SITE INFORMATION

Report Type: Closure Report

General Site Information:						
Site:	Delhi B State #3					
Company:	Alamo Permian Resources, LLC.					
Section, Township and Range	Section 32	T17S	R28E			
Lease Number:	API-30-015-39590					
County:	Eddy County					
GPS:	32.800365 104.187837					
Surface Owner:	State					
Mineral Owner:						
Directions:	From Artesia New Mexico, at the intersection of NM Hwy 229 and US hwy 82, drive East on US hwy 82 for 10.7 miles, turn north and drive 0.2 miles, to location.					

Release Data:	
Date Released:	5/21/2012
Type Release:	oil and water
Source of Contamination:	flow line
Fluid Released:	50 barrels
Fluids Recovered:	30 barrels

Official Communication:			
Name:	Steven Mastin		James F. Kennedy
Company:	Alamo Permian Resources, LLC.		Tetra Tech
Address:	415 W. Wall St. Suite 500		1910 N. Big Spring
P.O. Box			
City:	Midland Texas		Midland, Texas
Phone number:	(432) 557-5847		(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	
>100 ft.	**0**	**>100**
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	**0**	0
Total Ranking Score:	**0**	

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

TETRA TECH

February 6, 2013

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

RE: Assessment Report and Closure Request on a Spill at the Delhi B State Well #3, Located in Section 28, Township 17 South, Range 28 East, Eddy County, New Mexico, Operated by Alamo Permian Resources, LLC, API-30-015-39590.

Mr. Bratcher:

Tetra Tech Inc. was contacted by Alamo Permian Resources, LLC (Alamo) to assess the soil impact from a crude oil spill that occurred at the Delhi B State Well #3, Located in Section 28, Township 17 South, Range 28 East, Eddy County, New Mexico (Site). The GPS coordinates for the site are N 32.800365° and W 104.187837°. The site location is shown on Figures 1 and 2.

Background

On May 21, 2012, the spill occurred due to a flow line leak at the well site. According to the C-141, a total of fifty (50) barrels of crude oil, and fifty (50) barrels of produced water were released, with thirty (30) barrels of crude oil recovered, leaving a total of twenty (20) barrels of crude oil and fifty (50) barrels of produced water unrecovered. Referring to Figure 3, the spill initiated at the well and migrated south beyond the perimeter of the well pad and impacted the pasture area. The spill footprint measured approximately 180' x 100'. Alamo immediately removed approximately 0.5 feet to 2.0 feet of impacted soil from the spill area footprint and stockpiled the material on well pad. After excavation activities were complete, the stockpiled material was worked and blended on site. A copy of the OCD Form C-141 is included in Appendix A.

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

Groundwater

According to the USGS data, one well is located in Section 22, Township 17 South, Range 28 East, with a depth to groundwater of 79.0' below surface. Two wells are located in Section 19, Township 17 South, Range 28 East and Section 4, Township 18 South, Range 28 East, with reported depths of 191.0' and 108.0', respectively. According the NMOCD groundwater map, the groundwater depth in the area is approximately 125' below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On August 16, 2012, Tetra Tech personnel inspected and sampled the excavated spill area. A total of six (6) backhoe trenches (T-1 through, T-6) were installed to evaluate the excavated spill areas. In addition, composite samples were collected from the stockpile onsite. Prior to sampling, the stockpile was segregated into three separate piles and worked onsite for sampling. The stockpiles were labeled, stockpile east, stockpile west, and stockpile center. The sample locations are shown on Figure 3.

The samples were placed into laboratory provided sample containers, preserved according to EPA protocol and analyzed within appropriate holding times. Soil samples were evaluated for TPH by method 8015 modified and chlorides by SM 4500. The results are summarized in Table 1. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C.

Conclusions and Recommendations

Referring to Table 1, the benzene, total BTEX and TPH concentrations from all of the trench samples (T-1 through T-6) and the stockpile results were below the RRALs. Chloride concentrations detected in the trench samples do not appear to be an environmental concern, with detectable concentrations ranging from 24.1 mg/kg to 321 mg/kg. In addition, stockpiles (west, east and center) showed chloride concentrations of <20 mg/kg, 39.7 mg/kg, and 34.7 mg/kg, respectively.

TETRA TECH

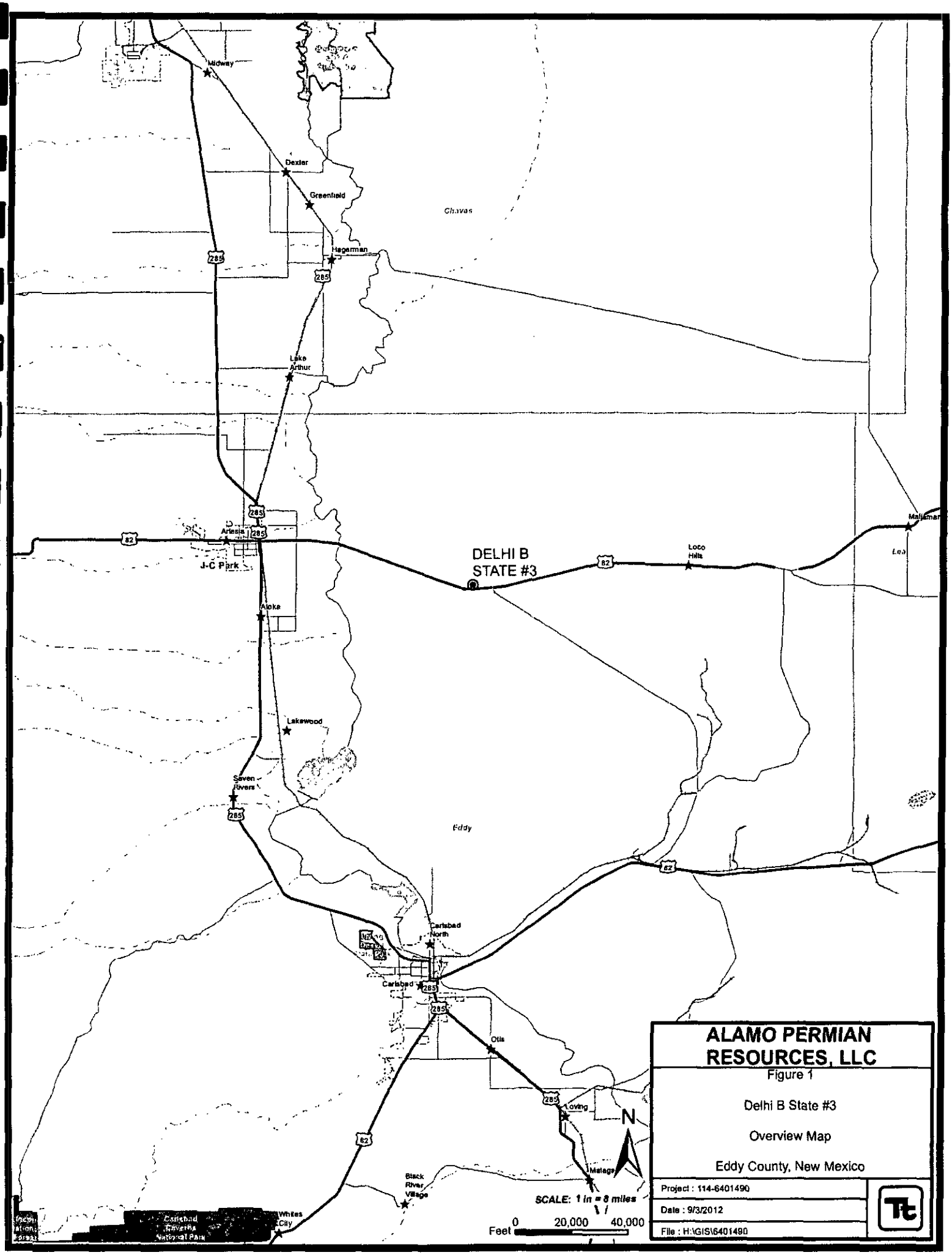
The excavation samples were below the RRAL and the chlorides do not appear an environmental concern. Based on the stockpile results, the stockpiled material will be used to backfill the open excavations to grade, if approved. Based upon the work performed and the results of the assessment, Alamo requests closure of this spill issue. If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

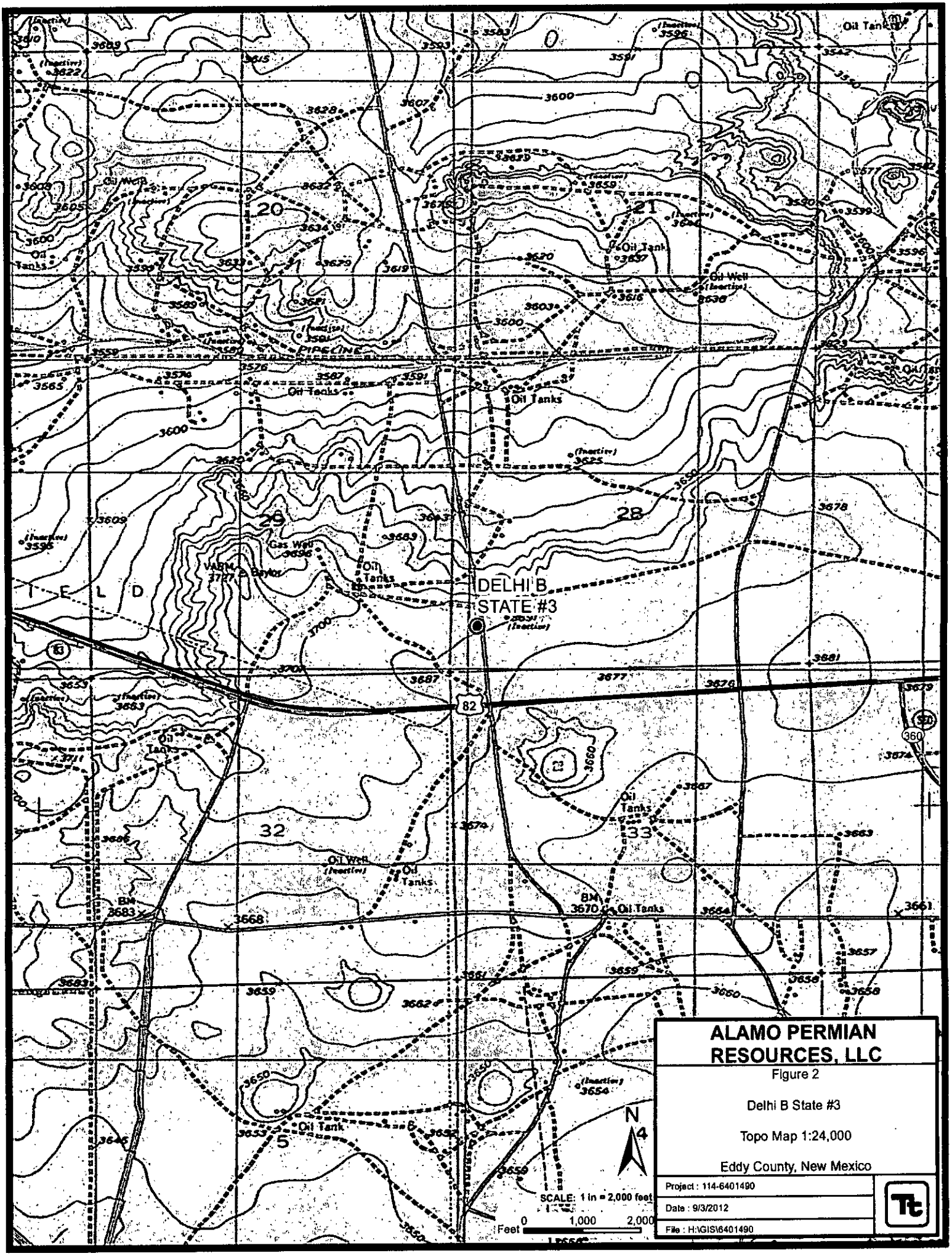
Respectfully submitted,
Tetra Tech Inc.

James F. Kennedy
Staff Professional

cc: Hollie Lamb – Helm Oil

Figures


Midway
Dexter
Greenfield
Chaves
Hagerman
285
Lake Arthur
Artesia
J-C Park
82
DELHI B
STATE #3
Loco Hills
Aloke
Lakewood
Seven Rivers
Eddy
Carlsbad North
Carlsbad
Otis
Loving
Malaga
Black River Village
Whites City
Carlsbad Caverns National Park
N
SCALE: 1 in = 8 miles
0 20,000 40,000
Feet
ALAMO PERMIAN RESOURCES, LLC
Figure 1
Delhi B State #3
Overview Map
Eddy County, New Mexico
Project : 114-6401490
Date : 9/3/2012
File : H:\GIS\6401490



ALAMO PERMIAN RESOURCES, LLC

Figure 2

Delhi B State #3

Topo Map 1:24,000

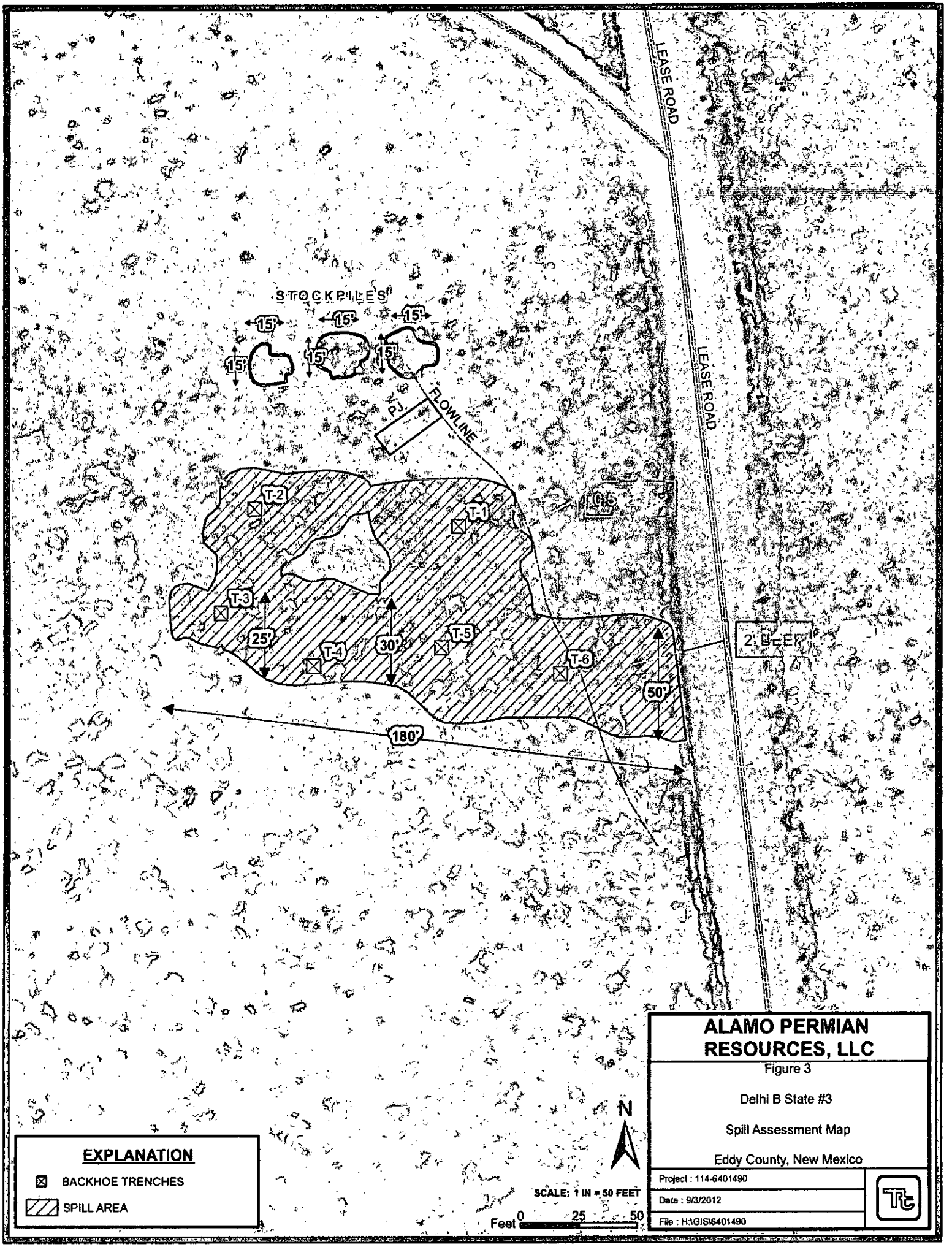
Eddy County, New Mexico

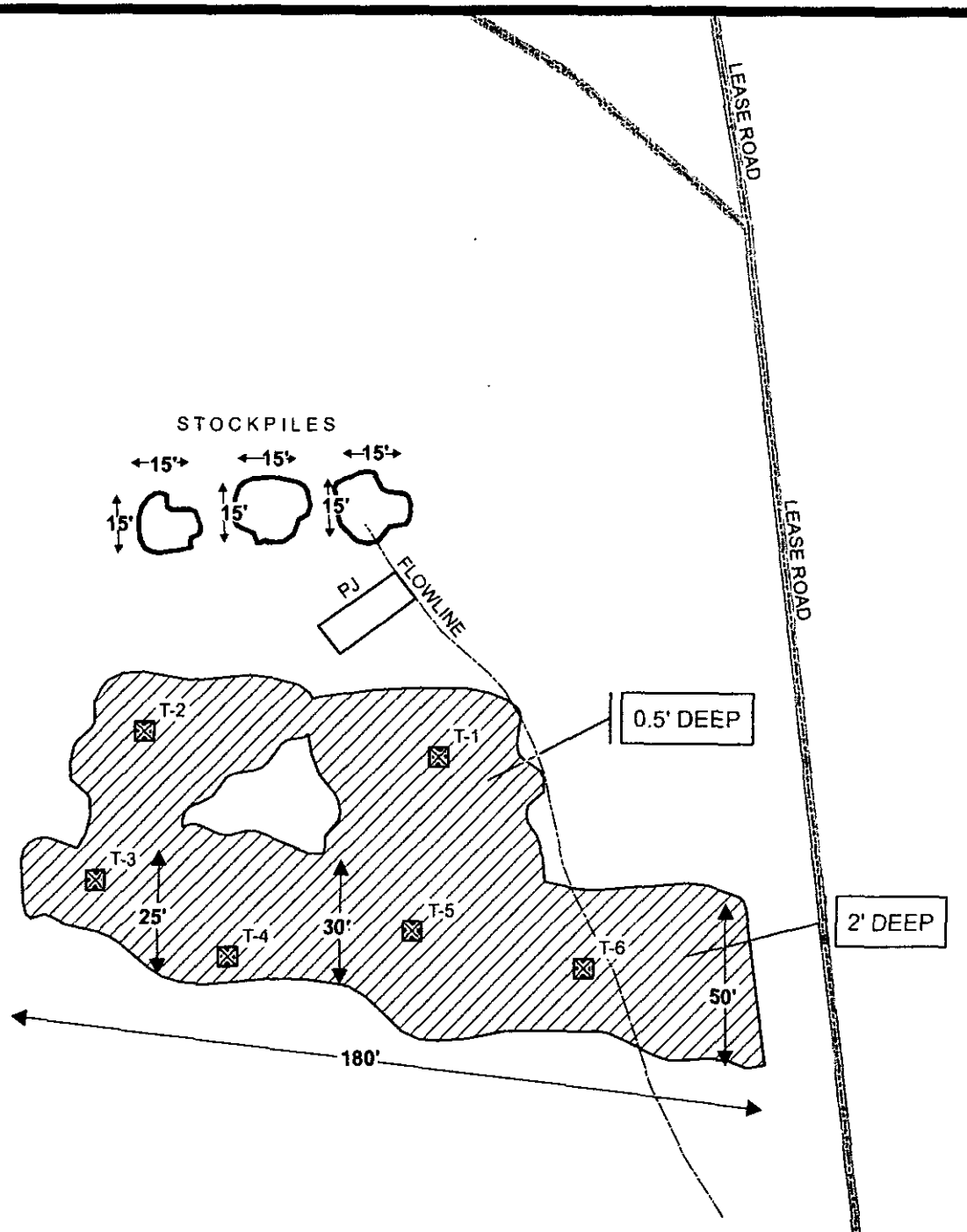
Project : 114-6401490

Date : 9/3/2012

File : H:\GIS\6401490

Drawn By: Isabel Manquinio


LEASE ROAD
LEASE ROAD
STOCKPILES
15'
15'
15'
15'
15'
15'
PJ
FLOWLINE
T-1
T-2
T-3
T-4
T-5
T-6
25'
30'
50'
180'
2' BERM
N
SCALE: 1 IN = 50 FEET
Feet 0 25 50
EXPLANATION
BACKHOE TRENCHES
SPILL AREA
ALAMO PERMIAN RESOURCES, LLC
Figure 3
Delhi B State #3
Spill Assessment Map
Eddy County, New Mexico
Project : 114-6401490
Date : 9/3/2012
File : H:\GIS\6401490



EXPLANATION

- BACKHOE TRENCHES
- SPILL AREA

N

SCALE: 1 IN = 50 FEET

Feet 0 25 50

ALAMO PERMIAN RESOURCES, LLC

Figure 3

Delhi B State #3

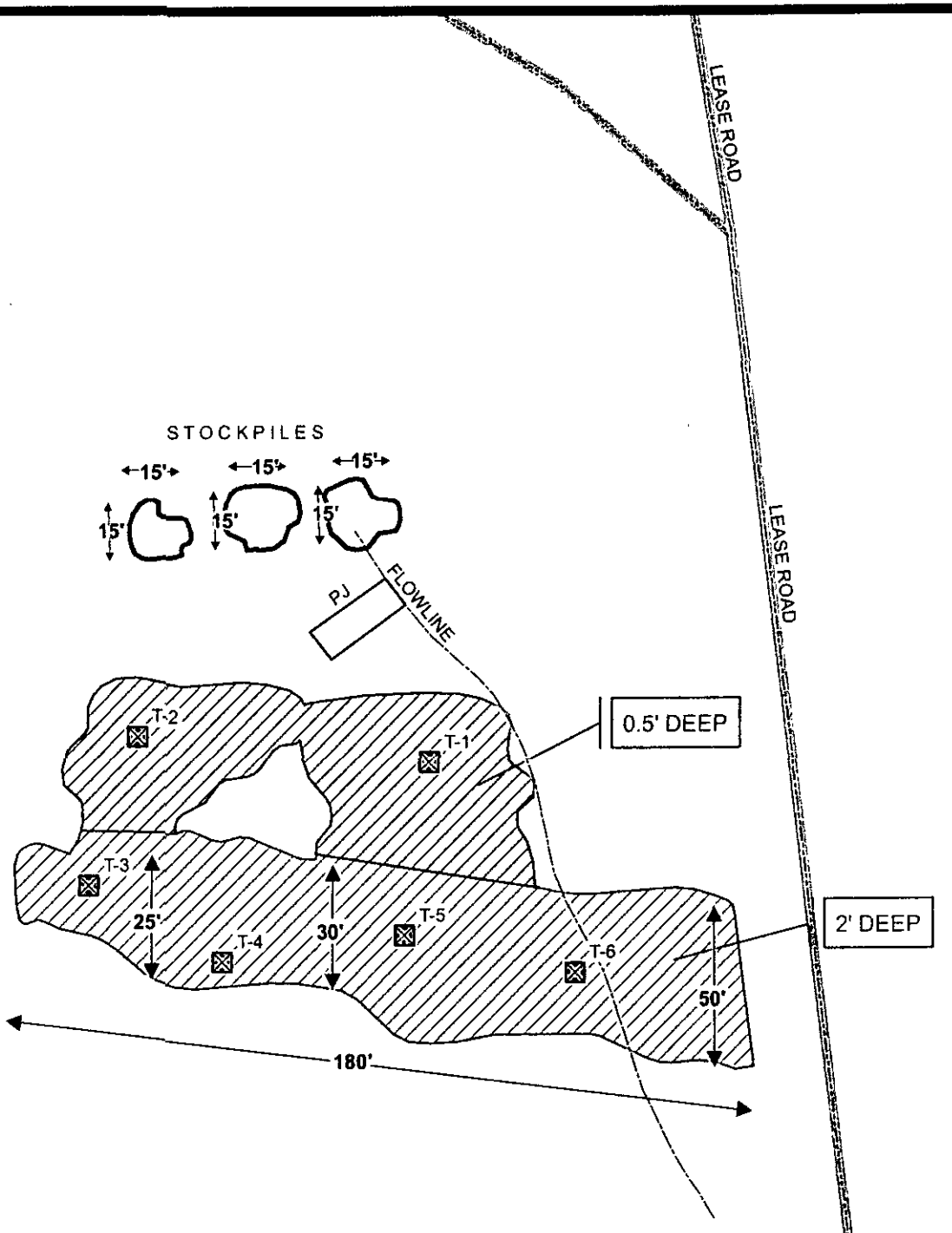
Spill Assessment Map

Eddy County, New Mexico

Project : 114-6401490

Date : 9/3/2012

File : H:\GIS\6401490



EXPLANATION

- BACKHOE TRENCHES
- EXCAVATED AREA

N

SCALE: 1 IN = 50 FEET

Feet 0 25 50

ALAMO PERMIAN RESOURCES, LLC

Figure 4

Delhi B State #3

Excavation Areas & Depths Map

Eddy County, New Mexico

Project : 114-6401490	
Date : 9/3/2012	
File : H:\GIS\6401490	

Drawn By: Isabel Marmolejo

Tables

Table 1
Alamo Permian
Delhi B State #3
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	EB 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						
Stockpile West	8/16/2012	composite	-	X		8.52	106	115	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<20.0
Stockpile East	"	composite	-	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	39.7
Stockpile Center	"	composite	-	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	34.7
T-1	8/16/2012	0-1, bottom	0.5	X		384	2,090	2,474	<0.100	0.138	6.80	4.44	11.4	274
	"	2	-	X		-	-	-	-	-	-	-	-	<20.0
	"	3	-	X		-	-	-	-	-	-	-	-	321
T-2	8/16/2012	0-1, bottom	0.5	X		16.2	420	436	<0.0200	0.0359	<0.0200	0.0679	0.1018	53.5
	"	2	-	X		-	-	-	-	-	-	-	-	34.0
	"	4	-	X		-	-	-	-	-	-	-	-	102
	"	6	-	X		-	-	-	-	-	-	-	-	155
	"	8	-	X		-	-	-	-	-	-	-	-	112
	"	10	-	X		-	-	-	-	-	-	-	-	180
T-3	8/16/2012	0-1, bottom	2	X		4.89	<50.0	4.89	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	151
	"	2		X		-	-	-	-	-	-	-	-	146
	"	4		X		-	-	-	-	-	-	-	-	546
	"	6		X		-	-	-	-	-	-	-	-	198
	"	8		X		-	-	-	-	-	-	-	-	189
	"	10		X		-	-	-	-	-	-	-	-	208
T-4	8/16/2012	0-1, bottom	2	X		38.5	2,460	2,499	<0.100	0.125	0.161	0.429	0.715	24.2
	"	2		X		-	-	-	-	-	-	-	-	145
	"	4		X		-	-	-	-	-	-	-	-	179
	"	6		X		-	-	-	-	-	-	-	-	208
	"	8		X		-	-	-	-	-	-	-	-	77.3
	"	10		X		-	-	-	-	-	-	-	-	179

Table 1
Alamo Permian
Delhi B State #3
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	EB 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						
T-5	8/16/2012	0-1, bottom	2	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<20.0
	"	2		X		-	-	-	-	-	-	-	-	111
	"	4		X		-	-	-	-	-	-	-	-	91.4
	"	6		X		-	-	-	-	-	-	-	-	207
	"	8		X		-	-	-	-	-	-	-	-	217
	"	10		X		-	-	-	-	-	-	-	-	298
T-6	8/16/2012	0-1, bottom	2	X		<20.0	451	451	<0.100	<0.100	<0.100	<0.100	<0.100	111

(--) Not Analyzed

(EB) Excavation Bottom

Photos

PHOTOGRAPHIC DOCUMENTATION
Alamo Permian Resources, LLC
Delhi State B #3
Eddy County, New Mexico

Photo 1. View of the release area on the well pad.

Photo 2. View of the impacted area to the south of the well pad.

PHOTOGRAPHIC DOCUMENTATION
Alamo Permian Resources, LLC
Delhi State B #3
Eddy County, New Mexico

Photo 3. View of the backhoe trench being installed.

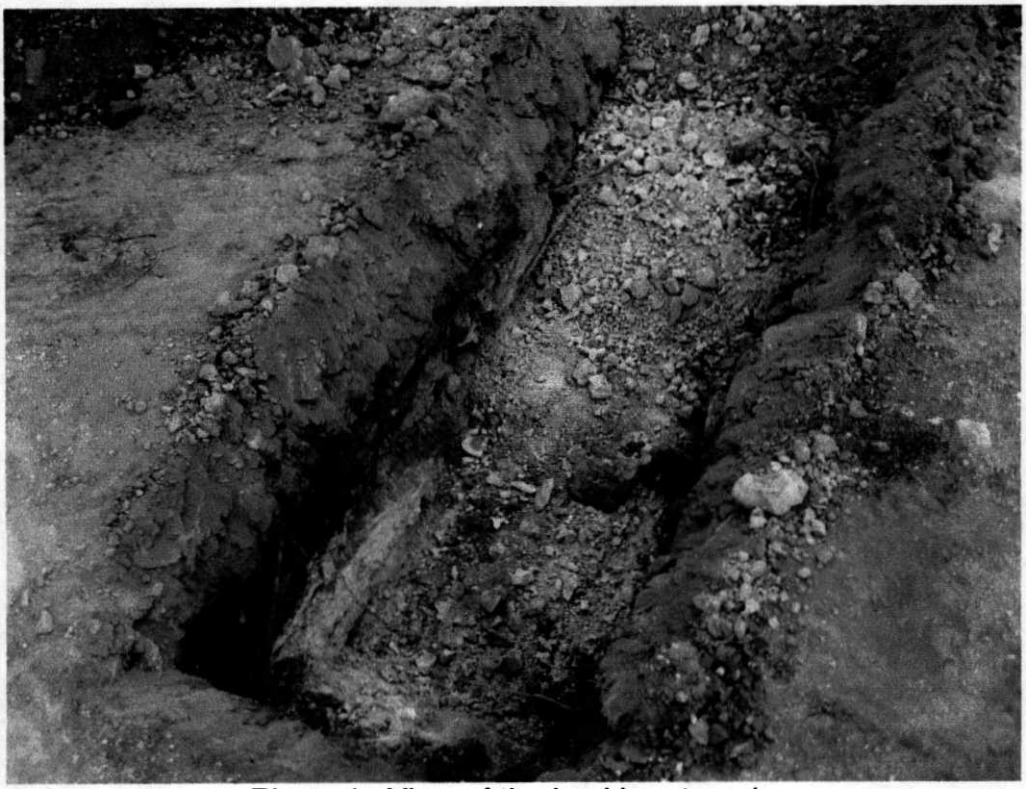


Photo 4. View of the backhoe trench.

PHOTOGRAPHIC DOCUMENTATION
Alamo Permian Resources, LLC
Delhi State B #3
Eddy County, New Mexico

Photo 5. View of the backhoe trench locations.

Photo 6. View of the stockpiled soil on location.

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 **Alamo Permian Resources, LLC**	Contact **Steven Mastin**
Address **415 W. Wall St. Suite 500**	Telephone No. **(432) 557-5847**
Facility Name **Delhi B State #3**	Facility Type **Well**

Surface Owner **State**	Mineral Owner **State**	Lease No. **30-015-39590**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	17S	28E	835	South	330	West	Eddy

Latitude 32.800365 **Longitude** -104.187837

NATURE OF RELEASE

Type of Release **Oil and produced water**	Volume of Release **50 bbls of Oil, 50 bbls of Water**	Volume Recovered **30 bbls of Oil**
Source of Release ***flowline***	Date and Hour of Occurrence *Unknown* ***May 21, 2012***	Date and Hour of Discovery ***May 22, 2012***
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour **10/1/09 9:10 am**	
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.*

Flow line leak at wellsite location, vacuum trucks dispatched to suck up standing fluid.

Describe Area Affected and Cleanup Action Taken.*
Localized area around well site, vacuum trucks picked up 30 bbls of standing oil.

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: James F. Kennedy IKE Tavarez (Tetra Tech)	Approved by District Supervisor:
Title: Project Manager	Approval Date: / Expiration Date:
E-mail Address: james.kennedy@tetratech.com	Conditions of Approval: / Attached ☐
Date: 9/28/12 Phone: (432) 682-4559	

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Delhi B State #3
Eddy County, New Mexico

16 South 27 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 **70**	26	25
31	32	33	34	35	36

16 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21 **61**	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

16 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 220 dry	13
19 **110**	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South 27 East

6	5 **30**	4	3	2	1
7 **14**	8	9	10	11 **54** **50**	12
18 **111**	17 **90**	16 **175**	15	14	13
19	20	21	22	23 **40**	24
30	29	28	27	26	25
31	32 **140**	33	34	35	36

17 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19 **191**	20	21	22 **79**	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22 **80**	23	24
30	29 **210** **208'**	28	27	26	25
31	32	33	34	35 153	36

18 South 27 East

6	5	4	3	2	1
7	8	9	10 **50**	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28 **100**	27	26	25
31 **65**	32	33	34	35	36

18 South 28 East

6	5	4 **108**	3	2	1
7 **49**	8 **69**	9	10	11	12
18	17	16	15	14	13
19	20	21 **225**	22	23	24
49	29	28	27	26	25
31	32	33	34	35 **65**	36

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

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

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

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

34 NMOCD - Groundwater Data

123 *Tetra Tech installed temporary wells and field water level*

143 NMOCD Groundwater map well location

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

News updated March, 2012

Groundwater levels for New Mexico

NM

Search Results -- 1 sites found

Search Criteria

site_no list =
- 324855104093101

Minimum number of levels = 1

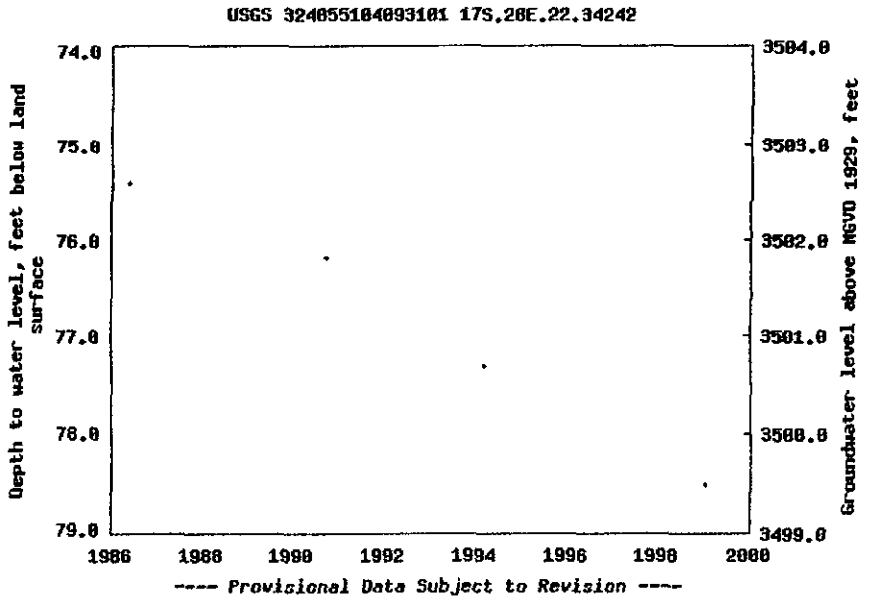
Save file of selected sites to local disk for future upload

USGS 324855104093101 17S.28E.22.34242

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°48'55", Longitude 104°09'31" NAD27
Land-surface elevation 3,578 feet above NGVD29
The depth of the well is 95.00 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data? Data Tips

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

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

No records found.

PLSS Search:

Township: 17S **Range:** 28E

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	Water Column
L 01142 POD1		L	LE	2	4	15	18S	28E	578921	3623453*	80			
L 01150 POD1		L	LE	1	1	35	18S	28E	579344	3619433*	135	65		70
RA 09588			ED	1	2	33	18S	28E	576976	3619384*	300			

Average Depth to Water: **65 feet**

Minimum Depth: **65 feet**

Maximum Depth: **65 feet**

Record Count: 3

PLSS Search:

Township: 18S Range: 28E

*UTM location was derived from PLSS - see Help

4/16/12 8:39 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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	Water Column
RA 03714			CH	4	4	2	08	18S	27E	566212	3625253*	381		
RA 03917			LE	4	1	2	10	18S	27E	569019	3625660*	130	50	80
RA 04048			LE	1	4	4	14	18S	27E	570841	3623030*	2096		
RA 04211			CH		3	1	28	18S	27E	566512	3620562*	120	100	20
RA 04298			ED		1	2	19	18S	27E	564082	3622523*	92		
RA 05524			ED		2	4	33	18S	27E	567721	3618532*	90	49	41
RA 05660			ED		3	4	31	18S	27E	564094	3618090*	305	65	240
RA 05684			ED		4	1	33	18S	27E	566914	3618936*		145	
RA 06091			ED	1	2	3	29	18S	27E	565211	3620222*	90	17	73

Average Depth to Water: **71 feet**

Minimum Depth: **17 feet**

Maximum Depth: **145 feet**

Record Count: 9

PLSS Search:

Township: 18S **Range:** 27E

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

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	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 01493			ED		2	1	27	17S	27E	568468	3630529*	876		
RA 01716 (D)	O		ED	4	4	3	16	17S	27E	566953	3632420*	1220	175	1045
RA 01716 S			ED	4	4	3	16	17S	27E	566953	3632420*	1200		
RA 02966			ED	4	4	4	05	17S	27E	566117	3635707*	80	30	50
RA 03279			ED		3	2	07	17S	27E	564020	3635011*	250	14	236
RA 03661			ED	3	2	3	32	17S	27E	565186	3628038*	330	140	190
RA 03664			CH	3	2	3	32	17S	27E	565186	3628038*	400	100	300
RA 03694			ED			4	17	17S	27E	565854	3632721*	300	90	210
RA 03816			CH			4	17	17S	27E	565854	3632721*	945	931	14
RA 04114			LE	4	4	3	16	17S	27E	566953	3632420*	1042	260	782
RA 04153			CH	4	4	3	16	17S	27E	566953	3632420*	1220	175	1045
RA 04320			ED			3	17	17S	27E	565053	3632719*	120	50	70
RA 04554			ED			1	23	17S	27E	569859	3631947*	220	40	180
RA 04561			ED		4	2	26	17S	27E	570871	3630142*	250		
RA 04786			ED	4	3	2	18	17S	27E	564133	3633277*	138	111	27
RA 06531			ED	4	1	4	17	17S	27E	565747	3632821*	200		
RA 06560			CH	2	1	2	20	17S	27E	565757	3632217*	133	80	53
RA 06635			ED	2	2	2	18	17S	27E	564531	3633852*	325	60	265
RA 07774			ED	3	2	1	11	17S	27E	569933	3635251*	100	50	50
RA 07844			ED	3	4	3	16	17S	27E	566753	3632420*	1300	180	1120
RA 07844 EXPL			ED		4	3	16	17S	27E	566854	3632521*	1300	180	1120
RA 08823			ED	1	1	3	17	17S	27E	564745	3633019*	348	60	288
RA 11691 POD1			ED	2	1	4	17	17S	27E	565800	3633029	150	0	150

Average Depth to Water: **143 feet**

Minimum Depth: **0 feet**

Maximum Depth: **931 feet**

Record Count: 23

PLSS Search:

Township: 17S **Range:** 27E

***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: August 27, 2012

Work Order: 12081735

Project Location: Eddy Co., NM
Project Name: Alamo/Delhi B State #3
Project Number: 114-6401490

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
307066	Stockpile West	soil	2012-08-16	00:00	2012-08-17
307067	Stockpile East	soil	2012-08-16	00:00	2012-08-17
307068	Stockpile Center	soil	2012-08-16	00:00	2012-08-17

	BTEX				TPH DRO - NEW	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
307066 - Stockpile West	<0.0200	<0.0200	<0.0200	**0.0320**	**106** Qr	**8.52**
307067 - Stockpile East	<0.0200	<0.0200	<0.0200	<0.0200	<50.0 Qr	<4.00
307068 - Stockpile Center	<0.0200	<0.0200	<0.0200	<0.0200	<50.0 Qr	<4.00

Sample: 307066 - Stockpile West

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

Sample: 307067 - Stockpile East

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

Sample: 307068 - Stockpile Center

Param	Flag	Result	Units	RL
Chloride		**34.7**	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

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

Report Date: August 27, 2012

Work Order: 12081735

Project Location: Eddy Co., NM
Project Name: Alamo/Delhi B State #3
Project Number: 114-6401490

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
307066	Stockpile West	soil	2012-08-16	00:00	2012-08-17
307067	Stockpile East	soil	2012-08-16	00:00	2012-08-17
307068	Stockpile Center	soil	2012-08-16	00:00	2012-08-17

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.

Blair Leftwich

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

Report Contents

Case Narrative

Samples for project Alamo/Delhi B State #3 were received by TraceAnalysis, Inc. on 2012-08-17 and assigned to work order 12081735. Samples for work order 12081735 were received intact at a temperature of 8.8 C. Samples were received on ice.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	79813	2012-08-22 at 12:56	94162	2012-08-22 at 12:56
BTEX	S 8021B	79847	2012-08-23 at 16:25	94203	2012-08-23 at 16:25
Chloride (Titration)	SM 4500-Cl B	79857	2012-08-23 at 13:15	94231	2012-08-24 at 13:23
TPH DRO - NEW	S 8015 D	79748	2012-08-20 at 08:00	94082	2012-08-21 at 08:20
TPH GRO	S 8015 D	79813	2012-08-22 at 12:56	94163	2012-08-22 at 12:56
TPH GRO	S 8015 D	79847	2012-08-23 at 16:25	94204	2012-08-23 at 16:25

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12081735 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: 307066 - Stockpile West

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94162	Date Analyzed:	2012-08-22	Analyzed By:	MT
Prep Batch:	79813	Sample Preparation:	2012-08-22	Prepared By:	MT

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		1	<0.0200	mg/Kg	1	0.0200
Xylene		1	**0.0320**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	1	2.00	99	70 - 130

Sample: 307066 - Stockpile West

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94231	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307066 - Stockpile West

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94082	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79748	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr	2	**106**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			123	mg/Kg	1	100	123	70 - 130

Sample: 307066 - Stockpile West

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94163	Date Analyzed:	2012-08-22	Analyzed By:	MT
Prep Batch:	79813	Sample Preparation:	2012-08-22	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**8.52**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.25	mg/Kg	1	2.00	112	70 - 130
4-Bromofluorobenzene (4-BFB)			2.32	mg/Kg	1	2.00	116	70 - 130

Sample: 307067 - Stockpile East

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94162	Date Analyzed:	2012-08-22	Analyzed By:	MT
Prep Batch:	79813	Sample Preparation:	2012-08-22	Prepared By:	MT

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	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

Sample: 307067 - Stockpile East

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94231	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307067 - Stockpile East

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94082	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79748	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr,U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			111	mg/Kg	1	100	111	70 - 130

Sample: 307067 - Stockpile East

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94163	Date Analyzed:	2012-08-22	Analyzed By:	MT
Prep Batch:	79813	Sample Preparation:	2012-08-22	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.21	mg/Kg	1	2.00	110	70 - 130
4-Bromofluorobenzene (4-BFB)			2.13	mg/Kg	1	2.00	106	70 - 130

Sample: 307068 - Stockpile Center

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

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	JU	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			2.07	mg/Kg	1	2.00	104	70 - 130

Sample: 307068 - Stockpile Center

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94231	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**34.7**	mg/Kg	5	4.00

Sample: 307068 - Stockpile Center

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94082	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79748	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			115	mg/Kg	1	100	115	70 - 130

Sample: 307068 - Stockpile Center

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

Method Blanks

Method Blank (1) QC Batch: 94082

QC Batch: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79748 | QC Preparation: 2012-08-20 | Prepared By: CW

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		2	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			105	mg/Kg	1	100	105	70 - 130

Method Blank (1) QC Batch: 94162

QC Batch: 94162 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00365	mg/Kg	0.02
Toluene		1	<0.00816	mg/Kg	0.02
Ethylbenzene		1	<0.00560	mg/Kg	0.02
Xylene		1	<0.00460	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	70 - 130

Method Blank (1) QC Batch: 94163

QC Batch: 94163 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<0.359	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.38	mg/Kg	1	2.00	119	70 - 130
4-Bromofluorobenzene (4-BFB)			2.15	mg/Kg	1	2.00	108	70 - 130

Method Blank (1) QC Batch: 94203

QC Batch: 94203 Date Analyzed: 2012-08-23 Analyzed By: MT
Prep Batch: 79847 QC Preparation: 2012-08-23 Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00365	mg/Kg	0.02
Toluene		1	<0.00816	mg/Kg	0.02
Ethylbenzene		1	<0.00560	mg/Kg	0.02
Xylene		1	0.00770	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	70 - 130

Method Blank (1) QC Batch: 94204

QC Batch: 94204 Date Analyzed: 2012-08-23 Analyzed By: MT
Prep Batch: 79847 QC Preparation: 2012-08-23 Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<0.359	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.14	mg/Kg	1	2.00	107	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Method Blank (1) QC Batch: 94231

QC Batch:	94231	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	QC Preparation:	2012-08-23	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: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79748 | QC Preparation: 2012-08-20 | Prepared By: CW

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	220	mg/Kg	1	250	<14.5	88	70 - 130

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	Qr	Qr 2	280	mg/Kg	1	250	<14.5	112	70 - 130	24	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	118	136	mg/Kg	1	100	118	136	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94162 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.79	mg/Kg	1	2.00	<0.00365	90	75.4 - 120
Toluene		1	1.74	mg/Kg	1	2.00	<0.00816	87	74.9 - 120
Ethylbenzene		1	1.74	mg/Kg	1	2.00	<0.00560	87	78.1 - 120
Xylene		1	5.19	mg/Kg	1	6.00	<0.00460	86	77.3 - 120

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	1.72	mg/Kg	1	2.00	<0.00365	86	75.4 - 120	4	20
Toluene		1	1.68	mg/Kg	1	2.00	<0.00816	84	74.9 - 120	4	20
Ethylbenzene		1	1.69	mg/Kg	1	2.00	<0.00560	84	78.1 - 120	3	20
Xylene		1	5.04	mg/Kg	1	6.00	<0.00460	84	77.3 - 120	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)	1.76	1.66	mg/Kg	1	2.00	88	83	70 - 130
4-Bromofluorobenzene (4-BFB)	1.73	1.67	mg/Kg	1	2.00	86	84	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94163 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.9	mg/Kg	1	20.0	<0.359	89	68.9 - 120

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	<0.359	91	68.9 - 120	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.05	2.08	mg/Kg	1	2.00	102	104	70 - 130
4-Bromofluorobenzene (4-BFB)	1.97	1.99	mg/Kg	1	2.00	98	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.84	mg/Kg	1	2.00	<0.00365	92	75.4 - 120
Toluene		1	1.80	mg/Kg	1	2.00	<0.00816	90	74.9 - 120
Ethylbenzene		1	1.79	mg/Kg	1	2.00	<0.00560	90	78.1 - 120
Xylene		1	5.40	mg/Kg	1	6.00	0.0077	90	77.3 - 120

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	1.96	mg/Kg	1	2.00	<0.00365	98	75.4 - 120	6	20

continued ...

control spikes continued ...

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Toluene		1	1.94	mg/Kg	1	2.00	<0.00816	97	74.9 - 120	8	20
Ethylbenzene		1	1.94	mg/Kg	1	2.00	<0.00560	97	78.1 - 120	8	20
Xylene		1	5.85	mg/Kg	1	6.00	0.0077	97	77.3 - 120	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
Trifluorotoluene (TFT)	1.77	1.81	mg/Kg	1	2.00	88	90	70 - 130
4-Bromofluorobenzene (4-BFB)	1.73	1.81	mg/Kg	1	2.00	86	90	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.0	mg/Kg	1	20.0	<0.359	85	68.9 - 120

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	16.4	mg/Kg	1	20.0	<0.359	82	68.9 - 120	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.95	1.84	mg/Kg	1	2.00	97	92	70 - 130
4-Bromofluorobenzene (4-BFB)	1.89	1.77	mg/Kg	1	2.00	95	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94231 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2630	mg/Kg	1	2500	<3.85	105	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			2720	mg/Kg	1	2500	<3.85	109	85 - 115	3	20

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

Matrix Spike (MS-1) Spiked Sample: 306914

QC Batch: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79748 | QC Preparation: 2012-08-20 | Prepared By: CW

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	231	mg/Kg	1	250	<14.5	92	70 - 130

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		2	233	mg/Kg	1	250	<14.5	93	70 - 130	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	112	113	mg/Kg	1	100	112	113	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306910

QC Batch: 94162 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.76	mg/Kg	1	2.00	<0.00365	88	37.6 - 142
Toluene		1	1.96	mg/Kg	1	2.00	<0.00816	98	38.6 - 153
Ethylbenzene		1	2.02	mg/Kg	1	2.00	<0.00560	101	36.7 - 172
Xylene		1	6.03	mg/Kg	1	6.00	<0.00460	100	36.7 - 173

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

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	1.81	mg/Kg	1	2.00	<0.00365	90	37.6 - 142	3	20
Toluene		1	2.03	mg/Kg	1	2.00	<0.00816	102	38.6 - 153	4	20
Ethylbenzene		1	2.13	mg/Kg	1	2.00	<0.00560	106	36.7 - 172	5	20
Xylene		1	6.36	mg/Kg	1	6.00	<0.00460	106	36.7 - 173	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
Trifluorotoluene (TFT)	1.84	1.94	mg/Kg	1	2	92	97	70 - 130
4-Bromofluorobenzene (4-BFB)	1.93	1.98	mg/Kg	1	2	96	99	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306910

QC Batch: 94163 | Date Analyzed: 2012-08-22 | Analyzed By: MT
Prep Batch: 79813 | QC Preparation: 2012-08-22 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	19.9	mg/Kg	1	20.0	1.92	90	68.9 - 120

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	21.1	mg/Kg	1	20.0	1.92	96	68.9 - 120	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)	1.88	1.82	mg/Kg	1	2	94	91	70 - 130
4-Bromofluorobenzene (4-BFB)	2.44	2.36	mg/Kg	1	2	122	118	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307092

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.74	mg/Kg	1	2.00	<0.00365	87	37.6 - 142
Toluene		1	1.94	mg/Kg	1	2.00	<0.00816	97	38.6 - 153
Ethylbenzene		1	2.00	mg/Kg	1	2.00	<0.00560	100	36.7 - 172
Xylene		1	6.08	mg/Kg	1	6.00	<0.00460	101	36.7 - 173

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	1.92	mg/Kg	1	2.00	<0.00365	96	37.6 - 142	10	20
Toluene		1	2.19	mg/Kg	1	2.00	<0.00816	110	38.6 - 153	12	20
Ethylbenzene		1	2.27	mg/Kg	1	2.00	<0.00560	114	36.7 - 172	13	20
Xylene		1	6.93	mg/Kg	1	6.00	<0.00460	116	36.7 - 173	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
Trifluorotoluene (TFT)	1.54	1.88	mg/Kg	1	2	77	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.62	1.97	mg/Kg	1	2	81	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307092

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.0	mg/Kg	1	20.0	<0.359	90	68.9 - 120

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	16.1	mg/Kg	1	20.0	<0.359	80	68.9 - 120	11	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	1.43	mg/Kg	1	2	100	72	70 - 130
4-Bromofluorobenzene (4-BFB)	2.17	1.99	mg/Kg	1	2	108	100	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307068

QC Batch: 94231 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2730	mg/Kg	5	2500	34.7	108	78.9 - 121

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			2800	mg/Kg	5	2500	34.7	111	78.9 - 121	2	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: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	230	92	80 - 120	2012-08-21

Standard (CCV-2)

QC Batch: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	224	90	80 - 120	2012-08-21

Standard (CCV-3)

QC Batch: 94082 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	240	96	80 - 120	2012-08-21

Standard (CCV-1)

QC Batch: 94162 | Date Analyzed: 2012-08-22 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0865	86	80 - 120	2012-08-22
Toluene		1	mg/kg	0.100	0.0852	85	80 - 120	2012-08-22

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		1	mg/kg	0.100	0.0860	86	80 - 120	2012-08-22
Xylene		1	mg/kg	0.300	0.256	85	80 - 120	2012-08-22

Standard (CCV-2)

QC Batch: 94162 Date Analyzed: 2012-08-22 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0865	86	80 - 120	2012-08-22
Toluene		1	mg/kg	0.100	0.0840	84	80 - 120	2012-08-22
Ethylbenzene		1	mg/kg	0.100	0.0832	83	80 - 120	2012-08-22
Xylene		1	mg/kg	0.300	0.248	83	80 - 120	2012-08-22

Standard (CCV-3)

QC Batch: 94162 Date Analyzed: 2012-08-22 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0874	87	80 - 120	2012-08-22
Toluene		1	mg/kg	0.100	0.0851	85	80 - 120	2012-08-22
Ethylbenzene		1	mg/kg	0.100	0.0846	85	80 - 120	2012-08-22
Xylene		1	mg/kg	0.300	0.251	84	80 - 120	2012-08-22

Standard (CCV-1)

QC Batch: 94163 Date Analyzed: 2012-08-22 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.851	85	80 - 120	2012-08-22

Standard (CCV-2)

QC Batch: 94163 Date Analyzed: 2012-08-22 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.834	83	80 - 120	2012-08-22

Standard (CCV-3)

QC Batch: 94163 Date Analyzed: 2012-08-22 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.867	87	80 - 120	2012-08-22

Standard (CCV-1)

QC Batch: 94203 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0854	85	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0918	92	80 - 120	2012-08-23
Ethylbenzene		1	mg/kg	0.100	0.0886	89	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.269	90	80 - 120	2012-08-23

Standard (CCV-2)

QC Batch: 94203 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.100	100	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0989	99	80 - 120	2012-08-23
Ethylbenzene		1	mg/kg	0.100	0.0965	96	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.291	97	80 - 120	2012-08-23

Standard (CCV-3)

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0994	99	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0977	98	80 - 120	2012-08-23
Ethylbenzene		1	mg/kg	0.100	0.0985	98	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.300	100	80 - 120	2012-08-23

Standard (CCV-1)

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.864	86	80 - 120	2012-08-23

Standard (CCV-2)

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.840	84	80 - 120	2012-08-23

Standard (CCV-3)

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.904	90	80 - 120	2012-08-23

Standard (CCV-1)

QC Batch: 94231 | Date Analyzed: 2012-08-24 | 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	2012-08-24

Standard (CCV-2)

QC Batch: 94231 | Date Analyzed: 2012-08-24 | 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	2012-08-24

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	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	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.

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: Alamo Permian
SITE MANAGER: Ike Tavarez
PROJECT NO.: 114-640/490
PROJECT NAME: Delhi B St #3 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
3066	8-16		S	X		Stockpile West	1	N			X	X	X	X												X				
067	8-16		S	X		Stockpile East	1	N			X	X	X	X												X				
068	8-16		S	X		Stockpile Center	1	N			X	X	X	X												X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) — Date: 8-17-12 Time: 1030
RECEIVED BY: (Signature) — Date: 8/17/12 Time: 1245
RELINQUISHED BY: (Signature) — Date: 8/17/12 Time: 1205
RECEIVED BY: (Signature) — Date: 8/17/12 Time: [illegible]
RELINQUISHED BY: (Signature) — Date: Time:
RECEIVED BY: (Signature) — Date: Time:

SAMPLED BY: (Print & Initial) James — Date: 8-16-12 Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS — AIRBILL #: OTHER:

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

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

SAMPLE CONDITION WHEN RECEIVED: 8C
REMARKS: Midland - cc

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

Summary Report

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

Report Date: August 28, 2012

Work Order: 12081902

Project Location: Eddy Co., NM
Project Name: Alamo/Delhi B State #3
Project Number: 114-6401490

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
307099	T-1 (0-1')	soil	2012-08-16	00:00	2012-08-17
307100	T-1 (2')	soil	2012-08-16	00:00	2012-08-17
307101	T-1 (3')	soil	2012-08-16	00:00	2012-08-17
307102	T-2 (0-1')	soil	2012-08-16	00:00	2012-08-17
307103	T-2 (2')	soil	2012-08-16	00:00	2012-08-17
307104	T-2 (4')	soil	2012-08-16	00:00	2012-08-17
307105	T-2 (6')	soil	2012-08-16	00:00	2012-08-17
307106	T-2 (8')	soil	2012-08-16	00:00	2012-08-17
307107	T-2 (10')	soil	2012-08-16	00:00	2012-08-17
307108	T-3 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307109	T-3 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307110	T-3 (4') BEB	soil	2012-08-16	00:00	2012-08-17
307111	T-3 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307112	T-3 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307113	T-3 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307114	T-4 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307115	T-4 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307116	T-4 (4') BEB	soil	2012-08-16	00:00	2012-08-17
307117	T-4 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307118	T-4 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307119	T-4 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307120	T-5 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307121	T-5 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307122	T-5 (4') BEB	soil	2012-08-16	00:00	2012-08-17
307123	T-5 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307124	T-5 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307125	T-5 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307126	T-6 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17

Sample - Field Code	BTEX Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
307099 - T-1 (0-1')	<0.100 [1]	**0.138**	**6.80**	**4.44**	**2090**	**384**
307102 - T-2 (0-1')	<0.0200	**0.0359**	<0.0200	**0.0679**	**420**	**16.2**
307108 - T-3 (0-1') BEB	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	**4.89**
307114 - T-4 (0-1') BEB	<0.100 [2]	**0.125**	**0.161**	**0.429**	**2460**	**38.5**
307120 - T-5 (0-1') BEB	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<4.00
307126 - T-6 (0-1') BEB	<0.100 [3]	<0.100	<0.100	<0.100	**451**	<20.0

Sample: 307099 - T-1 (0-1')

Param	Flag	Result	Units	RL
Chloride		**274**	mg/Kg	4

Sample: 307100 - T-1 (2')

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

Sample: 307101 - T-1 (3')

Param	Flag	Result	Units	RL
Chloride		**321**	mg/Kg	4

Sample: 307102 - T-2 (0-1')

Param	Flag	Result	Units	RL
Chloride		**53.5**	mg/Kg	4

Sample: 307103 - T-2 (2')

Param	Flag	Result	Units	RL
Chloride		**34.0**	mg/Kg	4

Sample: 307104 - T-2 (4')

Param	Flag	Result	Units	RL
Chloride		**102**	mg/Kg	4

[1]Sample dilution due to hydrocarbons.
[2]Sample dilution due to hydrocarbons.
[3]Sample dilution due to hydrocarbons.

Sample: 307105 - T-2 (6')

Param	Flag	Result	Units	RL
Chloride		**155**	mg/Kg	4

Sample: 307106 - T-2 (8')

Param	Flag	Result	Units	RL
Chloride		**112**	mg/Kg	4

Sample: 307107 - T-2 (10')

Param	Flag	Result	Units	RL
Chloride		**180**	mg/Kg	4

Sample: 307108 - T-3 (0-1') BEB

Param	Flag	Result	Units	RL
Chloride		**151**	mg/Kg	4

Sample: 307109 - T-3 (2') BEB

Param	Flag	Result	Units	RL
Chloride		**146**	mg/Kg	4

Sample: 307110 - T-3 (4') BEB

Param	Flag	Result	Units	RL
Chloride		**546**	mg/Kg	4

Sample: 307111 - T-3 (6') BEB

Param	Flag	Result	Units	RL
Chloride		**198**	mg/Kg	4

Sample: 307112 - T-3 (8') BEB

Param	Flag	Result	Units	RL
Chloride		**189**	mg/Kg	4

Sample: 307113 - T-3 (10') BEB

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

Sample: 307114 - T-4 (0-1') BEB

Param	Flag	Result	Units	RL
Chloride		**24.2**	mg/Kg	4

Sample: 307115 - T-4 (2') BEB

Param	Flag	Result	Units	RL
Chloride		**145**	mg/Kg	4

Sample: 307116 - T-4 (4') BEB

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

Sample: 307117 - T-4 (6') BEB

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

Sample: 307118 - T-4 (8') BEB

Param	Flag	Result	Units	RL
Chloride		**77.3**	mg/Kg	4

Sample: 307119 - T-4 (10') BEB

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

Sample: 307120 - T-5 (0-1') BEB

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

Sample: 307121 - T-5 (2') BEB

Param	Flag	Result	Units	RL
Chloride		**111**	mg/Kg	4

Sample: 307122 - T-5 (4') BEB

Param	Flag	Result	Units	RL
Chloride		**91.4**	mg/Kg	4

Sample: 307123 - T-5 (6') BEB

Param	Flag	Result	Units	RL
Chloride		**207**	mg/Kg	4

Sample: 307124 - T-5 (8') BEB

Param	Flag	Result	Units	RL
Chloride		**217**	mg/Kg	4

Sample: 307125 - T-5 (10') BEB

Param	Flag	Result	Units	RL
Chloride		**298**	mg/Kg	4

Sample: 307126 - T-6 (0-1') BEB

Param	Flag	Result	Units	RL
Chloride		**111**	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: August 28, 2012

Work Order: 12081902

Project Location: Eddy Co., NM
Project Name: Alamo/Delhi B State #3
Project Number: 114-6401490

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
307099	T-1 (0-1')	soil	2012-08-16	00:00	2012-08-17
307100	T-1 (2')	soil	2012-08-16	00:00	2012-08-17
307101	T-1 (3')	soil	2012-08-16	00:00	2012-08-17
307102	T-2 (0-1')	soil	2012-08-16	00:00	2012-08-17
307103	T-2 (2')	soil	2012-08-16	00:00	2012-08-17
307104	T-2 (4')	soil	2012-08-16	00:00	2012-08-17
307105	T-2 (6')	soil	2012-08-16	00:00	2012-08-17
307106	T-2 (8')	soil	2012-08-16	00:00	2012-08-17
307107	T-2 (10')	soil	2012-08-16	00:00	2012-08-17
307108	T-3 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307109	T-3 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307110	T-3 (4') BEB	soil	2012-08-16	00:00	2012-08-17
307111	T-3 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307112	T-3 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307113	T-3 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307114	T-4 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307115	T-4 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307116	T-4 (4') BEB	soil	2012-08-16	00:00	2012-08-17

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
307117	T-4 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307118	T-4 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307119	T-4 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307120	T-5 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17
307121	T-5 (2') BEB	soil	2012-08-16	00:00	2012-08-17
307122	T-5 (4') BEB	soil	2012-08-16	00:00	2012-08-17
307123	T-5 (6') BEB	soil	2012-08-16	00:00	2012-08-17
307124	T-5 (8') BEB	soil	2012-08-16	00:00	2012-08-17
307125	T-5 (10') BEB	soil	2012-08-16	00:00	2012-08-17
307126	T-6 (0-1') BEB	soil	2012-08-16	00:00	2012-08-17

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 Alamo/Delhi B State #3 were received by TraceAnalysis, Inc. on 2012-08-17 and assigned to work order 12081902. Samples for work order 12081902 were received intact at a temperature of 8.8 C. Samples were received on ice.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	79847	2012-08-23 at 16:25	94203	2012-08-23 at 16:25
Chloride (Titration)	SM 4500-Cl B	79857	2012-08-23 at 13:15	94224	2012-08-24 at 13:16
Chloride (Titration)	SM 4500-Cl B	79857	2012-08-23 at 13:15	94225	2012-08-24 at 13:17
Chloride (Titration)	SM 4500-Cl B	79857	2012-08-23 at 13:15	94226	2012-08-24 at 13:19
Chloride (Titration)	SM 4500-Cl B	79857	2012-08-23 at 13:15	94232	2012-08-24 at 13:25
TPH DRO - NEW	S 8015 D	79749	2012-08-20 at 08:00	94083	2012-08-21 at 08:25
TPH GRO	S 8015 D	79847	2012-08-23 at 16:25	94204	2012-08-23 at 16:25

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12081902 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: 307099 - T-1 (0-1')

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene [1]	U	1	<0.100	mg/Kg	5	0.0200
Toluene		1	**0.138**	mg/Kg	5	0.0200
Ethylbenzene		1	**6.80**	mg/Kg	5	0.0200
Xylene		1	**4.44**	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	5	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	5.68	mg/Kg	5	2.00	284	70 - 130

Sample: 307099 - T-1 (0-1')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94232	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**274**	mg/Kg	5	4.00

Sample: 307099 - T-1 (0-1')

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		2	**2090**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	182	mg/Kg	1	100	182	70 - 130

Sample: 307099 - T-1 (0-1')

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**384**	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.43	mg/Kg	5	2.00	72	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	8.17	mg/Kg	5	2.00	408	70 - 130

Sample: 307100 - T-1 (2')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307101 - T-1 (3')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

continued ...

sample 307101 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**321**	mg/Kg	5	4.00

Sample: 307102 - T-2 (0-1')

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	1	<0.0200	mg/Kg	1	0.0200
Toluene		1	**0.0359**	mg/Kg	1	0.0200
Ethylbenzene		1	<0.0200	mg/Kg	1	0.0200
Xylene	B	1	**0.0679**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

Sample: 307102 - T-2 (0-1')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**53.5**	mg/Kg	5	4.00

Sample: 307102 - T-2 (0-1')

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		2	**420**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			126	mg/Kg	1	100	126	70 - 130

Sample: 307102 - T-2 (0-1')

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**16.2**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	70 - 130
4-Bromofluorobenzene (4-BFB)			2.57	mg/Kg	1	2.00	128	70 - 130

Sample: 307103 - T-2 (2')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**34.0**	mg/Kg	5	4.00

Sample: 307104 - T-2 (4')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Chloride			**102**		mg/Kg	5	4.00

Sample: 307105 - T-2 (6')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Chloride			**155**		mg/Kg	5	4.00

Sample: 307106 - T-2 (8')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL	Units	Dilution	RL
Chloride			**112**		mg/Kg	5	4.00

Sample: 307107 - T-2 (10')

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**180**	mg/Kg	5	4.00

Sample: 307108 - T-3 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

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)			1.95	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	70 - 130

Sample: 307108 - T-3 (0-1') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**151**	mg/Kg	5	4.00

Sample: 307108 - T-3 (0-1') BEB

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			112	mg/Kg	1	100	112	70 - 130

Sample: 307108 - T-3 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		J	**4.89**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.10	mg/Kg	1	2.00	105	70 - 130

Sample: 307109 - T-3 (2') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94224	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**146**	mg/Kg	5	4.00

Sample: 307110 - T-3 (4') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**546**	mg/Kg	5	4.00

Sample: 307111 - T-3 (6') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**198**	mg/Kg	5	4.00

Sample: 307112 - T-3 (8') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**189**	mg/Kg	5	4.00

Sample: 307113 - T-3 (10') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307114 - T-4 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene [2]	U	1	<0.100	mg/Kg	5	0.0200
Toluene		1	**0.125**	mg/Kg	5	0.0200
Ethylbenzene		1	**0.161**	mg/Kg	5	0.0200
Xylene		1	**0.429**	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	5	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	5	2.00	106	70 - 130

Sample: 307114 - T-4 (0-1') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**24.2**	mg/Kg	5	4.00

Sample: 307114 - T-4 (0-1') BEB

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO		2	**2460**	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	227	mg/Kg	5	100	227	70 - 130

Sample: 307114 - T-4 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	**38.5**	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.71	mg/Kg	5	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	5	2.00	102	70 - 130

Sample: 307115 - T-4 (2') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**145**	mg/Kg	5	4.00

Sample: 307116 - T-4 (4') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307117 - T-4 (6') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307118 - T-4 (8') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**77.3**	mg/Kg	5	4.00

Sample: 307119 - T-4 (10') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94225	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307120 - T-5 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

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)			2.01	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Sample: 307120 - T-5 (0-1') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

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

Sample: 307120 - T-5 (0-1') BEB

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			118	mg/Kg	1	100	118	70 - 130

Sample: 307120 - T-5 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO			<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.08	mg/Kg	1	2.00	104	70 - 130

Sample: 307121 - T-5 (2') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**111**	mg/Kg	5	4.00

Sample: 307122 - T-5 (4') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**91.4**	mg/Kg	5	4.00

Sample: 307123 - T-5 (6') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**207**	mg/Kg	5	4.00

Sample: 307124 - T-5 (8') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**217**	mg/Kg	5	4.00

Sample: 307125 - T-5 (10') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**298**	mg/Kg	5	4.00

Sample: 307126 - T-6 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	94203	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene [3]	U	1	<0.100	mg/Kg	5	0.0200
Toluene		1	<0.100	mg/Kg	5	0.0200
Ethylbenzene	U	1	<0.100	mg/Kg	5	0.0200

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sample 307126 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Xylene	U	1	<0.100	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.57	mg/Kg	5	2.00	78	70 - 130
4-Bromofluorobenzene (4-BFB)			1.87	mg/Kg	5	2.00	94	70 - 130

Sample: 307126 - T-6 (0-1') BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	94226	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	Sample Preparation:	2012-08-24	Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			111	mg/Kg	5	4.00

Sample: 307126 - T-6 (0-1') BEB

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	94083	Date Analyzed:	2012-08-21	Analyzed By:	CW
Prep Batch:	79749	Sample Preparation:	2012-08-20	Prepared By:	CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		2	451	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qm Qsr		150	mg/Kg	1	100	150	70 - 130

Sample: 307126 - T-6 (0-1') BEB

Laboratory:	Lubbock				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	94204	Date Analyzed:	2012-08-23	Analyzed By:	MT
Prep Batch:	79847	Sample Preparation:	2012-08-23	Prepared By:	MT

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.41	mg/Kg	5	2.00	70	70 - 130
4-Bromofluorobenzene (4-BFB)			2.09	mg/Kg	5	2.00	104	70 - 130

Method Blanks

Method Blank (1) QC Batch: 94083

QC Batch: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79749 | QC Preparation: 2012-08-20 | Prepared By: CW

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		2	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			113	mg/Kg	1	100	113	70 - 130

Method Blank (1) QC Batch: 94203

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00365	mg/Kg	0.02
Toluene		1	<0.00816	mg/Kg	0.02
Ethylbenzene		1	<0.00560	mg/Kg	0.02
Xylene		1	0.00770	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130
4-Bromofluorobenzene (4-BFB)			1.99	mg/Kg	1	2.00	100	70 - 130

Method Blank (1) QC Batch: 94204

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<0.359	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.14	mg/Kg	1	2.00	107	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

Method Blank (1) QC Batch: 94224

QC Batch: 94224 Date Analyzed: 2012-08-24 Analyzed By: AR
Prep Batch: 79857 QC Preparation: 2012-08-23 Prepared By: AR

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

Method Blank (1) QC Batch: 94225

QC Batch: 94225 Date Analyzed: 2012-08-24 Analyzed By: AR
Prep Batch: 79857 QC Preparation: 2012-08-23 Prepared By: AR

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

Method Blank (1) QC Batch: 94226

QC Batch: 94226 Date Analyzed: 2012-08-24 Analyzed By: AR
Prep Batch: 79857 QC Preparation: 2012-08-23 Prepared By: AR

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

Method Blank (1) QC Batch: 94232

QC Batch:	94232	Date Analyzed:	2012-08-24	Analyzed By:	AR
Prep Batch:	79857	QC Preparation:	2012-08-23	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: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79749 | QC Preparation: 2012-08-20 | Prepared By: CW

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	220	mg/Kg	1	250	<14.5	88	70 - 130

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		2	239	mg/Kg	1	250	<14.5	96	70 - 130	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	118	126	mg/Kg	1	100	118	126	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.84	mg/Kg	1	2.00	<0.00365	92	75.4 - 120
Toluene		1	1.80	mg/Kg	1	2.00	<0.00816	90	74.9 - 120
Ethylbenzene		1	1.79	mg/Kg	1	2.00	<0.00560	90	78.1 - 120
Xylene		1	5.40	mg/Kg	1	6.00	0.0077	90	77.3 - 120

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	1.96	mg/Kg	1	2.00	<0.00365	98	75.4 - 120	6	20
Toluene		1	1.94	mg/Kg	1	2.00	<0.00816	97	74.9 - 120	8	20
Ethylbenzene		1	1.94	mg/Kg	1	2.00	<0.00560	97	78.1 - 120	8	20
Xylene		1	5.85	mg/Kg	1	6.00	0.0077	97	77.3 - 120	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
Trifluorotoluene (TFT)	1.77	1.81	mg/Kg	1	2.00	88	90	70 - 130
4-Bromofluorobenzene (4-BFB)	1.73	1.81	mg/Kg	1	2.00	86	90	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.0	mg/Kg	1	20.0	<0.359	85	68.9 - 120

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	16.4	mg/Kg	1	20.0	<0.359	82	68.9 - 120	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.95	1.84	mg/Kg	1	2.00	97	92	70 - 130
4-Bromofluorobenzene (4-BFB)	1.89	1.77	mg/Kg	1	2.00	95	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94224 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2720	mg/Kg	1	2500	<3.85	109	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			2630	mg/Kg	1	2500	<3.85	105	85 - 115	3	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 94225 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2670	mg/Kg	1	2500	<3.85	107	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			2640	mg/Kg	1	2500	<3.85	106	85 - 115	1	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: 94226 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2640	mg/Kg	1	2500	<3.85	106	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			2530	mg/Kg	1	2500	<3.85	101	85 - 115	4	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 94232 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2630	mg/Kg	1	2500	<3.85	105	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			2680	mg/Kg	1	2500	<3.85	107	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 307094

QC Batch: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW
Prep Batch: 79749 | QC Preparation: 2012-08-20 | Prepared By: CW

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	244	mg/Kg	1	250	<14.5	98	70 - 130

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		2	239	mg/Kg	1	250	<14.5	96	70 - 130	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	115	117	mg/Kg	1	100	115	117	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307092

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.74	mg/Kg	1	2.00	<0.00365	87	37.6 - 142
Toluene		1	1.94	mg/Kg	1	2.00	<0.00816	97	38.6 - 153
Ethylbenzene		1	2.00	mg/Kg	1	2.00	<0.00560	100	36.7 - 172
Xylene		1	6.08	mg/Kg	1	6.00	<0.00460	101	36.7 - 173

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	1.92	mg/Kg	1	2.00	<0.00365	96	37.6 - 142	10	20
Toluene		1	2.19	mg/Kg	1	2.00	<0.00816	110	38.6 - 153	12	20

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ethylbenzene		1	2.27	mg/Kg	1	2.00	<0.00560	114	36.7 - 172	13	20
Xylene		1	6.93	mg/Kg	1	6.00	<0.00460	116	36.7 - 173	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
Trifluorotoluene (TFT)	1.54	1.88	mg/Kg	1	2	77	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.62	1.97	mg/Kg	1	2	81	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307092

QC Batch: 94204 | Date Analyzed: 2012-08-23 | Analyzed By: MT
Prep Batch: 79847 | QC Preparation: 2012-08-23 | Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.0	mg/Kg	1	20.0	<0.359	90	68.9 - 120

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	16.1	mg/Kg	1	20.0	<0.359	80	68.9 - 120	11	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	1.43	mg/Kg	1	2	100	72	70 - 130
4-Bromofluorobenzene (4-BFB)	2.17	1.99	mg/Kg	1	2	108	100	70 - 130

Matrix Spike (MS-1) Spiked Sample: 307100

QC Batch: 94224 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2620	mg/Kg	1	2500	<3.85	105	78.9 - 121

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			2530	mg/Kg	1	2500	<3.85	101	78.9 - 121	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: 307110

QC Batch: 94225 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2670	mg/Kg	5	2500	546	85	78.9 - 121

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			2770	mg/Kg	5	2500	546	89	78.9 - 121	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: 307129

QC Batch: 94226 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			4120	mg/Kg	10	2500	1300	113	78.9 - 121

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			4290	mg/Kg	10	2500	1300	120	78.9 - 121	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: 307099

QC Batch: 94232 | Date Analyzed: 2012-08-24 | Analyzed By: AR
Prep Batch: 79857 | QC Preparation: 2012-08-23 | Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2860	mg/Kg	5	2500	274	103	78.9 - 121

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			2940	mg/Kg	5	2500	274	107	78.9 - 121	3	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: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	244	98	80 - 120	2012-08-21

Standard (CCV-2)

QC Batch: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	240	96	80 - 120	2012-08-21

Standard (CCV-3)

QC Batch: 94083 | Date Analyzed: 2012-08-21 | Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	233	93	80 - 120	2012-08-21

Standard (CCV-1)

QC Batch: 94203 | Date Analyzed: 2012-08-23 | Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0854	85	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0918	92	80 - 120	2012-08-23

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		1	mg/kg	0.100	0.0886	89	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.269	90	80 - 120	2012-08-23

Standard (CCV-2)

QC Batch: 94203 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.100	100	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0989	99	80 - 120	2012-08-23
Ethylbenzene		1	mg/kg	0.100	0.0965	96	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.291	97	80 - 120	2012-08-23

Standard (CCV-3)

QC Batch: 94203 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0994	99	80 - 120	2012-08-23
Toluene		1	mg/kg	0.100	0.0977	98	80 - 120	2012-08-23
Ethylbenzene		1	mg/kg	0.100	0.0985	98	80 - 120	2012-08-23
Xylene		1	mg/kg	0.300	0.300	100	80 - 120	2012-08-23

Standard (CCV-1)

QC Batch: 94204 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.864	86	80 - 120	2012-08-23

Standard (CCV-2)

QC Batch: 94204 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.840	84	80 - 120	2012-08-23

Standard (CCV-3)

QC Batch: 94204 Date Analyzed: 2012-08-23 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.904	90	80 - 120	2012-08-23

Standard (CCV-1)

QC Batch: 94224 Date Analyzed: 2012-08-24 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	2012-08-24

Standard (CCV-2)

QC Batch: 94224 Date Analyzed: 2012-08-24 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	2012-08-24

Standard (CCV-1)

QC Batch: 94225 Date Analyzed: 2012-08-24 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	2012-08-24

Standard (CCV-2)

QC Batch: 94225 Date Analyzed: 2012-08-24 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	2012-08-24

Standard (CCV-1)

QC Batch: 94226 Date Analyzed: 2012-08-24 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	2012-08-24

Standard (CCV-2)

QC Batch: 94226 Date Analyzed: 2012-08-24 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	99.4	99	85 - 115	2012-08-24

Standard (CCV-1)

QC Batch: 94232 Date Analyzed: 2012-08-24 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	98.9	99	85 - 115	2012-08-24

Standard (CCV-2)

QC Batch: 94232 Date Analyzed: 2012-08-24 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	2012-08-24

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	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	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

Result Comments

1 Sample dilution due to hydrocarbons.
2 Sample dilution due to hydrocarbons.
3 Sample dilution due to hydrocarbons.

Attachments

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

1208902

Analysis Request of Chain of Custody Record

PAGE: 1 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: Alamo Permian
SITE MANAGER: Ike Tavarez
PROJECT NO.: 114-6401490
PROJECT NAME: Delhi B State #3 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 (Ext. to C35)	TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
001099	8-16		S	X		T-1 (0-1')	1	N			X	X	X	X												X				
100					X	T-1 (2')																								
101					X	T-1 (3')																								
102				X		T-2 (0-1')							X	X																
103					X	T-2 (2')																								
104					X	T-2 (4')																								
105					X	T-2 (6')																								
106					X	T-2 (8')																								
107					X	T-2 (10')																								
108	8-16		S	X		T-3 (0-1') BEB	1	N			X	X	X	X												X				

RELINQUISHED BY: (Signature) — Date: 8-17-12 Time: 1030
RECEIVED BY: (Signature) — Date: 17 Aug 2012 Time: 1030
SAMPLED BY: (Print & Initial) James — Date: 8-16-12 Time:
RELINQUISHED BY: (Signature) — Date: 17 Aug 2012 Time: 1210
RECEIVED BY: (Signature) — Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS — AIRBILL #: OTHER:
RELINQUISHED BY: (Signature) — Date: Time:
RECEIVED BY: (Signature) — Date: Time:
RECEIVING LABORATORY: Trace — RECEIVED BY: (Signature)
ADDRESS: CITY: Midland STATE: ZIP:
CONTACT: PHONE: DATE: TIME:
TETRA TECH CONTACT PERSON: IKE Tavarez
Results by:
RUSH Charges Authorized: Yes No
SAMPLE CONDITION WHEN RECEIVED: 88
REMARKS: Run deeper Samples if TPH exceeds 5,000 mg/kg, Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg

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

Midland-ACL

1308190S

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: Alamo Permian
SITE MANAGER: Ike Tavarez
PROJECT NO.: 114-6401490
PROJECT NAME: Delhi B St #3 Eddy CoNM

LAB I.D. NUMBER	DATE 2012	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
109	8-16		S		X	T-3 (2') BEB	1	N			X	X
110					X	T-3 (4') BEB						
111					X	T-3 (6') BEB						
112					X	T-3 (8') BEB						
113					X	T-3 (10') BEB						
114				X		T-4 (0-1') BEB						
115					X	T-4 (2') BEB						
116					X	T-4 (4') BEB						
117					X	T-4 (6') BEB						
118	8-16		S		X	T-4 (8') BEB	1	N			X	X

ANALYSIS REQUEST (Circle or Specify Method No.)

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

RELINQUISHED BY: (Signature) Date: 8-17-12 Time: 1030
RECEIVED BY: (Signature) Date: 12 Aug 12 Time: 1030
RELINQUISHED BY: (Signature) Date: 14 Aug 2012 Time: 1215
RECEIVED BY: (Signature) Date: 8/14/12 Time: 12:15
RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Initial) James Date: 8-16-12 Time:
SAMPLE SHIPPED BY: (Circle) FEDEX AND DELIVERED BUS UPS
AIRBILL #:
OTHER:

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

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 8 8

REMARKS: See Notes on COC #1

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

1208403

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: Alamo Permian
SITE MANAGER: IKE Tavarez
PROJECT NO.: 114-6401490
PROJECT NAME: Delhi B St #3 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
119	8-16		S		X	T-4 (10') BEB	1	N			X	Y														X				
120				X		T-5 (0-1') BEB							X	X																
121					X	T-5 (2') BEB																								
122					X	T-5 (4') BEB																								
123					Y	T-5 (6') BEB																								
124					Y	T-5 (8') BEB																								
125					Y	T-5 (10') BEB																								
126	8-16		S	X		T-6 (0-1') BEB	1	N			X	X	X	X												X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 8-17-12 Time: 1030
RECEIVED BY: (Signature) Date: 17 Aug 2012 Time: 1030
SAMPLED BY: (Print & Initial) James Date: 8-16-12 Time:
RELINQUISHED BY: (Signature) Date: 17 Aug 2012 Time: 1215
RECEIVED BY: (Signature) Date: 8/17/12 Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS HAND DELIVERED UPS
AIRBILL #:
OTHER:
RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
TETRA TECH CONTACT PERSON: IKE Tavarez
Results by:
RUSH Charges Authorized: Yes No
SAMPLE CONDITION WHEN RECEIVED: 8.8
REMARKS: See Notes on COC #1

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