SITE INFORMATION

Report Type: Closure Report

General Site Information:

Site:	**SRO State Unit Com #2**					
Company:	**COG Operating LLC**					
Section, Township and Range	**Unit P**	**Sec 32**	**T25S**	**R28E**		
Lease Number:	**API-30-015-37141**					
County:	**Eddy County**					
GPS:	**32.08034° N**			**104.10180° W**		
Surface Owner:	State					
Mineral Owner:						
Directions:	From Hwy 285 and CR-274 (White City Road) travel west on CR-274 for 2.0 miles, turn right (north) and travel for 1.1 miles to site.					

Release Data:

Date Released:	3/15/2012	RECEIVED
Type Release:	Produced Fluid	
Source of Contamination:	Heater Treater	NOV 01 2012
Fluid Released:	50 bbls oil 80 bbls pw	
Fluids Recovered:	10 bbls oil 30 bbls pw	NMOCD ARTESIA

Official Communication:

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

Ranking Criteria

Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	10
>100 ft.	0	

WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	0	0

Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0

Total Ranking Score:	**10**

Acceptable Soil RRAL (mg/kg)

Benzene	***Total BTEX***	***TPH***
10	50	1,000

TETRA TECH

October 18, 2012

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Closure Report for the COG Operating LLC., SRO State Unit Com #2, Unit P, Section 32, Township 25 South, Range 28 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the SRO State Unit Com #2, Unit P, Section 32, Township 25 South, Range 28 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.08031°, W 104.10168°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico Oil Conservation Division (NMOCD) Form C-141 Initial Report, the leak was discovered on March 15, 2012, and released approximately 50 barrels of oil and 80 barrels of produce water due to an over-pressured heater treater. Approximately 10 barrels of oil and 30 barrels of produced waster were recovered from the spill area. The spill initiated at the heater treater and impacted an area approximately 45' x 112' inside the facility firewalls. The spill breached the firewall and migrated north impacting an area measuring approximately 50' x 60' in the pasture. The initial Form C-141 is enclosed in Appendix A.

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

Groundwater

No water wells were reported in Section 32. One well is listed in Section 28 with a reported depth to groundwater of 90' below surface. According to the NMOCD groundwater map, the average depth to groundwater is approximately 50' below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 1,000 mg/kg.

Soil Assessment

On April 25, 2012, Tetra Tech personnel inspected and sampled the spill area. Thirteen (13) auger holes (AH-1 through AH-13) were installed using a stainless steel hand auger to assess the impacted soils. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B and chloride by EPA method 300.0. The sampling results are summarized in Table 1 and 2. The auger hole locations are shown on Figure 3. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C.

Referring to Table 1, all of the samples at 0-1' exceeded the RRAL for TPH, except for the area of AH-1. The TPH concentrations exceeding the RRAL ranged from 1,958 mg/kg to 15,738 mg/kg. In addition, the area of AH-8 at 0-1' exceeded the RRAL for total BTEX with a concentration of 65.8 mg/kg.

In the areas of auger holes (AH-1, AH-2, AH-3, AH-4, AH-5, AH-6, AH-8 and AH-9 detected elevated chlorides and were not vertically defined. Auger holes (AH-11 and AH-13) were vertically defined and showed a significant decline at 2.0' below surface, The areas of AH-7, AH-10 and AH-12 did not show a significant impact to the soils, with chloride concentrations at 0-1' of 685 mg/kg and 403 mg/kg, respectively.

On June 13, 2012, Tetra Tech personnel supervised the installation of five (5) trenches (T-1 through T-5) to define the vertical extents of the impacted soils. The trench locations are shown on Figure 3. Soil samples were collected to a depth of 12.0' below grade surface. Selected samples were analyzed for TPH and chlorides. The results of the sampling are summarized in Table 2.

Referring to Table 2, T-3 exceeded the RRAL for TPH of 4,500 mg/kg (0-1'), but declined below the RRAL at 2.0' below surface. The trenches did not show a significant chloride impact to the soils. The area of T-4 did show a deeper impact to the soil, which declined to 362 mg/kg at 12.0' below surface.

Remediation and Conclusion

On January 2012, Tetra Tech personnel supervised the excavation of the soils. The excavated areas and depths are highlighted in Table 1 and shown on Figure 4. In order to remove the hydrocarbon and elevated chloride concentrations, the proposed excavation depths ranged from 1.0' to 4.0' below surface. At T-4 (AH-5), the impacted area was excavated to a depth of 4.0' below surface and capped the excavation bottom with a 40 mil liner. The remaining areas inside the facility dike were excavated to a depth of 1.0' below surface. The impacted areas north, outside the facility dike, were excavated to a depth of 2.0' below surface. Approximately 160 yards^3 were removed and disposed of at R360.

TETRA TECH

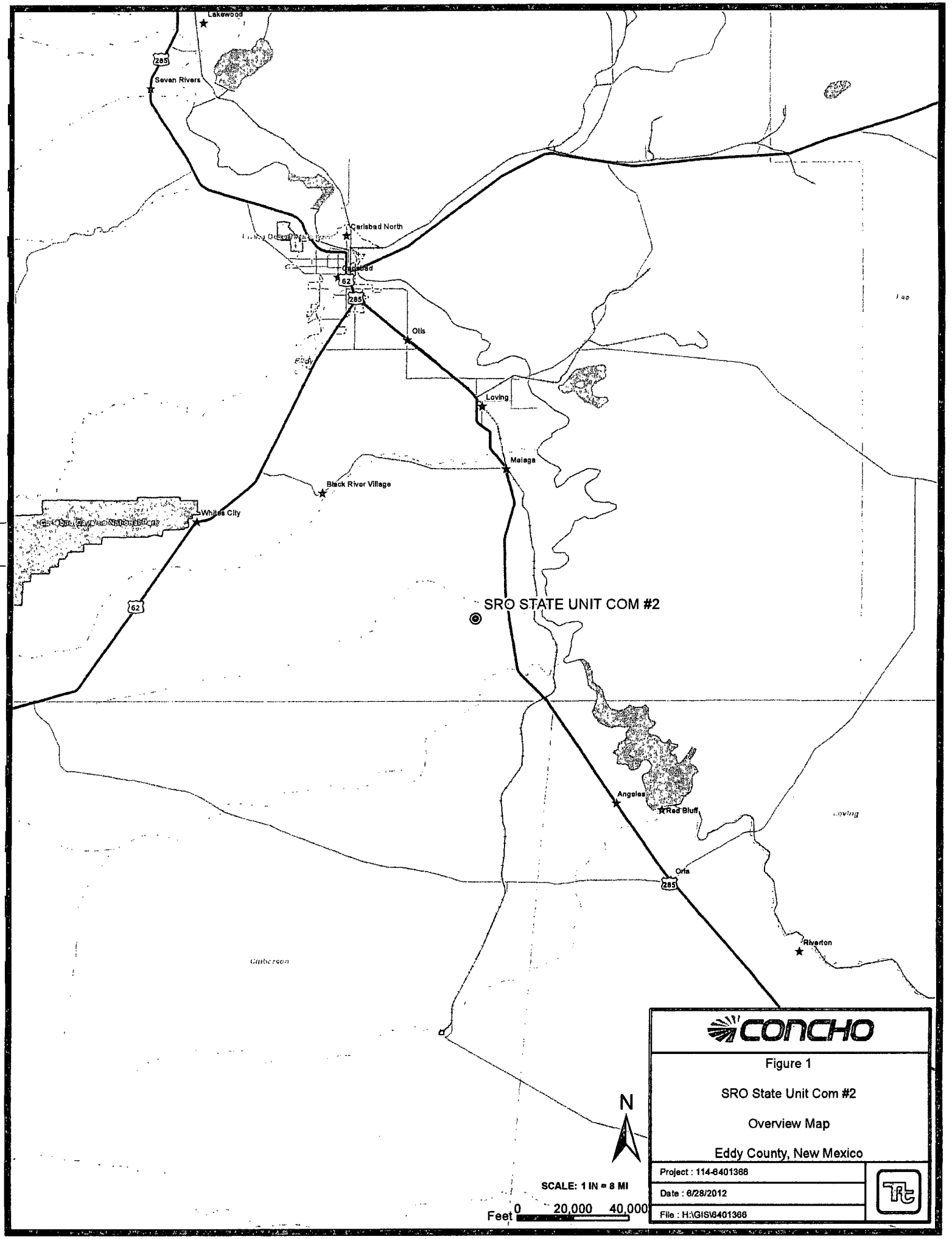
Based on the remediation activities performed at this location, COG request closure for this site. The C-141 (Final) is included in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities performed at the site, please call me at (432) 682-4559.

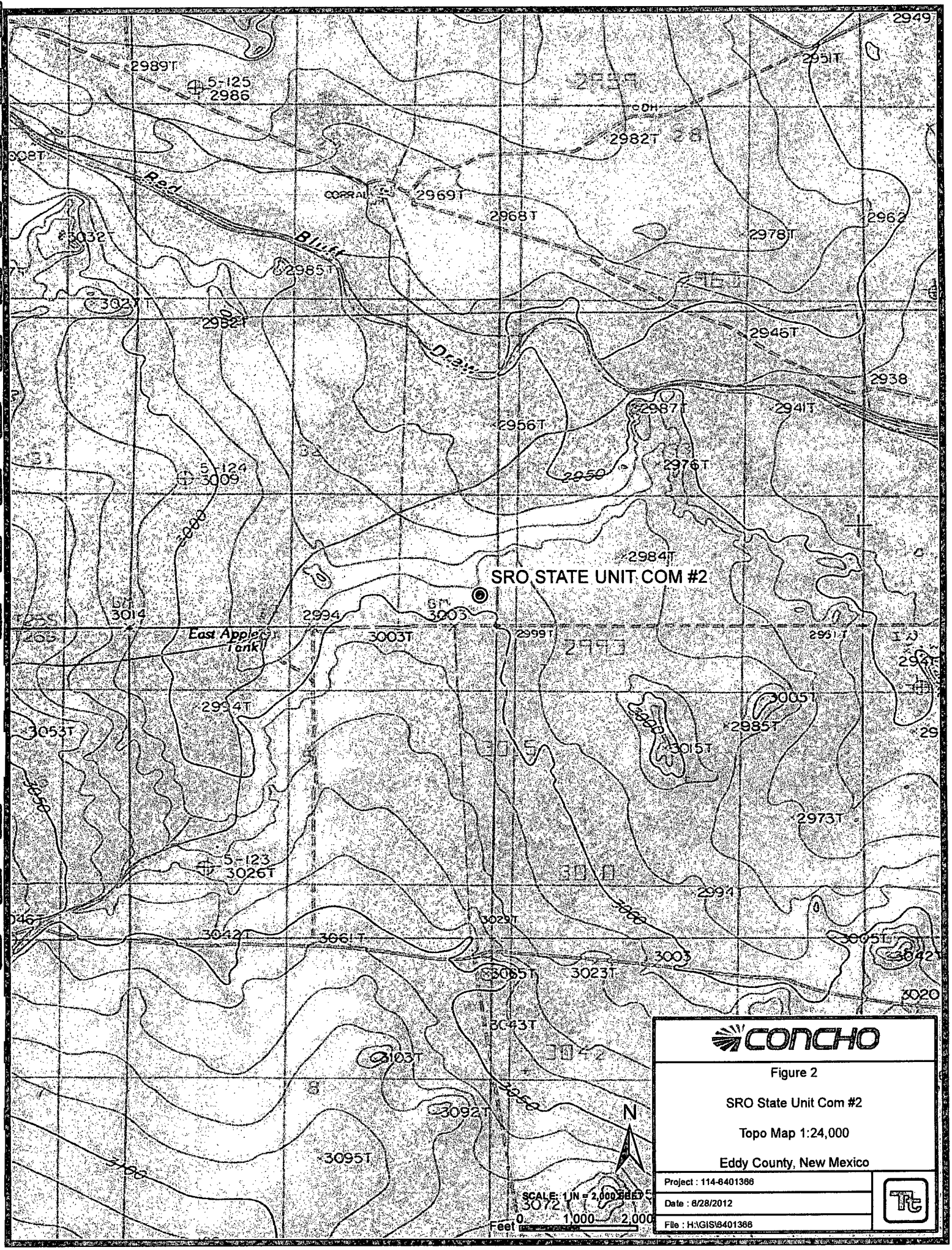
Respectfully submitted,
TETRA TECH

Ike Tavarez, PG
Senior Project Manager

cc: Pat Ellis – COG

Figures


Lakewood
285
Seven Rivers
Carlsbad North
Carlsbad
62
285
Otis
Loving
Malaga
Black River Village
White City
62
SRO STATE UNIT COM #2
Angoles
Red Bluff
Orla
285
Riverton
Gilbertson
Loving
N
SCALE: 1 IN = 8 MI
Feet 0 20,000 40,000
CONCHO
Figure 1
SRO State Unit Com #2
Overview Map
Eddy County, New Mexico
Project : 114-6401368
Date : 6/28/2012
File : H:\GIS\6401368



CONCHO

Figure 2

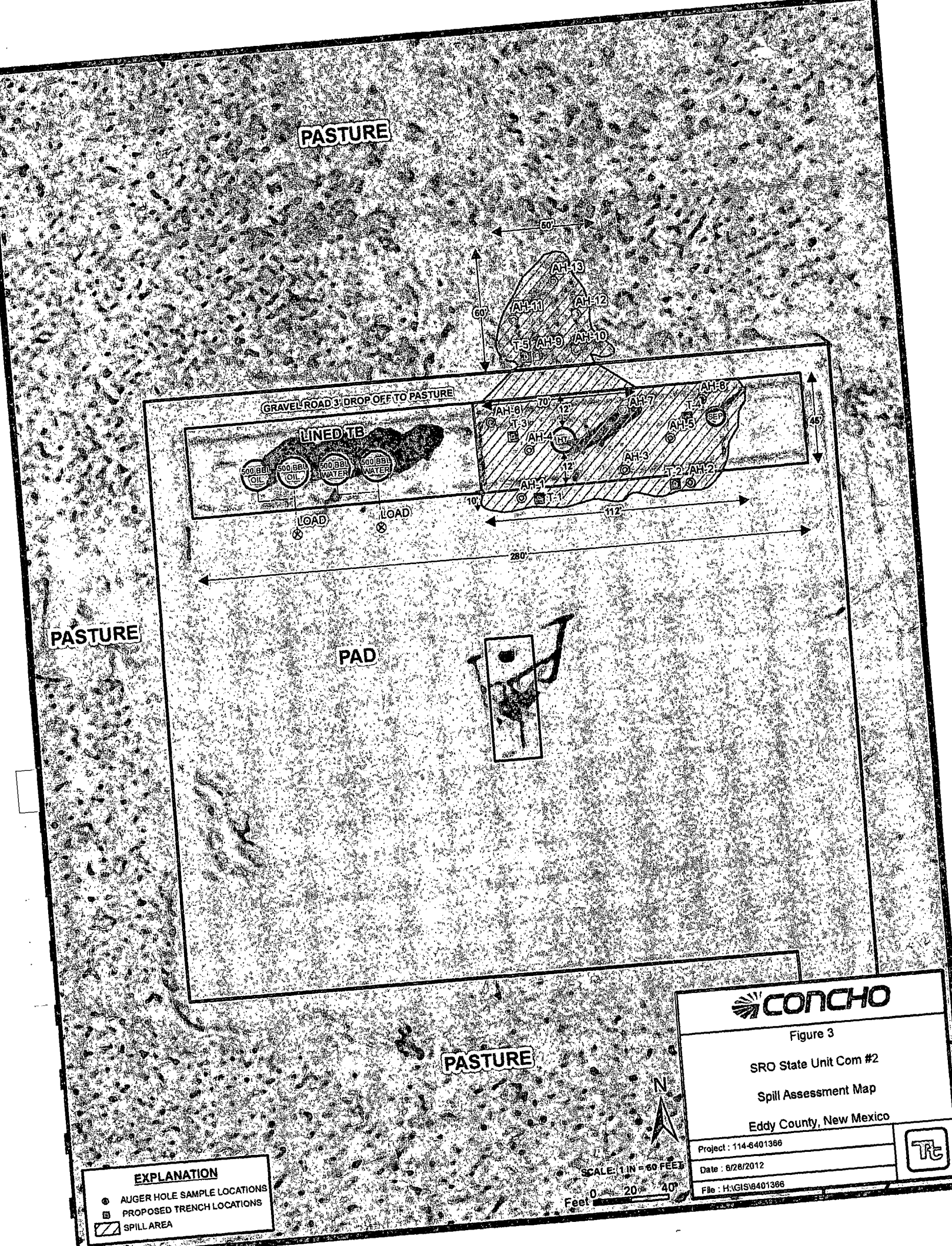
SRO State Unit Com #2

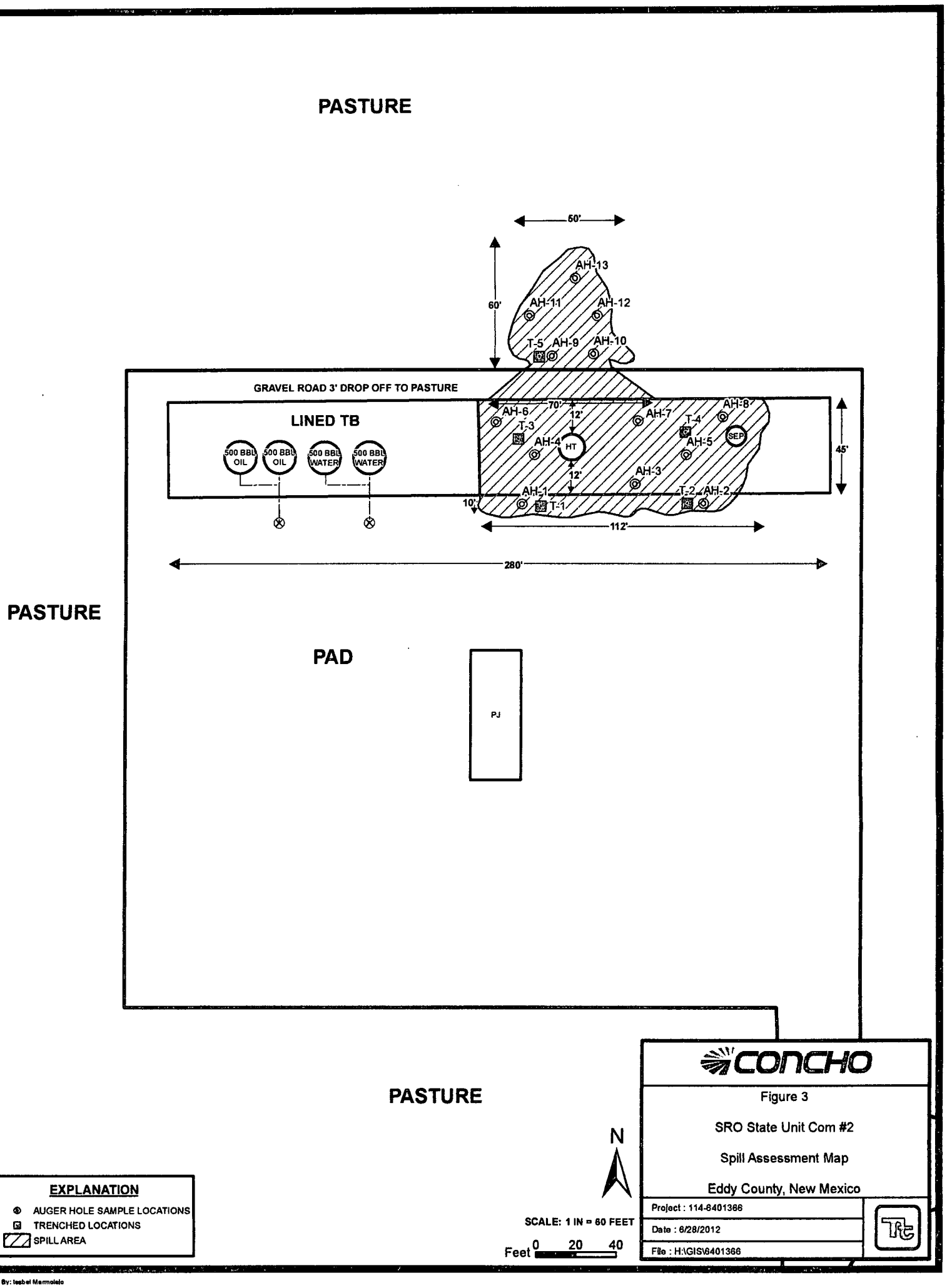
Topo Map 1:24,000

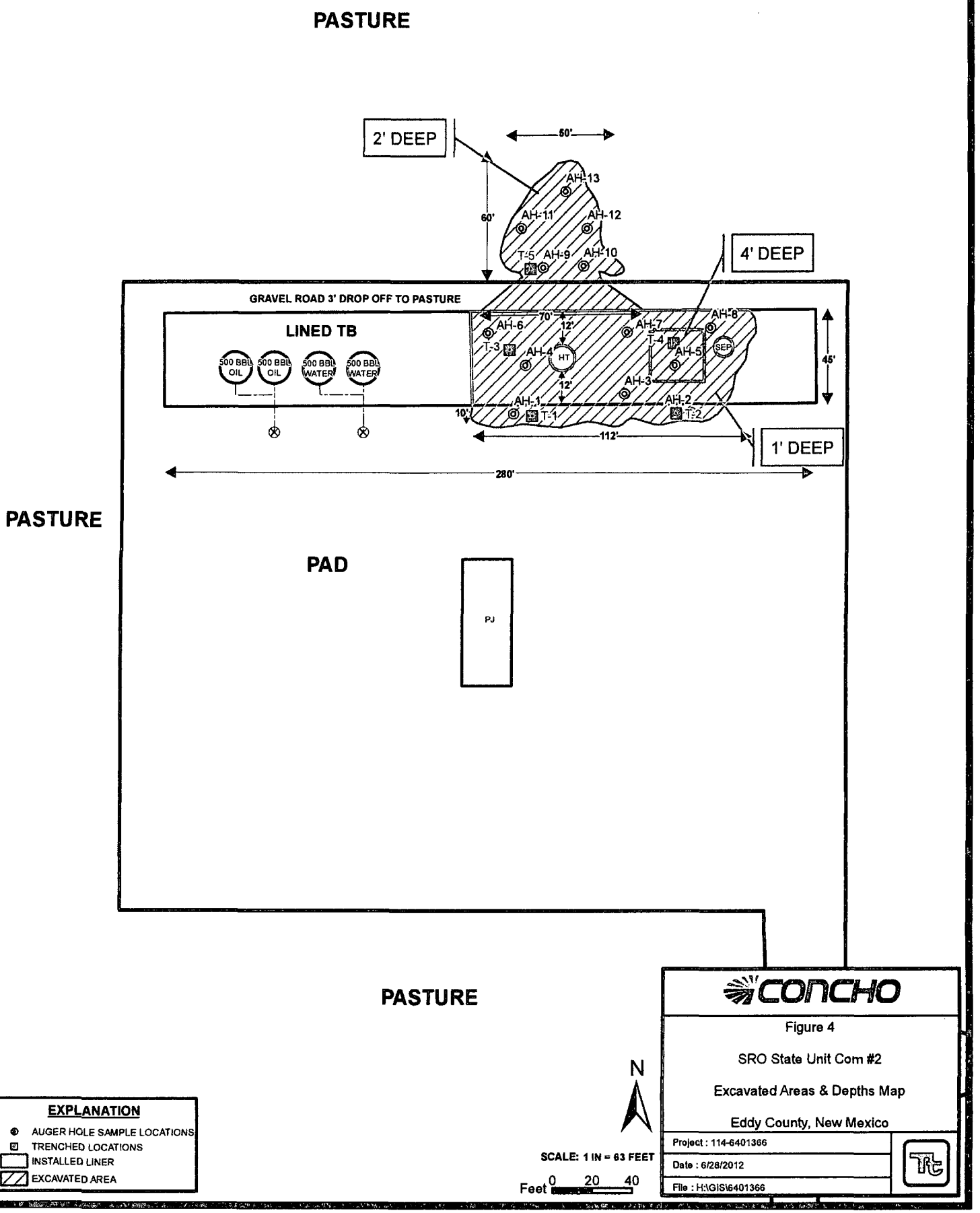
Eddy County, New Mexico

Project : 114-6401366	
Date : 6/28/2012	
File : H:\GIS\6401366	

Drawn By: Isabel Marmolejo


PASTURE
60'
60'
AH-13
AH-11
AH-12
T-5
AH-9
AH-10
GRAVEL ROAD
DROP OFF TO PASTURE
LINED TB
500 BBL OIL
500 BBL OIL
500 BBL WATER
500 BBL WATER
LOAD
LOAD
AH-6
70'
12'
AH-7
AH-8
T-4
T-3
AH-4
HT
AH-5
SEP
45'
12'
AH-3
T-2
AH-2
AH-1
T-1
10'
112'
280'
PASTURE
PAD
PASTURE
N
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
PROPOSED TRENCH LOCATIONS
SPILL AREA
SCALE: 1 IN = 60 FEET
Feet 0 20 40
CONCHO
Figure 3
SRO State Unit Com #2
Spill Assessment Map
Eddy County, New Mexico
Project : 114-6401366
Date : 8/26/2012
File : H:\GIS\6401366


PASTURE
60'
50'
AH-13
AH-11
AH-12
T-5
AH-9
AH-10
GRAVEL ROAD 3' DROP OFF TO PASTURE
LINED TB
500 BBL OIL
500 BBL OIL
500 BBL WATER
500 BBL WATER
70'
12'
AH-6
T-3
AH-4
HT
AH-7
T-4
AH-8
AH-5
SEP
45'
12'
AH-3
AH-1
T-1
T-2
AH-2
10'
112'
280'
PASTURE
PAD
PJ
PASTURE
N
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
TRENCHED LOCATIONS
SPILL AREA
SCALE: 1 IN = 60 FEET
Feet 0 20 40
CONCHO
Figure 3
SRO State Unit Com #2
Spill Assessment Map
Eddy County, New Mexico
Project : 114-6401366
Date : 6/28/2012
File : H:\GIS\6401366
Drawn By: Isabel Marmolejo


PASTURE
2' DEEP
50'
60'
AH-13
AH-11
AH-12
T-5
AH-9
AH-10
4' DEEP
GRAVEL ROAD 3' DROP OFF TO PASTURE
LINED TB
500 BBL OIL
500 BBL OIL
500 BBL WATER
500 BBL WATER
70'
12'
AH-6
T-3
AH-4
HT
12'
AH-7
T-4
AH-5
SEP
AH-8
AH-3
AH-1
T-1
AH-2
T-2
10'
45'
112'
1' DEEP
280'
PASTURE
PAD
PJ
PASTURE
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
TRENCHED LOCATIONS
INSTALLED LINER
EXCAVATED AREA
N
SCALE: 1 IN = 63 FEET
Feet 0 20 40
CONCHO
Figure 4
SRO State Unit Com #2
Excavated Areas & Depths Map
Eddy County, New Mexico
Project : 114-6401366
Date : 6/28/2012
File : H:\GIS\6401366
Drawn By: Isabel Marmolejo

Tables

Table 1
COG Operating LLC.
SRO State Unit Commingle #2
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-1	4/23/2012	0-0.5		X	<2.00	292	**292**	-	-			-	3,570
AH-2	4/23/2012	0-0.5		X	511	2,990	**3,501**	-	-	-	-	-	6,080
AH-3	4/23/2012	0-0.5		X	438	15,300	**15,738**	<1.00	<1.00	<1.00	<1.00	<1.00	13,000
AH-4	4/23/2012	0-0.5		X	752	8,940	**9,692**	0.538	2.08	1.42	6.91	10.9	3,460
AH-5	4/23/2012	0-0.5		X	331	3,640	**3,971**	-	-			-	1,790
AH-6	4/23/2012	0-0.5		X	335	2,360	**2,695**	-	-	-	-	-	3,020
AH-7	4/23/2012	0-0.5		X	444	4,600	**5,044**	<0.100	0.390	0.581	2.08	3.05	685
AH-8	4/23/2012	0-0.5		X	2,460	9,000	**11,460**	2.38	12.8	9.58	41.0	**65.8**	1,230
AH-9	4/23/2012	0-0.5		X	99.1	4,470	**4,569**	<0.200	<0.200	<0.200	<0.200	<0.200	12,000
AH-10	4/23/2012	0-0.5		X	58.4	1,900	**1,958**	-	-			-	403

Table 1
COG Operating LLC.
SRO State Unit Commingle #2
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-11	4/23/2012	0-1		X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	5,640
	"	1-1.5		X	-	-	-	-	-	-	-	-	3,090
	"	2-2.5	X		-	-	-	-	-	-	-	-	114
	"	3-3.5	X		-	-	-	-	-	-	-	-	69.5
	"	4-4.5	X		-	-	-	-	-	-	-	-	179
	"	5-5.5	X		-	-	-	-	-	-	-	-	39.7
AH-12	4/23/2012	0-1		X	<2.00	133	133	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	169
	"	1-1.5		X	<2.00	120	120	-	-	-	-	-	<20.0
	"	2-2.5	X		<2.00	<50.0	<50.0	-	-	-	-	-	<20.0
	"	3-3.5	X		-	-	-	-	-	-	-	-	<20.0
	"	4-4.5	X		-	-	-	-	-	-	-	-	104
	"	5-5.5	X		-	-	-	-	-	-	-	-	104
AH-13	4/23/2012	0-1		X	114	<50.0	114	<0.0200	0.114	0.172	0.662	0.948	6,790
	"	1-1.5		X	3.50	<50.0	3.50	-	-	-	-	-	5,930
	"	2-2.5	X		-	-	-	-	-	-	-	-	64.6
	"	3-3.5	X		-	-	-	-	-	-	-	-	114

BEB Below Excavation Bottom

(--) Not Analyzed

Excavated Depths

Table 2
COG Operating LLC.
SRO State Unit Commingle #2
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total	
Trench-1	6/13/2012	surface		X	<2.00	849	849	744
(Area of AH-1)	"	2	X		<2.00	<50.0	<50.0	208
	"	4	X		-	-	-	<20.0
	"	6	X		-	-	-	69.4
	"	8	X		-	-	-	<20.0
	"	10	X		-	-	-	41.6
	"	12	X		-	-	-	<20.0
Trench-2	6/13/2012	surface		X	<2.00	<50.0	<50.0	83.2
(Area of AH-2)	"	2	X		-	-	-	509
	"	4	X		-	-	-	647
	"	6	X		-	-	-	<20.0
	"	8	X		-	-	-	84.0
	"	10	X		-	-	-	<20.0
	"	12	X		-	-	-	70.0
Trench-3	6/13/2012	surface		X	<10.0	4,500	4,500	961
(Area between	"	2	X		<2.00	<50.0	<50.0	322
AH-4 and AH-6)	"	4	X		<2.00	<50.0	<50.0	135
	"	6	X		-	-	-	215
	"	8	X		-	-	-	<20.0
	"	10	X		-	-	-	<20.0
	"	12	X		-	-	-	131
Trench-4	6/13/2012	surface		X	<2.00	914	914	221
(Area between	"	2		X	<2.00	<50.0	<50.0	9,290
AH-3, AH-7 and AH-8)	"	4		X				405
	"	6	X		-	-	-	2,000
		8	X		-	-	-	1,670
		10	X		-	-	-	716
		12	X		-	-	-	362
Trench-5	6/13/2012	surface		X	<2.00	<50.0	<50.0	1,070
(Area of AH-9)	"	2	X		-	-	-	122
	"	4	X		-	-	-	<20.0
	"	6	X		-	-	-	49.5
	"	8	X		-	-	-	40.5
	"	10	X		-	-	-	245
	"	12	X		-	-	-	107

(--) Not Analyzed

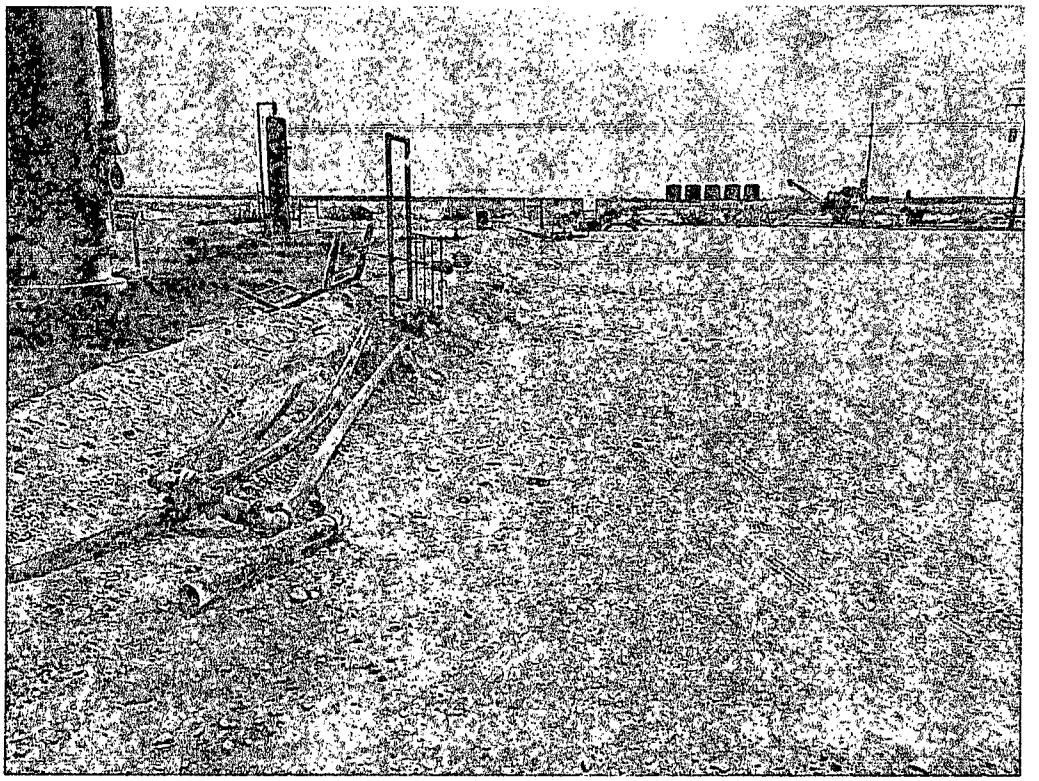
Excavated Depths

.40 mil Liner Installed

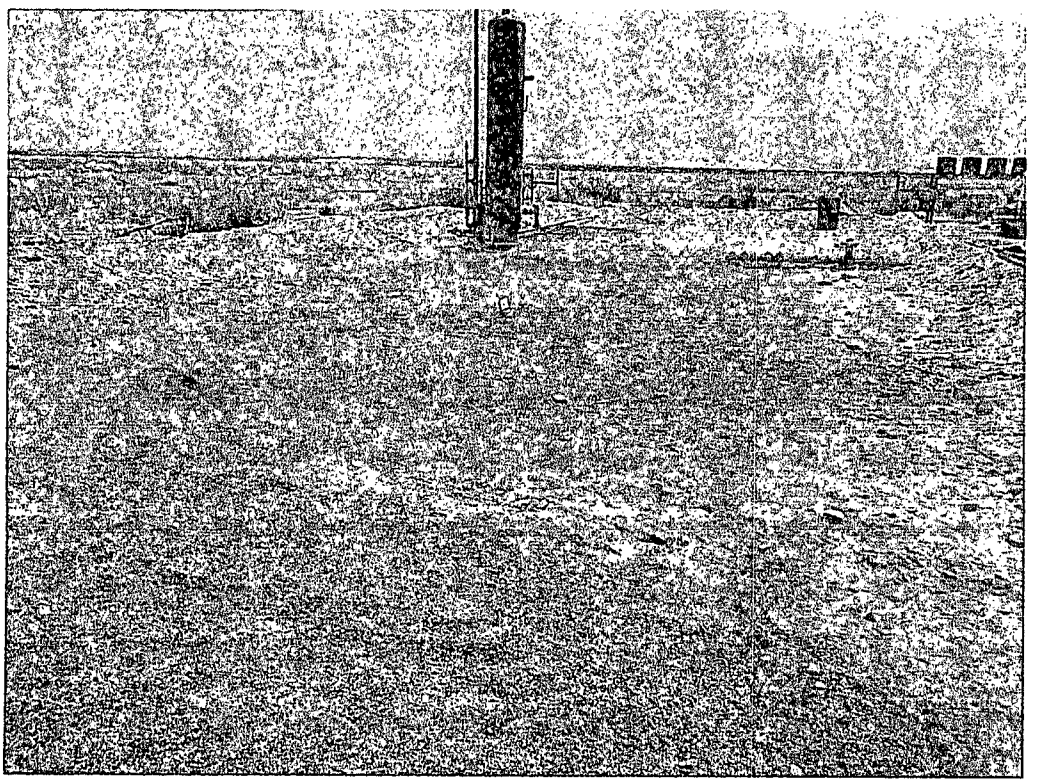
Photos

COG Operating LLC
SRO State Unit Com #2
Eddy County, New Mexico

TETRA TECH



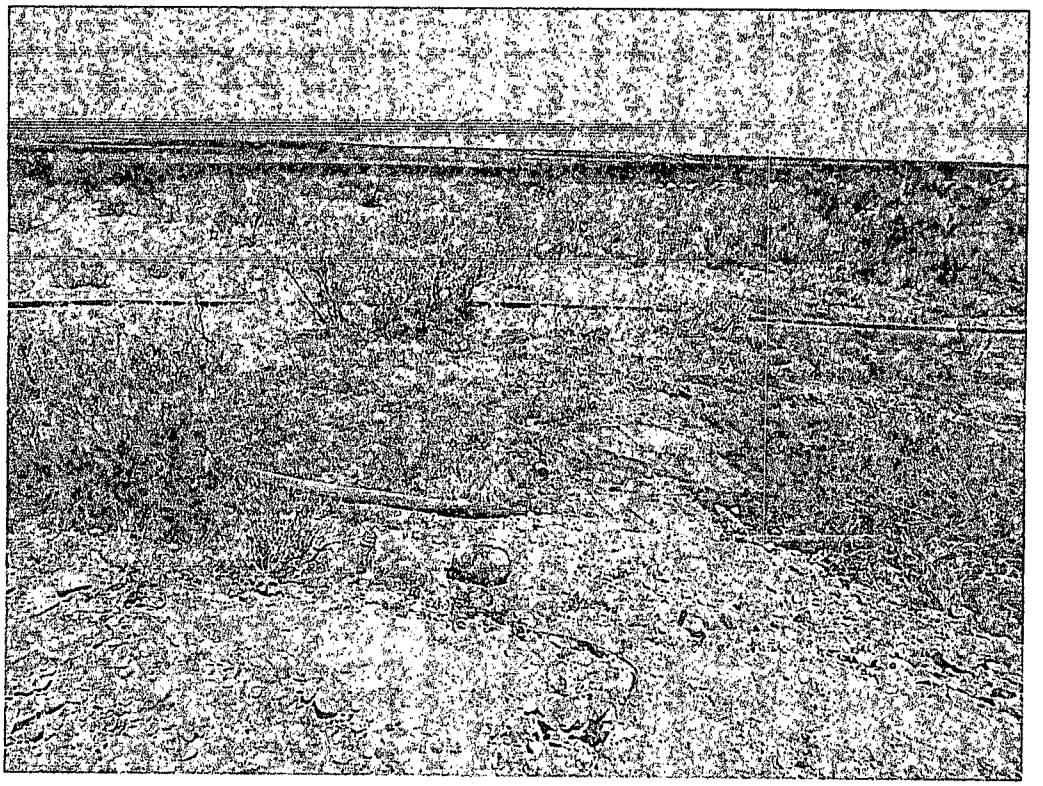
Spill Assessment: View East – Area of AH-1, 2 and 3



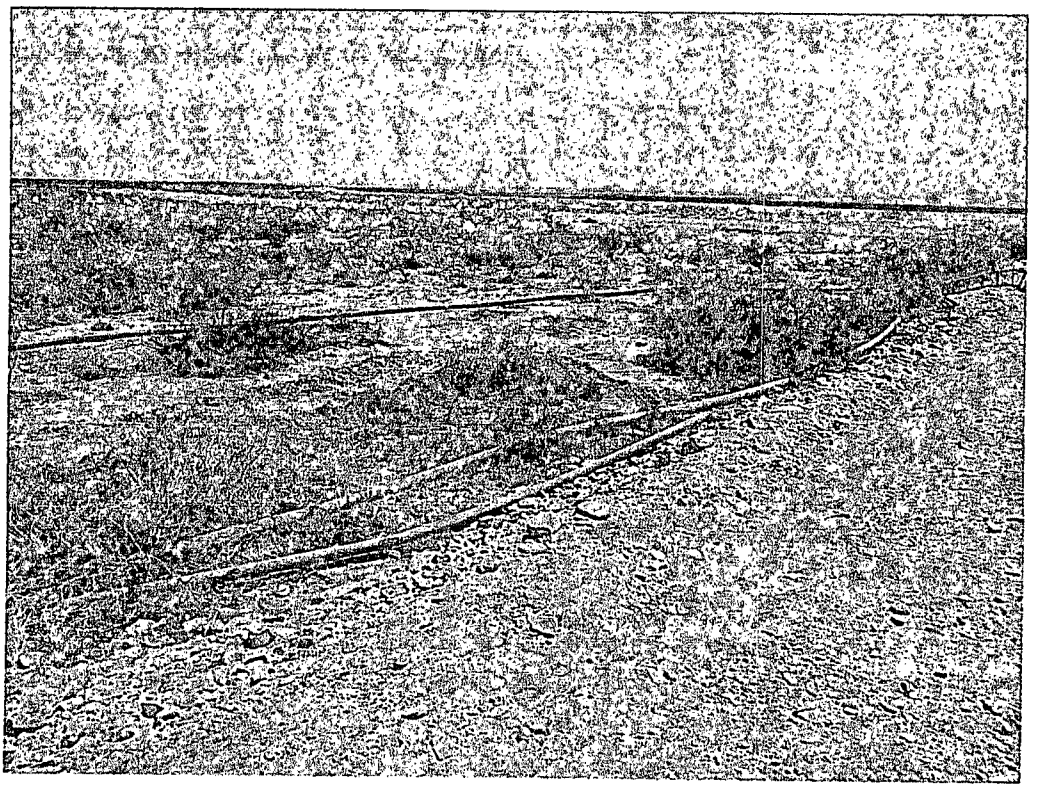
Spill Assessment: View East – Area of AH-4 and 5

COG Operating LLC
SRO State Unit Com #2
Eddy County, New Mexico

TETRA TECH



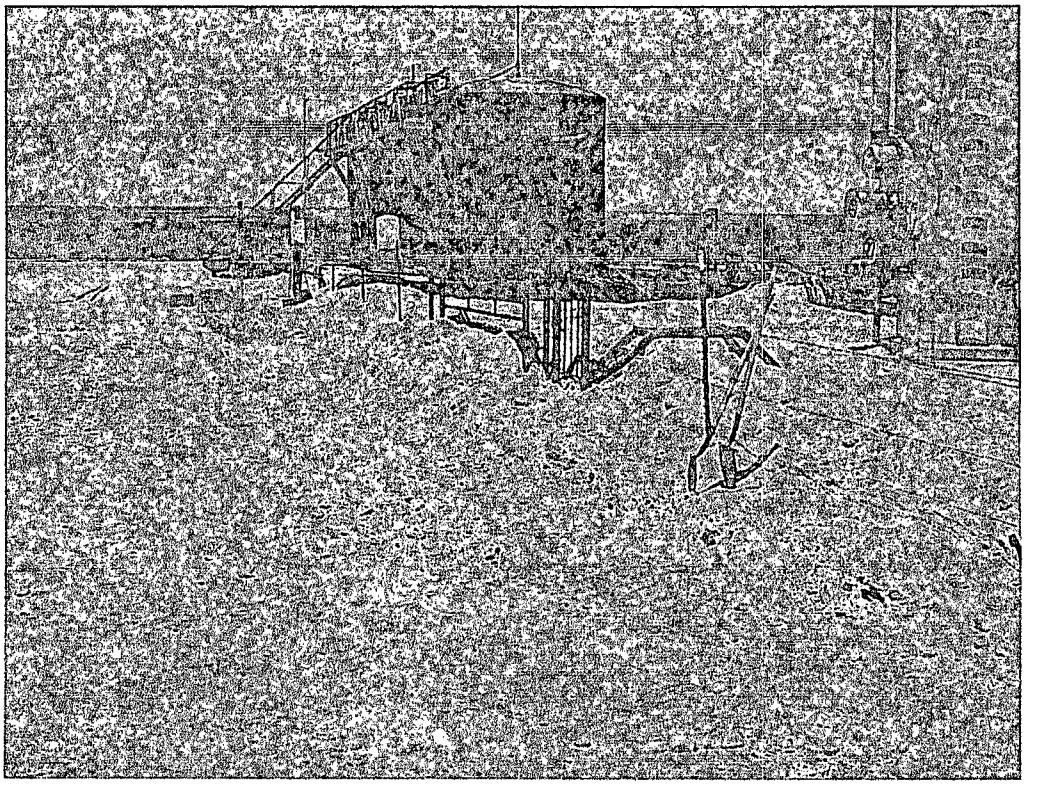
Spill Assessment: View North – Area of AH-9 and 11



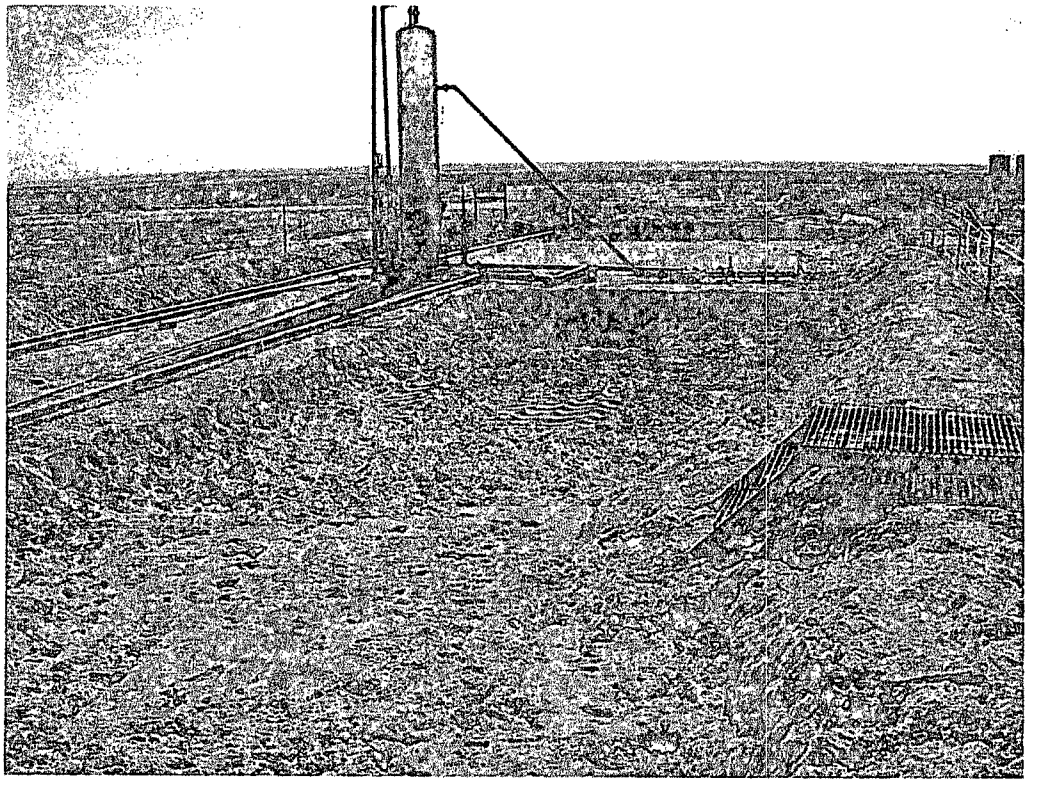
Spill Assessment: View Northeast – Area of AH-10, 12 and 13

COG Operating LLC
SRO State Unit Com #2
Eddy County, New Mexico

TETRA TECH



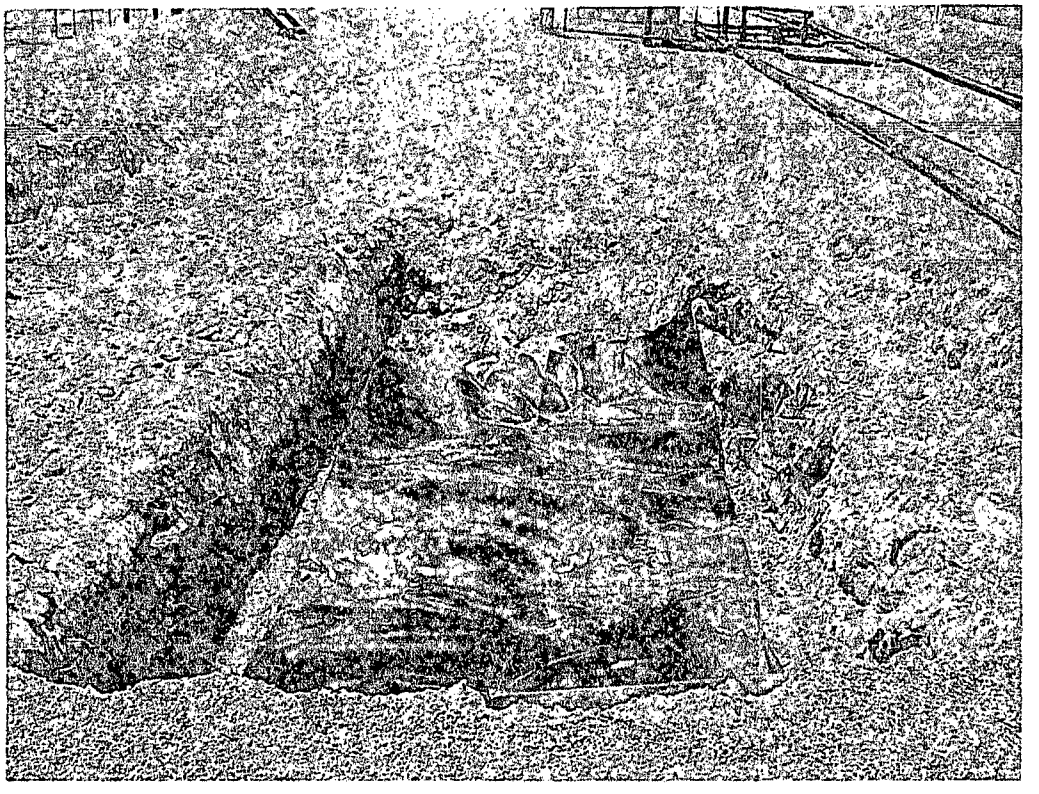
Excavation: View West – Area of AH-1 and 2



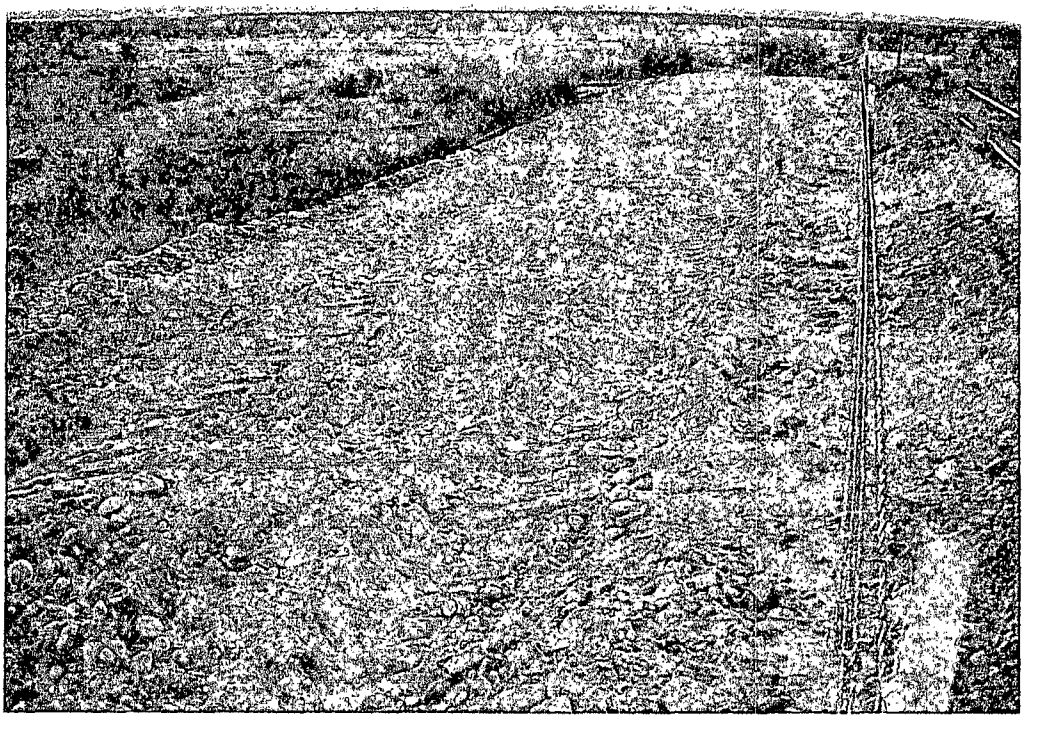
Excavation: View East – 1.0' area inside of Tank Battery

COG Operating LLC
SRO State Unit Com #2
Eddy County, New Mexico

TETRA TECH



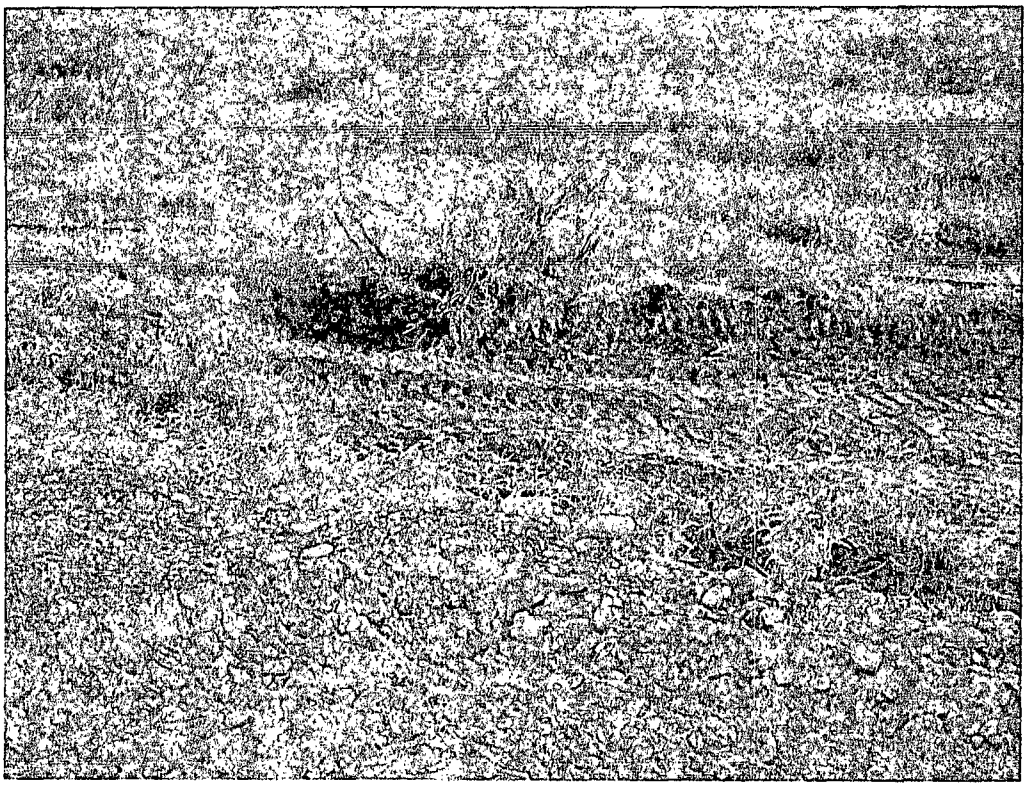
Excavation: View West – Area of T-4, .40 mil liner installed



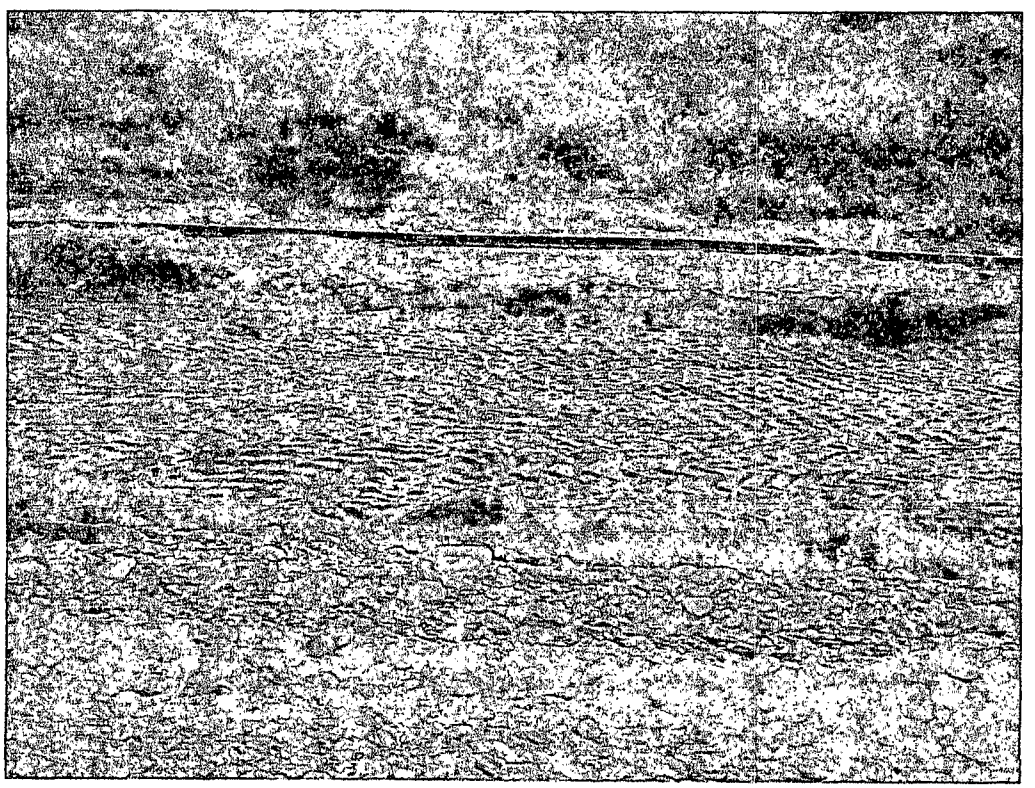
Excavation: View East – Area of Gravel road north of Tank Battery

COG Operating LLC
SRO State Unit Com #2
Eddy County, New Mexico

TETRA TECH



Excavation: View North – Area of AH-9 and 11



Excavation: View North – Area of AH-10, 12 and 13

Appendix A

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
NOV 01 2012
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) 230-0077**
Facility Name	**SRO State Unit Com #2**	Facility Type	**Tank Battery**

Surface Owner: State	Mineral Owner	Lease No. (API#) 30-015-37141

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	32	25S	28E					Eddy

Latitude N 32.08034° **Longitude** W 104.10180°

NATURE OF RELEASE

Type of Release: Produced Fluid	Volume of Release 50 bbls oil 80 bbls pw	Volume Recovered 10 bbls oil 30 bbls pw
Source of Release: Heater Treater	Date and Hour of Occurrence 3/15/2012	Date and Hour of Discovery 3/15/2012 9:00p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher--OCD	
By Whom? Josh Russo	Date and Hour 3/19/2012 10:18 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The heater treater over-pressured and ruptured at the SRO State Unit Com #2 Tank Battery. A new heater treater will be installed.

Describe Area Affected and Cleanup Action Taken.*

Tetra Tech personnel inspected the site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. The site was then brought up to surface grade with clean backfill material. Tetra Tech prepared a closure report and submitted to NMOCD for review.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez (Agent for COG)	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:	Attached ☐
Date: 10-18-12 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	SRO State Unit Com #2	Facility Type	Tank Battery

Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-37141

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	32	25S	28E					Eddy

Latitude 32.0802 **Longitude** 104.1021

NATURE OF RELEASE

Type of Release Produced fluid	Volume of Release 50bbls oil 80bbls pw	Volume Recovered 10bbls oil 30bbls pw
Source of Release Heater treater	Date and Hour of Occurrence 03/15/2012	Date and Hour of Discovery 03/15/2012 9:00 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher-OCD	
By Whom? Josh Russo	Date and Hour 03/19/2012 10:18 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 heater treater over-pressured and ruptured at the SRO State Unit Com #2 Tank Battery. A new heater treater will be installed.

Describe Area Affected and Cleanup Action Taken.*

Initially roughly 130bbls of produced fluid was release from the heater treater and we were able to recover 40bbls with a vacuum truck. The release occurred inside the unlined dike walls of the facility. The spill also reached the pasture adjacent to the tank battery and measures an area of 30' x 50'. 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 for approval prior to any significant remediation work.

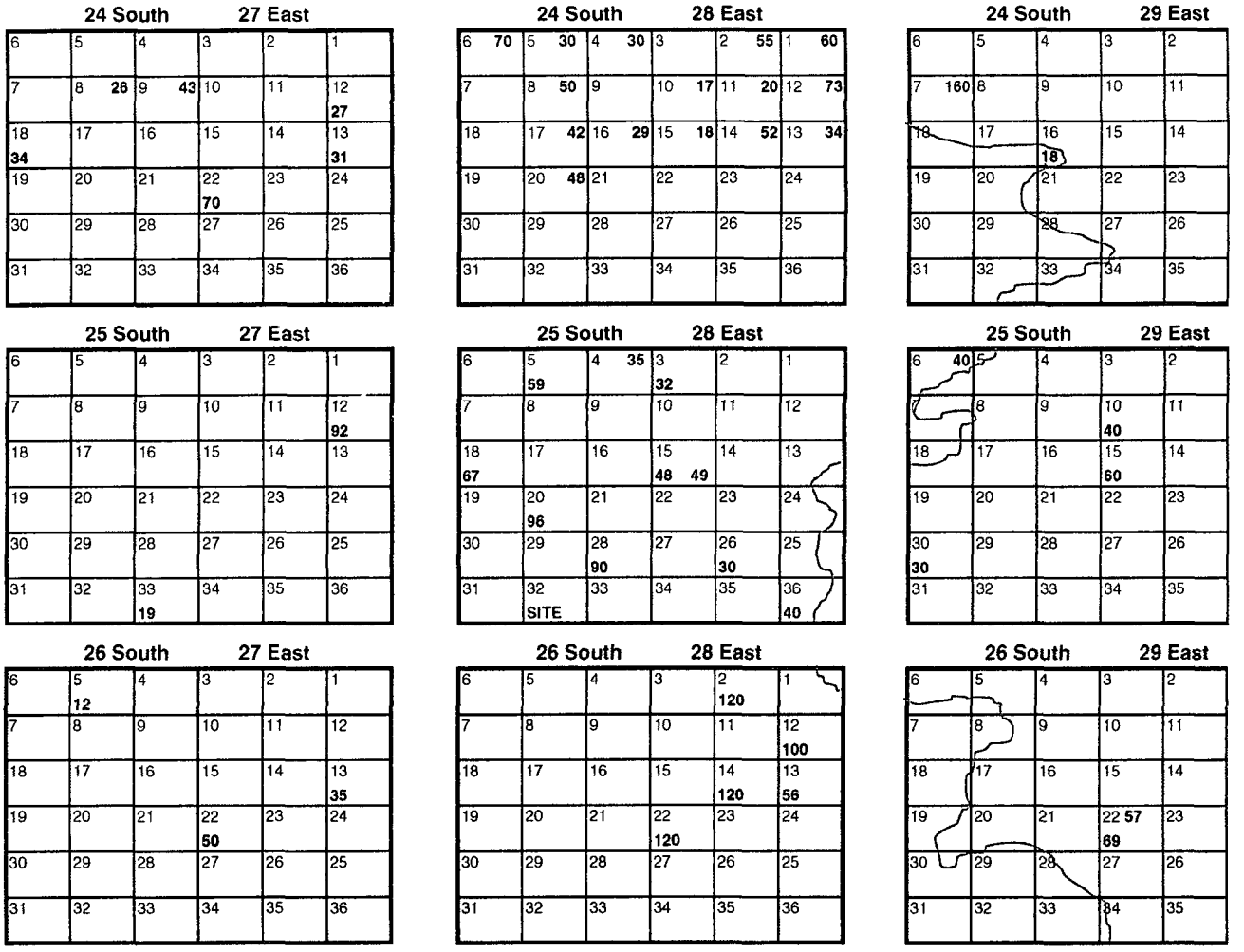
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Josh Russo	Approved by District Supervisor:
Title: HSE Coordinator	Approval Date: / Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: / Attached ☐
Date: 03/29/2012 Phone: 432-212-2399	

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - SRO State Unit Com #2
Eddy County, New Mexico



- 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
- Tetra Tech Temporary well

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Column
C 01278		C	ED		4	3	28	25S	28E	585470	3551338*	205	90	115
C 01411		C	ED	4	4	2	04	25S	28E	586289	3558522*	69	35	34
C 01453		C	ED		1	2	26	25S	28E	589096	3552612*	70	40	30
C 01522		C	ED			1	22	25S	28E	586843	3554004*	150		
C 01573 POD1		C	ED	3	1	4	20	25S	28E	584144	3553361	176	96	80
C 02668		C	ED	2	1	2	09	25S	28E	585890	3557525*	150		
C 03263 POD1			ED	1	1	1	07	25S	28E	581628	3557501*	133		

Average Depth to Water: **65 feet**

Minimum Depth: **35 feet**

Maximum Depth: **96 feet**

Record Count: 7

PLSS Search:

Township: 25S **Range:** 28E

***UTM location was derived from PLSS - see Help**

Appendix C

Summary Report

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

Report Date: June 29, 2012

Work Order: 12061820

Project Location: Eddy Co., NM
Project Name: COG/SRO State Unit Com. #2
Project Number: 114-6401366

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
301372	Trench-1 Surface (AH-1)	soil	2012-06-13	00:00	2012-06-18
301373	Trench-1 2' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301374	Trench-1 4' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301375	Trench-1 6' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301376	Trench-1 8' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301377	Trench-1 10' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301378	Trench-1 12' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301379	Trench-2 Surface (AH-2)	soil	2012-06-13	00:00	2012-06-18
301380	Trench-2 2' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301381	Trench-2 4' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301382	Trench-2 6' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301383	Trench-2 8' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301384	Trench-2 10' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301385	Trench-2 12' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301386	Trench-3 Surface (AH-4)	soil	2012-06-13	00:00	2012-06-18
301387	Trench-3 2' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301388	Trench-3 4' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301389	Trench-3 6' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301390	Trench-3 8' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301391	Trench-3 10' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301392	Trench-3 12' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301393	Trench-4 Surface (AH-5)	soil	2012-06-13	00:00	2012-06-18
301394	Trench-4 2' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301395	Trench-4 4' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301396	Trench-4 6' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301397	Trench-4 8' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301398	Trench-4 10' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301399	Trench-4 12' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301400	Trench-5 Surface (AH-9)	soil	2012-06-13	00:00	2012-06-18
301401	Trench-5 2' (AH-9)	soil	2012-06-13	00:00	2012-06-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
301402	Trench-5 4' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301403	Trench-5 6' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301404	Trench-5 8' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301405	Trench-5 10' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301406	Trench-5 12' (AH-9)	soil	2012-06-13	00:00	2012-06-18

Sample - Field Code	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
301372 - Trench-1 Surface (AH-1)	**849** $_{Qr,Qs}$	<2.00
301373 - Trench-1 2' (AH-1)	<50.0	<2.00
301379 - Trench-2 Surface (AH-2)	<50.0 $_{Qr,Qs}$	<2.00
301386 - Trench-3 Surface (AH-4)	**4500** $_{Qr,Qs}$	<10.0
301387 - Trench-3 2' (AH-4)	<50.0	<2.00
301388 - Trench-3 4' (AH-4)	<50.0	<2.00
301393 - Trench-4 Surface (AH-5)	**914** $_{Qr,Qs}$	<2.00
301394 - Trench-4 2' (AH-5)	<50.0	<2.00
301400 - Trench-5 Surface (AH-9)	<50.0 $_{Qr,Qs}$	<2.00

Sample: 301372 - Trench-1 Surface (AH-1)

Param	Flag	Result	Units	RL
Chloride		**744**	mg/Kg	4

Sample: 301373 - Trench-1 2' (AH-1)

Param	Flag	Result	Units	RL
Chloride		**208**	mg/Kg	4

Sample: 301374 - Trench-1 4' (AH-1)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301375 - Trench-1 6' (AH-1)

Param	Flag	Result	Units	RL
Chloride		**69.4**	mg/Kg	4

Sample: 301376 - Trench-1 8' (AH-1)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301377 - Trench-1 10' (AH-1)

Param	Flag	Result	Units	RL
Chloride		**41.6**	mg/Kg	4

Sample: 301378 - Trench-1 12' (AH-1)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301379 - Trench-2 Surface (AH-2)

Param	Flag	Result	Units	RL
Chloride		**83.2**	mg/Kg	4

Sample: 301380 - Trench-2 2' (AH-2)

Param	Flag	Result	Units	RL
Chloride		**509**	mg/Kg	4

Sample: 301381 - Trench-2 4' (AH-2)

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

Sample: 301382 - Trench-2 6' (AH-2)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301383 - Trench-2 8' (AH-2)

Param	Flag	Result	Units	RL
Chloride		**84.0**	mg/Kg	4

Sample: 301384 - Trench-2 10' (AH-2)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301385 - Trench-2 12' (AH-2)

Param	Flag	Result	Units	RL
Chloride		**70.0**	mg/Kg	4

Sample: 301386 - Trench-3 Surface (AH-4)

Param	Flag	Result	Units	RL
Chloride		**961**	mg/Kg	4

Sample: 301387 - Trench-3 2' (AH-4)

Param	Flag	Result	Units	RL
Chloride		**322**	mg/Kg	4

Sample: 301388 - Trench-3 4' (AH-4)

Param	Flag	Result	Units	RL
Chloride		**135**	mg/Kg	4

Sample: 301389 - Trench-3 6' (AH-4)

Param	Flag	Result	Units	RL
Chloride		**215**	mg/Kg	4

Sample: 301390 - Trench-3 8' (AH-4)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301391 - Trench-3 10' (AH-4)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301392 - Trench-3 12' (AH-4)

Param	Flag	Result	Units	RL
Chloride		**131**	mg/Kg	4

Sample: 301393 - Trench-4 Surface (AH-5)

Param	Flag	Result	Units	RL
Chloride		**221**	mg/Kg	4

Sample: 301394 - Trench-4 2' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**9290**	mg/Kg	4

Sample: 301395 - Trench-4 4' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**405**	mg/Kg	4

Sample: 301396 - Trench-4 6' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**2000**	mg/Kg	4

Sample: 301397 - Trench-4 8' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**1670**	mg/Kg	4

Sample: 301398 - Trench-4 10' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**716**	mg/Kg	4

Sample: 301399 - Trench-4 12' (AH-5)

Param	Flag	Result	Units	RL
Chloride		**362**	mg/Kg	4

Sample: 301400 - Trench-5 Surface (AH-9)

Param	Flag	Result	Units	RL
Chloride		**1070**	mg/Kg	4

Sample: 301401 - Trench-5 2' (AH-9)

Param	Flag	Result	Units	RL
Chloride		**122**	mg/Kg	4

Sample: 301402 - Trench-5 4' (AH-9)

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 301403 - Trench-5 6' (AH-9)

Param	Flag	Result	Units	RL
Chloride		**49.5**	mg/Kg	4

Sample: 301404 - Trench-5 8' (AH-9)

Param	Flag	Result	Units	RL
Chloride		**40.5**	mg/Kg	4

Sample: 301405 - Trench-5 10' (AH-9)

Param	Flag	Result	Units	RL
Chloride		**245**	mg/Kg	4

Sample: 301406 - Trench-5 12' (AH-9)

Param	Flag	Result	Units	RL
Chloride		**107**	mg/Kg	4

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report
(Corrected Report)

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

Report Date: June 29, 2012

Work Order: 12061820

Project Location: Eddy Co., NM
Project Name: COG/SRO State Unit Com. #2
Project Number: 114-6401366

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
301372	Trench-1 Surface (AH-1)	soil	2012-06-13	00:00	2012-06-18
301373	Trench-1 2' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301374	Trench-1 4' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301375	Trench-1 6' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301376	Trench-1 8' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301377	Trench-1 10' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301378	Trench-1 12' (AH-1)	soil	2012-06-13	00:00	2012-06-18
301379	Trench-2 Surface (AH-2)	soil	2012-06-13	00:00	2012-06-18
301380	Trench-2 2' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301381	Trench-2 4' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301382	Trench-2 6' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301383	Trench-2 8' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301384	Trench-2 10' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301385	Trench-2 12' (AH-2)	soil	2012-06-13	00:00	2012-06-18
301386	Trench-3 Surface (AH-4)	soil	2012-06-13	00:00	2012-06-18
301387	Trench-3 2' (AH-4)	soil	2012-06-13	00:00	2012-06-18

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
301388	Trench-3 4' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301389	Trench-3 6' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301390	Trench-3 8' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301391	Trench-3 10' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301392	Trench-3 12' (AH-4)	soil	2012-06-13	00:00	2012-06-18
301393	Trench-4 Surface (AH-5)	soil	2012-06-13	00:00	2012-06-18
301394	Trench-4 2' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301395	Trench-4 4' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301396	Trench-4 6' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301397	Trench-4 8' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301398	Trench-4 10' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301399	Trench-4 12' (AH-5)	soil	2012-06-13	00:00	2012-06-18
301400	Trench-5 Surface (AH-9)	soil	2012-06-13	00:00	2012-06-18
301401	Trench-5 2' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301402	Trench-5 4' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301403	Trench-5 6' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301404	Trench-5 8' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301405	Trench-5 10' (AH-9)	soil	2012-06-13	00:00	2012-06-18
301406	Trench-5 12' (AH-9)	soil	2012-06-13	00:00	2012-06-18

Report Corrections (Work Order 12061820)

- 6/26/12: Added chloride test to samples 301397 - 301399 per client.

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

Report Contents

Case Narrative

Samples for project COG/SRO State Unit Com. #2 were received by TraceAnalysis, Inc. on 2012-06-18 and assigned to work order 12061820. Samples for work order 12061820 were received intact at a temperature of 4.6 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	78417	2012-06-22 at 10:41	92467	2012-06-25 at 13:28
Chloride (Titration)	SM 4500-Cl B	78417	2012-06-22 at 10:41	92468	2012-06-25 at 13:29
Chloride (Titration)	SM 4500-Cl B	78417	2012-06-22 at 10:41	92474	2012-06-25 at 14:54
Chloride (Titration)	SM 4500-Cl B	78417	2012-06-22 at 10:41	92475	2012-06-25 at 14:55
Chloride (Titration)	SM 4500-Cl B	78477	2012-06-27 at 11:30	92580	2012-06-27 at 14:24
TPH DRO - NEW	S 8015 D	78292	2012-06-19 at 08:30	92297	2012-06-19 at 15:37
TPH DRO - NEW	S 8015 D	78333	2012-06-20 at 08:30	92352	2012-06-20 at 11:57
TPH GRO	S 8015 D	78308	2012-06-19 at 13:00	92316	2012-06-19 at 17:29
TPH GRO	S 8015 D	78339	2012-06-20 at 13:00	92359	2012-06-20 at 15:53

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12061820 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: 301372 - Trench-1 Surface (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**744**	mg/Kg	5	4.00

Sample: 301372 - Trench-1 Surface (AH-1)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	Sample Preparation:	2012-06-19	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	1	**849**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		255	mg/Kg	1	100	255	49.3 - 157.5

Sample: 301372 - Trench-1 Surface (AH-1)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	Sample Preparation:	2012-06-19	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.22	mg/Kg	1	2.00	111	58.5 - 155.1

continued ...

sample continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			1.54	mg/Kg	1	2.00	77	45.1 - 162.2

Sample: 301373 - Trench-1 2' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**208**	mg/Kg	5	4.00

Sample: 301373 - Trench-1 2' (AH-1)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92352	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78333	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			100	mg/Kg	1	100	100	49.3 - 157.5

Sample: 301373 - Trench-1 2' (AH-1)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92359	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78339	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)				1.49	mg/Kg	1	2.00	74	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr		0.691	mg/Kg	1	2.00	34	45.1 - 162.2

Sample: 301374 - Trench-1 4' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301375 - Trench-1 6' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**69.4**	mg/Kg	5	4.00

Sample: 301376 - Trench-1 8' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301377 - Trench-1 10' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**41.6**	mg/Kg	5	4.00

Sample: 301378 - Trench-1 12' (AH-1)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301379 - Trench-2 Surface (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**83.2**	mg/Kg	5	4.00

Sample: 301379 - Trench-2 Surface (AH-2)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	Sample Preparation:	2012-06-19	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Q_{F,Q_S}	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			92.7	mg/Kg	1	100	93	49.3 - 157.5

Sample: 301379 - Trench-2 Surface (AH-2)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	Sample Preparation:	2012-06-19	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.50	mg/Kg	1	2.00	75	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.00	mg/Kg	1	2.00	50	45.1 - 162.2

Sample: 301380 - Trench-2 2' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**509**	mg/Kg	5	4.00

Sample: 301381 - Trench-2 4' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92467	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**647**	mg/Kg	5	4.00

Sample: 301382 - Trench-2 6' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301383 - Trench-2 8' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**84.0**	mg/Kg	5	4.00

Sample: 301384 - Trench-2 10' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301385 - Trench-2 12' (AH-2)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**70.0**	mg/Kg	5	4.00

Sample: 301386 - Trench-3 Surface (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**961**	mg/Kg	10	4.00

Sample: 301386 - Trench-3 Surface (AH-4)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	Sample Preparation:	2012-06-19	Prepared By:	CW

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Q_{r,Q_s}	1	**4500**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Q_{sr}	Q_{sr}		446	mg/Kg	1	100	446	49.3 - 157.5

Sample: 301386 - Trench-3 Surface (AH-4)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	Sample Preparation:	2012-06-19	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	1	<10.0	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.53	mg/Kg	5	5.00	91	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			3.55	mg/Kg	5	5.00	71	45.1 - 162.2

Sample: 301387 - Trench-3 2' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**322**	mg/Kg	5	4.00

Sample: 301387 - Trench-3 2' (AH-4)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92352	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78333	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			94.7	mg/Kg	1	100	95	49.3 - 157.5

Sample: 301387 - Trench-3 2' (AH-4)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92359	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78339	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.43	mg/Kg	1	2.00	72	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	0.762	mg/Kg	1	2.00	38	45.1 - 162.2

Sample: 301388 - Trench-3 4' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**135**	mg/Kg	5	4.00

Sample: 301388 - Trench-3 4' (AH-4)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92352	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78333	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			96.6	mg/Kg	1	100	97	49.3 - 157.5

Sample: 301388 - Trench-3 4' (AH-4)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92359	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78339	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.72	mg/Kg	1	2.00	86	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	0.899	mg/Kg	1	2.00	45	45.1 - 162.2

Sample: 301389 - Trench-3 6' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**215**	mg/Kg	5	4.00

Sample: 301390 - Trench-3 8' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301391 - Trench-3 10' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92468	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301392 - Trench-3 12' (AH-4)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**131**	mg/Kg	5	4.00

Sample: 301393 - Trench-4 Surface (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**221**	mg/Kg	5	4.00

Sample: 301393 - Trench-4 Surface (AH-5)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	Sample Preparation:	2012-06-19	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	1	**914**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		159	mg/Kg	1	100	159	49.3 - 157.5

Sample: 301393 - Trench-4 Surface (AH-5)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	Sample Preparation:	2012-06-19	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.73	mg/Kg	1	2.00	86	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.25	mg/Kg	1	2.00	62	45.1 - 162.2

Sample: 301394 - Trench-4 2' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**9290**	mg/Kg	10	4.00

Sample: 301394 - Trench-4 2' (AH-5)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92352	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78333	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			97.7	mg/Kg	1	100	98	49.3 - 157.5

Sample: 301394 - Trench-4 2' (AH-5)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92359	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78339	Sample Preparation:	2012-06-20	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.60	mg/Kg	1	2.00	80	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	0.828	mg/Kg	1	2.00	41	45.1 - 162.2

Sample: 301395 - Trench-4 4' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**405**	mg/Kg	5	4.00

Sample: 301396 - Trench-4 6' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**2000**	mg/Kg	10	4.00

Sample: 301397 - Trench-4 8' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92580	Date Analyzed:	2012-06-27	Analyzed By:	AR
Prep Batch:	78477	Sample Preparation:	2012-06-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1670**	mg/Kg	10	4.00

Sample: 301398 - Trench-4 10' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92580	Date Analyzed:	2012-06-27	Analyzed By:	AR
Prep Batch:	78477	Sample Preparation:	2012-06-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**716**	mg/Kg	10	4.00

Sample: 301399 - Trench-4 12' (AH-5)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92580	Date Analyzed:	2012-06-27	Analyzed By:	AR
Prep Batch:	78477	Sample Preparation:	2012-06-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**362**	mg/Kg	5	4.00

Sample: 301400 - Trench-5 Surface (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1070**	mg/Kg	10	4.00

Sample: 301400 - Trench-5 Surface (AH-9)

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	Sample Preparation:	2012-06-19	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.3	mg/Kg	1	100	79	49.3 - 157.5

Sample: 301400 - Trench-5 Surface (AH-9)

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	Sample Preparation:	2012-06-19	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.71	mg/Kg	1	2.00	86	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.20	mg/Kg	1	2.00	60	45.1 - 162.2

Sample: 301401 - Trench-5 2' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**122**	mg/Kg	5	4.00

Sample: 301402 - Trench-5 4' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 301403 - Trench-5 6' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**49.5**	mg/Kg	5	4.00

Sample: 301404 - Trench-5 8' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**40.5**	mg/Kg	5	4.00

Sample: 301405 - Trench-5 10' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92475	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**245**	mg/Kg	5	4.00

Sample: 301406 - Trench-5 12' (AH-9)

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	92475	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	Sample Preparation:	2012-06-22	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**107**	mg/Kg	5	4.00

Method Blanks

Method Blank (1) QC Batch: 92297

QC Batch:	92297	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78292	QC Preparation:	2012-06-19	Prepared By:	AG

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			152	mg/Kg	1	100	152	52 - 160.8

Method Blank (1) QC Batch: 92316

QC Batch:	92316	Date Analyzed:	2012-06-19	Analyzed By:	AG
Prep Batch:	78308	QC Preparation:	2012-06-19	Prepared By:	AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	78.6 - 131
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	51 - 130

Method Blank (1) QC Batch: 92352

QC Batch:	92352	Date Analyzed:	2012-06-20	Analyzed By:	AG
Prep Batch:	78333	QC Preparation:	2012-06-20	Prepared By:	AG

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			108	mg/Kg	1	100	108	52 - 160.8

Method Blank (1) QC Batch: 92359

QC Batch: 92359 | Date Analyzed: 2012-06-20 | Analyzed By: AG
Prep Batch: 78339 | QC Preparation: 2012-06-20 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	78.6 - 131
4-Bromofluorobenzene (4-BFB)			1.21	mg/Kg	1	2.00	60	51 - 130

Method Blank (1) QC Batch: 92467

QC Batch: 92467 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

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

Method Blank (1) QC Batch: 92468

QC Batch: 92468 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

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

Method Blank (1) QC Batch: 92474

QC Batch:	92474	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	QC Preparation:	2012-06-22	Prepared By:	AR

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

Method Blank (1) QC Batch: 92475

QC Batch:	92475	Date Analyzed:	2012-06-25	Analyzed By:	AR
Prep Batch:	78417	QC Preparation:	2012-06-22	Prepared By:	AR

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

Method Blank (1) QC Batch: 92580

QC Batch:	92580	Date Analyzed:	2012-06-27	Analyzed By:	AR
Prep Batch:	78477	QC Preparation:	2012-06-27	Prepared By:	AR

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

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 92297 | Date Analyzed: 2012-06-19 | Analyzed By: AG
Prep Batch: 78292 | QC Preparation: 2012-06-19 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	251	mg/Kg	1	250	<14.5	100	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	250	mg/Kg	1	250	<14.5	100	62 - 128.3	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	112	113	mg/Kg	1	100	112	113	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 92316 | Date Analyzed: 2012-06-19 | Analyzed By: AG
Prep Batch: 78308 | QC Preparation: 2012-06-19 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.2	mg/Kg	1	20.0	<1.22	91	65.3 - 105.7

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.2	mg/Kg	1	20.0	<1.22	91	65.3 - 105.7	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.15	2.10	mg/Kg	1	2.00	108	105	79 - 131.2
4-Bromofluorobenzene (4-BFB)	2.42	2.37	mg/Kg	1	2.00	121	118	56.4 - 136.6

Laboratory Control Spike (LCS-1)

QC Batch: 92352 | Date Analyzed: 2012-06-20 | Analyzed By: AG
Prep Batch: 78333 | QC Preparation: 2012-06-20 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	201	mg/Kg	1	250	<14.5	80	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	209	mg/Kg	1	250	<14.5	84	62 - 128.3	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	82.4	69.6	mg/Kg	1	100	82	70	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 92359 | Date Analyzed: 2012-06-20 | Analyzed By: AG
Prep Batch: 78339 | QC Preparation: 2012-06-20 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.5	mg/Kg	1	20.0	<1.22	88	65.3 - 105.7

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.8	mg/Kg	1	20.0	<1.22	94	65.3 - 105.7	7	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	2.12	mg/Kg	1	2.00	104	106	79 - 131.2
4-Bromofluorobenzene (4-BFB)	1.61	1.62	mg/Kg	1	2.00	80	81	56.4 - 136.6

Laboratory Control Spike (LCS-1)

QC Batch: 92467 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2560	mg/Kg	1	2500	<3.85	102	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2730	mg/Kg	1	2500	<3.85	109	85 - 115	6	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 92468 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2440	mg/Kg	1	2500	<3.85	98	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2610	mg/Kg	1	2500	<3.85	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: 92474 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2530	mg/Kg	1	2500	<3.85	101	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2710	mg/Kg	1	2500	<3.85	108	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: 92475 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2510	mg/Kg	1	2500	<3.85	100	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2650	mg/Kg	1	2500	<3.85	106	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: 92580 | Date Analyzed: 2012-06-27 | Analyzed By: AR
Prep Batch: 78477 | QC Preparation: 2012-06-27 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2430	mg/Kg	1	2500	<3.85	97	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2550	mg/Kg	1	2500	<3.85	102	85 - 115	5	20

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

Matrix Spike (MS-1) Spiked Sample: 301379

QC Batch: 92297 | Date Analyzed: 2012-06-19 | Analyzed By: AG
Prep Batch: 78292 | QC Preparation: 2012-06-19 | Prepared By: AG

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	Qs	Qs	1	26.3	mg/Kg	1	250	<14.5	10	45.5 - 127

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

Param		F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr,Qs	Qr,Qs	1	21.2	mg/Kg	1	250	<14.5	8	45.5 - 127	22	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	Qsr	Qsr	9.17	12.7	mg/Kg	1	100	9	13	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 301379

QC Batch: 92316 | Date Analyzed: 2012-06-19 | Analyzed By: AG
Prep Batch: 78308 | QC Preparation: 2012-06-19 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	15.2	mg/Kg	1	20.0	<1.22	76	28.2 - 157.2

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	14.3	mg/Kg	1	20.0	<1.22	72	28.2 - 157.2	6	20

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

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			2.00	1.81	mg/Kg	1	2	100	90	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	1.49	1.37	mg/Kg	1	2	74	68	77.9 - 122.4

Matrix Spike (MS-1) Spiked Sample: 301417

QC Batch: 92352 | Date Analyzed: 2012-06-20 | Analyzed By: AG
Prep Batch: 78333 | QC Preparation: 2012-06-20 | Prepared By: AG

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	210	mg/Kg	1	250	<14.5	84	45.5 - 127

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	239	mg/Kg	1	250	<14.5	96	45.5 - 127	13	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	82.7	82.3	mg/Kg	1	100	83	82	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 301423

QC Batch: 92359 | Date Analyzed: 2012-06-20 | Analyzed By: AG
Prep Batch: 78339 | QC Preparation: 2012-06-20 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	19.1	mg/Kg	1	20.0	<1.22	96	28.2 - 157.2

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	20.9	mg/Kg	1	20.0	<1.22	104	28.2 - 157.2	9	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)			1.67	2.00	mg/Kg	1	2	84	100	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	1.33	1.49	mg/Kg	1	2	66	74	77.9 - 122.4

Matrix Spike (MS-1) Spiked Sample: 301381

QC Batch: 92467 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			3470	mg/Kg	5	2500	647	113	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			3310	mg/Kg	5	2500	647	106	79.4 - 120.6	5	20

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

Matrix Spike (MS-1) Spiked Sample: 301391

QC Batch: 92468 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2430	mg/Kg	5	2500	<19.2	97	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2630	mg/Kg	5	2500	<19.2	105	79.4 - 120.6	8	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: 301404

QC Batch: 92474 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2470	mg/Kg	5	2500	40.5	97	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2670	mg/Kg	5	2500	40.5	105	79.4 - 120.6	8	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: 301423

QC Batch: 92475 | Date Analyzed: 2012-06-25 | Analyzed By: AR
Prep Batch: 78417 | QC Preparation: 2012-06-22 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2560	mg/Kg	1	2500	<3.85	102	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2750	mg/Kg	1	2500	<3.85	110	79.4 - 120.6	7	20

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

Matrix Spike (MS-1) Spiked Sample: 301399

QC Batch: 92580 | Date Analyzed: 2012-06-27 | Analyzed By: AR
Prep Batch: 78477 | QC Preparation: 2012-06-27 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2950	mg/Kg	5	2500	362	104	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			3150	mg/Kg	5	2500	362	112	79.4 - 120.6	7	20

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

Calibration Standards

Standard (CCV-1)

QC Batch: 92297 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	273	109	80 - 120	2012-06-19

Standard (CCV-2)

QC Batch: 92297 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	265	106	80 - 120	2012-06-19

Standard (CCV-3)

QC Batch: 92297 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	238	95	80 - 120	2012-06-19

Standard (CCV-1)

QC Batch: 92316 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.20	120	80 - 120	2012-06-19

Standard (CCV-2)

QC Batch: 92316 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.856	86	80 - 120	2012-06-19

Standard (CCV-3)

QC Batch: 92316 | Date Analyzed: 2012-06-19 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.811	81	80 - 120	2012-06-19

Standard (CCV-1)

QC Batch: 92352 | Date Analyzed: 2012-06-20 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	296	118	80 - 120	2012-06-20

Standard (CCV-2)

QC Batch: 92352 | Date Analyzed: 2012-06-20 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	276	110	80 - 120	2012-06-20

Standard (CCV-3)

QC Batch: 92352 | Date Analyzed: 2012-06-20 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	284	114	80 - 120	2012-06-20

Standard (CCV-1)

QC Batch: 92359 Date Analyzed: 2012-06-20 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.933	93	80 - 120	2012-06-20

Standard (CCV-2)

QC Batch: 92359 Date Analyzed: 2012-06-20 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.907	91	80 - 120	2012-06-20

Standard (CCV-3)

QC Batch: 92359 Date Analyzed: 2012-06-20 Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.803	80	80 - 120	2012-06-20

Standard (CCV-1)

QC Batch: 92467 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2012-06-25

Standard (CCV-2)

QC Batch: 92467 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.6	100	85 - 115	2012-06-25

Standard (CCV-1)

QC Batch: 92468 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2012-06-25

Standard (CCV-2)

QC Batch: 92468 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.5	100	85 - 115	2012-06-25

Standard (CCV-1)

QC Batch: 92474 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	98.2	98	85 - 115	2012-06-25

Standard (CCV-2)

QC Batch: 92474 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	102	102	85 - 115	2012-06-25

Standard (CCV-1)

QC Batch: 92475 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2012-06-25

Standard (CCV-2)

QC Batch: 92475 Date Analyzed: 2012-06-25 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.3	99	85 - 115	2012-06-25

Standard (CCV-1)

QC Batch: 92580 Date Analyzed: 2012-06-27 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	102	102	85 - 115	2012-06-27

Standard (CCV-2)

QC Batch: 92580 | Date Analyzed: 2012-06-27 | Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	98.2	98	85 - 115	2012-06-27

Appendix

Report Definitions

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

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-11-3	Midland

Standard Flags

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

Attachments

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

12061820

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

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6401366

PROJECT NAME: COG / SRO St Unit Com #2 Eddy Co, NM

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
301372	6/13		S		X	Trench-1 Surface (AH-1)	1				X	
373						Trench-1 2' (AH-1)						
374						Trench-1 4' (AH-1)						
375						Trench-1 6' (AH-1)						
376						Trench-1 8' (AH-1)						
377						Trench-1 10' (AH-1)						
378						Trench-1 12' (AH-1)						
379						Trench-2 Surface (AH-2)						
380						Trench-2 2' (AH-2)						
381	↓		↓		↓	Trench-2 4' (AH-2)	↓				↓	

ANALYSIS REQUEST (Circle or Specify Method No.)

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

RELINQUISHED BY: (Signature) — Date: 6/13/12 Time: 1600

RECEIVED BY: (Signature) — Date: 6/18/12 Time: 2:00 PM

SAMPLED BY: (Print & Initial) Robert Gubbels Jr. — Date: 6/14/12 Time: 0850

RELINQUISHED BY: (Signature) — Date: 6/18/12 Time: 2:00 PM

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: Brenda PHONE:

RECEIVED BY: (Signature)

DATE: 6-18-12 TIME: 14:00

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.6°C intact

REMARKS: Run deeper samples if TPH exceeds 100 mg/kg Midland all

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

1Z0610CU

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.: 114-6409366

PROJECT NAME: COG / STRD St Unit Com #2 Eddy Co, NM

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION			NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH TX1005 (Ext. to C35)	TPH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
382	6/13		S		X	Trench-2	6'	(AH-2)	1				X															X				
383						Trench-2	8'	(AH-2)																				X				
384						Trench-2	10'	(AH-2)																				X				
385						Trench-2	12'	(AH-2)																				X				
386						Trench-3	Surface	(AH-4)								X												X				
387						Trench-3	2'	(AH-4)																				X				
388						Trench-3	4'	(AH-4)																				X				
389						Trench-3	6'	(AH-4)																				X				
390						Trench-3	8'	(AH-4)																				X				
391	↓		↓		↓	Trench-3	10'	(AH-4)	↓				↓															X				

RELINQUISHED BY: (Signature) — Date: 6/15/12 Time: 1600
RECEIVED BY: (Signature) — Date: 6/18/12 Time: 2:30 PM

RELINQUISHED BY: (Signature) — Date: 6/18/12 Time: 2:30 PM
RECEIVED BY: (Signature) — Date: Time:

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

SAMPLED BY: (Print & Initial) Robert Grubbs Jr — Date: 6/14/12 Time: 0855

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: Mendez PHONE:
RECEIVED BY: (Signature)
DATE: 6-18-12 TIME: 14:00

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.6°C

REMARKS: Midland lab

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

12061820

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: Mike Farmer

PROJECT NO.: 114-6401366

PROJECT NAME: COG/SRO St Unit Com #2 Eddy Co, NM

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
392	6/13		S		X	Trench 3 12' (AH-4)	1				X	
393						Trench 4 Surface (AH-5)						
394						Trench 4 2' (AH-5)						
395						Trench 4 4' (AH-5)						
396						Trench 4 6' (AH-5)						
397						Trench 4 8' (AH-5)						
398						Trench 4 10' (AH-5)						
399						Trench 4 12' (AH-5)						
400						Trench 5 Surface (AH-9)						
401	↓		↓		↓	Trench 5 2' (AH-9)	↓				↓	

ANALYSIS REQUEST (Circle or Specify Method No.)

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

RELINQUISHED BY: (Signature) — Date: 6/15/12 Time: 1602 — RECEIVED BY: (Signature) — Date: 6/18/12 Time:

RELINQUISHED BY: (Signature) — Date: 6/18/12 Time: 2:00 P.M. — RECEIVED BY: (Signature) — Date: Time:

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

SAMPLED BY: (Print & Initial) Robert Gubbs Jr. — Date: 6/14/12 Time: 0900

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

TETRA TECH CONTACT PERSON: Mike Farmer — Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: Trace

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: Marcie PHONE:

RECEIVED BY: (Signature) DATE: 6-18-12 TIME: 14:30

SAMPLE CONDITION WHEN RECEIVED: 4.6°C Intact

REMARKS:

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

1206182O

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.: 114-64-1366
PROJECT NAME: COG / SRO St Unit Com # 2 (Billing by NM)

LAB I.D. NUMBER	DATE 2012	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
402	6/13		X		X	Trench-5 4' (AH-9)	1				X														X			
403	↓		↓		↓	Trench-5 6' (AH-5)	↓				↓														X			
404						Trench-5 8' (AH-9)																			X			
405						Trench-5 10' (AH-9)																			X			
406						Trench-5 12' (AH-5)																			X			

RELINQUISHED BY: (Signature) — Date: 6/13/12 Time: 1803
RECEIVED BY: (Signature) — Date: 6/18/12 Time:
SAMPLED BY: (Print & Initial) Robert Gabbs Jr — Date: 6/14/12 Time: 0905

RELINQUISHED BY: (Signature) — Date: 6/18/12 Time: 2:00 PM
RECEIVED BY: (Signature) — Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX HAND DELIVERED BUS UPS — AIRBILL #: OTHER:

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

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: Glenda PHONE:
RECEIVED BY: (Signature)
DATE: 6-18-12 TIME: 14:00
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.6°C intact
REMARKS:

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

12061820

Analysis Request of Chain of Custody Record

PAGE: 3 of 4

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

CLIENT NAME: COG
SITE MANAGER: Ike Tavarez
PROJECT NO.: 114-6401366
PROJECT NAME: COG/SRO St Unit Com #2 Eddy Co, NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
392	6/13		S		X	Trench-3 12' (AH-4)	1				X														X				
393	↓		↓		↓	Trench-4 Surface (AH-5)	↓				↓			X											X				
394	↓		↓		↓	Trench-4 2' (AH-5)	↓				↓			X											X				
395	↓		↓		↓	Trench-4 4' (AH-5)	↓				↓														X				
396	↓		↓		↓	Trench-4 6' (AH-5)	↓				↓														X				
397	↓		↓		↓	Trench-4 8' (AH-5)	↓				↓													Hold	(X)				
398	↓		↓		↓	Trench-4 10' (AH-5)	↓				↓													Hold	(X)				
399	↓		↓		↓	Trench-4 12' (AH-5)	↓				↓													Hold	(X)				
400	↓		↓		↓	Trench-5 Surface (AH-9)	↓				↓			X											X				
401	↓		↓		↓	Trench-5 2' (AH-9)	↓				↓														X				

Analyze per: Jeanne 6/26/12

RELINQUISHED BY: (Signature) [signature] Date: 6/15/12 Time: 1602
RECEIVED BY: (Signature) [signature] Date: 6/18/12 Time:
SAMPLED BY: (Print & Initial) Robert Grubbs Jr. Date: 6/14/12 Time: 0900

RELINQUISHED BY: (Signature) [signature] Date: 6/18/12 Time: 2:00 P.M.
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

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

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: Monte PHONE:
RECEIVED BY: (Signature) [signature]
DATE: 6-18-12 TIME: 14:00

TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.6°C intact
REMARKS:

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

8

Summary Report

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

Report Date: May 2, 2012

Work Order: 12042402

Project Location: Eddy Co., NM
Project Name: COG/SRO State Unit Com. #2
Project Number: 114-6401366

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
294981	AH-1 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294982	AH-2 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294983	AH-3 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294984	AH-4 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294985	AH-5 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294986	AH-6 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294987	AH-7 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294988	AH-8 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294989	AH-9 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294990	AH-10 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294991	AH-11 0-1'	soil	2012-04-23	00:00	2012-04-23
294992	AH-11 1-1.5'	soil	2012-04-23	00:00	2012-04-23
294993	AH-11 2-2.5'	soil	2012-04-23	00:00	2012-04-23
294994	AH-11 3-3.5'	soil	2012-04-23	00:00	2012-04-23
294995	AH-11 4-4.5'	soil	2012-04-23	00:00	2012-04-23
294996	AH-11 5-5.5'	soil	2012-04-23	00:00	2012-04-23
294997	AH-12 0-1'	soil	2012-04-23	00:00	2012-04-23
294998	AH-12 1-1.5'	soil	2012-04-23	00:00	2012-04-23
294999	AH-12 2-2.5'	soil	2012-04-23	00:00	2012-04-23
295000	AH-12 3-3.5'	soil	2012-04-23	00:00	2012-04-23
295001	AH-12 4-4.5'	soil	2012-04-23	00:00	2012-04-23
295002	AH-12 5-5.5'	soil	2012-04-23	00:00	2012-04-23
295003	AH-13 0-1'	soil	2012-04-23	00:00	2012-04-23
295004	AH-13 1-1.5'	soil	2012-04-23	00:00	2012-04-23
295005	AH-13 2-2.5'	soil	2012-04-23	00:00	2012-04-23
295006	AH-13 3-3.5'	soil	2012-04-23	00:00	2012-04-23

Sample - Field Code	BTEX Benzene (mg/Kg)	BTEX Toluene (mg/Kg)	BTEX Ethylbenzene (mg/Kg)	BTEX Xylene (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
294981 - AH-1 0-0.5'					**292**	<2.00 Qs
294982 - AH-2 0-0.5'					**2990**	**511** Qs
294983 - AH-3 0-0.5'	<1.00	<1.00	<1.00	<1.00	**15300**	**438** Qs
294984 - AH-4 0-0.5'	**0.538**	**2.08**	**1.42**	**6.91**	**8940**	**752** Qs
294985 - AH-5 0-0.5'					**3640**	**331** Qs
294986 - AH-6 0-0.5'					**2360** Qs	**335** Qs
294987 - AH-7 0-0.5'	<0.100	**0.390**	**0.581**	**2.08**	**4600** Qs	**444** Qs
294988 - AH-8 0-0.5'	**2.38**	**12.8**	**9.58**	**41.0**	**9000** Qs	**2460** Qs
294989 - AH-9 0-0.5'	<0.200	<0.200	<0.200	<0.200	**4470** Qs	**99.1** Qs
294990 - AH-10 0-0.5'					**1900** Qs	**58.4** Qs
294991 - AH-11 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0 Qs	<2.00 Qs
294997 - AH-12 0-1'	<0.0200	<0.0200	<0.0200	<0.0200	**133** Qs	<2.00 Qs
294998 - AH-12 1-1.5'					**120**	<2.00 Qr,Qs
294999 - AH-12 2-2.5'					<50.0	<2.00
295003 - AH-13 0-1'	<0.0200	**0.114**	**0.172**	**0.662**	<50.0 Qs	**114** Qs
295004 - AH-13 1-1.5'					<50.0	**3.50** Qr,Qs

Sample: 294981 - AH-1 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**3570**	mg/Kg	4

Sample: 294982 - AH-2 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**6080**	mg/Kg	4

Sample: 294983 - AH-3 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**13000**	mg/Kg	4

Sample: 294984 - AH-4 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**3460**	mg/Kg	4

Sample: 294985 - AH-5 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**1790**	mg/Kg	4

Sample: 294986 - AH-6 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**3020**	mg/Kg	4

Sample: 294987 - AH-7 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**685**	mg/Kg	4

Sample: 294988 - AH-8 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**1230**	mg/Kg	4

Sample: 294989 - AH-9 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**12000**	mg/Kg	4

Sample: 294990 - AH-10 0-0.5'

Param	Flag	Result	Units	RL
Chloride		**403**	mg/Kg	4

Sample: 294991 - AH-11 0-1'

Param	Flag	Result	Units	RL
Chloride		**5640**	mg/Kg	4

Sample: 294992 - AH-11 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**3090**	mg/Kg	4

Sample: 294993 - AH-11 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**114**	mg/Kg	4

Sample: 294994 - AH-11 3-3.5'

Param	Flag	Result	Units	RL
Chloride		**69.5**	mg/Kg	4

Sample: 294995 - AH-11 4-4.5'

Param	Flag	Result	Units	RL
Chloride		**179**	mg/Kg	4

Sample: 294996 - AH-11 5-5.5'

Param	Flag	Result	Units	RL
Chloride		**39.7**	mg/Kg	4

Sample: 294997 - AH-12 0-1'

Param	Flag	Result	Units	RL
Chloride		**169**	mg/Kg	4

Sample: 294998 - AH-12 1-1.5'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 294999 - AH-12 2-2.5'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 295000 - AH-12 3-3.5'

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

Sample: 295001 - AH-12 4-4.5'

Param	Flag	Result	Units	RL
Chloride		**104**	mg/Kg	4

Sample: 295002 - AH-12 5-5.5'

Param	Flag	Result	Units	RL
Chloride		**104**	mg/Kg	4

Sample: 295003 - AH-13 0-1'

Param	Flag	Result	Units	RL
Chloride		**6790**	mg/Kg	4

Sample: 295004 - AH-13 1-1.5'

Param	Flag	Result	Units	RL
Chloride		**5930**	mg/Kg	4

Sample: 295005 - AH-13 2-2.5'

Param	Flag	Result	Units	RL
Chloride		**64.6**	mg/Kg	4

Sample: 295006 - AH-13 3-3.5'

Param	Flag	Result	Units	RL
Chloride		**114**	mg/Kg	4

TRACEANALYSIS, INC.

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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: May 2, 2012

Work Order: 12042402

Project Location: Eddy Co., NM
Project Name: COG/SRO State Unit Com. #2
Project Number: 114-6401366

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
294981	AH-1 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294982	AH-2 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294983	AH-3 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294984	AH-4 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294985	AH-5 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294986	AH-6 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294987	AH-7 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294988	AH-8 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294989	AH-9 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294990	AH-10 0-0.5'	soil	2012-04-23	00:00	2012-04-23
294991	AH-11 0-1'	soil	2012-04-23	00:00	2012-04-23
294992	AH-11 1-1.5'	soil	2012-04-23	00:00	2012-04-23
294993	AH-11 2-2.5'	soil	2012-04-23	00:00	2012-04-23
294994	AH-11 3-3.5'	soil	2012-04-23	00:00	2012-04-23
294995	AH-11 4-4.5'	soil	2012-04-23	00:00	2012-04-23
294996	AH-11 5-5.5'	soil	2012-04-23	00:00	2012-04-23
294997	AH-12 0-1'	soil	2012-04-23	00:00	2012-04-23
294998	AH-12 1-1.5'	soil	2012-04-23	00:00	2012-04-23

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
294999	AH-12 2-2.5'	soil	2012-04-23	00:00	2012-04-23
295000	AH-12 3-3.5'	soil	2012-04-23	00:00	2012-04-23
295001	AH-12 4-4.5'	soil	2012-04-23	00:00	2012-04-23
295002	AH-12 5-5.5'	soil	2012-04-23	00:00	2012-04-23
295003	AH-13 0-1'	soil	2012-04-23	00:00	2012-04-23
295004	AH-13 1-1.5'	soil	2012-04-23	00:00	2012-04-23
295005	AH-13 2-2.5'	soil	2012-04-23	00:00	2012-04-23
295006	AH-13 3-3.5'	soil	2012-04-23	00:00	2012-04-23

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

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

Report Contents

Case Narrative

Samples for project COG/SRO State Unit Com. #2 were received by TraceAnalysis, Inc. on 2012-04-23 and assigned to work order 12042402. Samples for work order 12042402 were received intact at a temperature of 3.9 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	76841	2012-04-24 at 10:30	90566	2012-04-24 at 10:23
Chloride (Titration)	SM 4500-Cl B	76915	2012-04-27 at 09:48	90661	2012-04-27 at 14:53
Chloride (Titration)	SM 4500-Cl B	76915	2012-04-27 at 09:48	90737	2012-04-30 at 10:13
Chloride (Titration)	SM 4500-Cl B	76915	2012-04-27 at 09:48	90738	2012-04-30 at 10:14
TPH DRO - NEW	S 8015 D	76815	2012-04-24 at 13:11	90552	2012-04-24 at 14:56
TPH DRO - NEW	S 8015 D	76815	2012-04-24 at 13:11	90553	2012-04-24 at 14:58
TPH DRO - NEW	S 8015 D	76854	2012-04-25 at 13:34	90586	2012-04-25 at 13:36
TPH DRO - NEW	S 8015 D	76989	2012-05-01 at 13:09	90755	2012-05-01 at 13:10
TPH GRO	S 8015 D	76841	2012-04-24 at 10:30	90567	2012-04-24 at 10:51
TPH GRO	S 8015 D	76879	2012-04-25 at 10:55	90612	2012-04-25 at 11:39
TPH GRO	S 8015 D	77014	2012-05-01 at 10:45	90780	2012-05-01 at 12:10

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 12042402 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: 294981 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**3570**	mg/Kg	50	4.00

Sample: 294981 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1	**292**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	198	mg/Kg	1	100	198	49.3 - 157.5

Sample: 294981 - AH-1 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs,U	1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	58.5 - 155.1

continued ...

sample continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	45.1 - 162.2

Sample: 294982 - AH-2 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**6080**	mg/Kg	50	4.00

Sample: 294982 - AH-2 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**2990**	mg/Kg	5	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		440	mg/Kg	5	100	440	49.3 - 157.5

Sample: 294982 - AH-2 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**511**	mg/Kg	20	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			20.9	mg/Kg	20	20.0	104	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			19.4	mg/Kg	20	20.0	97	45.1 - 162.2

Sample: 294983 - AH-3 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<1.00	mg/Kg	50	0.0200
Toluene	U	1	<1.00	mg/Kg	50	0.0200
Ethylbenzene	U	1	<1.00	mg/Kg	50	0.0200
Xylene	U	1	<1.00	mg/Kg	50	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			43.1	mg/Kg	50	50.0	86	75 - 135.4
4-Bromofluorobenzene (4-BFB)			42.4	mg/Kg	50	50.0	85	63.6 - 158.9

Sample: 294983 - AH-3 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**13000**	mg/Kg	50	4.00

Sample: 294983 - AH-3 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**15300**	mg/Kg	5	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		2310	mg/Kg	5	100	2310	49.3 - 157.5

Sample: 294983 - AH-3 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**438**	mg/Kg	50	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			46.0	mg/Kg	50	50.0	92	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			42.0	mg/Kg	50	50.0	84	45.1 - 162.2

Sample: 294984 - AH-4 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.538**	mg/Kg	10	0.0200
Toluene		1	**2.08**	mg/Kg	10	0.0200
Ethylbenzene		1	**1.42**	mg/Kg	10	0.0200
Xylene		1	**6.91**	mg/Kg	10	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			10.7	mg/Kg	10	10.0	107	75 - 135.4
4-Bromofluorobenzene (4-BFB)			11.0	mg/Kg	10	10.0	110	63.6 - 158.9

Sample: 294984 - AH-4 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**3460**	mg/Kg	50	4.00

Sample: 294984 - AH-4 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1	**8940**	mg/Kg	5	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		1320	mg/Kg	5	100	1320	49.3 - 157.5

Sample: 294984 - AH-4 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**752**	mg/Kg	10	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			10.9	mg/Kg	10	10.0	109	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			12.1	mg/Kg	10	10.0	121	45.1 - 162.2

Sample: 294985 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**1790**	mg/Kg	50	4.00

Sample: 294985 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		1	**3640**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	642	mg/Kg	5	100	642	49.3 - 157.5

Sample: 294985 - AH-5 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**331**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.67	mg/Kg	1	2.00	134	45.1 - 162.2

Sample: 294986 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**3020**	mg/Kg	100	4.00

Sample: 294986 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qs	1	**2360**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		364	mg/Kg	1	100	364	49.3 - 157.5

Sample: 294986 - AH-6 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**335**	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			5.26	mg/Kg	5	5.00	105	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			5.32	mg/Kg	5	5.00	106	45.1 - 162.2

Sample: 294987 - AH-7 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.100	mg/Kg	5	0.0200
Toluene		1	**0.390**	mg/Kg	5	0.0200
Ethylbenzene		1	**0.581**	mg/Kg	5	0.0200
Xylene		1	**2.08**	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.49	mg/Kg	5	5.00	90	75 - 135.4
4-Bromofluorobenzene (4-BFB)			5.02	mg/Kg	5	5.00	100	63.6 - 158.9

Sample: 294987 - AH-7 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**685**	mg/Kg	50	4.00

Sample: 294987 - AH-7 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qs	1	**4600**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane Qsr	Qsr		747	mg/Kg	5	100	747	49.3 - 157.5

Sample: 294987 - AH-7 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	444	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.64	mg/Kg	5	5.00	93	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			5.59	mg/Kg	5	5.00	112	45.1 - 162.2

Sample: 294988 - AH-8 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**2.38**	mg/Kg	50	0.0200
Toluene		1	**12.8**	mg/Kg	50	0.0200
Ethylbenzene		1	**9.58**	mg/Kg	50	0.0200
Xylene		1	**41.0**	mg/Kg	50	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			46.8	mg/Kg	50	50.0	94	75 - 135.4
4-Bromofluorobenzene (4-BFB)			50.1	mg/Kg	50	50.0	100	63.6 - 158.9

Sample: 294988 - AH-8 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

continued ...

sample 294988 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1230**	mg/Kg	50	4.00

Sample: 294988 - AH-8 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qs	1	**9000**	mg/Kg	5	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		1070	mg/Kg	5	100	1070	49.3 - 157.5

Sample: 294988 - AH-8 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**2460**	mg/Kg	50	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			48.4	mg/Kg	50	50.0	97	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			52.8	mg/Kg	50	50.0	106	45.1 - 162.2

Sample: 294989 - AH-9 0-0.5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.200	mg/Kg	10	0.0200
Toluene	U	1	<0.200	mg/Kg	10	0.0200
Ethylbenzene	U	1	<0.200	mg/Kg	10	0.0200
Xylene	U	1	<0.200	mg/Kg	10	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			9.89	mg/Kg	10	10.0	99	75 - 135.4
4-Bromofluorobenzene (4-BFB)			9.99	mg/Kg	10	10.0	100	63.6 - 158.9

Sample: 294989 - AH-9 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

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

Sample: 294989 - AH-9 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qs	1	**4470**	mg/Kg	5	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		1000	mg/Kg	5	100	1000	49.3 - 157.5

Sample: 294989 - AH-9 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Qs	1	**99.1**	mg/Kg	10	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			10.6	mg/Kg	10	10.0	106	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			9.59	mg/Kg	10	10.0	96	45.1 - 162.2

Sample: 294990 - AH-10 0-0.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**403**	mg/Kg	50	4.00

Sample: 294990 - AH-10 0-0.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qs	1	**1900**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		351	mg/Kg	1	100	351	49.3 - 157.5

Sample: 294990 - AH-10 0-0.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	Q=	1	**58.4**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.23	mg/Kg	1	2.00	112	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	45.1 - 162.2

Sample: 294991 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.11	mg/Kg	1	2.00	106	75 - 135.4
4-Bromofluorobenzene (4-BFB)			2.10	mg/Kg	1	2.00	105	63.6 - 158.9

Sample: 294991 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

continued ...

sample 294991 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**5640**	mg/Kg	10	4.00

Sample: 294991 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			145	mg/Kg	1	100	145	49.3 - 157.5

Sample: 294991 - AH-11 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.22	mg/Kg	1	2.00	111	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	45.1 - 162.2

Sample: 294992 - AH-11 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**3090**	mg/Kg	10	4.00

Sample: 294993 - AH-11 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**114**	mg/Kg	5	4.00

Sample: 294994 - AH-11 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**69.5**	mg/Kg	5	4.00

Sample: 294995 - AH-11 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**179**	mg/Kg	5	4.00

Sample: 294996 - AH-11 5-5.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**39.7**	mg/Kg	5	4.00

Sample: 294997 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	75 - 135.4
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	63.6 - 158.9

Sample: 294997 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**169**	mg/Kg	5	4.00

Sample: 294997 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Q_8	1	**133**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			154	mg/Kg	1	100	154	49.3 - 157.5

Sample: 294997 - AH-12 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	$Q_{8,U}$	1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	45.1 - 162.2

Sample: 294998 - AH-12 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 294998 - AH-12 1-1.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90586	Date Analyzed:	2012-04-25	Analyzed By:	DA
Prep Batch:	76854	Sample Preparation:	2012-04-25	Prepared By:	DA

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	**120**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			141	mg/Kg	1	100	141	49.3 - 157.5

Sample: 294998 - AH-12 1-1.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90612	Date Analyzed:	2012-04-25	Analyzed By:	tc
Prep Batch:	76879	Sample Preparation:	2012-04-25	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,Qs,U	1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.32	mg/Kg	1	2.00	116	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	45.1 - 162.2

Sample: 294999 - AH-12 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 294999 - AH-12 2-2.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90755	Date Analyzed:	2012-05-01	Analyzed By:	DA
Prep Batch:	76989	Sample Preparation:	2012-05-01	Prepared By:	DA

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			132	mg/Kg	1	100	132	49.3 - 157.5

Sample: 294999 - AH-12 2-2.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90780	Date Analyzed:	2012-05-01	Analyzed By:	tc
Prep Batch:	77014	Sample Preparation:	2012-05-01	Prepared By:	tc

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.98	mg/Kg	1	2.00	99	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			1.73	mg/Kg	1	2.00	86	45.1 - 162.2

Sample: 295000 - AH-12 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 295001 - AH-12 4-4.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**104**	mg/Kg	5	4.00

Sample: 295002 - AH-12 5-5.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**104**	mg/Kg	5	4.00

Sample: 295003 - AH-13 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene		1	**0.114**	mg/Kg	1	0.0200
Ethylbenzene		1	**0.172**	mg/Kg	1	0.0200

continued ...

sample 295003 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Xylene		1	**0.662**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	75 - 135.4
4-Bromofluorobenzene (4-BFB)			1.96	mg/Kg	1	2.00	98	63.6 - 158.9

Sample: 295003 - AH-13 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**6790**	mg/Kg	10	4.00

Sample: 295003 - AH-13 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	Sample Preparation:	2012-04-24	Prepared By:	DA

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			134	mg/Kg	1	100	134	49.3 - 157.5

Sample: 295003 - AH-13 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90567	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	Sample Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qs	1	**114**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.26	mg/Kg	1	2.00	113	45.1 - 162.2

Sample: 295004 - AH-13 1-1.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**5930**	mg/Kg	10	4.00

Sample: 295004 - AH-13 1-1.5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	90586	Date Analyzed:	2012-04-25	Analyzed By:	DA
Prep Batch:	76854	Sample Preparation:	2012-04-25	Prepared By:	DA

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			110	mg/Kg	1	100	110	49.3 - 157.5

Sample: 295004 - AH-13 1-1.5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	90612	Date Analyzed:	2012-04-25	Analyzed By:	tc
Prep Batch:	76879	Sample Preparation:	2012-04-25	Prepared By:	tc

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Qr,Qs	1	**3.50**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.61	mg/Kg	1	2.00	130	58.5 - 155.1
4-Bromofluorobenzene (4-BFB)			2.34	mg/Kg	1	2.00	117	45.1 - 162.2

Sample: 295005 - AH-13 2-2.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**64.6**	mg/Kg	5	4.00

Sample: 295006 - AH-13 3-3.5'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	Sample Preparation:	2012-04-27	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**114**	mg/Kg	5	4.00

Method Blanks

Method Blank (1) QC Batch: 90552

QC Batch:	90552	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	QC Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	52 - 140.8

Method Blank (1) QC Batch: 90553

QC Batch:	90553	Date Analyzed:	2012-04-24	Analyzed By:	DA
Prep Batch:	76815	QC Preparation:	2012-04-24	Prepared By:	DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			118	mg/Kg	1	100	118	52 - 140.8

Method Blank (1) QC Batch: 90566

QC Batch:	90566	Date Analyzed:	2012-04-24	Analyzed By:	tc
Prep Batch:	76841	QC Preparation:	2012-04-24	Prepared By:	tc

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00470	mg/Kg	0.02
Toluene		1	<0.00980	mg/Kg	0.02
Ethylbenzene		1	<0.00500	mg/Kg	0.02

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Xylene		1	<0.0170	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	78 - 123.6
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	55.9 - 112.4

Method Blank (1) QC Batch: 90567

QC Batch: 90567 | Date Analyzed: 2012-04-24 | Analyzed By: tc
Prep Batch: 76841 | QC Preparation: 2012-04-24 | Prepared By: tc

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.96	mg/Kg	1	2.00	98	78.6 - 111
4-Bromofluorobenzene (4-BFB)			1.72	mg/Kg	1	2.00	86	55 - 100

Method Blank (1) QC Batch: 90586

QC Batch: 90586 | Date Analyzed: 2012-04-25 | Analyzed By: DA
Prep Batch: 76854 | QC Preparation: 2012-04-25 | Prepared By: DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			110	mg/Kg	1	100	110	52 - 140.8

Method Blank (1) QC Batch: 90612

QC Batch:	90612	Date Analyzed:	2012-04-25	Analyzed By:	tc
Prep Batch:	76879	QC Preparation:	2012-04-25	Prepared By:	tc

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.70	mg/Kg	1	2.00	85	78.6 - 111
4-Bromofluorobenzene (4-BFB)			1.52	mg/Kg	1	2.00	76	55 - 100

Method Blank (1) QC Batch: 90661

QC Batch:	90661	Date Analyzed:	2012-04-27	Analyzed By:	AR
Prep Batch:	76915	QC Preparation:	2012-04-27	Prepared By:	AR

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

Method Blank (1) QC Batch: 90737

QC Batch:	90737	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	QC Preparation:	2012-04-27	Prepared By:	AR

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

Method Blank (1) QC Batch: 90738

QC Batch:	90738	Date Analyzed:	2012-04-30	Analyzed By:	AR
Prep Batch:	76915	QC Preparation:	2012-04-27	Prepared By:	AR

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

Method Blank (1) QC Batch: 90755

QC Batch: 90755 Date Analyzed: 2012-05-01 Analyzed By: DA
Prep Batch: 76989 QC Preparation: 2012-05-01 Prepared By: DA

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	52 - 140.8

Method Blank (1) QC Batch: 90780

QC Batch: 90780 Date Analyzed: 2012-05-01 Analyzed By: tc
Prep Batch: 77014 QC Preparation: 2012-05-01 Prepared By: tc

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<1.22	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.75	mg/Kg	1	2.00	88	78.6 - 111
4-Bromofluorobenzene (4-BFB)			1.57	mg/Kg	1	2.00	78	55 - 100

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 90552 | Date Analyzed: 2012-04-24 | Analyzed By: DA
Prep Batch: 76815 | QC Preparation: 2012-04-24 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	253	mg/Kg	1	250	<14.5	101	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	252	mg/Kg	1	250	<14.5	101	62 - 128.3	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	115	116	mg/Kg	1	100	115	116	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 90553 | Date Analyzed: 2012-04-24 | Analyzed By: DA
Prep Batch: 76815 | QC Preparation: 2012-04-24 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	242	mg/Kg	1	250	<14.5	97	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	262	mg/Kg	1	250	<14.5	105	62 - 128.3	8	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	117	125	mg/Kg	1	100	117	125	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 90566 | Date Analyzed: 2012-04-24 | Analyzed By: tc
Prep Batch: 76841 | QC Preparation: 2012-04-24 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.38	mg/Kg	1	2.00	<0.00470	119	86.5 - 124.9
Toluene		1	2.32	mg/Kg	1	2.00	<0.00980	116	84.7 - 122.5
Ethylbenzene		1	2.18	mg/Kg	1	2.00	<0.00500	109	79.4 - 118.9
Xylene		1	6.51	mg/Kg	1	6.00	<0.0170	108	79.5 - 118.9

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.33	mg/Kg	1	2.00	<0.00470	116	86.5 - 124.9	2	20
Toluene		1	2.25	mg/Kg	1	2.00	<0.00980	112	84.7 - 122.5	3	20
Ethylbenzene		1	2.15	mg/Kg	1	2.00	<0.00500	108	79.4 - 118.9	1	20
Xylene		1	6.41	mg/Kg	1	6.00	<0.0170	107	79.5 - 118.9	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)	1.94	2.24	mg/Kg	1	2.00	97	112	73.9 - 127
4-Bromofluorobenzene (4-BFB)	1.44	1.76	mg/Kg	1	2.00	72	88	70.4 - 119.9

Laboratory Control Spike (LCS-1)

QC Batch: 90567 | Date Analyzed: 2012-04-24 | Analyzed By: tc
Prep Batch: 76841 | QC Preparation: 2012-04-24 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	15.6	mg/Kg	1	20.0	<1.22	78	68.3 - 105.7

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	16.0	mg/Kg	1	20.0	<1.22	80	68.3 - 105.7	2	20

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

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Surrogate	*LCS Result*	*LCSD Result*	*Units*	*Dil.*	*Spike Amount*	*LCS Rec.*	*LCSD Rec.*	*Rec. Limit*
Trifluorotoluene (TFT)	1.89	1.95	mg/Kg	1	2.00	94	98	80 - 111.2
4-Bromofluorobenzene (4-BFB)	1.80	1.82	mg/Kg	1	2.00	90	91	66.4 - 106.6

Laboratory Control Spike (LCS-1)

QC Batch: 90586 | Date Analyzed: 2012-04-25 | Analyzed By: DA
Prep Batch: 76854 | QC Preparation: 2012-04-25 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	261	mg/Kg	1	250	<14.5	104	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	271	mg/Kg	1	250	<14.5	108	62 - 128.3	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	110	115	mg/Kg	1	100	110	115	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 90612 | Date Analyzed: 2012-04-25 | Analyzed By: tc
Prep Batch: 76879 | QC Preparation: 2012-04-25 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.1	mg/Kg	1	20.0	<1.22	86	68.3 - 105.7

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.3	mg/Kg	1	20.0	<1.22	86	68.3 - 105.7	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)	1.91	1.97	mg/Kg	1	2.00	96	98	80 - 111.2
4-Bromofluorobenzene (4-BFB)	1.78	1.83	mg/Kg	1	2.00	89	92	66.4 - 106.6

Laboratory Control Spike (LCS-1)

QC Batch: 90661 | Date Analyzed: 2012-04-27 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2600	mg/Kg	50	2500	<192	104	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2480	mg/Kg	50	2500	<192	99	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: 90737 | Date Analyzed: 2012-04-30 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2560	mg/Kg	1	2500	<3.85	102	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2380	mg/Kg	1	2500	<3.85	95	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: 90738 | Date Analyzed: 2012-04-30 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2580	mg/Kg	1	2500	<3.85	103	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2540	mg/Kg	1	2500	<3.85	102	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 90755 | Date Analyzed: 2012-05-01 | Analyzed By: DA
Prep Batch: 76989 | QC Preparation: 2012-05-01 | Prepared By: DA

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	281	mg/Kg	1	250	<14.5	112	62 - 128.3

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	289	mg/Kg	1	250	<14.5	116	62 - 128.3	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	121	124	mg/Kg	1	100	121	124	58.6 - 149.6

Laboratory Control Spike (LCS-1)

QC Batch: 90780 | Date Analyzed: 2012-05-01 | Analyzed By: tc
Prep Batch: 77014 | QC Preparation: 2012-05-01 | Prepared By: tc

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	14.3	mg/Kg	1	20.0	<1.22	72	68.3 - 105.7

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	16.1	mg/Kg	1	20.0	<1.22	80	68.3 - 105.7	12	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)	1.85	1.78	mg/Kg	1	2.00	92	89	80 - 111.2
4-Bromofluorobenzene (4-BFB)	1.72	1.70	mg/Kg	1	2.00	86	85	66.4 - 106.6

Matrix Spike (MS-1) Spiked Sample: 294981

QC Batch: 90552 | Date Analyzed: 2012-04-24 | Analyzed By: DA
Prep Batch: 76815 | QC Preparation: 2012-04-24 | Prepared By: DA

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	518	mg/Kg	1	250	292	90	45.5 - 127

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	535	mg/Kg	1	250	292	97	45.5 - 127	3	20

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

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	Qsr	Qsr	192	190	mg/Kg	1	100	192	190	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 295039

QC Batch: 90553 | Date Analyzed: 2012-04-24 | Analyzed By: DA
Prep Batch: 76815 | QC Preparation: 2012-04-24 | Prepared By: DA

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	2340	mg/Kg	5	250	2210	52	45.5 - 127

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO Qs	Qs	1	2700	mg/Kg	5	250	2210	196	45.5 - 127	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
n-Tricosane	Qsr	Qsr	378	411	mg/Kg	5	100	378	411	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 295021

QC Batch: 90566 | Date Analyzed: 2012-04-24 | Analyzed By: tc
Prep Batch: 76841 | QC Preparation: 2012-04-24 | Prepared By: tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.39	mg/Kg	1	2.00	<0.00470	120	69.3 - 159.2
Toluene		1	2.42	mg/Kg	1	2.00	0.1064	116	68.7 - 157
Ethylbenzene		1	2.52	mg/Kg	1	2.00	0.1049	121	71.6 - 158.2
Xylene		1	7.76	mg/Kg	1	6.00	0.3622	123	70.8 - 159.8

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	2.45	mg/Kg	1	2.00	<0.00470	122	69.3 - 159.2	2	20
Toluene		1	2.49	mg/Kg	1	2.00	0.1064	119	68.7 - 157	3	20
Ethylbenzene		1	2.60	mg/Kg	1	2.00	0.1049	125	71.6 - 158.2	3	20
Xylene		1	7.90	mg/Kg	1	6.00	0.3622	126	70.8 - 159.8	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.44	2.20	mg/Kg	1	2	122	110	71.4 - 133.9
4-Bromofluorobenzene (4-BFB)	2.44	2.15	mg/Kg	1	2	122	108	72.6 - 144.1

Matrix Spike (MS-1) Spiked Sample: 295018

QC Batch: 90567 | Date Analyzed: 2012-04-24 | Analyzed By: tc
Prep Batch: 76841 | QC Preparation: 2012-04-24 | Prepared By: tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	Qs	Qs	1	7400	mg/Kg	50	500	4149.32	650	28.2 - 157.2

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qs	Qs	1	7620	mg/Kg	50	500	4149.32	694	28.2 - 157.2	3	20

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

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)			53.8	52.0	mg/Kg	50	50	108	104	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	70.0	69.2	mg/Kg	50	50	140	138	77.9 - 122.4

Matrix Spike (MS-1) Spiked Sample: 294998

QC Batch: 90586 | Date Analyzed: 2012-04-25 | Analyzed By: DA
Prep Batch: 76854 | QC Preparation: 2012-04-25 | Prepared By: DA

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	274	mg/Kg	1	250	120	62	45.5 - 127

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	288	mg/Kg	1	250	120	67	45.5 - 127	5	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	126	121	mg/Kg	1	100	126	121	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 295158

QC Batch: 90612 | Date Analyzed: 2012-04-25 | Analyzed By: tc
Prep Batch: 76879 | QC Preparation: 2012-04-25 | Prepared By: tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	6340	mg/Kg	50	500	5925.95	83	28.2 - 157.2

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	Qr1,Qs Qr1,Qs	1	7790	mg/Kg	50	500	5925.95	373	28.2 - 157.2	20	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)			51.2	51.0	mg/Kg	50	50	102	102	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	66.2	65.4	mg/Kg	50	50	132	131	77.9 - 122.4

Matrix Spike (MS-1) Spiked Sample: 294990

QC Batch: 90661 | Date Analyzed: 2012-04-27 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2930	mg/Kg	50	2500	403	101	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			3040	mg/Kg	50	2500	403	105	79.4 - 120.6	4	20

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

Matrix Spike (MS-1) Spiked Sample: 295000

QC Batch: 90737 | Date Analyzed: 2012-04-30 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2530	mg/Kg	5	2500	<19.2	101	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2480	mg/Kg	5	2500	<19.2	99	79.4 - 120.6	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: 295011

QC Batch: 90738 | Date Analyzed: 2012-04-30 | Analyzed By: AR
Prep Batch: 76915 | QC Preparation: 2012-04-27 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			3100	mg/Kg	5	2500	606	100	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			3190	mg/Kg	5	2500	606	103	79.4 - 120.6	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: 295046

QC Batch: 90755 | Date Analyzed: 2012-05-01 | Analyzed By: DA
Prep Batch: 76989 | QC Preparation: 2012-05-01 | Prepared By: DA

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	297	mg/Kg	1	250	<14.5	119	45.5 - 127

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	295	mg/Kg	1	250	<14.5	118	45.5 - 127	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	126	125	mg/Kg	1	100	126	125	45.4 - 145.8

Matrix Spike (MS-1) Spiked Sample: 295045

QC Batch:	90780	Date Analyzed:	2012-05-01	Analyzed By:	tc
Prep Batch:	77014	QC Preparation:	2012-05-01	Prepared By:	tc

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	24.7	mg/Kg	1	20.0	1.6489	115	28.2 - 157.2

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	24.2	mg/Kg	1	20.0	1.6489	113	28.2 - 157.2	2	20

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

Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	Qsr	Qsr	2.60	2.32	mg/Kg	1	2	130	116	75.5 - 122.3
4-Bromofluorobenzene (4-BFB)			2.37	2.15	mg/Kg	1	2	118	108	77.9 - 122.4

Calibration Standards

Standard (CCV-2)

QC Batch: 90552 | Date Analyzed: 2012-04-24 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	246	98	80 - 120	2012-04-24

Standard (CCV-3)

QC Batch: 90552 | Date Analyzed: 2012-04-24 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	244	98	80 - 120	2012-04-24

Standard (CCV-4)

QC Batch: 90552 | Date Analyzed: 2012-04-24 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	242	97	80 - 120	2012-04-24

Standard (CCV-1)

QC Batch: 90553 | Date Analyzed: 2012-04-24 | Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	239	96	80 - 120	2012-04-24

Standard (CCV-2)

QC Batch: 90553 Date Analyzed: 2012-04-24 Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	236	94	80 - 120	2012-04-24

Standard (CCV-1)

QC Batch: 90566 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.109	109	80 - 120	2012-04-24
Toluene		1	mg/kg	0.100	0.107	107	80 - 120	2012-04-24
Ethylbenzene		1	mg/kg	0.100	0.108	108	80 - 120	2012-04-24
Xylene		1	mg/kg	0.300	0.323	108	80 - 120	2012-04-24

Standard (CCV-2)

QC Batch: 90566 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.111	111	80 - 120	2012-04-24
Toluene		1	mg/kg	0.100	0.109	109	80 - 120	2012-04-24
Ethylbenzene		1	mg/kg	0.100	0.105	105	80 - 120	2012-04-24
Xylene		1	mg/kg	0.300	0.317	106	80 - 120	2012-04-24

Standard (CCV-3)

QC Batch: 90566 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.106	106	80 - 120	2012-04-24

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		1	mg/kg	0.100	0.102	102	80 - 120	2012-04-24
Ethylbenzene		1	mg/kg	0.100	0.0984	98	80 - 120	2012-04-24
Xylene		1	mg/kg	0.300	0.294	98	80 - 120	2012-04-24

Standard (CCV-1)

QC Batch: 90567 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.10	110	80 - 120	2012-04-24

Standard (CCV-2)

QC Batch: 90567 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.14	114	80 - 120	2012-04-24

Standard (CCV-3)

QC Batch: 90567 Date Analyzed: 2012-04-24 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.04	104	80 - 120	2012-04-24

Standard (CCV-2)

QC Batch: 90586 Date Analyzed: 2012-04-25 Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	272	109	80 - 120	2012-04-25

Standard (CCV-3)

QC Batch: 90586 Date Analyzed: 2012-04-25 Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	250	100	80 - 120	2012-04-25

Standard (CCV-1)

QC Batch: 90612 Date Analyzed: 2012-04-25 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.07	107	80 - 120	2012-04-25

Standard (CCV-2)

QC Batch: 90612 Date Analyzed: 2012-04-25 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.18	118	80 - 120	2012-04-25

Standard (CCV-1)

QC Batch: 90661 Date Analyzed: 2012-04-27 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2012-04-27

Standard (CCV-2)

QC Batch: 90661 Date Analyzed: 2012-04-27 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.9	100	85 - 115	2012-04-27

Standard (CCV-1)

QC Batch: 90737 Date Analyzed: 2012-04-30 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.1	99	85 - 115	2012-04-30

Standard (CCV-2)

QC Batch: 90737 Date Analyzed: 2012-04-30 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2012-04-30

Standard (CCV-1)

QC Batch: 90738 Date Analyzed: 2012-04-30 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2012-04-30

Standard (CCV-2)

QC Batch: 90738 Date Analyzed: 2012-04-30 Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.0	99	85 - 115	2012-04-30

Standard (CCV-1)

QC Batch: 90755 Date Analyzed: 2012-05-01 Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	287	115	80 - 120	2012-05-01

Standard (CCV-2)

QC Batch: 90755 Date Analyzed: 2012-05-01 Analyzed By: DA

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	219	88	80 - 120	2012-05-01

Standard (CCV-1)

QC Batch: 90780 Date Analyzed: 2012-05-01 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.896	90	80 - 120	2012-05-01

Standard (CCV-2)

QC Batch: 90780 Date Analyzed: 2012-05-01 Analyzed By: tc

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.945	94	80 - 120	2012-05-01

Appendix

Report Definitions

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

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-11-3	Midland

Standard Flags

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

Attachments

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

#1204202

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: 3

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-64013666	SRO State Unit Com #2 Eddy Co NM

LAB I.D. NUMBER	DATE 2012	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
294981	4/23		S		X	AH-1 0-0.5'	1				X			X														
982						AH-2 0-0.5'								X														
983						AH-3 0-0.5'								X														
984						AH-4 0-0.5'								X														
985						AH-5 0-0.5'								X														
986						AH-6 0-0.5'								X														
987						AH-7 0-0.5'								X														
988						AH-8 0-0.5'								X														
989						AH-9 0-0.5'								X														
990						AH-10 0-0.5'								X														

RELINQUISHED BY: (Signature)	Date: 4/23/12 Time: 4:50 PM	RECEIVED BY: (Signature)	Date: 4/23/12 Time: 16:50
SAMPLED BY: (Print & Initial) TF RS	Date: 4-23-12 Time:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS	AIRBILL #: OTHER:		
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez	Results by:		
RECEIVING LABORATORY: Trace ADDRESS: CITY: Midland STATE: TX ZIP: CONTACT: PHONE:	RECEIVED BY: (Signature) DATE: TIME:		RUSH Charges Authorized: Yes No
SAMPLE CONDITION WHEN RECEIVED: 2.9°	REMARKS: (AH-1 → AH-10) Run (5) BTEX w/ highest TPH		

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

(AH-11 → AH-13) Run deepest sample if TPH exceed 100 mg/kg
Run deepest sample if benzene exceed 10 mg/kg or total BTEX 50 mg/kg.

#12042402

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 3

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.: 114-6401366
PROJECT NAME: SRO State Unit Com #2 Eddy Co NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	Chloride
991	4/23		S		X	AH-11 0-1'	1				X		X	X	X
992	↓		↓		↓	1-1.5'	↓				↓				X
993						2-2.5'									X
994						3-3.5'									X
995						4-4.5'									X
996						5-5.5'									X
997						AH-12 0-1'							X	X	X
998						1-1.5'									X
999						2-2.5'									X
295000	↓		↓		↓	3-3.5'	↓				↓				X

Other analysis columns (not marked): 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; Gamma Spec.; Alpha Beta (Air); PLM (Asbestos); Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature) [signature] Date: 4/23/12 Time: 4:52 P.
RECEIVED BY: (Signature) [signature] Date: 4/23/12 Time: 1650
SAMPLED BY: (Print & Initial) TF / RS Date: 4-23-12 Time:

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

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 3.9° intact
REMARKS:

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

H 12062402

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 3

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.: 114-6401366

PROJECT NAME: SRD State Unit Com # 2

LAB I.D. NUMBER	DATE 2012	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
001	4/23		S		X	AH-12 1-1.5'	1				X													X				
002						5-5.5'																		X				
003						AH-13 0-1'							X	X										X				
004						1-1.5'																		X				
005						2-2.5'																		X				
006	↓		↓		↓	3-3.5'	↓				↓													X				

RELINQUISHED BY: (Signature) — Date: 4/23/12 Time: 4:50 P.M.
RECEIVED BY: (Signature) — Date: 4-23-12 Time: 16:50
SAMPLED BY (Print & Initial): YE / RS — Date: 4-23-12 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: 3.9° Intact

REMARKS:

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

#12042402

Analysis Request of Chain of Custody Record

PAGE: | OF: 3

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.: 114-6401366
PROJECT NAME: SRO State Unit Com #2 Eddy Co NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
294981	4/23		S		X	AH-1	0-0.5'	1				X			X											X				
982	↓		↓		↓	AH-2	0-0.5'	↓				↓			X											↓				
983	↓		↓		↓	AH-3	0-0.5'	↓				↓		X	X											↓				
984	↓		↓		↓	AH-4	0-0.5'	↓				↓		X	X											↓				
985	↓		↓		↓	AH-5	0-0.5'	↓				↓			X											↓				
986	↓		↓		↓	AH-6	0-0.5'	↓				↓			X											↓				
987	↓		↓		↓	AH-7	0-0.5'	↓				↓		X	X											↓				
988	↓		↓		↓	AH-8	0-0.5'	↓				↓		X	X											↓				
989	↓		↓		↓	AH-9	0-0.5'	↓				↓		X	X											↓				
990	↓		↓		↓	AH-10	0-0.5'	↓				↓			X											↓				

RELINQUISHED BY: (Signature) [signature] Date: 4/23/12 Time: 4:50 PM
RECEIVED BY: (Signature) [signature] Date: 4/23/12 Time: 16:58
SAMPLED BY: (Print & Initial) TF RS Date: 4-23-12 Time:

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

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

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

SAMPLE CONDITION WHEN RECEIVED: 2.9°

REMARKS: (AH-1 → AH-10) Run (5) BTEX w/ highest TPH. All tests Midland

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

(AH-11 → AH-13) Run deeper sample if TPH exceed 100 mg/kg ... 10 mg/kg ... BTEX & 50 mg/kg

#1204202

Analysis Request of Chain of Custody Record

PAGE: 2 : 3

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:	SITE MANAGER:
COG	Ike Tavarez

PROJECT NO.:	PROJECT NAME:
114-6401366	SRO State Unit Com #2 Eddy Co NM

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH TX1005 (Ext. to C35)	TPH 8015 MOD.	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
991	4/23		S		X	AH-11 0-1'	1				X		X	X	X											X				
992						1-1.5'																				X				
993						2-2.5'																				X				
994						3-3.5'																				X				
995						4-4.5'																				X				
996						5-5.5'																				X				
997						AH-12 0-1'							X	X	X											X				
998						1-1.5'								X	X											X				
999						2-2.5'								X	X											X				
1000						3-3.5'																				X				

RELINQUISHED BY: (Signature)	Date: 4/23/12 Time: 4:55p	RECEIVED BY: (Signature)	Date: 4/23/12 Time: 1650
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:

SAMPLED BY: (Print & Initial) TF RS — Date: 4-23-12 Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

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

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 39° intact

REMARKS:

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

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 3

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.: 114-6401366

PROJECT NAME: SRD State Unit Com # 2

LAB I.D. NUMBER	DATE 2012	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 C36)	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
001	4/23		S		X	AH-12 4-4.5'	1				X													X				
002						5-5.5'																		X				
003						AH-13 0-1'							X	X										X				
004						1-1.5'								X										X				
005						2-2.5'																		X				
006	↓		↓		↓	3-3.5'	↓				↓													X				

RELINQUISHED BY: (Signature)	Date: 4/23/12 Time: 4:30 P.M.	RECEIVED BY: (Signature)	Date: 4-23-12 Time: 16:30
SAMPLED BY (Print & Initial): TF RB	Date: 4-23-12 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: 5.9° intact	REMARKS:		

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