SITE INFORMATION

Report Type: Closure

General Site Information: 2RP-443						
Site:	Tex Mack 11 Federal #35					
Company:	COG Operating LLC					
Section, Township and Range	11	17S	31E			
Lease Number:	API-30-015-37667					
County:	Eddy County					
GPS:	32.84437° N			103.84547° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From the intersection of Hwy 529 and the Lovington Hwy travel east on the Lovington Hwy for 2m, turn left on lease road travel 0.3m, turn right travel 1.5m, turn left travel 0.5m arrive at site.					

Release Data:	
Date Released:	7/27/2010
Type Release:	Produced Fluid
Source of Contamination:	Wellbore
Fluid Released:	70 bbls
Fluids Recovered:	60 bbls

Official Communication:			
Name:	Pat Ellis		Jeff Kindley
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) 631-0348
Fax:	(432) 684-7137		
Email:	pellis@conchoresources.com		jeff.kindley@tetratech.com

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

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

TETRA TECH

February 2, 2011

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

Re: Closure Report for the COG Operating LLC., Tex Mack 11 Federal #35, Unit M, Section 11, Township 17 South, Range 31 East, Eddy County, New Mexico. (2RP-443)

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Tex Mack 11 Federal #35 located in Unit M, Section 11, Township 17 South, Range 31 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.84437°, W 103.84547°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on July 27, 2010, when approximately seventy (70) barrels of produced fluid was released from the wellbore. To alleviate the problem, COG personnel repaired the wellbore. A vacuum truck was utilized to recover sixty (60) barrels of standing fluids. The spill extended west to east with dimensions of 120' x 120' and tapering to 75'. The initial and final C-141's are enclosed in Appendix A.

Groundwater

No water wells were listed within Section 11. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 200' below surface. The groundwater information is enclosed in Appendix B.

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

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 Analytical Results

On August 8, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of six (6) auger holes (AH-1 through AH-6) were installed using a stainless steel hand auger to assess the impacted soils. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples at AH-1, AH-2, AH-3, and AH-6 exceeded the RRAL for TPH or BTEX. Auger holes (AH-4 and AH-5) did show TPH and BTEX concentrations above RRAL at 0-1' and 5.0' below ground surface (bgs), respectively. The deeper samples declined below the RRAL at AH-4 (1.0'-1.5') and AH-5 (6.0'-6.5') bgs. The chloride impact was defined in AH-1, AH-2, AH-3, AH-4, and AH-6, at a depth of 1.0' bgs. Auger hole (AH-5) had an increase in chloride concentrations near the bottom of the hole, with chloride concentrations of 1,220 mg/kg at 7.0' and 1,060 mg/kg at 9.0'.

Corrective Action

As per the approved work plan dated October 1, 2010, Tetra Tech personnel were onsite to oversee the excavation of hydrocarbon impacted soils at the site. The soils were excavated along the footprint of the spill to a depth of 1.0' in the areas of AH-1, AH-2, AH-3, AH-4 and AH-6. The deepest impact was encountered in the area of AH-5 and excavated the area 25' x 25' at a depth of 6-6.5'. A confirmation samples (CS-1) was collected from the bottom of the excavation and installed a backhoe trench (T-1) to assess

the bottom of the excavation. Based on the results, the bottom was over-excavated to remove the soils exceeding the RRAL. In addition, side wall samples were collected for analysis of BTEX, TPH, and chlorides. Laboratory analysis verified that the TPH, BTEX and chlorides were below the RRAL. Upon completion of the excavation, approximately 720 cubic yards of hydrocarbon/chloride impacted soils were removed and transported offsite for disposal at Controlled Recovery Inc. (CRI) of Carlsbad, NM. The site was backfilled with clean caliche and brought up to surface grade. See Figure 4 for excavation dimensions.

Closure Request

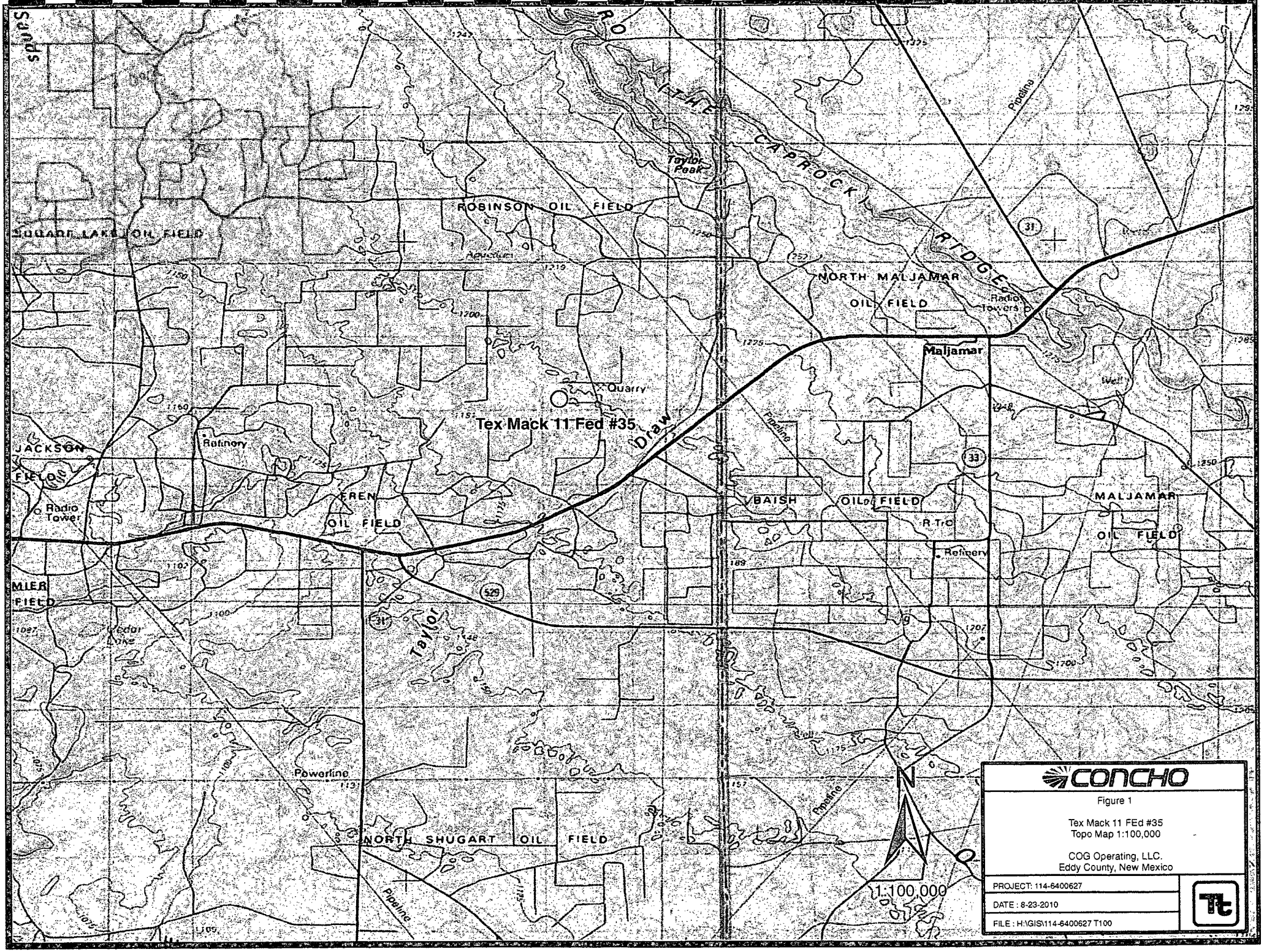
Based upon the remediation performed at this site, COG Operating LLC respectfully requests closure of this site. A form C-141 final is included in Appendix A. If you have any question or comments concerning the activities performed at the Site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Jeff Kindley, P.G.
Senior Project Manager

cc: Pat Ellis – COG
cc: Terry Gregston – BLM

FIGURES



CONCHO

Figure 1

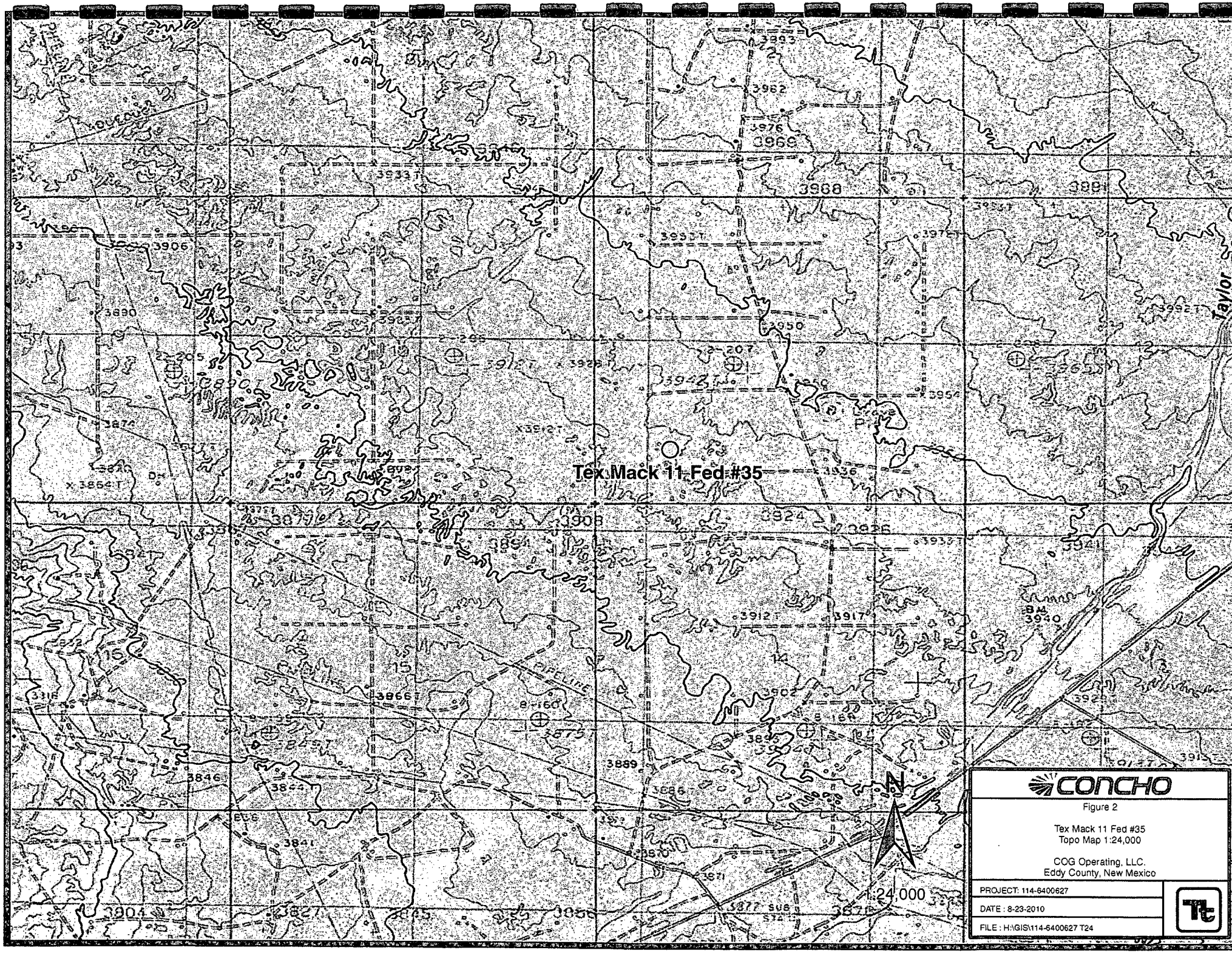
Tex Mack 11 FEd #35
Topo Map 1:100,000

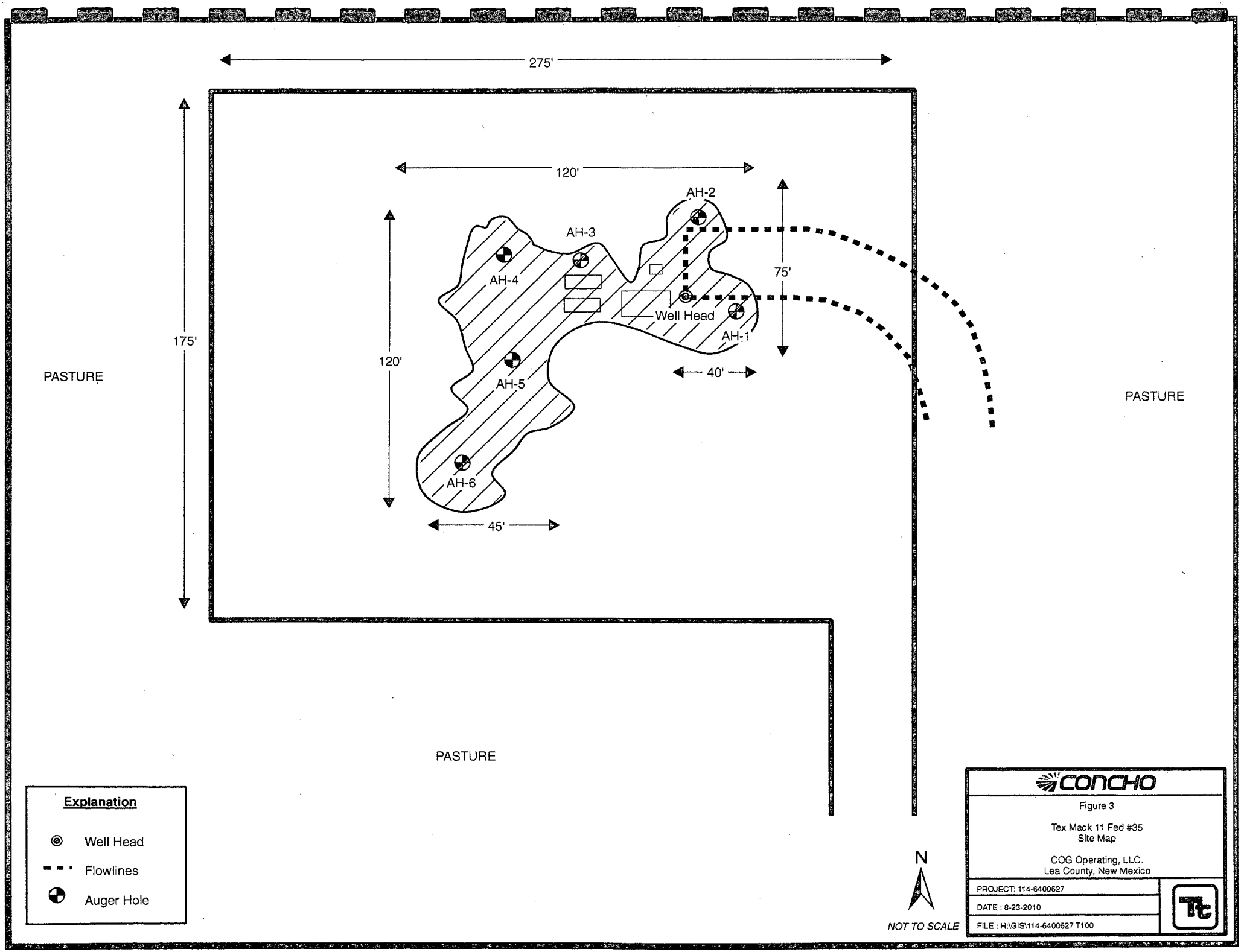
COG Operating, LLC.
Eddy County, New Mexico

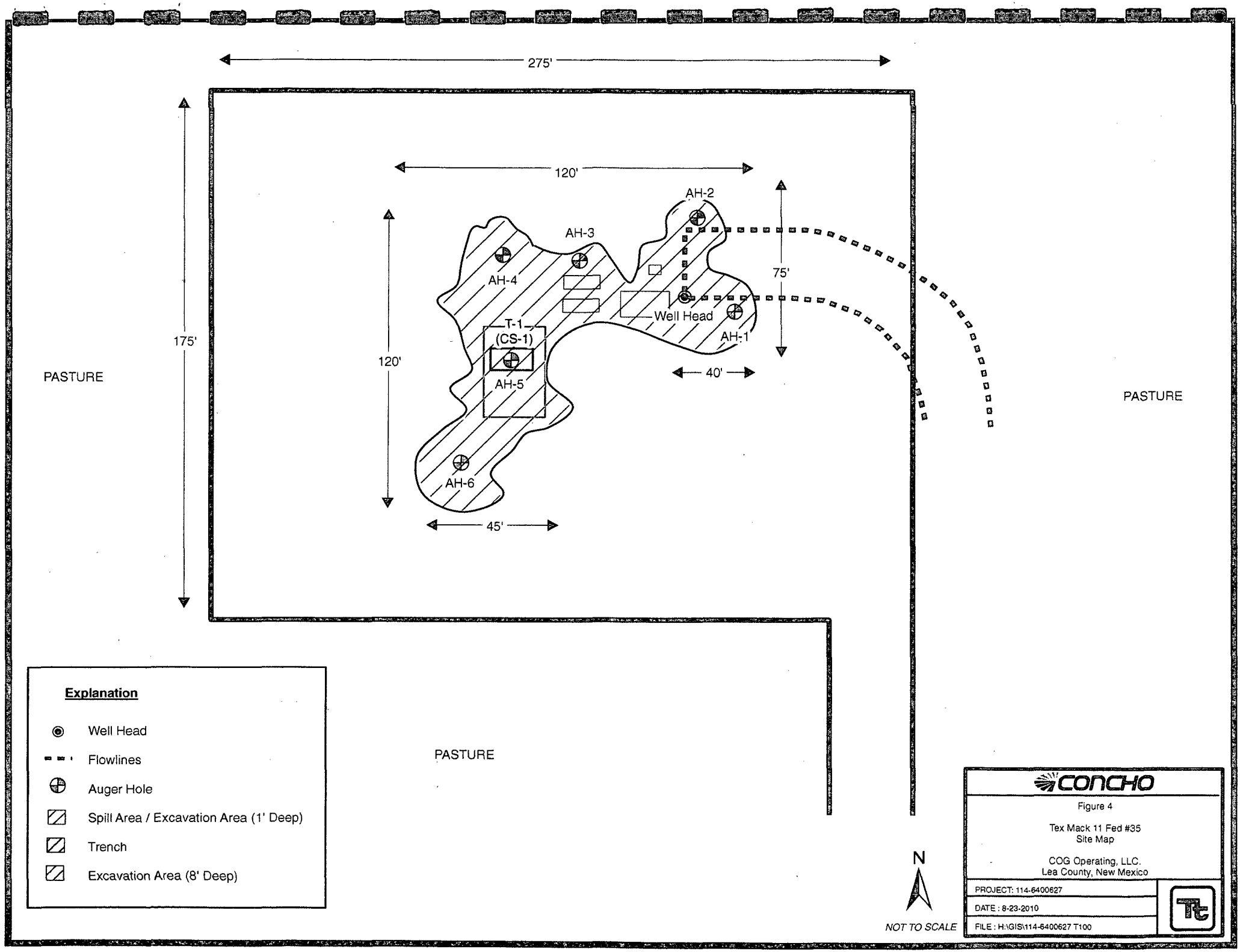
PROJECT: 114-6400627

DATE : 8-23-2010

FILE : H:\GIS\114-6400627 T100


Tex Mack 11 Fed #35
Taylor
PIPELINE
1:24,000
CONCHO
Figure 2
Tex Mack 11 Fed #35
Topo Map 1:24,000
COG Operating, LLC.
Eddy County, New Mexico
PROJECT: 114-6400627
DATE : 8-23-2010
FILE : H:\GIS\114-6400627 T24


275'
175'
120'
120'
75'
40'
45'
AH-1
AH-2
AH-3
AH-4
AH-5
AH-6
Well Head
PASTURE
PASTURE
PASTURE
Explanation
Well Head
Flowlines
Auger Hole
N
NOT TO SCALE
CONCHO
Figure 3
Tex Mack 11 Fed #35
Site Map
COG Operating, LLC.
Lea County, New Mexico
PROJECT: 114-6400627
DATE : 8-23-2010
FILE : H:\GIS\114-6400527 T100


275'
175'
120'
120'
75'
40'
45'
AH-1
AH-2
AH-3
AH-4
AH-5
AH-6
T-1
(CS-1)
Well Head
PASTURE
PASTURE
PASTURE
Explanation
Well Head
Flowlines
Auger Hole
Spill Area / Excavation Area (1' Deep)
Trench
Excavation Area (8' Deep)
N
NOT TO SCALE
CONCHO
Figure 4
Tex Mack 11 Fed #35
Site Map
COG Operating, LLC.
Lea County, New Mexico
PROJECT: 114-6400627
DATE : 8-23-2010
FILE : H:\GIS\114-6400627 T100

TABLES

Table 1
COG Operating LLC.
TEX-MACK 11 FEDERAL #35
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-1	8/12/2010	0-1'			X	3.01	51.6	54.6	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	1,520
	"	1-1.5'		X		-	-	-	-	-	-	-		317
	"	2-2.5'		X		-	-	-	-	-	-	-		206
	"	3-3.5'		X		-	-	-	-	-	-	-		212
	"	4-4.5'		X		-	-	-	-	-	-	-		<200
AH-2	8/12/2010	0-1'			X	9.77	<50.0	9.77	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	3,320
	"	1-1.5'		X		-	-	-	-	-	-	-		808
	"	2-2.5'		X		-	-	-	-	-	-	-		351
	"	3-3.5'		X		-	-	-	-	-	-	-		<200
	"	4-4.5'		X		-	-	-	-	-	-	-		<200
	"	5-5.5'		X		-	-	-	-	-	-	-		1,890
	"	6-6.5'		X		-	-	-	-	-	-	-		351
	"	6.5-7'		X		-	-	-	-	-	-	-		<200
AH-3	8/12/2010	0-1'			X	<2.00	<50.0	<50.0	-	-	-	-		2,100
	"	1-1.5'		X		-	-	-	-	-	-	-		233
	"	2-2.5'		X		-	-	-	-	-	-	-		<200
	"	3-3.5'		X		-	-	-	-	-	-	-		<200
	"	4-4.5'		X		-	-	-	-	-	-	-		<200
AH-4	8/12/2010	0-1'			X	1,910	4,580	6,490	1.15	14.6	26.8	33.3	75.85	731
	"	1-1.5'		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200		<200
	"	2-2.5'		X		-	-	-	-	-	-	-		<200
	"	3-3.5'		X		-	-	-	-	-	-	-		<200
	"	4-4.5'		X		-	-	-	-	-	-	-		<200

Table 1
COG Operating LLC.
TEX-MACK 11 FEDERAL #35
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-5	8/12/2010	0-1'			X	2,720	2,590	5,310	6.43	36.0	32.0	36.5	**110.93**	1,620
	"	1-1.5'			X	4,320	6,940	11,260	22.4	104	81.8	95.6	**303.8**	704
	"	2-2.5'			X	2,610	4,470	7,080	7.78	67.6	58.1	67.6	**201.08**	307
	"	3-3.5'			X	2,940	3,430	6,370	4.16	60.8	58.8	67.2	**190.96**	302
	"	4-4.5'			X	1,060	4,040	5,100	1.71	22.2	22.1	24.9	**70.91**	222
	"	5-5.5'			X	2,310	4,460	6,770	12.0	86.9	77.6	83.1	**259.6**	<200
	"	6-6.5'		X		2.40	<50.0	2.40	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	291
	"	7-7.5'		X		-	-	-	-	-	-	-		1,220
	"	8-8.5'		X		-	-	-	-	-	-	-		1,360
	"	9-9.5'		X		-	-	-	-	-	-	-		1,060
CS-1	10/21/2010	6-6.5'		X		112	2.58	115	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
(bottom hole)														
T-1	10/21/2010	8-8.5'		X		1860	3020	4880	7.38	57.4	60.1	69.6	194.48	<200
(trench)		10-10.5	X			<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	207
		12-12.5	X			-	-	-	-	-	-	-		864
		14-14.5	X			-	-	-	-	-	-	-		<200
North wall	10/21/2010	-				<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
East wall	10/21/2010	-				<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
Southwall	10/21/2010	-				<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
west wall	10/21/2010	-				<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200

Table 1
COG Operating LLC.
TEX-MACK 11 FEDERAL #35
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
AH-6	8/12/2010	0-1'			X	<2.00	<50.0	<50.0	-	-	-	-		1,280
	"	1-1.5'		X		-	-	-	-	-	-	-		<200
	"	2-2.5'		X		-	-	-	-	-	-	-		<200
	"	3-3.5'		X		-	-	-	-	-	-	-		<200
	"	4-4.5'		X		-	-	-	-	-	-	-		<200

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

APPENDIX A
INITIAL/FINAL C-141

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

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AUG - 6 2010
NMOCD ARTESIA

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

nMLB1027952232

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC 229 137	Contact	Pat Ellis
Address	550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	Tex Mack 11 Federal #35	Facility Type	Well

Surface Owner	Mineral Owner	Lease No. (API#) 30-015-37667
Federal		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	11	17S	31E	920	SOUTH	1024	WEST	EDDY

Latitude 32 50.659 **Longitude** 103 50.721

NATURE OF RELEASE

Type of Release: Produced Fluid	Volume of Release: 70bbls	Volume Recovered: 60bbls
Source of Release: Wellbore (casing)	Date and Hour of Occurrence: 07/27/2010	Date and Hour of Discovery: 07/27/2010 1:00 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher—OCD	
By Whom? Josh Russo	Date and Hour: 07/28/2010 10:52 a.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 well was flowing up the backside and a shallow hole in the 5 ½ casing allowed fluid to escape into the 8 5/8 casing. The fluid in the 8 5/8 casing then escaped into the wellbore due to an improper seal between the 5 ½ and 8 5/8 casing. The well is in the process of being repaired and put back into service.

Describe Area Affected and Cleanup Action Taken.*

Initially 70bbls of produced fluid escaped from the wellbore covering roughly 40% of the well pad in fluid. We were able to recover 60bbls of fluid with a vacuum truck. All released fluid remained on the well pad location. 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: Signed By: Mike Bratcher
Title: HSE Coordinator	Approval Date: OCT 06 2010 Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: REMEDIATION per OCD Rules and Guidelines. SUBMIT REMEDIATION PROPOSAL BY: Proposal Rec'd 10/4/10
Date: 08/03/2010 Phone: 432-212-2399	Attached ☐

* Attach Additional Sheets If Necessary

2RP-443

pMLB1027934853

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

RECEIVED
FEB 16 2011
NMOCD ARTESIA

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 Tex Mack 11 Federal #35	Facility Type **Well**

Surface Owner: Federal	Mineral Owner	Lease No. API 30-015-37667

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	11	17S	31E	920	South	1024	West	Eddy

Latitude N 32 50.659° **Longitude** W 103 50.721°

NATURE OF RELEASE

Type of Release: Produced Fluids	Volume of Release 70 bbls	Volume Recovered 145 bbls
Source of Release: Wellbore (casing)	Date and Hour of Occurrence 7/27/10	Date and Hour of Discovery 7/27/10 1:00 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **Mike Bratcher - OCD**	
By Whom? Josh Russo	Date and Hour 7/28/10 10:52 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

The well was flowing up the backside and a shallow hole in the 5 ½ casing allowed fluid to escape into the 8 5/8 casing. The fluid in the 8 5/8 casing then escaped into the wellbore due to an improper seal. The well is in the process of being repaired and put back into service.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. Site was then 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: Jeffrey Kindley for Ike Tavarez as agent for COG	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:	Attached ☐
Date: February 16, 2011 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

APPENDIX B
WATER WELL REPORT

Water Well Data
Average Depth to Groundwater (ft)
COG - Tex Mack 11 Federal #35
Eddy County, New Mexico

16 South 30 East

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

16 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 288
18	17	16	15	14	13 113
19	20	21	22	23	24
30	29	28	27	26	25
31 290	32	33	34	35	36

16 South 32 East

6	5	4	3 65	2 265	1 265
7	8	9	10	11	12 215
18	17	16 221	15	14	13 215
19 220	20	21 210	22	23 210	24
30	29	28	27	26 243	25
31	32	33	34	35	36 260

17 South 30 East

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

17 South 31 East

6	5	4	3	2	1
7	8	9	10	11 SITE	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

17 South 32 East

6	5	4 82	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

18 South 30 East

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

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

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy. County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

APPENDIX C
LABORATORY ANALYSIS

TRACEANALYSIS, INC.

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

Certifications

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

NELAP Certifications

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

Analytical and Quality Control Report

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

Report Date: August 23, 2010

Work Order: 10081616

Project Location: Eddy County, NM
Project Name: COG/Tex-Mark 11 Fed. #35
Project Number: 114-6400627

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
241117	AH-1 0-1'	soil	2010-08-12	00:00	2010-08-13
241118	AH-1 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241119	AH-1 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241120	AH-1 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241121	AH-1 4-4.5'	soil	2010-08-12	00:00	2010-08-13
241122	AH-2 0-1'	soil	2010-08-12	00:00	2010-08-13
241123	AH-2 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241124	AH-2 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241125	AH-2 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241126	AH-2 4-4.5'	soil	2010-08-12	00:00	2010-08-13

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
241127	AH-2 5-5.5'	soil	2010-08-12	00:00	2010-08-13
241128	AH-2 6-6.5'	soil	2010-08-12	00:00	2010-08-13
241129	AH-2 6.5-7'	soil	2010-08-12	00:00	2010-08-13
241130	AH-3 0-1'	soil	2010-08-12	00:00	2010-08-13
241131	AH-3 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241132	AH-3 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241133	AH-3 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241134	AH-3 4-4.5'	soil	2010-08-12	00:00	2010-08-13
241135	AH-4 0-1'	soil	2010-08-12	00:00	2010-08-13
241136	AH-4 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241137	AH-4 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241138	AH-4 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241139	AH-4 4-4.5'	soil	2010-08-12	00:00	2010-08-13
241140	AH-5 0-1'	soil	2010-08-12	00:00	2010-08-13
241141	AH-5 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241142	AH-5 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241143	AH-5 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241144	AH-5 4-4.5'	soil	2010-08-12	00:00	2010-08-13
241145	AH-5 5-5.5'	soil	2010-08-12	00:00	2010-08-13
241146	AH-5 6-6.5'	soil	2010-08-12	00:00	2010-08-13
241147	AH-5 7-7.5'	soil	2010-08-12	00:00	2010-08-13
241148	AH-5 8-8.5'	soil	2010-08-12	00:00	2010-08-13
241149	AH-5 9-9.5'	soil	2010-08-12	00:00	2010-08-13
241150	AH-6 0-1'	soil	2010-08-12	00:00	2010-08-13
241151	AH-6 1-1.5'	soil	2010-08-12	00:00	2010-08-13
241152	AH-6 2-2.5'	soil	2010-08-12	00:00	2010-08-13
241153	AH-6 3-3.5'	soil	2010-08-12	00:00	2010-08-13
241154	AH-6 4-4.5'	soil	2010-08-12	00:00	2010-08-13

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

Michael Abel

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/Tex-Mark 11 Fed. #35 were received by TraceAnalysis, Inc. on 2010-08-13 and assigned to work order 10081616. Samples for work order 10081616 were received intact at a temperature of 18.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	62330	2010-08-18 at 09:15	72769	2010-08-18 at 11:58
BTEX	S 8021B	62422	2010-08-20 at 12:00	72806	2010-08-20 at 15:59
Chloride (Titration)	SM 4500-Cl B	62281	2010-08-16 at 10:09	72663	2010-08-16 at 16:28
Chloride (Titration)	SM 4500-Cl B	62282	2010-08-16 at 10:10	72664	2010-08-16 at 16:29
Chloride (Titration)	SM 4500-Cl B	62283	2010-08-16 at 10:10	72665	2010-08-16 at 16:29
Chloride (Titration)	SM 4500-Cl B	62284	2010-08-16 at 10:10	72666	2010-08-16 at 16:30
Chloride (Titration)	SM 4500-Cl B	62286	2010-08-16 at 10:11	72667	2010-08-16 at 16:31
TPH DRO - NEW	S 8015 D	62397	2010-08-19 at 10:46	72774	2010-08-19 at 10:46
TPH DRO - NEW	S 8015 D	62429	2010-08-20 at 13:56	72814	2010-08-20 at 13:56
TPH DRO - NEW	S 8015 D	62460	2010-08-23 at 15:02	72851	2010-08-23 at 15:02
TPH GRO	S 8015 D	62330	2010-08-18 at 09:15	72770	2010-08-18 at 12:25
TPH GRO	S 8015 D	62422	2010-08-20 at 12:00	72807	2010-08-20 at 16:27

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 10081616 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

Samples received on ice.

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

Analytical Report

Sample: 241117 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72806	Date Analyzed:	2010-08-20	Analyzed By:	AG
Prep Batch:	62422	Sample Preparation:	2010-08-20	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)		2.03	mg/Kg	1	2.00	102	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.90	mg/Kg	1	2.00	95	38.4 - 157

Sample: 241117 - AH-1 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72663	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62281	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1520**	mg/Kg	100	4.00

Sample: 241117 - AH-1 0-1'

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

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**51.6**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		101	mg/Kg	1	100	101	70 - 130

Sample: 241117 - AH-1 0-1'

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

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**3.01**	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.832	mg/Kg	1	2.00	42	48.5 - 152
4-Bromofluorobenzene (4-BFB)		0.879	mg/Kg	1	2.00	44	42 - 159

Sample: 241118 - AH-1 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72663	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62281	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**317**	mg/Kg	50	4.00

Sample: 241119 - AH-1 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72663	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62281	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**206**	mg/Kg	50	4.00

[1] Surrogate out due to peak interference. •

Sample: 241120 - AH-1 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72663	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62281	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**212**	mg/Kg	50	4.00

Sample: 241121 - AH-1 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241122 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72769	Date Analyzed:	2010-08-18	Analyzed By:	AG
Prep Batch:	62330	Sample Preparation:	2010-08-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
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)		1.18	mg/Kg	1	2.00	59	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.21	mg/Kg	1	2.00	60	38.4 - 157

Sample: 241122 - AH-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241122 - AH-2 0-1'

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

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		103	mg/Kg	1	100	103	70 - 130

Sample: 241122 - AH-2 0-1'

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

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**9.77**	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.35	mg/Kg	1	2.00	68	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.64	mg/Kg	1	2.00	82	42 - 159

Sample: 241123 - AH-2 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**808**	mg/Kg	50	4.00

Sample: 241124 - AH-2 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**351**	mg/Kg	50	4.00

Sample: 241125 - AH-2 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241126 - AH-2 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241127 - AH-2 5-5.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1890**		mg/Kg	100	4.00

Sample: 241128 - AH-2 6-6.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**351**		mg/Kg	50	4.00

Sample: 241129 - AH-2 6.5-7'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241130 - AH-3 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2100**		mg/Kg	100	4.00

Sample: 241130 - AH-3 0-1'

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

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		104	mg/Kg	1	100	104	70 - 130

Sample: 241130 - AH-3 0-1'

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

Parameter	Flag	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)		1.64	mg/Kg	1	2.00	82	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.42	mg/Kg	1	2.00	71	42 - 159

Sample: 241131 - AH-3 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**233**		mg/Kg	50	4.00

Sample: 241132 - AH-3 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241133 - AH-3 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241134 - AH-3 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241135 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72769	Date Analyzed:	2010-08-18	Analyzed By:	AG
Prep Batch:	62330	Sample Preparation:	2010-08-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**1.15**	mg/Kg	20	0.0200
Toluene		**14.6**	mg/Kg	20	0.0200

continued ...

sample 241135 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		**26.8**	mg/Kg	20	0.0200
Xylene		**33.3**	mg/Kg	20	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[2]	9.91	mg/Kg	20	20.0	50	52.8 - 137
4-Bromofluorobenzene (4-BFB)		19.1	mg/Kg	20	20.0	96	38.4 - 157

Sample: 241135 - AH-4 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**731**	mg/Kg	50	4.00

Sample: 241135 - AH-4 0-1'

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

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**4580**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[3]	357	mg/Kg	5	100	357	70 - 130

Sample: 241135 - AH-4 0-1'

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

[2]Surrogate out due to peak interference.
[3]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**1910**	mg/Kg	20	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		19.4	mg/Kg	20	20.0	97	48.5 - 152
4-Bromofluorobenzene (4-BFB)		28.5	mg/Kg	20	20.0	142	42 - 159

Sample: 241136 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72806	Date Analyzed:	2010-08-20	Analyzed By:	AG
Prep Batch:	62422	Sample Preparation:	2010-08-20	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)		1.69	mg/Kg	1	2.00	84	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.59	mg/Kg	1	2.00	80	38.4 - 157

Sample: 241136 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241136 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72814	Date Analyzed:	2010-08-20	Analyzed By:	kg
Prep Batch:	62429	Sample Preparation:	2010-08-20	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	[4]	231	mg/Kg	1	100	231	70 - 130

Sample: 241136 - AH-4 1-1.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72807	Date Analyzed:	2010-08-20	Analyzed By:	AG
Prep Batch:	62422	Sample Preparation:	2010-08-20	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)		1.87	mg/Kg	1	2.00	94	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.73	mg/Kg	1	2.00	86	42 - 159

Sample: 241137 - AH-4 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

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

Sample: 241138 - AH-4 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241139 - AH-4 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241140 - AH-5 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72769	Date Analyzed:	2010-08-18	Analyzed By:	AG
Prep Batch:	62330	Sample Preparation:	2010-08-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**6.43**	mg/Kg	20	0.0200
Toluene		**36.0**	mg/Kg	20	0.0200
Ethylbenzene		**32.0**	mg/Kg	20	0.0200
Xylene		**36.5**	mg/Kg	20	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		17.0	mg/Kg	20	20.0	85	52.8 - 137
4-Bromofluorobenzene (4-BFB)		26.2	mg/Kg	20	20.0	131	38.4 - 157

Sample: 241140 - AH-5 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1620**		mg/Kg	100	4.00

Sample: 241140 - AH-5 0-1'

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

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**2590**		mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[5]	195	mg/Kg	5	100	195	70 - 130

Sample: 241140 - AH-5 0-1'

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

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**2720**		mg/Kg	20	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[6]	43.3	mg/Kg	20	20.0	216	48.5 - 152
4-Bromofluorobenzene (4-BFB)	[7]	32.1	mg/Kg	20	20.0	160	42 - 159

[5] High surrogate recovery due to peak interference.
[6] High surrogate recovery due to peak interference.
[7] High surrogate recovery due to peak interference.

Sample: 241141 - AH-5 1-1.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	72806	Date Analyzed:	2010-08-20	Analyzed By:	AG
Prep Batch:	62422	Sample Preparation:	2010-08-20	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**22.4**		mg/Kg	100	0.0200
Toluene		**104**		mg/Kg	100	0.0200
Ethylbenzene		**81.8**		mg/Kg	100	0.0200
Xylene		**95.6**		mg/Kg	100	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		92.8	mg/Kg	100	100	93	52.8 - 137
4-Bromofluorobenzene (4-BFB)		107	mg/Kg	100	100	107	38.4 - 157

Sample: 241141 - AH-5 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**704**		mg/Kg	50	4.00

Sample: 241141 - AH-5 1-1.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72814	Date Analyzed:	2010-08-20	Analyzed By:	kg
Prep Batch:	62429	Sample Preparation:	2010-08-20	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**6940**		mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[8]	499	mg/Kg	10	100	499	70 - 130

[8] High surrogate recovery due to peak interference.

Sample: 241141 - AH-5 1-1.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	72807	Date Analyzed:	2010-08-20	Analyzed By:	AG
Prep Batch:	62422	Sample Preparation:	2010-08-20	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**4320**	mg/Kg	100	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		106	mg/Kg	100	100	106	48.5 - 152
4-Bromofluorobenzene (4-BFB)		124	mg/Kg	100	100	124	42 - 159

Sample: 241142 - AH-5 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**307**	mg/Kg	50	4.00

Sample: 241142 - AH-5 2-2.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72851	Date Analyzed:	2010-08-23	Analyzed By:	kg
Prep Batch:	62460	Sample Preparation:	2010-08-23	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**4470**	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[9]	329	mg/Kg	10	100	329	70 - 130

[9] High surrogate recovery due to peak interference.

Sample: 241143 - AH-5 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**302**	mg/Kg	50	4.00

Sample: 241143 - AH-5 3-3.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	72851	Date Analyzed:	2010-08-23	Analyzed By:	kg
Prep Batch:	62460	Sample Preparation:	2010-08-23	Prepared By:	kg

Parameter	Flag	Result	RL Units	Dilution	RL
DRO		**3430**	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[10]	278	mg/Kg	10	100	278	70 - 130

Sample: 241144 - AH-5 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241145 - AH-5 5-5.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

[10] High surrogate recovery due to peak interference.

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

Sample: 241146 - AH-5 6-6.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**291**	mg/Kg	50	4.00

Sample: 241147 - AH-5 7-7.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1220**	mg/Kg	100	4.00

Sample: 241148 - AH-5 8-8.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1360**	mg/Kg	100	4.00

Sample: 241149 - AH-5 9-9.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241150 - AH-6 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72666	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62284	Sample Preparation:	2010-08-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1280**	mg/Kg	100	4.00

Sample: 241150 - AH-6 0-1'

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

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

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

Sample: 241150 - AH-6 0-1'

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.57	mg/Kg	1	2.00	78	48.5 - 152

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		1.44	mg/Kg	1	2.00	72	42 - 159

Sample: 241151 - AH-6 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72667	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62286	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241152 - AH-6 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72667	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62286	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241153 - AH-6 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72667	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62286	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Sample: 241154 - AH-6 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	72667	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62286	Sample Preparation:	2010-08-16	Prepared By:	AR

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

Method Blank (1) QC Batch: 72663

QC Batch:	72663	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62281	QC Preparation:	2010-08-16	Prepared By:	AR

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

Method Blank (1) QC Batch: 72664

QC Batch:	72664	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62282	QC Preparation:	2010-08-16	Prepared By:	AR

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

Method Blank (1) QC Batch: 72665

QC Batch:	72665	Date Analyzed:	2010-08-16	Analyzed By:	AR
Prep Batch:	62283	QC Preparation:	2010-08-16	Prepared By:	AR

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

Method Blank (1) QC Batch: 72666

QC Batch: 72666 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62284 | QC Preparation: 2010-08-16 | Prepared By: AR

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

Method Blank (1) QC Batch: 72667

QC Batch: 72667 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62286 | QC Preparation: 2010-08-16 | Prepared By: AR

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

Method Blank (1) QC Batch: 72769

QC Batch: 72769 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
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)		1.78	mg/Kg	1	2.00	89	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.48	mg/Kg	1	2.00	74	55.4 - 132

Method Blank (1) QC Batch: 72770

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

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

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

Method Blank (1) QC Batch: 72774

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

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

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

Method Blank (1) QC Batch: 72806

QC Batch: 72806 Date Analyzed: 2010-08-20 Analyzed By: AG
Prep Batch: 62422 QC Preparation: 2010-08-20 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)		1.76	mg/Kg	1	2.00	88	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.51	mg/Kg	1	2.00	76	55.4 - 132

Method Blank (1) QC Batch: 72807

QC Batch: 72807 Date Analyzed: 2010-08-20 Analyzed By: AG
Prep Batch: 62422 QC Preparation: 2010-08-20 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)		2.03	mg/Kg	1	2.00	102	67.6 - 150
4-Bromofluorobenzene (4-BFB)		1.63	mg/Kg	1	2.00	82	52.4 - 130

Method Blank (1) QC Batch: 72814

QC Batch: 72814 | Date Analyzed: 2010-08-20 | Analyzed By: kg
Prep Batch: 62429 | QC Preparation: 2010-08-20 | 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		95.2	mg/Kg	1	100	95	70 - 130

Method Blank (1) QC Batch: 72851

QC Batch: 72851 | Date Analyzed: 2010-08-23 | Analyzed By: kg
Prep Batch: 62460 | QC Preparation: 2010-08-23 | Prepared By: kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		88.1	mg/Kg	1	100	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 72663 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62281 | QC Preparation: 2010-08-16 | Prepared By: AR

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.0	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: 72664 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62282 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.0	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: 72665 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62283 | QC Preparation: 2010-08-16 | 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: 72666 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62284 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.1	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	103	mg/Kg	1	100	<2.18	103	85 - 115	5	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 72667 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62286 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.4	mg/Kg	1	100	<2.18	97	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	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: 72769 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.96	mg/Kg	1	2.00	<0.0150	98	81.9 - 108
Toluene	1.89	mg/Kg	1	2.00	<0.00950	94	81.9 - 107
Ethylbenzene	1.76	mg/Kg	1	2.00	<0.0106	88	78.4 - 107
Xylene	5.34	mg/Kg	1	6.00	<0.00930	89	79.1 - 107

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.97	mg/Kg	1	2.00	<0.0150	98	81.9 - 108	0	20
Toluene	1.91	mg/Kg	1	2.00	<0.00950	96	81.9 - 107	1	20
Ethylbenzene	1.77	mg/Kg	1	2.00	<0.0106	88	78.4 - 107	1	20
Xylene	5.38	mg/Kg	1	6.00	<0.00930	90	79.1 - 107	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.76	1.73	mg/Kg	1	2.00	88	86	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.65	1.64	mg/Kg	1	2.00	82	82	69.8 - 121

Laboratory Control Spike (LCS-1)

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

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

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	14.4	mg/Kg	1	20.0	<1.65	72	69.9 - 95.4	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	1.64	mg/Kg	1	2.00	100	82	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.78	1.59	mg/Kg	1	2.00	89	80	68.2 - 132

Laboratory Control Spike (LCS-1)

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	204	mg/Kg	1	250	<14.5	82	57.4 - 133.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	215	mg/Kg	1	250	<14.5	86	57.4 - 133.4	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	103	mg/Kg	1	100	116	103	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 72806 | Date Analyzed: 2010-08-20 | Analyzed By: AG
Prep Batch: 62422 | QC Preparation: 2010-08-20 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.98	mg/Kg	1	2.00	<0.0150	99	81.9 - 108
Toluene	1.91	mg/Kg	1	2.00	<0.00950	96	81.9 - 107
Ethylbenzene	1.78	mg/Kg	1	2.00	<0.0106	89	78.4 - 107
Xylene	5.40	mg/Kg	1	6.00	<0.00930	90	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	2.00	mg/Kg	1	2.00	<0.0150	100	81.9 - 108	1	20
Toluene	1.93	mg/Kg	1	2.00	<0.00950	96	81.9 - 107	1	20
Ethylbenzene	1.80	mg/Kg	1	2.00	<0.0106	90	78.4 - 107	1	20
Xylene	5.46	mg/Kg	1	6.00	<0.00930	91	79.1 - 107	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.87	1.85	mg/Kg	1	2.00	94	92	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.80	1.79	mg/Kg	1	2.00	90	90	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 72807 | Date Analyzed: 2010-08-20 | Analyzed By: AG
Prep Batch: 62422 | QC Preparation: 2010-08-20 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.1	mg/Kg	1	20.0	<1.65	76	69.9 - 95.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.0	mg/Kg	1	20.0	<1.65	75	69.9 - 95.4	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	1.95	mg/Kg	1	2.00	104	98	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.81	1.66	mg/Kg	1	2.00	90	83	68.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 72814 | Date Analyzed: 2010-08-20 | Analyzed By: kg
Prep Batch: 62429 | QC Preparation: 2010-08-20 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	247	mg/Kg	1	250	<14.5	99	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	238	mg/Kg	1	250	<14.5	95	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	118	115	mg/Kg	1	100	118	115	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 72851 | Date Analyzed: 2010-08-23 | Analyzed By: kg
Prep Batch: 62460 | QC Preparation: 2010-08-23 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	221	mg/Kg	1	250	<14.5	88	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	218	mg/Kg	1	250	<14.5	87	57.4 - 133.4	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	100	98.1	mg/Kg	1	100	100	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 241120

QC Batch: 72663 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62281 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10200	mg/Kg	100	10000	<218	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10500	mg/Kg	100	10000	<218	103	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: 241130

QC Batch: 72664 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62282 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11500	mg/Kg	100	10000	2100	94	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11800	mg/Kg	100	10000	2100	97	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: 241140

QC Batch: 72665 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62283 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11700	mg/Kg	100	10000	1620	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	12400	mg/Kg	100	10000	1620	108	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: 241150

QC Batch: 72666 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62284 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10700	mg/Kg	100	10000	1280	94	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11400	mg/Kg	100	10000	1280	101	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: 241154

QC Batch: 72667 | Date Analyzed: 2010-08-16 | Analyzed By: AR
Prep Batch: 62286 | QC Preparation: 2010-08-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10100	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	10300	mg/Kg	100	10000	<218	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: 241219

QC Batch: 72769 | Date Analyzed: 2010-08-18 | Analyzed By: AG
Prep Batch: 62330 | QC Preparation: 2010-08-18 | Prepared By: AG

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.15	mg/Kg	1	2.00	<0.0150	108	80.5 - 112
Toluene	2.13	mg/Kg	1	2.00	<0.00950	106	82.4 - 113
Ethylbenzene	2.15	mg/Kg	1	2.00	<0.0106	108	83.9 - 114
Xylene	6.47	mg/Kg	1	6.00	<0.00930	108	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	[11]	1.52	mg/Kg	1	2.00	<0.0150	76	80.5 - 112	34	20
Toluene	[12]	1.50	mg/Kg	1	2.00	<0.00950	75	82.4 - 113	35	20
Ethylbenzene	[13]	1.51	mg/Kg	1	2.00	<0.0106	76	83.9 - 114	35	20
Xylene	[14]	4.57	mg/Kg	1	6.00	<0.00930	76	84 - 114	34	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.74	1.18	mg/Kg	1	2	87	59	41.3 - 117
4-Bromofluorobenzene (4-BFB)	1.67	1.14	mg/Kg	1	2	84	57	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 241299

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

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

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.7	mg/Kg	1	20.0	<1.65	78	61.8 - 114	7	20

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

[11] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[12] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[13] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[14] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.12	1.23	mg/Kg	1	2	56	62	50 - 162
4-Bromofluorobenzene (4-BFB)	1.16	1.27	mg/Kg	1	2	58	64	50 - 162

Matrix Spike (MS-1) Spiked Sample: 241291

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

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	220	mg/Kg	1	250	<14.5	88	35.2 - 167.1

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	228	mg/Kg	1	250	<14.5	91	35.2 - 167.1	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	107	106	mg/Kg	1	100	107	106	70 - 130

Matrix Spike (MS-1) Spiked Sample: 241117

QC Batch: 72806 | Date Analyzed: 2010-08-20 | Analyzed By: AG
Prep Batch: 62422 | QC Preparation: 2010-08-20 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.24	mg/Kg	1	2.00	<0.0150	112	80.5 - 112
Toluene	2.20	mg/Kg	1	2.00	<0.00950	110	82.4 - 113
Ethylbenzene	2.18	mg/Kg	1	2.00	<0.0106	109	83.9 - 114
Xylene	6.60	mg/Kg	1	6.00	<0.00930	110	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	2.04	mg/Kg	1	2.00	<0.0150	102	80.5 - 112	9	20
Toluene	2.00	mg/Kg	1	2.00	<0.00950	100	82.4 - 113	10	20
Ethylbenzene	1.96	mg/Kg	1	2.00	<0.0106	98	83.9 - 114	11	20
Xylene	5.95	mg/Kg	1	6.00	<0.00930	99	84 - 114	10	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.54	1.13	mg/Kg	1	2	77	56	41.3 - 117
4-Bromofluorobenzene (4-BFB)	1.56	1.15	mg/Kg	1	2	78	58	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 240437

QC Batch: 72807 | Date Analyzed: 2010-08-20 | Analyzed By: AG
Prep Batch: 62422 | QC Preparation: 2010-08-20 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	47.9	mg/Kg	1	20.0	31.242	83	61.8 - 114

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO [15]	62.9	mg/Kg	1	20.0	31.242	158	61.8 - 114	27	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)	1.51	1.58	mg/Kg	1	2	76	79	50 - 162
4-Bromofluorobenzene (4-BFB)	2.09	2.47	mg/Kg	1	2	104	124	50 - 162

Matrix Spike (MS-1) Spiked Sample: 241593

QC Batch: 72814 | Date Analyzed: 2010-08-20 | Analyzed By: kg
Prep Batch: 62429 | QC Preparation: 2010-08-20 | 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	255	mg/Kg	1	250	<14.5	102	35.2 - 167.1	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
n-Tricosane	115	117	mg/Kg	1	100	115	117	70 - 130

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

Matrix Spike (MS-1) Spiked Sample: 242100

QC Batch: 72851 | Date Analyzed: 2010-08-23 | Analyzed By: kg
Prep Batch: 62460 | QC Preparation: 2010-08-23 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	234	mg/Kg	1	250	<14.5	94	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	237	mg/Kg	1	250	<14.5	95	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	93.2	93.1	mg/Kg	1	100	93	93	70 - 130

Standard (ICV-1)

QC Batch: 72663 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-08-16

Standard (CCV-1)

QC Batch: 72663 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.0	98	85 - 115	2010-08-16

Standard (ICV-1)

QC Batch: 72664 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-08-16

Standard (CCV-1)

QC Batch: 72664 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-08-16

Standard (ICV-1)

QC Batch: 72665 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-08-16

Standard (CCV-1)

QC Batch: 72665 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.0	99	85 - 115	2010-08-16

Standard (ICV-1)

QC Batch: 72666 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.0	99	85 - 115	2010-08-16

Standard (CCV-1)

QC Batch: 72666 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-08-16

Standard (ICV-1)

QC Batch: 72667 | Date Analyzed: 2010-08-16 | Analyzed By: AR

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

Standard (CCV-1)

QC Batch: 72667 | Date Analyzed: 2010-08-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-08-16

Standard (CCV-1)

QC Batch: 72769 | Date Analyzed: 2010-08-18 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0958	96	80 - 120	2010-08-18
Toluene		mg/Kg	0.100	0.0921	92	80 - 120	2010-08-18
Ethylbenzene		mg/Kg	0.100	0.0853	85	80 - 120	2010-08-18
Xylene		mg/Kg	0.300	0.260	87	80 - 120	2010-08-18

Standard (CCV-2)

QC Batch: 72769 | Date Analyzed: 2010-08-18 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0980	98	80 - 120	2010-08-18
Toluene		mg/Kg	0.100	0.0947	95	80 - 120	2010-08-18
Ethylbenzene		mg/Kg	0.100	0.0888	89	80 - 120	2010-08-18
Xylene		mg/Kg	0.300	0.266	89	80 - 120	2010-08-18

Standard (CCV-1)

QC Batch: 72770 | Date Analyzed: 2010-08-18 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.972	97	80 - 120	2010-08-18

Standard (CCV-2)

QC Batch: 72770 Date Analyzed: 2010-08-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.07	107	80 - 120	2010-08-18

Standard (CCV-3)

QC Batch: 72770 Date Analyzed: 2010-08-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.875	88	80 - 120	2010-08-18

Standard (CCV-1)

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

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

Standard (CCV-2)

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

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

Standard (CCV-3)

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

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

Standard (CCV-4)

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

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

Standard (CCV-1)

QC Batch: 72806 Date Analyzed: 2010-08-20 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	2010-08-20
Toluene		mg/Kg	0.100	0.0990	99	80 - 120	2010-08-20
Ethylbenzene		mg/Kg	0.100	0.0937	94	80 - 120	2010-08-20
Xylene		mg/Kg	0.300	0.283	94	80 - 120	2010-08-20

Standard (CCV-2)

QC Batch: 72806 Date Analyzed: 2010-08-20 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	0.0996	100	80 - 120	2010-08-20
Toluene		mg/Kg	0.100	0.0951	95	80 - 120	2010-08-20
Ethylbenzene		mg/Kg	0.100	0.0873	87	80 - 120	2010-08-20
Xylene		mg/Kg	0.300	0.265	88	80 - 120	2010-08-20

Standard (CCV-3)

QC Batch: 72806 Date Analyzed: 2010-08-20 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.101	101	80 - 120	2010-08-20
Toluene		mg/Kg	0.100	0.0969	97	80 - 120	2010-08-20
Ethylbenzene		mg/Kg	0.100	0.0892	89	80 - 120	2010-08-20
Xylene		mg/Kg	0.300	0.269	90	80 - 120	2010-08-20

Standard (CCV-1)

QC Batch: 72807 Date Analyzed: 2010-08-20 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	0.984	98	80 - 120	2010-08-20

Standard (CCV-2)

QC Batch: 72807 Date Analyzed: 2010-08-20 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.00	100	80 - 120	2010-08-20

Standard (CCV-3)

QC Batch: 72807 Date Analyzed: 2010-08-20 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	1.14	114	80 - 120	2010-08-20

Standard (CCV-1)

QC Batch: 72814 Date Analyzed: 2010-08-20 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	240	96	80 - 120	2010-08-20

Standard (CCV-2)

QC Batch: 72814 | Date Analyzed: 2010-08-20 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	80 - 120	2010-08-20

Standard (CCV-3)

QC Batch: 72814 | Date Analyzed: 2010-08-20 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	109	80 - 120	2010-08-20

Standard (CCV-4)

QC Batch: 72814 | Date Analyzed: 2010-08-20 | 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	2010-08-20

Standard (CCV-2)

QC Batch: 72851 | Date Analyzed: 2010-08-23 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	240	96	80 - 120	2010-08-23

Standard (CCV-3)

QC Batch: 72851 | Date Analyzed: 2010-08-23 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	247	99	80 - 120	2010-08-23

WO#: 100816016

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: 4

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-4400627

PROJECT NAME: COG / Tex-Mack 11 Fed #35 Eddy Co, NM

LAB I.D. NUMBER	DATE 20 10	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
241117	8/12		S		X	AH-1 0-1'	1				X			X											X				
118						AH-1 1'-1.5'																							
119						AH-1 2'-2.5'																							
126						AH-1 3'-3.5'																							
121						AH-1 4'-4.5'																							
122						AH-2 0-1'								X															
123						AH-2 1'-1.5'																							
124						AH-2 2'-2.5'																							
125						AH-2 3'-3.5'																							
126						AH-2 4'-4.5'																							

RELINQUISHED BY: (Signature) Date: 8/13/10 Time: 1545
RECEIVED BY: (Signature) Date: 8/13/10 Time: 15:45
SAMPLED BY: (Print & Initial) JT/BG Date: 8/12/10 Time:

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

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

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

SAMPLE CONDITION WHEN RECEIVED: 18.0°C intact

REMARKS: If total TPH exceeds 5,000 mg/kg run deeper samples. Run BTEX on 3 highest TPH. If Total BTEX exceeds 50 mg/kg or Benzene exceeds 10 mg/kg run deeper samples

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

WO#: 10081616

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-C40027

PROJECT NAME: COG / Ter-Mack 11 Fed #35 Eddy Co, NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
241127	8/12		S		X	AH-2 5'-5.5'	1				X													X				
128						AH-2 6'-6.5'																						
129						AH-2 6.5'-7'																						
130						AH-3 0-1'																						
131						AH-3 1'-1.5'																						
132						AH-3 2'-2.5'																						
133						AH-3 3'-3.5'																						
134						AH-3 4'-4.5'																						
135						AH-4 0-1'																						
136						AH-4 1'-1.5'																						

RELINQUISHED BY: (Signature) — Date: 8/13/10 Time: 1545
RECEIVED BY: (Signature) — Date: 8/13/10 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) JT/RG — Date: 8/12/10 Time:

SAMPLE SHIPPED BY: (Circle) FEDEX HAND DELIVERED BUS 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: 18.0°c intact

REMARKS: If Total TPH exceeds 5,000 mg/kg run deeper samples. Run BTEX on 3 highest TPH, If total BTEX exceeds 50 mg/kg or Benzene exceeds 10 mg/kg run deeper samples

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

WO #. 10081616

Analysis Request of Chain of Custody Record

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-640 0627

PROJECT NAME: COG / Tex-Mack 11 Fed #35 Eddy Co, NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD	TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
241137	8/12		S		X	AH-4 2'-2.5'	1				X															X				
138						AH-4 3'-3.5'																									
139						AH-4 4'-4.5'																									
140						AH-5 0-1'									X																
141						AH-5 1'-1.5'																									
142						AH-5 2'-2.5'																									
143						AH-5 3'-3.5'																									
144						AH-5 4'-4.5'																									
145						AH-5 5'-5.5'																									
146						AH-5 6'-6.5'																									

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

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

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

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

SAMPLE CONDITION WHEN RECEIVED: 18.0°C intact

REMARKS: If total TPH exceed 5,000 mg/Kg run deeper samples / Run BTEX on 3 highest TPH, If total BTEX exceeds 50 mg/Kg or Benzene exceeds 10 mg/Kg run deeper samples

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

WO #: 100516116

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 4

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-4100627

PROJECT NAME: COG / Tex-Mack 11 Fed #35 Eddy Co, NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD / TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
24147	8/12		S		X	AH-5 7'-7.5'	1				X													X				
148						AH-5 8'-8.5'																						
149						AH-5 9'-9.5'																						
150						AH-6 0-1'								X														
151						AH-6 1'-1.5'																						
152						AH-6 2'-2.5'																						
153						AH-6 3'-3.5'																						
154						AH-6 4'-4.5'																						

RELINQUISHED BY: (Signature) Date: 8/12/10 Time: 1545 — RECEIVED BY: (Signature) Date: 8/13/10 Time: 13:45

SAMPLED BY: (Print & Initial) JV/RG Date: 8/12/10 Time:

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 18.0°c intact

REMARKS: If Total TPH exceeds 5,000 mg/kg run deeper samples / Run BETX on 3 highest TPH, If Total BTEX exceeds 50 mg/kg or Benzene exceeds 10 mg/kg run deeper samples

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

TRACEANALYSIS, INC.

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

Certifications

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

NELAP Certifications

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

Analytical and Quality Control Report

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

Report Date: October 27, 2010

Work Order: 10102214

Project Location: Eddy County, NM
Project Name: COG/Tex-Mark 11 Fed. #35
Project Number: 114-6400627

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
248295	CS-1 6'-6.5' Bottom Hole	soil	2010-10-21	00:00	2010-10-22
248296	North Side Wall	soil	2010-10-21	00:00	2010-10-22
248297	East Side Wall	soil	2010-10-21	00:00	2010-10-22
248298	South Side Wall	soil	2010-10-21	00:00	2010-10-22
248299	West Side Wall	soil	2010-10-21	00:00	2010-10-22
248300	T-1 8'-8.5'	soil	2010-10-21	00:00	2010-10-22
248301	T-1 10'-10.5'	soil	2010-10-21	00:00	2010-10-22
248302	T-1 12'-12.5'	soil	2010-10-21	00:00	2010-10-22
248303	T-1 14'-14.5'	soil	2010-10-21	00:00	2010-10-22

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

This report consists of a total of 22 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

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

Standard Flags

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

Case Narrative

Samples for project COG/Tex-Mark 11 Fed. #35 were received by TraceAnalysis, Inc. on 2010-10-22 and assigned to work order 10102214. Samples for work order 10102214 were received intact at a temperature of 3.8 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	64067	2010-10-25 at 09:00	74716	2010-10-25 at 09:47
Chloride (Titration)	SM 4500-Cl B	64082	2010-10-25 at 08:34	74751	2010-10-26 at 16:10
Chloride (Titration)	SM 4500-Cl B	64082	2010-10-25 at 08:34	74752	2010-10-26 at 16:11
TPH DRO - NEW	S 8015 D	64105	2010-10-25 at 11:00	74723	2010-10-25 at 11:00
TPH GRO	S 8015 D	64067	2010-10-25 at 09:00	74717	2010-10-25 at 10:13

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 10102214 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: 248295 - CS-1 6'-6.5' Bottom Hole

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		2.11	mg/Kg	1	2.00	106	66.5 - 108
4-Bromofluorobenzene (4-BFB)		2.00	mg/Kg	1	2.00	100	50 - 139

Sample: 248295 - CS-1 6'-6.5' Bottom Hole

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Sample: 248295 - CS-1 6'-6.5' Bottom Hole

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**112**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		103	mg/Kg	1	100	103	70 - 130

Sample: 248295 - CS-1 6'-6.5' Bottom Hole

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**2.58**	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.88	mg/Kg	1	2.00	94	73.4 - 122
4-Bromofluorobenzene (4-BFB)		1.91	mg/Kg	1	2.00	96	50 - 138

Sample: 248296 - North Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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]	2.27	mg/Kg	1	2.00	114	66.5 - 108
4-Bromofluorobenzene (4-BFB)		2.25	mg/Kg	1	2.00	112	50 - 139

Sample: 248296 - North Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

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

Sample: 248296 - North Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	Prepared By:	kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		90.5	mg/Kg	1	100	90	70 - 130

Sample: 248296 - North Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		2.18	mg/Kg	1	2.00	109	73.4 - 122
4-Bromofluorobenzene (4-BFB)		2.10	mg/Kg	1	2.00	105	50 - 138

Sample: 248297 - East Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		2.01	mg/Kg	1	2.00	100	66.5 - 108
4-Bromofluorobenzene (4-BFB)		1.87	mg/Kg	1	2.00	94	50 - 139

Sample: 248297 - East Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Sample: 248297 - East Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	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		87.5	mg/Kg	1	100	88	70 - 130

Sample: 248297 - East Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.80	mg/Kg	1	2.00	90	73.4 - 122
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	1	2.00	87	50 - 138

Sample: 248298 - South Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		1.81	mg/Kg	1	2.00	90	66.5 - 108
4-Bromofluorobenzene (4-BFB)		1.91	mg/Kg	1	2.00	96	50 - 139

Sample: 248298 - South Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Sample: 248298 - South Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	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		87.7	mg/Kg	1	100	88	70 - 130

Sample: 248298 - South Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		1.87	mg/Kg	1	2.00	94	73.4 - 122
4-Bromofluorobenzene (4-BFB)		1.80	mg/Kg	1	2.00	90	50 - 138

Sample: 248299 - West Side Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		1.63	mg/Kg	1	2.00	82	66.5 - 108
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	1	2.00	87	50 - 139

Sample: 248299 - West Side Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Sample: 248299 - West Side Wall

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	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		92.1	mg/Kg	1	100	92	70 - 130

Sample: 248299 - West Side Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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)		1.68	mg/Kg	1	2.00	84	73.4 - 122
4-Bromofluorobenzene (4-BFB)		1.62	mg/Kg	1	2.00	81	50 - 138

Sample: 248300 - T-1 8'-8.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**7.38**	mg/Kg	20	0.0200
Toluene		**57.4**	mg/Kg	20	0.0200
Ethylbenzene		**60.1**	mg/Kg	20	0.0200
Xylene		**69.6**	mg/Kg	20	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		19.8	mg/Kg	20	20.0	99	66.5 - 108
4-Bromofluorobenzene (4-BFB)	[2]	32.5	mg/Kg	20	20.0	162	50 - 139

Sample: 248300 - T-1 8'-8.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Sample: 248300 - T-1 8'-8.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	Prepared By:	kg

[2]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1860**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[3]	311	mg/Kg	5	100	311	70 - 130

Sample: 248300 - T-1 8'-8.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**3020**	mg/Kg	20	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		20.0	mg/Kg	20	20.0	100	73.4 - 122
4-Bromofluorobenzene (4-BFB)	[4]	74.4	mg/Kg	20	20.0	372	50 - 138

Sample: 248301 - T-1 10'-10.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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	66.5 - 108
4-Bromofluorobenzene (4-BFB)		2.13	mg/Kg	1	2.00	106	50 - 139

[3] High surrogate recovery due to peak interference.
[4] High surrogate recovery due to peak interference.

Sample: 248301 - T-1 10'-10.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**207**		mg/Kg	50	4.00

Sample: 248301 - T-1 10'-10.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	74723	Date Analyzed:	2010-10-25	Analyzed By:	kg
Prep Batch:	64105	Sample Preparation:	2010-10-25	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		88.3	mg/Kg	1	100	88	70 - 130

Sample: 248301 - T-1 10'-10.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	Sample Preparation:	2010-10-25	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	73.4 - 122
4-Bromofluorobenzene (4-BFB)		2.01	mg/Kg	1	2.00	100	50 - 138

Sample: 248302 - T-1 12'-12.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74751	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**864**	mg/Kg	50	4.00

Sample: 248303 - T-1 14'-14.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	74752	Date Analyzed:	2010-10-26	Analyzed By:	AR
Prep Batch:	64082	Sample Preparation:	2010-10-25	Prepared By:	AR

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

Method Blank (1) QC Batch: 74716

QC Batch:	74716	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	QC Preparation:	2010-10-25	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00750	mg/Kg	0.02
Toluene		<0.0109	mg/Kg	0.02
Ethylbenzene		<0.00630	mg/Kg	0.02
Xylene		<0.0144	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	75.6 - 110
4-Bromofluorobenzene (4-BFB)		2.13	mg/Kg	1	2.00	106	41.5 - 139

Method Blank (1) QC Batch: 74717

QC Batch:	74717	Date Analyzed:	2010-10-25	Analyzed By:	AG
Prep Batch:	64067	QC Preparation:	2010-10-25	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.747	mg/Kg	2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.07	mg/Kg	1	2.00	104	76.9 - 115
4-Bromofluorobenzene (4-BFB)		1.99	mg/Kg	1	2.00	100	45.8 - 147

Method Blank (1) QC Batch: 74723

QC Batch: 74723 | Date Analyzed: 2010-10-25 | Analyzed By: kg
Prep Batch: 64105 | QC Preparation: 2010-10-25 | Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<14.6	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		120	mg/Kg	1	100	120	70 - 130

Method Blank (1) QC Batch: 74751

QC Batch: 74751 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

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

Method Blank (1) QC Batch: 74752

QC Batch: 74752 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

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

Laboratory Control Spike (LCS-1)

QC Batch: 74716 | Date Analyzed: 2010-10-25 | Analyzed By: AG
Prep Batch: 64067 | QC Preparation: 2010-10-25 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.92	mg/Kg	1	2.00	<0.00750	96	81.7 - 120
Toluene	1.88	mg/Kg	1	2.00	<0.0109	94	81.8 - 120
Ethylbenzene	1.91	mg/Kg	1	2.00	<0.00630	96	79.8 - 120
Xylene	5.80	mg/Kg	1	6.00	<0.0144	97	74 - 123

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.90	mg/Kg	1	2.00	<0.00750	95	81.7 - 120	1	20
Toluene	1.87	mg/Kg	1	2.00	<0.0109	94	81.8 - 120	0	20
Ethylbenzene	1.88	mg/Kg	1	2.00	<0.00630	94	79.8 - 120	2	20
Xylene	5.93	mg/Kg	1	6.00	<0.0144	99	74 - 123	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.97	1.97	mg/Kg	1	2.00	98	98	77.4 - 110
4-Bromofluorobenzene (4-BFB)	2.14	2.25	mg/Kg	1	2.00	107	112	46 - 140

Laboratory Control Spike (LCS-1)

QC Batch: 74717 | Date Analyzed: 2010-10-25 | Analyzed By: AG
Prep Batch: 64067 | QC Preparation: 2010-10-25 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.2	mg/Kg	1	20.0	<0.747	91	56.5 - 98.2

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	17.8	mg/Kg	1	20.0	<0.747	89	56.5 - 98.2	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)	2.11	2.00	mg/Kg	1	2.00	106	100	76.5 - 118
4-Bromofluorobenzene (4-BFB)	2.06	1.97	mg/Kg	1	2.00	103	98	51.1 - 150

Laboratory Control Spike (LCS-1)

QC Batch: 74723 | Date Analyzed: 2010-10-25 | Analyzed By: kg
Prep Batch: 64105 | QC Preparation: 2010-10-25 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	264	mg/Kg	1	250	<14.6	106	47.5 - 144.1

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	239	mg/Kg	1	250	<14.6	96	47.5 - 144.1	10	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	118	114	mg/Kg	1	100	118	114	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 74751 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.1	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	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: 74752 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.6	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	4	20

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

Matrix Spike (MS-1) Spiked Sample: 248301

QC Batch: 74716 | Date Analyzed: 2010-10-25 | Analyzed By: AG
Prep Batch: 64067 | QC Preparation: 2010-10-25 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.90	mg/Kg	1	2.00	<0.00750	95	75.7 - 125
Toluene	1.95	mg/Kg	1	2.00	<0.0109	98	74.4 - 125
Ethylbenzene	1.98	mg/Kg	1	2.00	<0.00630	99	72.2 - 128
Xylene	6.02	mg/Kg	1	6.00	<0.0144	100	63 - 131

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	2.20	mg/Kg	1	2.00	<0.00750	110	75.7 - 125	15	20
Toluene	2.18	mg/Kg	1	2.00	<0.0109	109	74.4 - 125	11	20
Ethylbenzene	2.29	mg/Kg	1	2.00	<0.00630	114	72.2 - 128	14	20
Xylene	6.92	mg/Kg	1	6.00	<0.0144	115	63 - 131	14	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) [5]	2.10	2.41	mg/Kg	1	2	105	120	78.8 - 109
4-Bromofluorobenzene (4-BFB)	2.23	2.21	mg/Kg	1	2	112	110	50 - 136

Matrix Spike (MS-1) Spiked Sample: 248296

QC Batch: 74717 | Date Analyzed: 2010-10-25 | Analyzed By: AG
Prep Batch: 64067 | QC Preparation: 2010-10-25 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.4	mg/Kg	1	20.0	<0.747	77	50 - 150

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

[5] High surrogate recovery due to peak interference.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	17.2	mg/Kg	1	20.0	<0.747	86	50 - 150	11	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)	1.79	2.15	mg/Kg	1	2	90	108	71.6 - 117
4-Bromofluorobenzene (4-BFB)	1.85	2.26	mg/Kg	1	2	92	113	50 - 170

Matrix Spike (MS-1) Spiked Sample: 247882

QC Batch: 74723 | Date Analyzed: 2010-10-25 | Analyzed By: kg
Prep Batch: 64105 | QC Preparation: 2010-10-25 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	409	mg/Kg	1	250	302	43	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	433	mg/Kg	1	250	302	52	11.7 - 152.3	6	20

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	[6] [7]	155	148	mg/Kg	1	100	155	148	70 - 130

Matrix Spike (MS-1) Spiked Sample: 248302

QC Batch: 74751 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11000	mg/Kg	100	10000	864	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	11200	mg/Kg	100	10000	864	103	85 - 115	2	20

[6]High surrogate recovery due to peak interference.
[7]High surrogate recovery due to peak interference.

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

Matrix Spike (MS-1) Spiked Sample: 248303

QC Batch: 74752 | Date Analyzed: 2010-10-26 | Analyzed By: AR
Prep Batch: 64082 | QC Preparation: 2010-10-25 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9340	mg/Kg	100	10000	<218	92	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	9580	mg/Kg	100	10000	<218	94	85 - 115	2	20

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

Standard (CCV-1)

QC Batch: 74716 | Date Analyzed: 2010-10-25 | 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	0.0917	92	80 - 120	2010-10-25
Toluene		mg/Kg	0.100	0.0903	90	80 - 120	2010-10-25
Ethylbenzene		mg/Kg	0.100	0.0919	92	80 - 120	2010-10-25
Xylene		mg/Kg	0.300	0.280	93	80 - 120	2010-10-25

Standard (CCV-2)

QC Batch: 74716 | Date Analyzed: 2010-10-25 | 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	0.0941	94	80 - 120	2010-10-25
Toluene		mg/Kg	0.100	0.0944	94	80 - 120	2010-10-25
Ethylbenzene		mg/Kg	0.100	0.0938	94	80 - 120	2010-10-25
Xylene		mg/Kg	0.300	0.285	95	80 - 120	2010-10-25

Standard (CCV-3)

QC Batch: 74716 | Date Analyzed: 2010-10-25 | 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	0.0967	97	80 - 120	2010-10-25
Toluene		mg/Kg	0.100	0.0949	95	80 - 120	2010-10-25
Ethylbenzene		mg/Kg	0.100	0.0954	95	80 - 120	2010-10-25
Xylene		mg/Kg	0.300	0.288	96	80 - 120	2010-10-25

Standard (CCV-1)

QC Batch: 74717 Date Analyzed: 2010-10-25 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	2010-10-25

Standard (CCV-2)

QC Batch: 74717 Date Analyzed: 2010-10-25 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.07	107	80 - 120	2010-10-25

Standard (CCV-3)

QC Batch: 74717 Date Analyzed: 2010-10-25 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	1.16	116	80 - 120	2010-10-25

Standard (CCV-2)

QC Batch: 74723 Date Analyzed: 2010-10-25 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	239	96	80 - 120	2010-10-25

Standard (CCV-3)

QC Batch: 74723 | Date Analyzed: 2010-10-25 | Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	215	86	80 - 120	2010-10-25

Standard (ICV-1)

QC Batch: 74751 | Date Analyzed: 2010-10-26 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2010-10-26

Standard (CCV-1)

QC Batch: 74751 | Date Analyzed: 2010-10-26 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2010-10-26

Standard (ICV-1)

QC Batch: 74752 | Date Analyzed: 2010-10-26 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-10-26

Standard (CCV-1)

QC Batch: 74752 | Date Analyzed: 2010-10-26 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-10-26

WO# 10102214

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: 1

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6400627	COG / Tra- Mack 11 Fed # 35 Eddy Co, NM

LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
248295	10/21		S		X	CS-1 4'-4.5' (bottom hole)	1				X		X	X										X				
248296						North side wall							X	X										X				
248297						East side wall - 1							X	X										X				
248298						South side wall							X	X										X				
248299						East ~~West~~ side wall - 2							X	X										X				
248300						T-1 8'-8.5'							X	X										X				
248301						T-1 10'-10.5'							X	X										X				
248302						T-1 12'-12.5'																		X				
248303						T-1 14-14.5'																		X				

RELINQUISHED BY: (Signature)	Date: / Time:	RECEIVED BY: (Signature)	Date: / Time:	SAMPLED BY: (Print & Initial) JT	Date: 10/21/10 / 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~~ Xenco
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 10-22-10 TIME: 9:55

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.8°C

REMARKS: If total TPH exceeds 5,000 mg/kg or BTEX exceeds 50 mg/kg or Benzene exceeds 10 mg/kg run deeper samples All to Xenco Midland

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

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