 - SB-3 3'

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

Sample: 243036 - SB-3 5'

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

Sample: 243037 - SB-3 7'

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

Sample: 243038 - SB-3 10'

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

Sample: 243039 - SB-3 15'

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

Sample: 243041 - SB-4 0-1'

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

Sample: 243042 - SB-4 3'

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

Sample: 243043 - SB-4 5'

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

Sample: 243044 - SB-4 7'

Param	Flag	Result	Units	RL
Chloride		**222**	mg/Kg	4.00

Sample: 243045 - SB-4 10'

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

Sample: 243046 - SB-4 15'

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

Sample: 243048 - SB-5 0-1'

Param	Flag	Result	Units	RL
Chloride		**4160**	mg/Kg	4.00

Sample: 243049 - SB-5 3'

Param	Flag	Result	Units	RL
Chloride		**11900**	mg/Kg	4.00

Sample: 243050 - SB-5 5'

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

Sample: 243051 - SB-5 7'

Param	Flag	Result	Units	RL
Chloride		**7830**	mg/Kg	4.00

Sample: 243052 - SB-5 10'

Param	Flag	Result	Units	RL
Chloride		**473**	mg/Kg	4.00

Sample: 243053 - SB-5 15'

Param	Flag	Result	Units	RL
Chloride		**737**	mg/Kg	4.00

Sample: 243054 - SB-5 20'

Param	Flag	Result	Units	RL
Chloride		**380**	mg/Kg	4.00

Sample: 243055 - SB-5 25'

Param	Flag	Result	Units	RL
Chloride		**312**	mg/Kg	4.00

Sample: 243058 - SB-6 0-1'

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

Sample: 243059 - SB-6 3'

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

Sample: 243060 - SB-6 5'

Param	Flag	Result	Units	RL
Chloride		**210**	mg/Kg	4.00

Sample: 243061 - SB-6 7'

Param	Flag	Result	Units	RL
Chloride		**224**	mg/Kg	4.00

Sample: 243062 - SB-6 10'

Param	Flag	Result	Units	RL
Chloride		**371**	mg/Kg	4.00

Sample: 243063 - SB-6 15'

Param	Flag	Result	Units	RL
Chloride		**391**	mg/Kg	4.00

Sample: 243065 - SB-7 0-1' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**9960**	mg/Kg	4.00

Sample: 243066 - SB-7 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**13400**	mg/Kg	4.00

Sample: 243067 - SB-7 5' (3' BEB)

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

Sample: 243068 - SB-7 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**9510**	mg/Kg	4.00

Sample: 243069 - SB-7 10' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**6320**	mg/Kg	4.00

Sample: 243070 - SB-7 15' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**7050**	mg/Kg	4.00

Sample: 243071 - SB-7 20' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5240**	mg/Kg	4.00

Sample: 243072 - SB-7 25' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**7680**	mg/Kg	4.00

Sample: 243073 - SB-7 30' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5550**	mg/Kg	4.00

Sample: 243074 - SB-7 40' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**8500**	mg/Kg	4.00

Sample: 243075 - SB-7 50' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**6290**	mg/Kg	4.00

Sample: 243076 - SB-7 60' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5360**	mg/Kg	4.00

Sample: 243077 - SB-7 70' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**1590**	mg/Kg	4.00

Sample: 243078 - SB-7 80' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**3640**	mg/Kg	4.00

TRACEANALYSIS, INC.

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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: September 7, 2010

Work Order: 10083111

Project Location: Lea Co., NM
Project Name: COG/Pronghorn 8 in. Sec. 14
Project Number: 114-6400644

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
243017	SB-1 0-1'	soil	2010-08-27	00:00	2010-08-30
243018	SB-1 3'	soil	2010-08-27	00:00	2010-08-30
243019	SB-1 5'	soil	2010-08-27	00:00	2010-08-30
243020	SB-1 7'	soil	2010-08-27	00:00	2010-08-30
243021	SB-1 10'	soil	2010-08-27	00:00	2010-08-30
243024	SB-2 0-1'	soil	2010-08-27	00:00	2010-08-30
243025	SB-2 3'	soil	2010-08-27	00:00	2010-08-30
243026	SB-2 5'	soil	2010-08-27	00:00	2010-08-30
243027	SB-2 7'	soil	2010-08-27	00:00	2010-08-30
243028	SB-2 10'	soil	2010-08-27	00:00	2010-08-30

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243029	SB-2 15'	soil	2010-08-27	00:00	2010-08-30
243030	SB-2 20'	soil	2010-08-27	00:00	2010-08-30
243031	SB-2 25'	soil	2010-08-27	00:00	2010-08-30
243032	SB-2 30'	soil	2010-08-27	00:00	2010-08-30
243034	SB-3 0-1'	soil	2010-08-27	00:00	2010-08-30
243035	SB-3 3'	soil	2010-08-27	00:00	2010-08-30
243036	SB-3 5'	soil	2010-08-27	00:00	2010-08-30
243037	SB-3 7'	soil	2010-08-27	00:00	2010-08-30
243038	SB-3 10'	soil	2010-08-27	00:00	2010-08-30
243039	SB-3 15'	soil	2010-08-27	00:00	2010-08-30
243041	SB-4 0-1'	soil	2010-08-27	00:00	2010-08-30
243042	SB-4 3'	soil	2010-08-27	00:00	2010-08-30
243043	SB-4 5'	soil	2010-08-27	00:00	2010-08-30
243044	SB-4 7'	soil	2010-08-27	00:00	2010-08-30
243045	SB-4 10'	soil	2010-08-27	00:00	2010-08-30
243046	SB-4 15'	soil	2010-08-27	00:00	2010-08-30
243048	SB-5 0-1'	soil	2010-08-27	00:00	2010-08-30
243049	SB-5 3'	soil	2010-08-27	00:00	2010-08-30
243050	SB-5 5'	soil	2010-08-27	00:00	2010-08-30
243051	SB-5 7'	soil	2010-08-27	00:00	2010-08-30
243052	SB-5 10'	soil	2010-08-27	00:00	2010-08-30
243053	SB-5 15'	soil	2010-08-27	00:00	2010-08-30
243054	SB-5 20'	soil	2010-08-27	00:00	2010-08-30
243055	SB-5 25'	soil	2010-08-27	00:00	2010-08-30
243058	SB-6 0-1'	soil	2010-08-27	00:00	2010-08-30
243059	SB-6 3'	soil	2010-08-27	00:00	2010-08-30
243060	SB-6 5'	soil	2010-08-27	00:00	2010-08-30
243061	SB-6 7'	soil	2010-08-27	00:00	2010-08-30
243062	SB-6 10'	soil	2010-08-27	00:00	2010-08-30
243063	SB-6 15'	soil	2010-08-27	00:00	2010-08-30
243065	SB-7 0-1' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243066	SB-7 3' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243067	SB-7 5' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243068	SB-7 7' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243069	SB-7 10' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243070	SB-7 15' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243071	SB-7 20' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243072	SB-7 25' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243073	SB-7 30' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243074	SB-7 40' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243075	SB-7 50' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243076	SB-7 60' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243077	SB-7 70' (3' BEB)	soil	2010-08-27	00:00	2010-08-30
243078	SB-7 80' (3' BEB)	soil	2010-08-27	00:00	2010-08-30

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 38 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/Pronghorn 8 in. Sec. 14 were received by TraceAnalysis, Inc. on 2010-08-30 and assigned to work order 10083111. Samples for work order 10083111 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
BTEX	S 8021B	62762	2010-09-01 at 12:00	73174	2010-09-01 at 09:52
Chloride (Titration)	SM 4500-Cl B	62738	2010-09-01 at 09:46	73196	2010-09-02 at 13:41
Chloride (Titration)	SM 4500-Cl B	62739	2010-09-01 at 09:47	73197	2010-09-02 at 13:42
Chloride (Titration)	SM 4500-Cl B	62740	2010-09-01 at 09:47	73198	2010-09-02 at 13:43
Chloride (Titration)	SM 4500-Cl B	62741	2010-09-01 at 09:47	73199	2010-09-02 at 13:44
Chloride (Titration)	SM 4500-Cl B	62742	2010-09-01 at 09:48	73200	2010-09-02 at 13:44
Chloride (Titration)	SM 4500-Cl B	62743	2010-09-01 at 09:48	73201	2010-09-02 at 13:45
TPH DRO - NEW	S 8015 D	62730	2010-08-31 at 14:41	73146	2010-08-31 at 14:41
TPH GRO	S 8015 D	62762	2010-09-01 at 12:00	73175	2010-09-01 at 10:20

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 10083111 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: 243017 - SB-1 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73174	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0200		mg/Kg	1	0.0200
Toluene		<0.0200		mg/Kg	1	0.0200
Ethylbenzene		<0.0200		mg/Kg	1	0.0200
Xylene		<0.0200		mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.26	mg/Kg	1	2.00	113	38.4 - 157

Sample: 243017 - SB-1 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243017 - SB-1 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		108	mg/Kg	1	100	108	70 - 130

Sample: 243017 - SB-1 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	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)		2.16	mg/Kg	1	2.00	108	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	1	2.00	103	42 - 159

Sample: 243018 - SB-1 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243019 - SB-1 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243020 - SB-1 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243021 - SB-1 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243024 - SB-2 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73174	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

Parameter	Flag	Result	RL Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.09	mg/Kg	1	2.00	104	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.31	mg/Kg	1	2.00	116	38.4 - 157

Sample: 243024 - SB-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**8970**	mg/Kg	100	4.00

Sample: 243024 - SB-2 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		108	mg/Kg	1	100	108	70 - 130

Sample: 243024 - SB-2 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.05	mg/Kg	1	2.00	102	42 - 159

Sample: 243025 - SB-2 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**10000**	mg/Kg	100	4.00

Sample: 243026 - SB-2 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243027 - SB-2 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7480**	mg/Kg	100	4.00

Sample: 243028 - SB-2 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**10200**	mg/Kg	100	4.00

Sample: 243029 - SB-2 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243030 - SB-2 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2710**	mg/Kg	100	4.00

Sample: 243031 - SB-2 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**419**	mg/Kg	50	4.00

Sample: 243032 - SB-2 30'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243034 - SB-3 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73174	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0200		mg/Kg	1	0.0200
Toluene		<0.0200		mg/Kg	1	0.0200
Ethylbenzene		<0.0200		mg/Kg	1	0.0200
Xylene		<0.0200		mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.30	mg/Kg	1	2.00	115	38.4 - 157

Sample: 243034 - SB-3 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243034 - SB-3 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		106	mg/Kg	1	100	106	70 - 130

Sample: 243034 - SB-3 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.04	mg/Kg	1	2.00	102	42 - 159

Sample: 243035 - SB-3 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243036 - SB-3 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243037 - SB-3 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243038 - SB-3 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243039 - SB-3 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243041 - SB-4 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73174	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.13	mg/Kg	1	2.00	106	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.45	mg/Kg	1	2.00	122	38.4 - 157

Sample: 243041 - SB-4 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243041 - SB-4 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		110	mg/Kg	1	100	110	70 - 130

Sample: 243041 - SB-4 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.13	mg/Kg	1	2.00	106	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.16	mg/Kg	1	2.00	108	42 - 159

Sample: 243042 - SB-4 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243043 - SB-4 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243044 - SB-4 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**222**	mg/Kg	50	4.00

Sample: 243045 - SB-4 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243046 - SB-4 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243048 - SB-5 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4160**	mg/Kg	100	4.00

Sample: 243048 - SB-5 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		99.3	mg/Kg	1	100	99	70 - 130

Sample: 243048 - SB-5 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	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)		2.01	mg/Kg	1	2.00	100	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.27	mg/Kg	1	2.00	114	42 - 159

Sample: 243049 - SB-5 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243050 - SB-5 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243051 - SB-5 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7830**	mg/Kg	100	4.00

Sample: 243052 - SB-5 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**473**	mg/Kg	50	4.00

Sample: 243053 - SB-5 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**737**	mg/Kg	50	4.00

Sample: 243054 - SB-5 20'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**380**	mg/Kg	50	4.00

Sample: 243055 - SB-5 25'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**312**	mg/Kg	50	4.00

Sample: 243058 - SB-6 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243058 - SB-6 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		102	mg/Kg	1	100	102	70 - 130

Sample: 243058 - SB-6 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.36	mg/Kg	1	2.00	118	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.63	mg/Kg	1	2.00	132	42 - 159

Sample: 243059 - SB-6 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243060 - SB-6 5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**210**	mg/Kg	50	4.00

Sample: 243061 - SB-6 7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243062 - SB-6 10'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**371**	mg/Kg	50	4.00

Sample: 243063 - SB-6 15'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**391**	mg/Kg	50	4.00

Sample: 243065 - SB-7 0-1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9960**	mg/Kg	100	4.00

Sample: 243065 - SB-7 0-1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	Sample Preparation:	2010-08-31	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		99.6	mg/Kg	1	100	100	70 - 130

Sample: 243065 - SB-7 0-1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	Sample Preparation:	2010-09-01	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)		2.01	mg/Kg	1	2.00	100	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.18	mg/Kg	1	2.00	109	42 - 159

Sample: 243066 - SB-7 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243067 - SB-7 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243068 - SB-7 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9510**	mg/Kg	100	4.00

Sample: 243069 - SB-7 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6320**	mg/Kg	100	4.00

Sample: 243070 - SB-7 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7050**	mg/Kg	100	4.00

Sample: 243071 - SB-7 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

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

Sample: 243072 - SB-7 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7680**	mg/Kg	100	4.00

Sample: 243073 - SB-7 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5550**	mg/Kg	100	4.00

Sample: 243074 - SB-7 40' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8500**	mg/Kg	100	4.00

Sample: 243075 - SB-7 50' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6290**	mg/Kg	100	4.00

Sample: 243076 - SB-7 60' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5360**	mg/Kg	100	4.00

Sample: 243077 - SB-7 70' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1590**	mg/Kg	100	4.00

Sample: 243078 - SB-7 80' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	Sample Preparation:	2010-09-01	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3640**	mg/Kg	100	4.00

Method Blank (1) QC Batch: 73146

QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	QC Preparation:	2010-08-31	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		99.5	mg/Kg	1	100	100	70 - 130

Method Blank (1) QC Batch: 73174

QC Batch:	73174	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	QC Preparation:	2010-09-01	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0150	mg/Kg	0.02

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method blank continued ...

Parameter	Flag	MDL Result	Units	RL
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)		2.05	mg/Kg	1	2.00	102	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.87	mg/Kg	1	2.00	94	55.4 - 132

Method Blank (1) QC Batch: 73175

QC Batch:	73175	Date Analyzed:	2010-09-01	Analyzed By:	AG
Prep Batch:	62762	QC Preparation:	2010-09-01	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)		2.02	mg/Kg	1	2.00	101	67.6 - 150
4-Bromofluorobenzene (4-BFB)		1.68	mg/Kg	1	2.00	84	52.4 - 130

Method Blank (1) QC Batch: 73196

QC Batch:	73196	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62738	QC Preparation:	2010-09-01	Prepared By:	AR

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

Method Blank (1) QC Batch: 73197

QC Batch:	73197	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62739	QC Preparation:	2010-09-01	Prepared By:	AR

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

Method Blank (1) QC Batch: 73198

QC Batch:	73198	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62740	QC Preparation:	2010-09-01	Prepared By:	AR

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

Method Blank (1) QC Batch: 73199

QC Batch:	73199	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62741	QC Preparation:	2010-09-01	Prepared By:	AR

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

Method Blank (1) QC Batch: 73200

QC Batch:	73200	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62742	QC Preparation:	2010-09-01	Prepared By:	AR

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

Method Blank (1) QC Batch: 73201

QC Batch:	73201	Date Analyzed:	2010-09-02	Analyzed By:	AR
Prep Batch:	62743	QC Preparation:	2010-09-01	Prepared By:	AR

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

Laboratory Control Spike (LCS-1)

QC Batch:	73146	Date Analyzed:	2010-08-31	Analyzed By:	kg
Prep Batch:	62730	QC Preparation:	2010-08-31	Prepared By:	kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	242	mg/Kg	1	250	<14.5	97	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	233	mg/Kg	1	250	<14.5	93	57.4 - 133.4	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
n-Tricosane	107	103	mg/Kg	1	100	107	103	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 73174 | Date Analyzed: 2010-09-01 | Analyzed By: AG
Prep Batch: 62762 | QC Preparation: 2010-09-01 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.12	mg/Kg	1	2.00	<0.0150	106	81.9 - 108
Toluene	2.10	mg/Kg	1	2.00	<0.00950	105	81.9 - 107
Ethylbenzene	2.14	mg/Kg	1	2.00	<0.0106	107	78.4 - 107
Xylene	6.38	mg/Kg	1	6.00	<0.00930	106	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	2.11	mg/Kg	1	2.00	<0.0150	106	81.9 - 108	0	20
Toluene	2.10	mg/Kg	1	2.00	<0.00950	105	81.9 - 107	0	20
Ethylbenzene	2.14	mg/Kg	1	2.00	<0.0106	107	78.4 - 107	0	20
Xylene	6.41	mg/Kg	1	6.00	<0.00930	107	79.1 - 107	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	2.02	mg/Kg	1	2.00	98	101	70.2 - 114
4-Bromofluorobenzene (4-BFB)	2.18	2.23	mg/Kg	1	2.00	109	112	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 73175 | Date Analyzed: 2010-09-01 | Analyzed By: AG
Prep Batch: 62762 | QC Preparation: 2010-09-01 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	16.7	mg/Kg	1	20.0	<1.65	84	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	17.6	mg/Kg	1	20.0	<1.65	88	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)	2.05	2.04	mg/Kg	1	2.00	102	102	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.86	1.81	mg/Kg	1	2.00	93	90	68.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 73196 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62738 | QC Preparation: 2010-09-01 | 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: 73197 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62739 | QC Preparation: 2010-09-01 | 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: 73198 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62740 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.5	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: 73199 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62741 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	95.6	mg/Kg	1	100	<2.18	96	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	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: 73200 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62742 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.9	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: 73201 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62743 | QC Preparation: 2010-09-01 | 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.

Matrix Spike (MS-1) Spiked Sample: 243065

QC Batch: 73146 | Date Analyzed: 2010-08-31 | Analyzed By: kg
Prep Batch: 62730 | QC Preparation: 2010-08-31 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	218	mg/Kg	1	250	<14.5	87	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	221	mg/Kg	1	250	<14.5	88	35.2 - 167.1	1	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	95.2	94.9	mg/Kg	1	100	95	95	70 - 130

Matrix Spike (MS-1) Spiked Sample: 243259

QC Batch: 73174 | Date Analyzed: 2010-09-01 | Analyzed By: AG
Prep Batch: 62762 | QC Preparation: 2010-09-01 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.95	mg/Kg	1	2.00	<0.0150	98	80.5 - 112
Toluene	2.01	mg/Kg	1	2.00	<0.00950	100	82.4 - 113

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ethylbenzene	2.17	mg/Kg	1	2.00	<0.0106	108	83.9 - 114
Xylene	6.38	mg/Kg	1	6.00	<0.00930	106	84 - 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
Benzene	1.92	mg/Kg	1	2.00	<0.0150	96	80.5 - 112	2	20
Toluene	2.00	mg/Kg	1	2.00	<0.00950	100	82.4 - 113	0	20
Ethylbenzene	2.18	mg/Kg	1	2.00	<0.0106	109	83.9 - 114	0	20
Xylene	6.42	mg/Kg	1	6.00	<0.00930	107	84 - 114	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.10	2.11	mg/Kg	1	2	105	106	41.3 - 117
4-Bromofluorobenzene (4-BFB)	2.31	2.28	mg/Kg	1	2	116	114	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 243065

QC Batch: 73175 | Date Analyzed: 2010-09-01 | Analyzed By: AG
Prep Batch: 62762 | QC Preparation: 2010-09-01 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.9	mg/Kg	1	20.0	<1.65	94	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	20.2	mg/Kg	1	20.0	<1.65	101	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)	2.10	2.19	mg/Kg	1	2	105	110	50 - 162
4-Bromofluorobenzene (4-BFB)	2.46	2.48	mg/Kg	1	2	123	124	50 - 162

Matrix Spike (MS-1) Spiked Sample: 243028

QC Batch: 73196 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62738 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	19900	mg/Kg	100	10000	10200	97	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	20600	mg/Kg	100	10000	10200	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: 243038

QC Batch: 73197 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62739 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9800	mg/Kg	100	10000	<218	98	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	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: 243050

QC Batch: 73198 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62740 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	20500	mg/Kg	100	10000	10400	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	20800	mg/Kg	100	10000	10400	104	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: 243062

QC Batch: 73199 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62741 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9990	mg/Kg	100	10000	371	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	10600	mg/Kg	100	10000	371	102	85 - 115	6	20

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

Matrix Spike (MS-1) Spiked Sample: 243073

QC Batch: 73200 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62742 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15600	mg/Kg	100	10000	5550	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	15900	mg/Kg	100	10000	5550	104	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: 243175

QC Batch: 73201 | Date Analyzed: 2010-09-02 | Analyzed By: AR
Prep Batch: 62743 | QC Preparation: 2010-09-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9830	mg/Kg	100	10000	<218	98	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115	3	20

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

Standard (CCV-2)

QC Batch: 73146 | Date Analyzed: 2010-08-31 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	256	102	80 - 120	2010-08-31

Standard (CCV-3)

QC Batch: 73146 Date Analyzed: 2010-08-31 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	2010-08-31

Standard (CCV-4)

QC Batch: 73146 Date Analyzed: 2010-08-31 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	2010-08-31

Standard (CCV-1)

QC Batch: 73174 Date Analyzed: 2010-09-01 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	0.104	104	80 - 120	2010-09-01
Toluene		mg/Kg	0.100	0.102	102	80 - 120	2010-09-01
Ethylbenzene		mg/Kg	0.100	0.0992	99	80 - 120	2010-09-01
Xylene		mg/Kg	0.300	0.303	101	80 - 120	2010-09-01

Standard (CCV-2)

QC Batch: 73174 Date Analyzed: 2010-09-01 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	0.103	103	80 - 120	2010-09-01
Toluene		mg/Kg	0.100	0.100	100	80 - 120	2010-09-01
Ethylbenzene		mg/Kg	0.100	0.0984	98	80 - 120	2010-09-01

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene		mg/Kg	0.300	0.291	97	80 - 120	2010-09-01

Standard (CCV-1)

QC Batch: 73175 Date Analyzed: 2010-09-01 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	1.11	111	80 - 120	2010-09-01

Standard (CCV-2)

QC Batch: 73175 Date Analyzed: 2010-09-01 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	0.882	88	80 - 120	2010-09-01

Standard (ICV-1)

QC Batch: 73196 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73196 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2010-09-02

Standard (ICV-1)

QC Batch: 73197 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73197 Date Analyzed: 2010-09-02 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	2010-09-02

Standard (ICV-1)

QC Batch: 73198 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73198 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2010-09-02

Standard (ICV-1)

QC Batch: 73199 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.9	99	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73199 Date Analyzed: 2010-09-02 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	2010-09-02

Standard (ICV-1)

QC Batch: 73200 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73200 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2010-09-02

Standard (ICV-1)

QC Batch: 73201 Date Analyzed: 2010-09-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-02

Standard (CCV-1)

QC Batch: 73201 Date Analyzed: 2010-09-02 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	2010-09-02

WO #: 10083111

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 7

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.: 114-64006644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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
243017	8/27		S		X	SB-1 0-1'	1				X			✓										X				
018						SB-1 3'	1				X													X				
019						SB-1 5'	1				X													X				
020						SB-1 7'	1				X													X				
021						SB-1 10'	1				X													X				
022						SB-1 15'	1				X																	
023						SB-1 20'	1				X																	
024						SB-2 0-1'	1				X			✓										X				
025						SB-2 3'	1				X													X				
026						SB-2 5'	1				X													X				

RELINQUISHED BY: (Signature) Jill Knaller — Date: 08/30/10 Time: 1645
RECEIVED BY: (Signature) — Date: 8/30/10 Time: 1645
SAMPLED BY: (Print & Initial) Kim — Date: 8/29/10 Time:

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

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

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

SAMPLE CONDITION WHEN RECEIVED: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's
** IF TPH ≥ 1,000 mg/kg run next sample down for TPH

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 #: 10083111

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.: 114-64006-14

PROJECT NAME: Pronghorn 8" Sec 14
Lea 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
243027	8/27		S		X	SB-2 7'	1				X														X				
028						SB-2 10'	1				X														X				
029						SB-2 15'	1				X														X				
030						SB-2 20'	1				X														X				
031						SB-2 25'	1				X														X				
032						SB-2 30'	1				X														X				
033						SB-2 40'	1				X																		
034						SB-3 0-1'	1				X		✓												X				
035						SB-3 3'	1				X														X				
036						SB-3 5'	1				X														X				

RELINQUISHED BY: (Signature) Date: 08/30/10 Time: 1645
RECEIVED BY: (Signature) Date: 8/30/10 Time: 16:45

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

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:

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 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: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPHs
** If TPH ≥ 1,000 mg/kg run next sample down for TPH

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 #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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 Aniona/Cations, pH, TDS
243037	8/27		S		X	SB-3 7'	1				X														X				
038						SB-3 10'	1				X														X				
039						SB-3 15'	1				X														X				
040						SB-3 20'	1				X																		
041						SB-4 0-1'	1				X			✓											X				
042						SB-4 3'	1				X														X				
043						SB-4 5'	1				X														X				
044						SB-4 7'	1				X														X				
045						SB-4 10'	1				X														X				
046						SB-4 15'	1				X														X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature)	Date: 8/30/10 Time: 1645	RECEIVED BY: (Signature)	Date: 8/30/10 Time: 1645
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: 8/29/10 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: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's

** If TPH > 1000 mg/kg run next sample for TPH

WO #: 10083111

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: 4 OF: 7

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez
PROJECT NO.:	**PROJECT NAME:**
114-6400644	Prairhorn 8" Sec 14 Lea 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
243047	8/27		S		X	SB-4 20'	1				X																	
048						SB-5 0-1'	1				X			✓										X				
049						SB-5 3'	1				X													X				
050						SB-5 5'	1				X													X				
051						SB-5 7'	1				X													X				
052						SB-5 10'	1				X													X				
053						SB-5 15'	1				X													X				
054						SB-5 20'	1				X													X				
055						SB-5 25'	1				X													X				
056						SB-5 30'	1				X																	

RELINQUISHED BY: (Signature) Emily	Date: 8/30/10 Time: 16:45	RECEIVED BY: (Signature)	Date: 8/30/10 Time: 16:45
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: 8/29/10 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.3°C intact

REMARKS: * BTEX, run BTEX on 4 highest TPH's
** IF TPH > 1000 mg/kg run not stepdown for TPH

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

WO #: 10083111

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.: 114-6400644

PROJECT NAME: Brayham 8" Sec 14 Lea 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. (Ext. to C35) TX1005	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
243057	8/27		S		X	SB-5 40'	1				X														X				
058						SB-6 0-1'	1				X			✓											X				
059						SB-6 3'	1				X														X				
060						SB-6 5'	1				X														X				
061						SB-6 7'	1				X														X				
062						SB-6 10'	1				X														X				
063						SB-6 15'	1				X														X				
064						SB-6 20'	1				X																		
065						SB-7 0-1' (3' BEB)	1				X			✓											X				
066						SB-7 3' (3' BEB)	1				X														X				

RELINQUISHED BY: (Signature) Date: 8/30/10 Time: 1645
RECEIVED BY: (Signature) Date: 8/30/10 Time: 1645

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: 8/29/10 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: 4.0° C Intact

REMARKS: * BTEX, run BTEX on 4 highest TPH's
** IF TPH ≥ 1,000 mg/kg run next sample down for TPH

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

WO#: 10083111

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 7

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.: 114-64100644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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
243067	8/27		S		X	SB-7 5' (3' BEB)	1				X	
068						SB-7 7' (3' BEB)	1				X	
069						SB-7 10' (3' BEB)	1				X	
070						SB-7 15' (3' BEB)	1				X	
071						SB-7 20' (3' BEB)	1				X	
072						SB-7 25' (3' BEB)	1				X	
073						SB-7 30' (3' BEB)	1				X	
074						SB-7 40' (3' BEB)	1				X	
075						SB-7 50' (3' BEB)	1				X	
076						SB-7 60' (3' BEB)	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	X											X				

RELINQUISHED BY: (Signature) — Date: 8/30/10 Time: 1645 — RECEIVED BY: (Signature) — Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim — Date: 8/29/10 Time:

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RECEIVING LABORATORY: TRACE — RECEIVED BY: (Signature)

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE: DATE: TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0°c intact

REMARKS: * BTEX run BTEX on 4 highest TPHs

** If TPH ≥ 1000 mg/kg run next sample down for TPH

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

WO #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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)	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	Chlorides	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
243077	8/27		S		X	SB-7 70' (3' BEB)	1				X														X				
078	8/27		S		X	SB-7 80' (3' BEB)	1				X														X				

RELINQUISHED BY: (Signature) [signature] Date: 8/30/10 Time: 1645

RECEIVED BY: (Signature) [signature] Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RECEIVING LABORATORY: TRACE
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's
** If TPH ≥ 1000 mg/kg run next sample down for TPH

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 #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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
243017	8/27		S		X	SB-1 0-1'	1				X			✓											X				
018						SB-1 3'	1				X														X				
019						SB-1 5'	1				X														X				
020						SB-1 7'	1				X														X				
021						SB-1 10'	1				X														X				
022						SB-1 15'	1				X																		
023						SB-1 20'	1				X																		
024						SB-2 0-1'	1				X			✓											X				
025						SB-2 3'	1				X														X				
026						SB-2 5'	1				X														X				

RELINQUISHED BY: (Signature) Date: 08/30/10 Time: 1645 — RECEIVED BY: (Signature) Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 Time:

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's
** IF TPH ≥ 1,000 mg/kg run next sample down for TPH

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 #: 10083111

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.: 114-64006414

PROJECT NAME: Pronghorn 8" Sec 14
Lea Co., NM

ANALYSIS REQUEST (Circle or Specify Method No.)

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 TX1005 (Ext. to C35)	TPH 8015 MOD.	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
243027	8/27/2010		S		X	SB-2 7'	1				X															X				
028						SB-2 10'	1				X															X				
029						SB-2 15'	1				X															X				
030						SB-2 20'	1				X															X				
031						SB-2 25'	1				X															X				
032						SB-2 30'	1				X															X				
033						SB-2 40'	1				X																			
034						SB-3 0-1'	1				X		✓													X				
035						SB-3 3'	1				X															X				
036						SB-3 5'	1				X															X				

RELINQUISHED BY: (Signature) Date: 08/30/10 Time: 1645
RECEIVED BY: (Signature) Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 Time:

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

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: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's
** If TPH ≥ 1,000 mg/kg run next sample down for TPH

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 #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14
Lea 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
243037	8/27		S		X	SB-3 7'	1				X	
038						SB-3 10'	1				X	
039						SB-3 15'	1				X	
040						SB-3 20'	1				X	
041						SB-4 0-1'	1				X	
042						SB-4 3'	1				X	
043						SB-4 5'	1				X	
044						SB-4 7'	1				X	
045						SB-4 10'	1				X	
046						SB-4 15'	1				X	

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B	TPH TX1005 (Ext. to C35)	TPH 8015 MOD	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) — Date: 8/30/10 Time: 1645
RECEIVED BY: (Signature) — Date: 8/30/10 Time: 1645

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: 8/29/10 Time:

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

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: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPH's
** If TPH ≥ 1000 mg/kg run next sample for TPH

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

WO #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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. (Ext. to C35) TX1005	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
243047	8/27		S		X	SB-4 20'	1				X																	
048						SB-5 0-1'	1				X			✓										X				
049						SB-5 3'	1				X													X				
050						SB-5 5'	1				X													X				
051						SB-5 7'	1				X													X				
052						SB-5 10'	1				X													X				
053						SB-5 15'	1				X													X				
054						SB-5 20'	1				X													X				
055						SB-5 25'	1				X													X				
056						SB-5 30'	1				X																	

RELINQUISHED BY: (Signature) Date: 8/30/10 Time: 1645 — RECEIVED BY: (Signature) Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 Time:

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RECEIVING LABORATORY: TRACE — RECEIVED BY: (Signature)

ADDRESS: Midland CITY: STATE: TX ZIP:

CONTACT: PHONE: DATE: TIME:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.3°C intact

REMARKS: * BTEX, run BTEX on 4 highest TPH's

** If TPH ≥ 1000 mg/kg run Next Sample down for TPH

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

WO #: 10083111

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.: 114-6400644

PROJECT NAME: Praghom 8" Sec 14 Lea 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 TX1005 (Ext. to C35) / 8015 MOD.	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
243057	8/27		S		X	SB-5 40'	1				X														X				
058						SB-6 0-1'	1				X			✓											X				
059						SB-6 3'	1				X														X				
060						SB-6 5'	1				X														X				
061						SB-6 7'	1				X														X				
062						SB-6 10'	1				X														X				
063						SB-6 15'	1				X														X				
064						SB-6 20'	1				X																		
065						SB-7 0-1' (3' BEB)	1				X			✓											X				
066						SB-7 3' (3' BEB)	1				X														X				

RELINQUISHED BY: (Signature) Date: 8/30/10 Time: 1645

RECEIVED BY: (Signature) Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim Date: 8/29/10 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: TRACE
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0° C Intact

REMARKS: * BTEX, run BTEX on 4 highest TPH's
** IF TPH ≥ 1,000 mg/kg run next sample down for TPH

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

WO #: 10083111

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.: 114-64100644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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. 8240/8260/824	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
243067	8/27		S		X	SB-7 5' (3' BEB)	1				X															X				
068						SB-7 7' (3' BEB)	1				X															X				
069						SB-7 10' (3' BEB)	1				X															X				
070						SB-7 15' (3' BEB)	1				X															X				
071						SB-7 20' (3' BEB)	1				X															X				
072						SB-7 25' (3' BEB)	1				X															X				
073						SB-7 30' (3' BEB)	1				X															X				
074						SB-7 40' (3' BEB)	1				X															X				
075						SB-7 50' (3' BEB)	1				X															X				
076						SB-7 60' (3' BEB)	1				X															X				

RELINQUISHED BY: (Signature) — Date: 8/30/10 Time: 1645 — RECEIVED BY: (Signature) — Date: 8/30/10 Time: 16:45 — SAMPLED BY: (Print & Initial) Kim — Date: 8/29/10 Time:

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

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

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0°C intact

REMARKS: * BTEX run BTEX on 4 highest TPHs
** IF TPH ≥ 1000 mg/kg run next sample down for TPH

WO #: 10083111

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.: 114-6400644

PROJECT NAME: Pronghorn 8" Sec 14 Lea 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 TX1005 (Ext. to C35)	TPH 8015 MOD	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
243077	8/27		S		X	SB-7 70' (3' BEB)	1				X															X				
078	8/27		S		X	SB-7 80' (3' BEB)	1				X															X				

RELINQUISHED BY: (Signature) John Kyle — Date: 8/30/10 Time: 1645

RECEIVED BY: (Signature) — Date: 8/30/10 Time: 1645

SAMPLED BY: (Print & Initial) Kim — Date: 8/28/10 Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

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

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: TRACE

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 4.0c intact

REMARKS: * BTEX run BTEX on 4 highest TPH's

** IFTPH > 1000 mg/kg run next sample down for TPH

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

Summary Report

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

Report Date: September 14, 2010

Work Order: 10090307

Project Location: Lea Co., NM
Project Name: COG/Pronghorn 8 in. Sec. 14
Project Number: 114-6400644

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243526	SB-8 1' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243527	SB-8 3' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243528	SB-8 5' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243529	SB-8 7' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243530	SB-8 10' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243531	SB-8 15' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243532	SB-8 20' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243533	SB-8 25' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243534	SB-8 30' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243535	SB-8 40' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243536	SB-8 50' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243537	SB-8 60' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243538	SB-8 70' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243539	SB-8 80' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243540	SB-8 90' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243541	SB-8 100' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243542	SB-8 110' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243543	SB-8 120' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243544	SB-9 1' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243545	SB-9 3' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243546	SB-9 5' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243547	SB-9 7' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243548	SB-9 10' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243549	SB-9 15' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243550	SB-9 20' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243551	SB-9 25' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243552	SB-9 30' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243553	SB-9 40' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243554	SB-9 50' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243555	SB-9 60' (3' BEB)	soil	2010-08-30	00:00	2010-09-02

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243556	SB-10 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243557	SB-10 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243558	SB-10 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243559	SB-10 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243560	SB-10 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243561	SB-10 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243562	SB-10 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243563	SB-10 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243564	SB-10 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243566	SB-11 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243567	SB-11 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243568	SB-11 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243569	SB-11 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243570	SB-11 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243571	SB-11 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243572	SB-11 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243573	SB-11 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243574	SB-11 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243576	SB-12 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243577	SB-12 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243578	SB-12 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243579	SB-12 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243580	SB-12 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243581	SB-12 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243582	SB-12 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243583	SB-12 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243584	SB-12 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243587	SB-7 80' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243588	SB-7 90' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243589	SB-7 100' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243590	SB-7 110' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243591	SB-7 120' (3' BEB)	soil	2010-08-31	00:00	2010-09-02

	BTEX				TPH DRO - NEW	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
243526 - SB-8 1' (3' BEB)	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243544 - SB-9 1' (3' BEB)					<50.0	<2.00
243556 - SB-10 1' (3' BEB)	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
243566 - SB-11 1' (3' BEB)					<50.0	<2.00
243576 - SB-12 1' (3' BEB)	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00

Sample: 243526 - SB-8 1' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**14100**	mg/Kg	4.00

Sample: 243527 - SB-8 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**11600**	mg/Kg	4.00

Sample: 243528 - SB-8 5' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**13200**	mg/Kg	4.00

Sample: 243529 - SB-8 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**7900**	mg/Kg	4.00

Sample: 243530 - SB-8 10' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**7720**	mg/Kg	4.00

Sample: 243531 - SB-8 15' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5900**	mg/Kg	4.00

Sample: 243532 - SB-8 20' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**7560**	mg/Kg	4.00

Sample: 243533 - SB-8 25' (3' BEB)

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

Sample: 243534 - SB-8 30' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**9780**	mg/Kg	4.00

Sample: 243535 - SB-8 40' (3' BEB)

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

Sample: 243536 - SB-8 50' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**4880**	mg/Kg	4.00

Sample: 243537 - SB-8 60' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**8430**	mg/Kg	4.00

Sample: 243538 - SB-8 70' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**3490**	mg/Kg	4.00

Sample: 243539 - SB-8 80' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**1350**	mg/Kg	4.00

Sample: 243540 - SB-8 90' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**569**	mg/Kg	4.00

Sample: 243541 - SB-8 100' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**553**	mg/Kg	4.00

Sample: 243542 - SB-8 110' (3' BEB)

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

Sample: 243543 - SB-8 120' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**258**	mg/Kg	4.00

Sample: 243544 - SB-9 1' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**11200**	mg/Kg	4.00

Sample: 243545 - SB-9 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5240**	mg/Kg	4.00

Sample: 243546 - SB-9 5' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**2190**	mg/Kg	4.00

Sample: 243547 - SB-9 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**1060**	mg/Kg	4.00

Sample: 243548 - SB-9 10' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5770**	mg/Kg	4.00

Sample: 243549 - SB-9 15' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5160**	mg/Kg	4.00

Sample: 243550 - SB-9 20' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**3710**	mg/Kg	4.00

Sample: 243551 - SB-9 25' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5720**	mg/Kg	4.00

Sample: 243552 - SB-9 30' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**5250**	mg/Kg	4.00

Sample: 243553 - SB-9 40' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**901**	mg/Kg	4.00

Sample: 243554 - SB-9 50' (3' BEB)

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

Sample: 243555 - SB-9 60' (3' BEB)

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

Sample: 243556 - SB-10 1' (3' BEB)

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

Sample: 243557 - SB-10 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**546**	mg/Kg	4.00

Sample: 243558 - SB-10 5' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**1070**	mg/Kg	4.00

Sample: 243559 - SB-10 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**2160**	mg/Kg	4.00

Sample: 243560 - SB-10 10' (3' BEB)

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

Sample: 243561 - SB-10 15' (3' BEB)

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

Sample: 243562 - SB-10 20' (3' BEB)

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

Sample: 243563 - SB-10 25' (3' BEB)

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

Sample: 243564 - SB-10 30' (3' BEB)

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

Sample: 243566 - SB-11 1' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**11800**	mg/Kg	4.00

Sample: 243567 - SB-11 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**11900**	mg/Kg	4.00

Sample: 243568 - SB-11 5' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**12300**	mg/Kg	4.00

Sample: 243569 - SB-11 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**1200**	mg/Kg	4.00

Sample: 243570 - SB-11 10' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**2400**	mg/Kg	4.00

Sample: 243571 - SB-11 15' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**529**	mg/Kg	4.00

Sample: 243572 - SB-11 20' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**2870**	mg/Kg	4.00

Sample: 243573 - SB-11 25' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**202**	mg/Kg	4.00

Sample: 243574 - SB-11 30' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**252**	mg/Kg	4.00

Sample: 243576 - SB-12 1' (3' BEB)

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

Sample: 243577 - SB-12 3' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**11900**	mg/Kg	4.00

Sample: 243578 - SB-12 5' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**9520**	mg/Kg	4.00

Sample: 243579 - SB-12 7' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**13400**	mg/Kg	4.00

Sample: 243580 - SB-12 10' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**2660**	mg/Kg	4.00

Sample: 243581 - SB-12 15' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**341**	mg/Kg	4.00

Sample: 243582 - SB-12 20' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**306**	mg/Kg	4.00

Sample: 243583 - SB-12 25' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**572**	mg/Kg	4.00

Sample: 243584 - SB-12 30' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**321**	mg/Kg	4.00

Sample: 243587 - SB-7 80' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**3360**	mg/Kg	4.00

Sample: 243588 - SB-7 90' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**814**	mg/Kg	4.00

Sample: 243589 - SB-7 100' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**3290**	mg/Kg	4.00

Sample: 243590 - SB-7 110' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**467**	mg/Kg	4.00

Sample: 243591 - SB-7 120' (3' BEB)

Param	Flag	Result	Units	RL
Chloride		**834**	mg/Kg	4.00

TRACEANALYSIS, INC.

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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: September 14, 2010

Work Order: 10090307

Project Location: Lea Co., NM
Project Name: COG/Pronghorn 8 in. Scc. 14
Project Number: 114-6400644

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
243526	SB-8 1' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243527	SB-8 3' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243528	SB-8 5' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243529	SB-8 7' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243530	SB-8 10' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243531	SB-8 15' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243532	SB-8 20' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243533	SB-8 25' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243534	SB-8 30' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243535	SB-8 40' (3' BEB)	soil	2010-08-30	00:00	2010-09-02

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243536	SB-8 50' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243537	SB-8 60' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243538	SB-8 70' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243539	SB-8 80' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243540	SB-8 90' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243541	SB-8 100' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243542	SB-8 110' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243543	SB-8 120' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243544	SB-9 1' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243545	SB-9 3' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243546	SB-9 5' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243547	SB-9 7' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243548	SB-9 10' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243549	SB-9 15' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243550	SB-9 20' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243551	SB-9 25' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243552	SB-9 30' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243553	SB-9 40' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243554	SB-9 50' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243555	SB-9 60' (3' BEB)	soil	2010-08-30	00:00	2010-09-02
243556	SB-10 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243557	SB-10 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243558	SB-10 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243559	SB-10 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243560	SB-10 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243561	SB-10 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243562	SB-10 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243563	SB-10 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243564	SB-10 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243566	SB-11 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243567	SB-11 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243568	SB-11 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243569	SB-11 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243570	SB-11 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243571	SB-11 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243572	SB-11 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243573	SB-11 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243574	SB-11 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243576	SB-12 1' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243577	SB-12 3' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243578	SB-12 5' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243579	SB-12 7' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243580	SB-12 10' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243581	SB-12 15' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243582	SB-12 20' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243583	SB-12 25' (3' BEB)	soil	2010-08-31	00:00	2010-09-02

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
243584	SB-12 30' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243587	SB-7 80' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243588	SB-7 90' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243589	SB-7 100' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243590	SB-7 110' (3' BEB)	soil	2010-08-31	00:00	2010-09-02
243591	SB-7 120' (3' BEB)	soil	2010-08-31	00:00	2010-09-02

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

Standard Flags

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

Case Narrative

Samples for project COG/Pronghorn 8 in. Sec. 14 were received by TraceAnalysis, Inc. on 2010-09-02 and assigned to work order 10090307. Samples for work order 10090307 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
BTEX	S 8021B	62833	2010-09-03 at 09:00	73284	2010-09-03 at 09:58
Chloride (Titration)	SM 4500-Cl B	62848	2010-09-07 at 09:01	73314	2010-09-08 at 10:46
Chloride (Titration)	SM 4500-Cl B	62849	2010-09-07 at 09:02	73315	2010-09-08 at 10:46
Chloride (Titration)	SM 4500-Cl B	62850	2010-09-07 at 09:02	73316	2010-09-08 at 10:47
Chloride (Titration)	SM 4500-Cl B	62851	2010-09-07 at 09:03	73317	2010-09-08 at 10:48
Chloride (Titration)	SM 4500-Cl B	62852	2010-09-07 at 09:03	73393	2010-09-10 at 11:22
Chloride (Titration)	SM 4500-Cl B	62929	2010-09-09 at 09:21	73394	2010-09-10 at 11:22
Chloride (Titration)	SM 4500-Cl B	62930	2010-09-09 at 09:22	73395	2010-09-10 at 11:23
TPH DRO - NEW	S 8015 D	62827	2010-09-03 at 10:09	73259	2010-09-03 at 10:09
TPH GRO	S 8015 D	62833	2010-09-03 at 09:00	73268	2010-09-03 at 10:26

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 10090307 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: 243526 - SB-8 1' (3' BEB)

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73284	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.74	mg/Kg	1	2.00	87	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.71	mg/Kg	1	2.00	86	38.4 - 157

Sample: 243526 - SB-8 1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**14100**	mg/Kg	100	4.00

Sample: 243526 - SB-8 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	Sample Preparation:	2010-09-03	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		92.8	mg/Kg	1	100	93	70 - 130

Sample: 243526 - SB-8 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	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)		1.71	mg/Kg	1	2.00	86	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.51	mg/Kg	1	2.00	76	42 - 159

Sample: 243527 - SB-8 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243528 - SB-8 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**13200**	mg/Kg	100	4.00

Sample: 243529 - SB-8 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7900**	mg/Kg	100	4.00

Sample: 243530 - SB-8 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7720**	mg/Kg	100	4.00

Sample: 243531 - SB-8 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5900**	mg/Kg	100	4.00

Sample: 243532 - SB-8 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7560**	mg/Kg	100	4.00

Sample: 243533 - SB-8 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243534 - SB-8 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**9780**	mg/Kg	100	4.00

Sample: 243535 - SB-8 40' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243536 - SB-8 50' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**4880**	mg/Kg	100	4.00

Sample: 243537 - SB-8 60' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8430**		mg/Kg	100	4.00

Sample: 243538 - SB-8 70' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3490**		mg/Kg	100	4.00

Sample: 243539 - SB-8 80' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1350**		mg/Kg	100	4.00

Sample: 243540 - SB-8 90' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**569**		mg/Kg	50	4.00

Sample: 243541 - SB-8 100' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**553**	mg/Kg	50	4.00

Sample: 243542 - SB-8 110' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243543 - SB-8 120' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**258**	mg/Kg	50	4.00

Sample: 243544 - SB-9 1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**11200**	mg/Kg	100	4.00

Sample: 243544 - SB-9 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	Sample Preparation:	2010-09-03	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		93.7	mg/Kg	1	100	94	70 - 130

Sample: 243544 - SB-9 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.74	mg/Kg	1	2.00	87	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.46	mg/Kg	1	2.00	73	42 - 159

Sample: 243545 - SB-9 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243546 - SB-9 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2190**	mg/Kg	100	4.00

Sample: 243547 - SB-9 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1060**	mg/Kg	100	4.00

Sample: 243548 - SB-9 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5770**	mg/Kg	100	4.00

Sample: 243549 - SB-9 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5160**	mg/Kg	100	4.00

Sample: 243550 - SB-9 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3710**	mg/Kg	100	4.00

Sample: 243551 - SB-9 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5720**	mg/Kg	100	4.00

Sample: 243552 - SB-9 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**5250**	mg/Kg	100	4.00

Sample: 243553 - SB-9 40' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73316	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62850	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**901**	mg/Kg	50	4.00

Sample: 243554 - SB-9 50' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243555 - SB-9 60' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243556 - SB-10 1' (3' BEB)

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73284	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.08	mg/Kg	1	2.00	104	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.94	mg/Kg	1	2.00	97	38.4 - 157

Sample: 243556 - SB-10 1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243556 - SB-10 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	Sample Preparation:	2010-09-03	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		97.1	mg/Kg	1	100	97	70 - 130

Sample: 243556 - SB-10 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	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)		2.06	mg/Kg	1	2.00	103	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.72	mg/Kg	1	2.00	86	42 - 159

Sample: 243557 - SB-10 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**546**	mg/Kg	50	4.00

Sample: 243558 - SB-10 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**1070**	mg/Kg	100	4.00

Sample: 243559 - SB-10 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**2160**	mg/Kg	100	4.00

Sample: 243560 - SB-10 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243561 - SB-10 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243562 - SB-10 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243563 - SB-10 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73317	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62851	Sample Preparation:	2010-09-07	Prepared By:	AR

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

Sample: 243564 - SB-10 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243566 - SB-11 1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**11800**		mg/Kg	100	4.00

Sample: 243566 - SB-11 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	Sample Preparation:	2010-09-03	Prepared By:	kg

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

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

Sample: 243566 - SB-11 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	Prepared By:	AG

Parameter	Flag	Result	RL	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)		1.47	mg/Kg	1	2.00	74	42 - 159

Sample: 243567 - SB-11 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243568 - SB-11 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243569 - SB-11 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1200**		mg/Kg	50	4.00

Sample: 243570 - SB-11 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2400**		mg/Kg	100	4.00

Sample: 243571 - SB-11 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**529**		mg/Kg	50	4.00

Sample: 243572 - SB-11 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2870**		mg/Kg	100	4.00

Sample: 243573 - SB-11 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**202**		mg/Kg	50	4.00

Sample: 243574 - SB-11 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73393	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62852	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**252**		mg/Kg	50	4.00

Sample: 243576 - SB-12 1' (3' BEB)

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	73284	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0200		mg/Kg	1	0.0200
Toluene		<0.0200		mg/Kg	1	0.0200
Ethylbenzene		<0.0200		mg/Kg	1	0.0200
Xylene		<0.0200		mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.03	mg/Kg	1	2.00	102	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.83	mg/Kg	1	2.00	92	38.4 - 157

Sample: 243576 - SB-12 1' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243576 - SB-12 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	Sample Preparation:	2010-09-03	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		94.5	mg/Kg	1	100	94	70 - 130

Sample: 243576 - SB-12 1' (3' BEB)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	Sample Preparation:	2010-09-03	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)		2.01	mg/Kg	1	2.00	100	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.62	mg/Kg	1	2.00	81	42 - 159

Sample: 243577 - SB-12 3' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243578 - SB-12 5' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9520**	mg/Kg	100	4.00

Sample: 243579 - SB-12 7' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

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

Sample: 243580 - SB-12 10' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2660**	mg/Kg	100	4.00

Sample: 243581 - SB-12 15' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**341**	mg/Kg	50	4.00

Sample: 243582 - SB-12 20' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**306**	mg/Kg	50	4.00

Sample: 243583 - SB-12 25' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**572**	mg/Kg	50	4.00

Sample: 243584 - SB-12 30' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**321**	mg/Kg	50	4.00

Sample: 243587 - SB-7 80' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73394	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62929	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3360**	mg/Kg	100	4.00

Sample: 243588 - SB-7 90' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73395	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62930	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**814**	mg/Kg	50	4.00

Sample: 243589 - SB-7 100' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73395	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62930	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3290**	mg/Kg	100	4.00

Sample: 243590 - SB-7 110' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73395	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62930	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**467**	mg/Kg	50	4.00

Sample: 243591 - SB-7 120' (3' BEB)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	73395	Date Analyzed:	2010-09-10	Analyzed By:	AR
Prep Batch:	62930	Sample Preparation:	2010-09-09	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**834**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 73259

QC Batch:	73259	Date Analyzed:	2010-09-03	Analyzed By:	kg
Prep Batch:	62827	QC Preparation:	2010-09-03	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		82.6	mg/Kg	1	100	83	70 - 130

Method Blank (1) QC Batch: 73268

QC Batch:	73268	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	QC Preparation:	2010-09-03	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)		1.96	mg/Kg	1	2.00	98	67.6 - 150
4-Bromofluorobenzene (4-BFB)		1.19	mg/Kg	1	2.00	60	52.4 - 130

Method Blank (1) QC Batch: 73284

QC Batch:	73284	Date Analyzed:	2010-09-03	Analyzed By:	AG
Prep Batch:	62833	QC Preparation:	2010-09-03	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)		1.96	mg/Kg	1	2.00	98	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.32	mg/Kg	1	2.00	66	55.4 - 132

Method Blank (1) QC Batch: 73314

QC Batch:	73314	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62848	QC Preparation:	2010-09-07	Prepared By:	AR

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

Method Blank (1) QC Batch: 73315

QC Batch:	73315	Date Analyzed:	2010-09-08	Analyzed By:	AR
Prep Batch:	62849	QC Preparation:	2010-09-07	Prepared By:	AR

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

Method Blank (1) QC Batch: 73316

QC Batch: 73316 Date Analyzed: 2010-09-08 Analyzed By: AR
Prep Batch: 62850 QC Preparation: 2010-09-07 Prepared By: AR

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

Method Blank (1) QC Batch: 73317

QC Batch: 73317 Date Analyzed: 2010-09-08 Analyzed By: AR
Prep Batch: 62851 QC Preparation: 2010-09-07 Prepared By: AR

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

Method Blank (1) QC Batch: 73393

QC Batch: 73393 Date Analyzed: 2010-09-10 Analyzed By: AR
Prep Batch: 62852 QC Preparation: 2010-09-07 Prepared By: AR

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

Method Blank (1) QC Batch: 73394

QC Batch: 73394 Date Analyzed: 2010-09-10 Analyzed By: AR
Prep Batch: 62929 QC Preparation: 2010-09-09 Prepared By: AR

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

Method Blank (1) QC Batch: 73395

QC Batch: 73395 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62930 | QC Preparation: 2010-09-09 | Prepared By: AR

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

Laboratory Control Spike (LCS-1)

QC Batch: 73259 | Date Analyzed: 2010-09-03 | Analyzed By: kg
Prep Batch: 62827 | QC Preparation: 2010-09-03 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	196	mg/Kg	1	250	<14.5	78	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	205	mg/Kg	1	250	<14.5	82	57.4 - 133.4	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
n-Tricosane	100	99.1	mg/Kg	1	100	100	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 73268 | Date Analyzed: 2010-09-03 | Analyzed By: AG
Prep Batch: 62833 | QC Preparation: 2010-09-03 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.8	mg/Kg	1	20.0	<1.65	79	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	16.3	mg/Kg	1	20.0	<1.65	82	69.9 - 95.4	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
Trifluorotoluene (TFT)	1.95	1.94	mg/Kg	1	2.00	98	97	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.54	1.49	mg/Kg	1	2.00	77	74	68.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 73284 | Date Analyzed: 2010-09-03 | Analyzed By: AG
Prep Batch: 62833 | QC Preparation: 2010-09-03 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.00	mg/Kg	1	2.00	<0.0150	100	81.9 - 108
Toluene	1.97	mg/Kg	1	2.00	<0.00950	98	81.9 - 107
Ethylbenzene	1.98	mg/Kg	1	2.00	<0.0106	99	78.4 - 107
Xylene	5.90	mg/Kg	1	6.00	<0.00930	98	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	2.01	mg/Kg	1	2.00	<0.0150	100	81.9 - 108	0	20
Toluene	1.98	mg/Kg	1	2.00	<0.00950	99	81.9 - 107	0	20
Ethylbenzene	2.02	mg/Kg	1	2.00	<0.0106	101	78.4 - 107	2	20
Xylene	6.03	mg/Kg	1	6.00	<0.00930	100	79.1 - 107	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.03	2.01	mg/Kg	1	2.00	102	100	70.2 - 114
4-Bromofluorobenzene (4-BFB)	2.02	2.02	mg/Kg	1	2.00	101	101	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 73314 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62848 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	95.7	mg/Kg	1	100	<2.18	96	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	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: 73315 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62849 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.4	mg/Kg	1	100	<2.18	96	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	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: 73316 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62850 | QC Preparation: 2010-09-07 | 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	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: 73317 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62851 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.3	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	104	mg/Kg	1	100	<2.18	104	85 - 115	7	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: 73393 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62852 | QC Preparation: 2010-09-07 | 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: 73394 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62929 | QC Preparation: 2010-09-09 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.4	mg/Kg	1	100	<2.18	96	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	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: 73395 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62930 | QC Preparation: 2010-09-09 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.1	mg/Kg	1	100	<2.18	96	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.8	mg/Kg	1	100	<2.18	100	85 - 115	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: 243576

QC Batch: 73259 | Date Analyzed: 2010-09-03 | Analyzed By: kg
Prep Batch: 62827 | QC Preparation: 2010-09-03 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	237	mg/Kg	1	250	<14.5	95	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	229	mg/Kg	1	250	<14.5	92	35.2 - 167.1	3	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	94.4	92.3	mg/Kg	1	100	94	92	70 - 130

Matrix Spike (MS-1) Spiked Sample: 243478

QC Batch: 73268 | Date Analyzed: 2010-09-03 | Analyzed By: AG
Prep Batch: 62833 | QC Preparation: 2010-09-03 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	17.7	mg/Kg	1	20.0	<1.65	88	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	18.3	mg/Kg	1	20.0	<1.65	92	61.8 - 114	3	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)	1.61	1.83	mg/Kg	1	2	80	92	50 - 162
4-Bromofluorobenzene (4-BFB)	1.63	1.85	mg/Kg	1	2	82	92	50 - 162

Matrix Spike (MS-1) Spiked Sample: 243533

QC Batch: 73314 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62848 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	20400	mg/Kg	100	10000	10400	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	21000	mg/Kg	100	10000	10400	106	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: 243543

QC Batch: 73315 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62849 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10200	mg/Kg	100	10000	258	99	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10600	mg/Kg	100	10000	258	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: 243553

QC Batch: 73316 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62850 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10800	mg/Kg	100	10000	901	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	901	101	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 243563

QC Batch: 73317 | Date Analyzed: 2010-09-08 | Analyzed By: AR
Prep Batch: 62851 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9940	mg/Kg	100	10000	<218	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	10500	mg/Kg	100	10000	<218	105	85 - 115	6	20

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

Matrix Spike (MS-1) Spiked Sample: 243574

QC Batch: 73393 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62852 | QC Preparation: 2010-09-07 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10100	mg/Kg	100	10000	252	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	10300	mg/Kg	100	10000	252	100	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 243587

QC Batch: 73394 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62929 | QC Preparation: 2010-09-09 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12900	mg/Kg	100	10000	3360	95	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	13200	mg/Kg	100	10000	3360	98	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: 243665

QC Batch: 73395 | Date Analyzed: 2010-09-10 | Analyzed By: AR
Prep Batch: 62930 | QC Preparation: 2010-09-09 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	22200	mg/Kg	100	10000	12300	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	22600	mg/Kg	100	10000	12300	103	85 - 115	2	20

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

Standard (CCV-2)

QC Batch: 73259 Date Analyzed: 2010-09-03 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	234	94	80 - 120	2010-09-03

Standard (CCV-3)

QC Batch: 73259 Date Analyzed: 2010-09-03 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	278	111	80 - 120	2010-09-03

Standard (CCV-4)

QC Batch: 73259 Date Analyzed: 2010-09-03 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	80 - 120	2010-09-03

Standard (CCV-2)

QC Batch: 73268 Date Analyzed: 2010-09-03 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	0.960	96	80 - 120	2010-09-03

Standard (CCV-3)

QC Batch: 73268 | Date Analyzed: 2010-09-03 | 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	2010-09-03

Standard (CCV-2)

QC Batch: 73284 | Date Analyzed: 2010-09-03 | 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	0.106	106	80 - 120	2010-09-03
Toluene		mg/Kg	0.100	0.106	106	80 - 120	2010-09-03
Ethylbenzene		mg/Kg	0.100	0.107	107	80 - 120	2010-09-03
Xylene		mg/Kg	0.300	0.314	105	80 - 120	2010-09-03

Standard (CCV-3)

QC Batch: 73284 | Date Analyzed: 2010-09-03 | 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	0.102	102	80 - 120	2010-09-03
Toluene		mg/Kg	0.100	0.100	100	80 - 120	2010-09-03
Ethylbenzene		mg/Kg	0.100	0.0997	100	80 - 120	2010-09-03
Xylene		mg/Kg	0.300	0.294	98	80 - 120	2010-09-03

Standard (ICV-1)

QC Batch: 73314 | Date Analyzed: 2010-09-08 | 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	2010-09-08

Standard (CCV-1)

QC Batch: 73314 | Date Analyzed: 2010-09-08 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.2	99	85 - 115	2010-09-08

Standard (ICV-1)

QC Batch: 73315 Date Analyzed: 2010-09-08 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-08

Standard (CCV-1)

QC Batch: 73315 Date Analyzed: 2010-09-08 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	2010-09-08

Standard (ICV-1)

QC Batch: 73316 Date Analyzed: 2010-09-08 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	2010-09-08

Standard (CCV-1)

QC Batch: 73316 Date Analyzed: 2010-09-08 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	2010-09-08

Standard (ICV-1)

QC Batch: 73317 Date Analyzed: 2010-09-08 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	2010-09-08

Standard (CCV-1)

QC Batch: 73317 Date Analyzed: 2010-09-08 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	2010-09-08

Standard (ICV-1)

QC Batch: 73393 Date Analyzed: 2010-09-10 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2010-09-10

Standard (CCV-1)

QC Batch: 73393 Date Analyzed: 2010-09-10 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	2010-09-10

Standard (ICV-1)

QC Batch: 73394 Date Analyzed: 2010-09-10 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	2010-09-10

Standard (CCV-1)

QC Batch: 73394 Date Analyzed: 2010-09-10 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	2010-09-10

Standard (ICV-1)

QC Batch: 73395 Date Analyzed: 2010-09-10 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-09-10

Standard (CCV-1)

QC Batch: 73395 Date Analyzed: 2010-09-10 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2010-09-10

WO#: 10090307

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: 1 OF: 7

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6430844	COG / Pronghorn 8" Sec 14 Lea 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
243526	8/30		S		X	SB-8 1' (3' BEB)	1				X	
527						SB-8 3' (3' BEB)	1				X	
528						SB-8 5' (3' BEB)	1				X	
529						SB-8 7' (3' BEB)	1				X	
530						SB-8 10' (3' BEB)	1				X	
531						SB-8 15' (3' BEB)	1				X	
532						SB-8 20' (3' BEB)	1				X	
533						SB-8 25' (3' BEB)	1				X	
534						SB-8 30' (3' BEB)	1				X	
535						SB-8 40' (3' BED)	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. 8081/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
X	✓											X				

RELINQUISHED BY: (Signature)	Date: 08/30/10 Time: 1545	RECEIVED BY: (Signature)	Date: 8/30/10 Time: 15:45	SAMPLED BY: (Print & Initial) Kim	Date: 8/30/10 Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:	SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS	AIRBILL #: OTHER:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:	TETRA TECH CONTACT PERSON: Ike Tavarez	Results by:

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.7°c intact

REMARKS: * Run BTEX on three highest TPH
** IF TPH ≥ 1,000 ppm run next deepest sample for TPH

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

WO #: 16090307

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.: 114-84006644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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	TX1005 (Ext. to C35)	TPH 8015 MOD	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
243531	8/30		S		X	SB-8 50' (3' BED)	1				X															X				
537						SB-8 60' (3' BEB)	1				X															X				
538						SB-8 70' (3' BEB)	1				X															X				
539						SB-8 80' (3' BEB)	1				X															X				
540						SB-8 90' (3' BEB)	1				X															X				
541						SB-8 100' (3' BEB)	1				X															X				
542						SB-8 110' (3' BEB)	1				X															X				
543						SB-8 120' (3' BED)	1				X															X				
544						SB-9 1' (3' BEB)	1				X				✓											X				
545						SB-9 3' (3' BEB)	1				X															X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature)	Date: 09/02/10 Time: 1545	RECEIVED BY: (Signature)	Date: 9/2/10 Time: 15:45
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: 8/30/10 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 on ice

REMARKS: * Run BTEX on the highest TPH
** If TPH ≥ 1000 ppm run next deepest sample for TPH

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 #: 10090307

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.: 114-6400644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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 TX1005 (Ext. to C35)	TPH 8015 MOD.	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. 608/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
243546	8/30		S		X	SB-9 5' (3' BEB)	1				X															X				
547						SB-9 7' (3' BEB)	1				X															X				
548						SB-9 10' (3' BEB)	1				X															X				
549						SB-9 15' (3' BEB)	1				X															X				
550						SB-9 20' (3' BEB)	1				X															X				
551						SB-9 25' (3' BEB)	1				X															X				
552						SB-9 30' (3' BEB)	1				X															X				
553						SB-9 40' (3' BEB)	1				X															X				
554						SB-9 50' (3' BEB)	1				X															X				
555						SB-9 60' (3' BEB)	1				X															X				

RELINQUISHED BY: (Signature) Jeffrey Kindley — Date: 08/31/10 Time: 1545

RECEIVED BY: (Signature) — Date: 9/1/10 Time: 1315

SAMPLED BY: (Print & Initial) Kim — Date: 8/30/10 Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

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

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: TRACE

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 3.7°C intact

REMARKS: * Run BTEX on the highest TPH

** IF TPH ≥ 1000 then run next down sample for TPH

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

WO #: 10090307

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.: 114-6400644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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. 8240/8260/824	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
243556	8/31		S		X	SB-10 1' (3' BEB)	1				X			✓											X				
557						SB-10 3' (3' BEB)	1				X														X				
558						SB-10 5' (3' BEB)	1				X														X				
559						SB-10 7' (3' BEB)	1				X														X				
560						SB-10 10' (3' BEB)	1				X														X				
561						SB-10 15' (3' BEB)	1				X														X				
562						SB-10 20' (3' BEB)	1				X														X				
563						SB-10 25' (3' BEB)	1				X														X				
564						SB-10 30' (3' BEB)	1				X														X				
565						SB-10 40' (3' BEB)	1				X																		

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature)	Date: 8/31/10 Time: 1545	RECEIVED BY: (Signature)	Date: 8/31/10 Time: 1545
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: 8/31/10 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: * Run BTEX on those highest TPH
** IF TPH > 1000 ppm run next deep sample for TPH

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 #: 10090307

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.: 114-6400644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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
243566	8/31		S		X	SB-11 1' (3' BEB)	1				X			✓											X				
567						SB-11 3' (3' BEB)	1				X														X				
568						SB-11 5' (3' BED)	1				X														X				
569						SB-11 7' (3' BED)	1				X														X				
570						SB-11 10' (3' BEB)	1				X														X				
571						SB-11 15' (3' BEB)	1				X														X				
572						SB-11 20' (3' BEB)	1				X														X				
573						SB-11 25' (3' BED)	1				X														X				
574						SB-11 30' (3' BED)	1				X														X				
575						SB-11 40' (3' BEB)	1				X																		

RELINQUISHED BY: (Signature) John Knowles — Date: 09/01/10 Time: 1545
RECEIVED BY: (Signature) — Date: 9/1/10 Time: 9:45
SAMPLED BY: (Print & Initial) Kim — Date: 8/31/10 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: * Run BTEX on Thru Light TPH
** If TPH ≥ 1000 ppm run next [illegible] sample for TPH

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 #: 100903O7

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 0644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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
243576	8/31		S	X		SB-12 1' (3' BED)	1				X	
577						SB-12 3' (3' BED)	1				X	
578						SB-12 5' (3' BED)	1				X	
579						SB-12 7' (3' BED)	1				X	
580						SB-12 10' (3' BED)	1				X	
581						SB-12 15' (3' BED)	1				X	
582						SB-12 20' (3' BED)	1				X	
583						SB-12 25' (3' BED)	1				X	
584						SB-12 30' (3' BED)	1				X	
585						SB-12 40' (3' BED)	1				X	

ANALYSIS REQUEST (Circle or Specify Method No.)

**	BTEX 8021B	TPH 8015 MOD (Ext. to C35) TX1005	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. 608/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
*		✓											X				

RELINQUISHED BY: (Signature) Date: 09/02/10 Time: 1545 — RECEIVED BY: (Signature) Date: 9/2/10 Time: 15:45

SAMPLED BY: (Print & Initial) Kim Date: 8/31/10 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: DATE: TIME:
RECEIVED BY: (Signature)

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.7°c intact

REMARKS: * Run BTEX on three highest TPH
** If TPH > 1000ppm can not design sample for TPH

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 #: 10090307

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 0644

PROJECT NAME: COG / Pronghorn 8" Sec 14 Lea 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 80216	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
243586	8/31		S		X	SB-12 50' (3' BEB)	1				X															X				
587	"		"		"	SB-7 80' (3' BEB)	1				X															X				
588						SB-7 90' (3' BEB)	1				X															X				
589						SB-7 100' (3' BEB)	1				X															X				
590						SB-7 110' (3' BEB)	1				X															X				
591	"		"		"	SB-7 120' (3' BEB)	1				X															X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 09/02/10 Time: 1545

RECEIVED BY: (Signature) Date: 9/2/10 Time: 15:45

SAMPLED BY: (Print & Initial) Kim Date: 8/31/10 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: * Run BTEX on the highest TPH

** IF TPH > 1000 ppm on next deepest sample for TPH

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