SITE INFORMATION

2RP-876

Report Type: Closure Report

General Site Information:						
Site:	Southern California 14 Federal #1					
Company:	W/K Land Company					
Section, Township and Range	Unit H	Sec 14	T 19S	R 30E		
Lease Number:	API-30-015-04600					
County:	Eddy County					
GPS:	32.66138° N			103.93516° W		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From the intersection of Hwy 360 and CR 222, travel east on CR 222 for 4.7 miles, turn left onto lease road and travel 0.9 miles, turn left and travel 0.3 miles, turn right and travel 0.4 miles, turn left and travel 2.6 miles to site.					

Release Data:	
Date Released:	Unknown
Type Release:	Oil
Source of Contamination:	Oil Tank
Fluid Released:	57 bbls
Fluids Recovered:	0 bbls

RECEIVED
MAR 30 2012
NMOCD ARTESIA

Official Communication:				
Name:	Rex Walker			Ike Tavarez
Company:	W/K Land Company			Tetra Tech
Address:	911 Kimbark Street			1910 N. Big Spring
P.O. Box				
City:	Longmont, Co 80501			Midland, Texas
Phone number:	(303) 442-0258			(432) 682-4559
Fax:				
Email:				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

February 27, 2012

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

Re: Closure Report for W/K Land Company, Southern California Federal 14-1, Unit H, Section 14, Township 19 South, Range 30 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by W/K Land Company to assess a spill from the Southern California Federal 14-1 located in Unit H, Section 14, Township 19 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.66138°, W 103.93516°. The site location is shown on Figures 1 and 2.

Background

According to the BLM inspection, oil staining was noted inside the dike from under one of the oil tank. The BLM requested W/K Land Company to submit a C-141 to the NMOCD to remediate the impacted soil to NMOCD spill guidelines. According to the State of New Mexico C-141 Initial Report, the leak was discovered on June 13, 2011, and released approximately fifty seven (57) barrels of produced fluid from an oil tank. Zero (0) barrels of standing fluids were recovered. The spill initiated from the oil tank and remained inside of the firewalls of the tank battery. The spill area measured 25' x 55'. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 14. According to the NMOCD groundwater map, the average depth to groundwater in this area is approximately 75' below surface. The groundwater information is shown in Appendix B.

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

Regulatory

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

Closure Activities and Confirmation Sampling

On September 20, 2011, Tetra Tech personnel supervised the removal of impacted material. Prior to excavation, the two tanks were removed from inside the firewall onto the facility pad. The excavated area measured 25' x 55' at a depth of 6.0' below surface. A total of 330 cubic yards were excavated and transported to proper disposal.

Once completed, Tetra Tech collected confirmation samples from the excavation for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The confirmation sample locations are shown on Figure 3.

Conclusion and Recommendation

Referring to Table 1, the TPH and BTEX concentrations were all below the RRAL. The chlorides detected do not appear to be an environmental concern. Once approved, the excavation was backfilled with clean soil to grade. Based upon the work performed at this site and the results of the assessment, W/K Land Company requests closure of this spill issue. The final C-141 is enclosed in Appendix A.

TETRA TECH

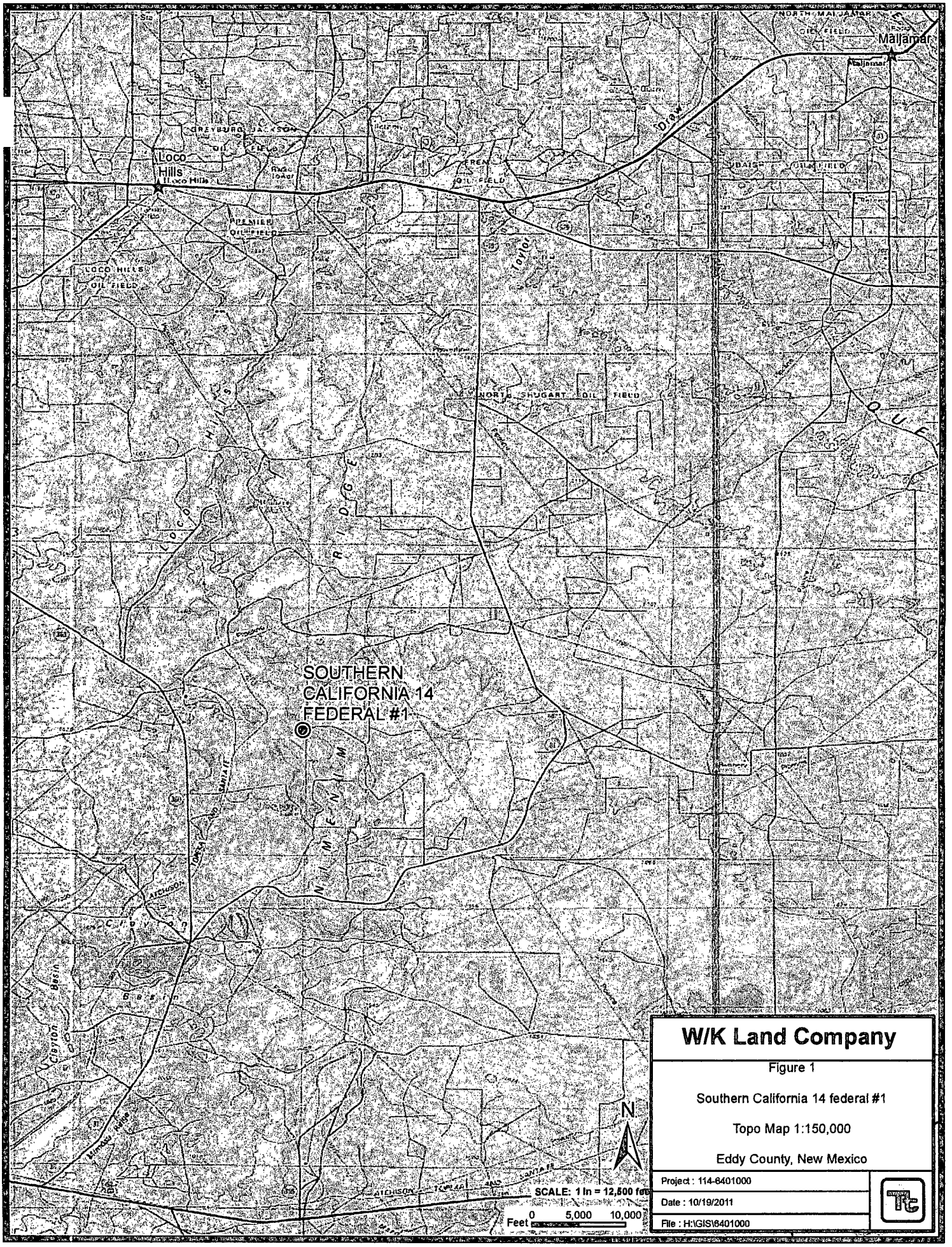
If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

Respectfully submitted,
Tetra Tech Inc.

Ike Alvarez
Project Manager

cc: Rex Walker - W/K Land Co.
cc: Jim Amos – BLM

FIGURES



W/K Land Company

Figure 1

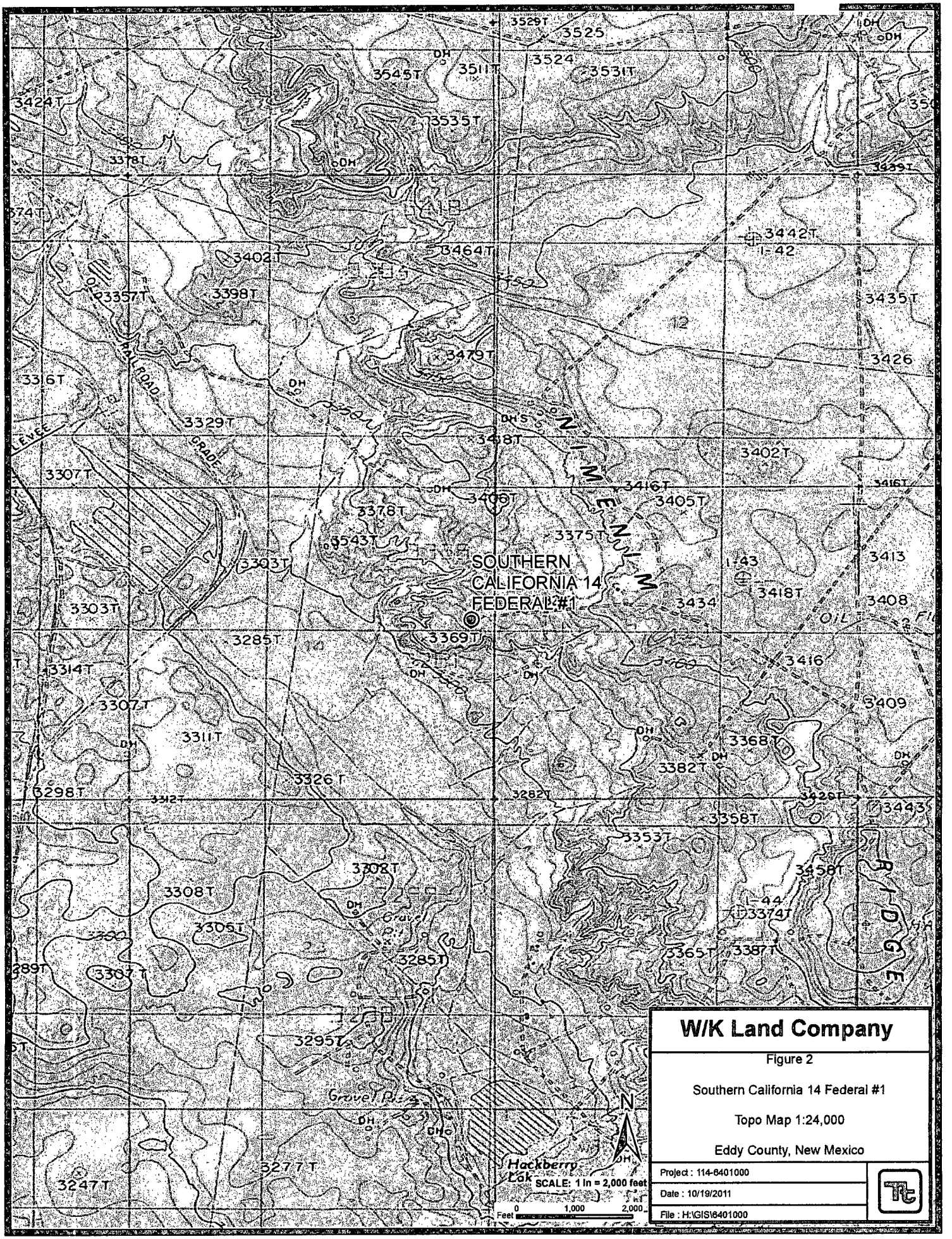
Southern California 14 federal #1

Topo Map 1:150,000

Eddy County, New Mexico

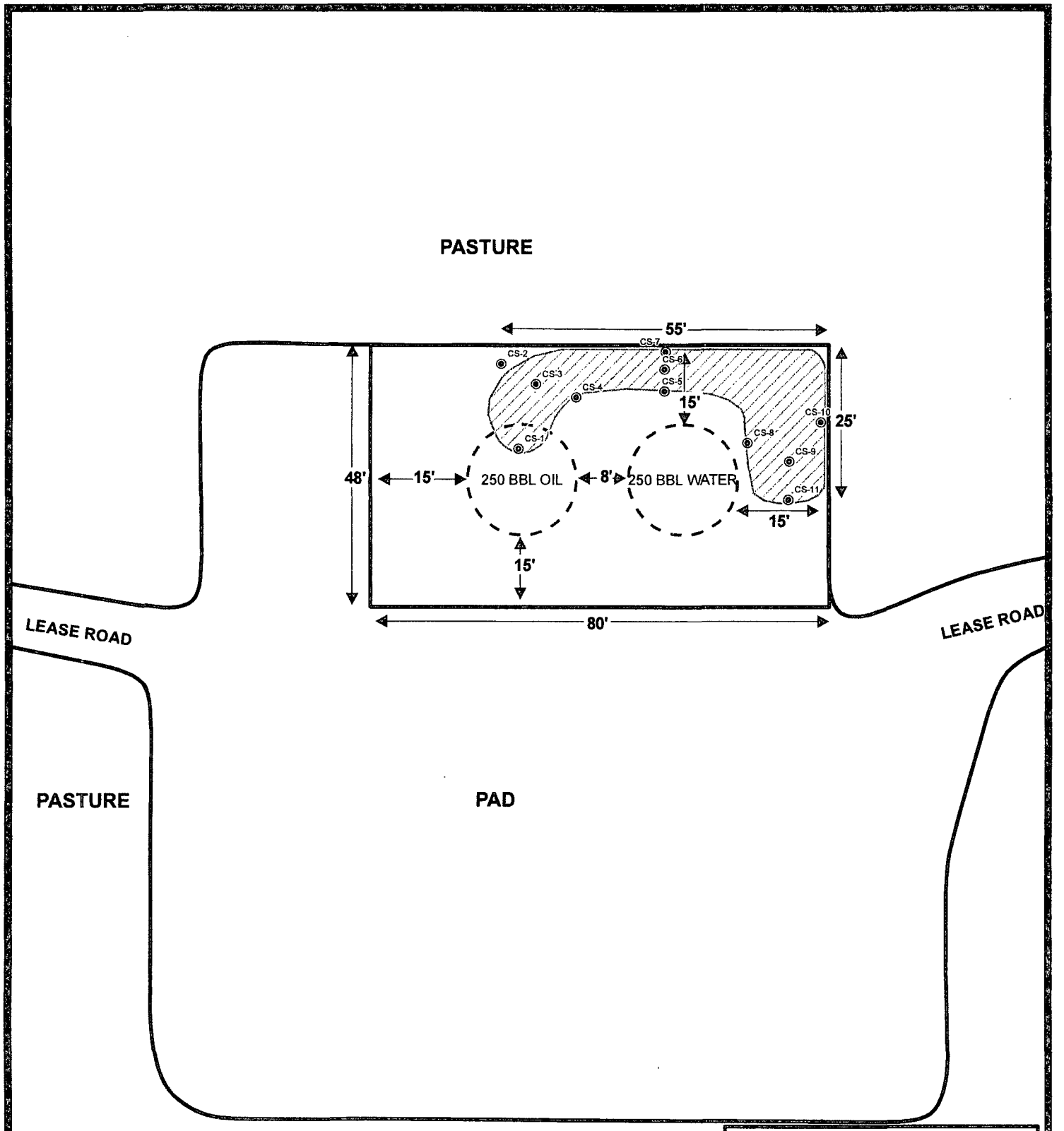
Project : 114-6401000	
Date : 10/19/2011	
File : H:\GIS\6401000	

Drawn By: Isabel Marmolejo



W/K Land Company	
Figure 2	
Southern California 14 Federal #1	
Topo Map 1:24,000	
Eddy County, New Mexico	
Project : 114-6401000	
Date : 10/19/2011	
File : H:\GIS\6401000	

Drawn By: Isabel Marmolejo



EXPLANATION

- CONFIRMATION SAMPLE LOCATIONS
- SPILL AREA
- REMOVED (TANKS)

N

SCALE: 1 IN = 25 FEET

Feet 0 9 18

W/K Land Company

Figure 3

Southern California 14 Federal #1

Spill Assessment Map

Eddy County, New Mexico

Project : 114-6401000

Date : 10/18/2011

File : H:\GIS\6401000

Drawn By: Isabel Marmolejo

TABLES

Table 1
W/K Land Company
Southern California 14 Federal #1
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	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
CS-1	South Side Wall	9/20/2011	3'	X		9.57	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
CS-2	West Side Wall	9/20/2011	3'	X		3.20	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
CS-3	Bottom Hole	9/20/2011	6'	X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
CS-4	East Side Wall	9/20/2011	3'	X		5.93	135	141	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
CS-5	South Side Wall	9/20/2011	3'	X		2.56	<50.0	<50.0	-	-	-	-	-	201
CS-6	Bottom Hole	9/20/2011	6'	X		28.2	525	553	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<200
CS-7	North Side Wall	9/20/2011	3'	X		3.99	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	358
CS-8	West Side Wall	9/20/2011	3'	X		<2.00	<50.0	<50.0	-	-	-	-	-	<200
CS-9	Bottom Hole	9/20/2011	6'	X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	201
CS-10	East Side Wall	9/20/2011	3'	X		<2.00	<50.0	<50.0	-	-	-	-	-	<200
CS-11	South Side Wall	9/20/2011	3'	X		<2.00	<50.0	<50.0	-	-	-	-	-	<200

(--) Not Analyzed

BEB Below Excavation Bottom

APPENDIX A

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company W/K Land Company	Contact Carlos A de la Cruz
Address: 911 Kimbark Street, Longmont, CO 80501	Telephone No. (303) 442-0258
Facility Name: Southern California 14 Federal #1	Facility Type Tank Battery

Surface Owner: Federal	Mineral Owner	Lease No. API 3001504600

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	14	19S	30E					Eddy

Latitude N 32.66138 **Longitude** W 103.93516

NATURE OF RELEASE

Type of Release Oil	Volume of Release: estimated 57 bbls	Volume Recovered 0 bbls
Source of Release Oil tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 6/13/11 Discovered by BLM
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*

Hole on bottom or side of oil tank. The remaining oil in the tank will removed to repair or replace tank.

Describe Area Affected and Cleanup Action Taken.*

The spill area was contained inside the facility firewalls. The spill area will be scraped and sampled for evaluation. The excavated soil will be transported to proper disposal. Based on the NMOCD RRAL, either a work plan or a closure report will be submitted for review and approval.

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: Rex Ross Walker	OIL CONSERVATION DIVISION	
Printed Name Rex Ross Walker	Approved by District Supervisor:	
Title: Managing Partner	Approval Date:	Expiration Date:
E-mail Address: cowboy@sombrero.com	Conditions of Approval:	Attached ☐
Date: 08/23/2011 Phone: 303-442-0258		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
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Form C-141
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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 W/K Land Company	Contact Carlos A de la Cruz
Address 911 Kimbark Street, Longmont, CO 80501	Telephone No. (303) 442-0258
Facility Name Southern California 14 Federal #1	Facility Type Tank Battery

Surface Owner Federal	Mineral Owner	Lease No. 3001504600

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	14	19S	30E					Eddy

Latitude N 32.66138 **Longitude** W 103.93516

NATURE OF RELEASE

Type of Release Oil	Volume of Release 57 bbls	Volume Recovered 0 bbls
Source of Release Oil tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 6/13/11
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Hole on the bottom or side of the oil tank. The remaining oil in the tank will be removed to repair or replace tank.

Describe Area Affected and Cleanup Action Taken.*

The spill occurred inside the facility firewalls. The impacted soil was removed and hauled to proper disposal. Tetra Tech collected confirmation samples and showed samples below the RRAL for TPH and BTEX. The chloride concentrations were not an environmental concern. The excavation was backfilled with clean soil. A closure report has been prepared and submitted to the NMOCD and BLM for review and approval.

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 W/K Land Company)	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: ike.tavarez@tetratech.com	Conditions of Approval:	Attached ☐
Date: 7/27/12 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

APPENDIX B

Water Well Data
Average Depth to Groundwater (ft)
W/K Land Company - Southern California 14 Federal #1 Tank Battery
Eddy County, New Mexico

18 South 29 East

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

18 South 30 East

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

18 South 31 East

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

19 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13 **123** **101**
19	20 **63**	21	22	23	24
30	29	28	27	26	25
31	32	33	34 62' **60**	35 121 **110**	36 **115**

19 South 30 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 SITE	13
19	20	21	22	23	24
30 **90**	29	28	27	26	25
31 **115**	32	33	34	35	36

19 South 31 East

6	5 SITE	4	3	2
7	8	9	10	11
18	17	16	15	14
19	20	21	22	23
30	29	28 **180**	27	26
31	32	33 101	34	35

20 South 29 East

6	5	4	3 **91**	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20 **62**	21	22	23	24
30 **52**	29	28	27	26	25
31	32	33	34	35	36

20 South 30 East

6	5 **3.5**	4	3 **6**	2	1
7	8	9	10	11	12
18	17	16 **29**	15	14	13
19	20 **29**	21 **150**	22	23	24
30	29	28	27	26	25
31	32 **170**	33 **191**	34	35	36

20 South 31 East

6	5	4	3	2
7	8	9	10 **130**	11
18	17	16	15	14
19	20	21	22	23
30	29	28	27	26
31	32	33	34	35

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data

APPENDIX C

Summary Report

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

Report Date: October 4, 2011

Work Order: 11092217

Project Location: Eddy Co., NM
Project Name: WKLC/So. California 14 Fed. #1
Project Number: 114-6401000

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278063	CS #1 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278064	CS #2 West Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278065	CS #3 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278066	CS #4 East Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278067	CS #5 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278068	CS #6 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278069	CS #7 North Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278070	CS #8 West Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278071	CS #9 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278072	CS #10 East Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278073	CS #11 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22

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)
278063 - CS #1 South Side Wall 3'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	<50.0 Q_r,Q_s	**9.57**
278064 - CS #2 West Side Wall 3'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	<50.0 Q_r,Q_s	**3.20**
278065 - CS #3 Bottom Hole 6'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	<50.0 Q_r,Q_s	<2.00
278066 - CS #4 East Side Wall 3'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	**135** Q_r,Q_s	**5.93**
278067 - CS #5 South Side Wall 3'					<50.0 Q_r,Q_s	**2.56**
278068 - CS #6 Bottom Hole 6'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	**525** Q_r,Q_s	**28.2**
278069 - CS #7 North Side Wall 3'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	<50.0 Q_r,Q_s	**3.99**
278070 - CS #8 West Side Wall 3'					<50.0 Q_r,Q_s	<2.00
278071 - CS #9 Bottom Hole 6'	<0.0200	<0.0200	<0.0200 Q_s	<0.0200 Q_s	<50.0 Q_r,Q_s	<2.00
278072 - CS #10 East Side Wall 3'					<50.0 Q_r,Q_s	<2.00
278073 - CS #11 South Side Wall 3'					<50.0 Q_r,Q_s	<2.00

Sample: 278063 - CS #1 South Side Wall 3'

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

Sample: 278064 - CS #2 West Side Wall 3'

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

Sample: 278065 - CS #3 Bottom Hole 6'

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

Sample: 278066 - CS #4 East Side Wall 3'

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

Sample: 278067 - CS #5 South Side Wall 3'

Param	Flag	Result	Units	RL
Chloride		**201**	mg/Kg	4

Sample: 278068 - CS #6 Bottom Hole 6'

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

Sample: 278069 - CS #7 North Side Wall 3'

Param	Flag	Result	Units	RL
Chloride		**358**	mg/Kg	4

Sample: 278070 - CS #8 West Side Wall 3'

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

Sample: 278071 - CS #9 Bottom Hole 6'

Param	Flag	Result	Units	RL
Chloride		**201**	mg/Kg	4

Sample: 278072 - CS #10 East Side Wall 3'

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

Sample: 278073 - CS #11 South Side Wall 3'

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

TRACEANALYSIS, INC.

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

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: October 4, 2011

Work Order: 11092217

Project Location: Eddy Co., NM
Project Name: WKLC/So. California 14 Fed. #1
Project Number: 114-6401000

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
278063	CS #1 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278064	CS #2 West Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278065	CS #3 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278066	CS #4 East Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278067	CS #5 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278068	CS #6 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278069	CS #7 North Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278070	CS #8 West Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278071	CS #9 Bottom Hole 6'	soil	2011-09-20	00:00	2011-09-22
278072	CS #10 East Side Wall 3'	soil	2011-09-20	00:00	2011-09-22
278073	CS #11 South Side Wall 3'	soil	2011-09-20	00:00	2011-09-22

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

Michael Abel

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

Report Contents

Case Narrative

Samples for project WKLC/So. California 14 Fed. #1 were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092217. Samples for work order 11092217 were received intact at a temperature of 1.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	72241	2011-09-27 at 12:00	85074	2011-09-27 at 17:50
Chloride (Titration)	SM 4500-Cl B	72245	2011-09-27 at 10:20	85171	2011-09-29 at 15:16
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85171	2011-09-29 at 15:16
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85172	2011-09-30 at 15:18
TPH DRO - NEW	S 8015 D	72249	2011-09-27 at 15:37	85087	2011-09-27 at 15:37
TPH GRO	S 8015 D	72241	2011-09-27 at 12:00	85075	2011-09-29 at 18:18

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 11092217 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: 278063 - CS #1 South Side Wall 3'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.13	mg/Kg	1	2.00	106	70.6 - 179

Sample: 278063 - CS #1 South Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72245	Sample Preparation:	2011-09-28	Prepared By:	AR

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

Sample: 278063 - CS #1 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			70.6	mg/Kg	1	100	71	67.5 - 147.1

Sample: 278063 - CS #1 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**9.57**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.20	mg/Kg	1	2.00	110	22.4 - 149

Sample: 278064 - CS #2 West Side Wall 3'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70.6 - 179

Sample: 278064 - CS #2 West Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72245	Sample Preparation:	2011-09-28	Prepared By:	AR

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

Sample: 278064 - CS #2 West Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			76.6	mg/Kg	1	100	77	67.5 - 147.1

Sample: 278064 - CS #2 West Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**3.20**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	22.4 - 149

Sample: 278065 - CS #3 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	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	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.09	mg/Kg	1	2.00	104	70.6 - 179

Sample: 278065 - CS #3 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72245	Sample Preparation:	2011-09-28	Prepared By:	AR

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

Sample: 278065 - CS #3 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			76.6	mg/Kg	1	100	77	67.5 - 147.1

Sample: 278065 - CS #3 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	22.4 - 149

Sample: 278066 - CS #4 East Side Wall 3'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.08	mg/Kg	1	2.00	104	70.6 - 179

Sample: 278066 - CS #4 East Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72245	Sample Preparation:	2011-09-28	Prepared By:	AR

continued ...

sample 278066 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

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

Sample: 278066 - CS #4 East Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	1	**135**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			91.8	mg/Kg	1	100	92	67.5 - 147.1

Sample: 278066 - CS #4 East Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**5.93**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	22.4 - 149

Sample: 278067 - CS #5 South Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**201**	mg/Kg	50	4.00

Sample: 278067 - CS #5 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			76.8	mg/Kg	1	100	77	67.5 - 147.1

Sample: 278067 - CS #5 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		1	**2.56**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.93	mg/Kg	1	2.00	96	22.4 - 149

Sample: 278068 - CS #6 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.07	mg/Kg	1	2.00	104	70.6 - 179

Sample: 278068 - CS #6 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

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

Sample: 278068 - CS #6 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr,Qs	1	**525**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			106	mg/Kg	1	100	106	67.5 - 147.1

Sample: 278068 - CS #6 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		1	**28.2**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.20	mg/Kg	1	2.00	110	22.4 - 149

Sample: 278069 - CS #7 North Side Wall 3'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,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	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.06	mg/Kg	1	2.00	103	70.6 - 179

Sample: 278069 - CS #7 North Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

continued ...

sample 278069 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**358**	mg/Kg	50	4.00

Sample: 278069 - CS #7 North Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			76.5	mg/Kg	1	100	76	67.5 - 147.1

Sample: 278069 - CS #7 North Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**3.99**	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	22.4 - 149

Sample: 278070 - CS #8 West Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

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

Sample: 278070 - CS #8 West Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			80.2	mg/Kg	1	100	80	67.5 - 147.1

Sample: 278070 - CS #8 West Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	22.4 - 149

Sample: 278071 - CS #9 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	85074	Date Analyzed:	2011-09-27	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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	Qs,U	1	<0.0200	mg/Kg	1	0.0200
Xylene	Qs,U	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	82.8 - 143.1
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70.6 - 179

Sample: 278071 - CS #9 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**201**	mg/Kg	50	4.00

Sample: 278071 - CS #9 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			78.9	mg/Kg	1	100	79	67.5 - 147.1

Sample: 278071 - CS #9 Bottom Hole 6'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.89	mg/Kg	1	2.00	94	22.4 - 149

Sample: 278072 - CS #10 East Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

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

Sample: 278072 - CS #10 East Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			77.0	mg/Kg	1	100	77	67.5 - 147.1

Sample: 278072 - CS #10 East Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	22.4 - 149

Sample: 278073 - CS #11 South Side Wall 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	Sample Preparation:	2011-09-29	Prepared By:	AR

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

Sample: 278073 - CS #11 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	85087	Date Analyzed:	2011-09-27	Analyzed By:	kg
Prep Batch:	72249	Sample Preparation:	2011-09-27	Prepared By:	kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.7	mg/Kg	1	100	80	67.5 - 147.1

Sample: 278073 - CS #11 South Side Wall 3'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	85075	Date Analyzed:	2011-09-29	Analyzed By:	AG
Prep Batch:	72241	Sample Preparation:	2011-09-27	Prepared By:	AG

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.90	mg/Kg	1	2.00	95	22.4 - 149

Method Blanks

Method Blank (1) QC Batch: 85074

QC Batch: 85074 | Date Analyzed: 2011-09-27 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.0118	mg/Kg	0.02
Toluene		1	<0.00600	mg/Kg	0.02
Ethylbenzene		1	<0.00850	mg/Kg	0.02
Xylene		1	<0.00613	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	65.9 - 111.8
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	48.4 - 123.1

Method Blank (1) QC Batch: 85075

QC Batch: 85075 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.949	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.73	mg/Kg	1	2.00	86	52.4 - 130

Method Blank (1) QC Batch: 85087

QC Batch: 85087 | Date Analyzed: 2011-09-27 | Analyzed By: kg
Prep Batch: 72249 | QC Preparation: 2011-09-27 | Prepared By: kg

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			85.3	mg/Kg	1	100	85	52.7 - 133.8

Method Blank (1) QC Batch: 85171

QC Batch:	85171	Date Analyzed:	2011-09-29	Analyzed By:	AR
Prep Batch:	72245	QC Preparation:	2011-09-27	Prepared By:	AR

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

Method Blank (1) QC Batch: 85172

QC Batch:	85172	Date Analyzed:	2011-09-30	Analyzed By:	AR
Prep Batch:	72274	QC Preparation:	2011-09-29	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: 85074 | Date Analyzed: 2011-09-27 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.01	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7
Toluene		1	2.04	mg/Kg	1	2.00	<0.00600	102	88.6 - 121.6
Ethylbenzene		1	2.05	mg/Kg	1	2.00	<0.00850	102	74.3 - 117.9
Xylene		1	6.14	mg/Kg	1	6.00	<0.00613	102	73.4 - 118.8

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	1.99	mg/Kg	1	2.00	<0.0118	100	77.4 - 121.7	1	20
Toluene		1	1.99	mg/Kg	1	2.00	<0.00600	100	88.6 - 121.6	2	20
Ethylbenzene		1	1.99	mg/Kg	1	2.00	<0.00850	100	74.3 - 117.9	3	20
Xylene		1	5.97	mg/Kg	1	6.00	<0.00613	100	73.4 - 118.8	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.01	2.00	mg/Kg	1	2.00	100	100	65.5 - 116.7
4-Bromofluorobenzene (4-BFB)	1.98	1.98	mg/Kg	1	2.00	99	99	56.2 - 132.1

Laboratory Control Spike (LCS-1)

QC Batch: 85075 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

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

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.9	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.90	mg/Kg	1	2.00	94	95	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.84	1.86	mg/Kg	1	2.00	92	93	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85087 | Date Analyzed: 2011-09-27 | Analyzed By: kg
Prep Batch: 72249 | QC Preparation: 2011-09-27 | Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	203	mg/Kg	1	250	<14.5	81	64.5 - 146.9

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
DRO		1	207	mg/Kg	1	250	<14.5	83	64.5 - 146.9	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
n-Tricosane	83.8	83.7	mg/Kg	1	100	84	84	65.3 - 135.8

Laboratory Control Spike (LCS-1)

QC Batch: 85171 | Date Analyzed: 2011-09-29 | Analyzed By: AR
Prep Batch: 72245 | QC Preparation: 2011-09-27 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			95.9	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			104	mg/Kg	1	100	<3.85	104	85 - 115	8	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 85172 | Date Analyzed: 2011-09-30 | Analyzed By: AR
Prep Batch: 72274 | QC Preparation: 2011-09-29 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			93.8	mg/Kg	1	100	<3.85	94	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			105	mg/Kg	1	100	<3.85	105	85 - 115	11	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: 278071

QC Batch: 85074 | Date Analyzed: 2011-09-27 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	2.45	mg/Kg	1	2.00	<0.0118	122	69.4 - 123.6
Toluene		1	2.57	mg/Kg	1	2.00	<0.00600	128	75.4 - 134.3
Ethylbenzene	Q8	1	2.69	mg/Kg	1	2.00	<0.00850	134	58.8 - 133.7
Xylene	Q8	1	8.08	mg/Kg	1	6.00	<0.00613	135	57 - 134.2

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
Benzene		1	2.20	mg/Kg	1	2.00	<0.0118	110	69.4 - 123.6	11	20
Toluene		1	2.33	mg/Kg	1	2.00	<0.00600	116	75.4 - 134.3	10	20
Ethylbenzene		1	2.45	mg/Kg	1	2.00	<0.00850	122	58.8 - 133.7	9	20
Xylene		1	7.35	mg/Kg	1	6.00	<0.00613	122	57 - 134.2	10	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.08	2.07	mg/Kg	1	2	104	104	79.4 - 141.1
4-Bromofluorobenzene (4-BFB)	2.06	2.09	mg/Kg	1	2	103	104	71 - 167

Matrix Spike (MS-1) Spiked Sample: 278077

QC Batch: 85075 | Date Analyzed: 2011-09-29 | Analyzed By: AG
Prep Batch: 72241 | QC Preparation: 2011-09-27 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.0	mg/Kg	1	20.0	0.9676	85	61.8 - 114

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	18.4	mg/Kg	1	20.0	0.9676	92	61.8 - 114	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.87	1.86	mg/Kg	1	2	94	93	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.98	1.99	mg/Kg	1	2	99	100	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278103

QC Batch: 85087 | Date Analyzed: 2011-09-27 | Analyzed By: kg
Prep Batch: 72249 | QC Preparation: 2011-09-27 | Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	464	mg/Kg	1	250	280	74	38.8 - 153.3

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	Q_{F1},Q_{S5}	1	835	mg/Kg	1	250	280	222	38.8 - 153.3	57	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	97.0	112	mg/Kg	1	100	97	112	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 278068

QC Batch: 85171 | Date Analyzed: 2011-09-29 | Analyzed By: AR
Prep Batch: 72245 | QC Preparation: 2011-09-27 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10200	mg/Kg	100	10000	<385	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			10700	mg/Kg	100	10000	<385	107	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: 278078

QC Batch: 85172 | Date Analyzed: 2011-09-30 | Analyzed By: AR
Prep Batch: 72274 | QC Preparation: 2011-09-29 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	453	99	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11100	mg/Kg	100	10000	453	106	79.4 - 120.6	6	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: 85074 | Date Analyzed: 2011-09-27 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.0983	98	80 - 120	2011-09-27
Toluene		1	mg/Kg	0.100	0.0998	100	80 - 120	2011-09-27
Ethylbenzene		1	mg/Kg	0.100	0.101	101	80 - 120	2011-09-27
Xylene		1	mg/Kg	0.300	0.304	101	80 - 120	2011-09-27

Standard (CCV-2)

QC Batch: 85074 | Date Analyzed: 2011-09-27 | Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/Kg	0.100	0.103	103	80 - 120	2011-09-27
Toluene		1	mg/Kg	0.100	0.107	107	80 - 120	2011-09-27
Ethylbenzene		1	mg/Kg	0.100	0.106	106	80 - 120	2011-09-27
Xylene		1	mg/Kg	0.300	0.319	106	80 - 120	2011-09-27

Standard (CCV-1)

QC Batch: 85075 | Date Analyzed: 2011-09-29 | 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	1.09	109	80 - 120	2011-09-29

Standard (CCV-2)

QC Batch: 85075 | Date Analyzed: 2011-09-29 | 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	1.04	104	80 - 120	2011-09-29

Standard (CCV-3)

QC Batch: 85075 Date Analyzed: 2011-09-29 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	1.04	104	80 - 120	2011-09-29

Standard (CCV-1)

QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	202	81	80 - 120	2011-09-27

Standard (CCV-2)

QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	208	83	80 - 120	2011-09-27

Standard (CCV-3)

QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	206	82	80 - 120	2011-09-27

Standard (ICV-1)

QC Batch: 85171 Date Analyzed: 2011-09-29 Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	102	102	85 - 115	2011-09-29

Standard (CCV-1)

QC Batch: 85171 Date Analyzed: 2011-09-29 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	97.8	98	85 - 115	2011-09-29

Standard (ICV-1)

QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2011-09-30

Standard (CCV-1)

QC Batch: 85172 Date Analyzed: 2011-09-30 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	99.7	100	85 - 115	2011-09-30

Appendix

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	T104704392-10-TX	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.

WO # 11092217

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

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

CLIENT NAME: W/K LAND COMPANY
SITE MANAGER: IKE TAVAREZ
PROJECT NO.: 114-6401000
PROJECT NAME: SOUTHERN CALIFORNIA 14 FEDERAL #1 Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	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
278063	9/20/11		S		X	CS #1 SOUTH SIDE WALL 3'	1				X			X											X			
064	9/20/11		S		X	CS #2 WEST SIDE WALL 3'	1				X			X											X			
065	9/20/11		S		X	CS #3 BOTTOM HOLE 6'	1				X		X	X											X			
066	9/20/11		S		X	CS #4 EAST SIDE WALL 3'	1				X			X											X			
067	9/20/11		S		X	CS #5 SOUTH SIDE WALL 3'	1				X			X											X			
068	9/20/11		S		X	CS #6 BOTTOM HOLE 6'	1				X		X	X											X			
069	9/20/11		S		X	CS #7 NORTH SIDE WALL 3'	1				X			X											X			
070	9/20/11		S		X	CS #8 WEST SIDE WALL 3'	1				X			X											X			
071	9/20/11		S		X	CS #9 BOTTOM HOLE 6'	1				X		X	X											X			
072	9/20/11		S		X	CS #10 EAST SIDE WALL 3'	1				X			X											X			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature)	Date: 9/21/11 Time: 1421	RECEIVED BY: (Signature)	Date: 9/22/11 Time: 1500
RELINQUISHED BY: (Signature)	Date: 9/22/11 Time: 1500	RECEIVED BY: (Signature)	Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:

SAMPLED BY: (Print & Initial) Date: Time:

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

TETRA TECH CONTACT PERSON: IKE Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 9/22/11 TIME: 3:10pm

SAMPLE CONDITION WHEN RECEIVED: 1°C

REMARKS: RUN (4) Sidewall Sample 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.

WO# 1092217

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 2

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: W/K Land Company

SITE MANAGER: Ike Tavarez

PROJECT NO.: 114-6401000

PROJECT NAME: Southern California 14 Federal 1 Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
278073	9/20/11		S		X	CS#11 South Side Wall 3'	1				X	

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

RELINQUISHED BY: (Signature)	Date: 9/21/11 Time: 1422	RECEIVED BY: (Signature)	Date: 9/22/11 Time: 1400
RELINQUISHED BY: (Signature)	Date: 9/22/11 Time: 1505	RECEIVED BY: (Signature)	Date: Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:

SAMPLED BY: (Print & Initial) Date: Time:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 9/22/11 TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED: 10C

REMARKS: See page 1

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