Highlander Environmental Corp.

Midland, Texas

August 9, 2007

RP#1590

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

Re: Assessment and Closure Report for the Cimarex of Colorado, S.R. Cooper Tank Battery Release Located in Unit J, Section 23, Township 24 South, Range 36 East, Lea County, New Mexico.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Cimarex of Colorado (Cimarex) to assess a spill from the S.R. Cooper Tank Battery, located in Unit J, Section 23, Township 24 South, Range 36 East, Lea County, New Mexico (Site). The spill site coordinates are N 32° 12.125', W 103° 14.071'. The Site is shown on Figure 1.

Background

According to the State of New Mexico C-141 Initial Report, approximately 130 barrels of oil and produced water were released from a water tank overflow. The overflow occurred when there was a power failure from a storm. When the electricians restored power to the facility, they did not turn the transfer pump back on and the water tank overflowed. A total of 130 barrels were recovered. The State of New Mexico C-141 (Initial and Final) are included in Appendix C.

Groundwater and Regulatory

The New Mexico State Engineer's Office database showed one water well in Section 23 with a reported depth to water of 160' below ground surface (bgs). Another water well was located in adjacent Sections 15 with reported average depths to water of 312' bgs. The New Mexico State Engineer water well report is shown in Appendix A.

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.

Assessment and Results

The majority of the spill was contained inside the facility dike, on the facility pad or on the road. An estimated 3-5 barrels flowed out into the pasture. After a vacuum truck had picked up all of the fluids, Cimarex had a local dirt contractor excavate impacted soils and place them on plastic.

On April 12, 2007, Highlander personnel inspected and sampled the spill area. A total of seventeen (17) auger holes (AH-1 through AH-17) were installed using a stainless steel hand auger to assess the impacted soils. Six auger holes were placed inside the facility, four were placed on the facility pad, two (2) were placed on the lease road and five (5) were placed in the spill area in the pasture. Samples were analyzed for TPH analysis by EPA method 8015 modified, and chloride by EPA method 300.0. Selected samples were analyzed for BTEX by EPA Method 8021B. The auger hole locations are shown on Figure 2. The results of the sampling are summarized in Table 1.

Referring to Table 1, TPH concentrations exceeded the RRAL in the 0-0.5 samples from five auger holes AH-4, AH-6, AH-13, AH-15 and AH-17. All BTEX concentrations were below the RRAL, and chloride concentrations ranged from 11 mg/kg to 457 mg/kg with the majority being below 250 mg/kg. The areas around auger holes AH-4 and AH-6 were excavated an additional 1.0' and stockpiled onsite. The remainder of the inside of the dike was tilled and fertilized, as was the area in the pasture. The pad and lease road were back dragged.

Referring to Table 2, additional samples were collected on May 15 and June 20, 2007. The areas around AH-13, AH-15 and AH-17 were re-sampled on May 15, 2007 and were below the RRAL for TPH. Sample Points SP-1 and SP-2 were collected on June 20, 2007 in the vicinity of AH-4 and AH-6 and were both below the TPH RRAL. Additionally, stockpile samples were collected and were below the RRAL for TPH and BTEX, and chloride concentrations from the stockpiles were below 50 mg/kg. The sample point locations are shown on Figure 3. The results of the sampling are summarized in Table 2. Copies of the laboratory analysis and chain-of-custody documentation are included in Appendix B.

Conclusions

The impacted soils have been excavated and stockpiled on the well pad. No remaining TPH or BTEX concentrations currently exceed the RRAL. Considering the chloride concentration and depth to water, the residual chloride do not appear to pose and imminent threat to groundwater. Since the stockpiles do not exceed the RRAL and chloride concentrations are below 50 mg/kg, this material will be blended with clean soil and used to backfill the excavation. Based upon the results of the assessment work performed at this site, Cimarex requests closure of this Site.

If you require any additional information or have any questions or comments concerning the assessment/closure report, please call at (432) 682-4559.

Respectfully submitted,
Highlander Environmental Corp.

Tim Reed

Timothy M. Reed, P.G.
Vice President

cc: Evan Wauhob – Cimarex Energy Co.
Bob Jennings – Cimarex Energy Co.

SITE INFORMATION

Report Type: ASSESSMENT & CLOSURE REPORT

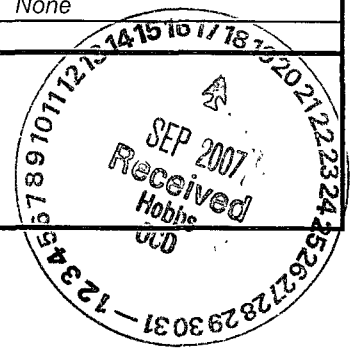
General Site Information	
Site:	S.R. Cooper Tank Battery
Company:	Cimarex of Colorado
Well Location:	Section 23, T24S R36E
Spill Location:	Section 23, T24S R36E
Unit Letter:	Unit J
Lease Number:	
County:	Lea
Spill GPS:	32° 12.125', 103° 14.071'
Surface Owner:	Randy Crawford
Mineral Owner:	
Directions:	From the intersection of Hwy 18 and 128 in Jal, head north on 18 for 6.2 miles. Turn left on
	Cooper Cemetary Road and go west 2.5 miles. Turn left on road and go north 0.5 mile
	to tank battery.

Release Data	
Date Released:	3/15/2007
Type Release:	Oil and Produced Water
Source of Contamination:	Tank overflow from power failure during storm.
Fluid Released:	78 barrels
Fluids Recovered:	78 barrels

Official Communication			
Name:	Hugo Naegle, Jr.	Evan Wauhob	Ike Tavarez
Company:	Cimarex of Colorado	Cimarex of Colorado	Highlander Environmental Corp.
Address:	300 W. Texas	508 W. Wall, Suite 600	1910 N. Big Spring
P.O. Box	P.O.Box 1237		
City:	Eunice, New Mexico	Midland, Texas 79701	Midland, Texas
Phone number:	(505) 390-9394	(432) 571-7800	(432) 682- 4559
Email:	hnaegle@cimarex	ewauhob@cimarex.com	itavarez@hec-enviro.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	**0**	*Average Depth >100 BS*
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	*None*
Water Source >1,000 ft., Private >200 ft.	***0***	
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	*None*
200 ft - 1,000 ft.	10	*None*
>1,000 ft.	0	
Total Ranking Score:	**0**	

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



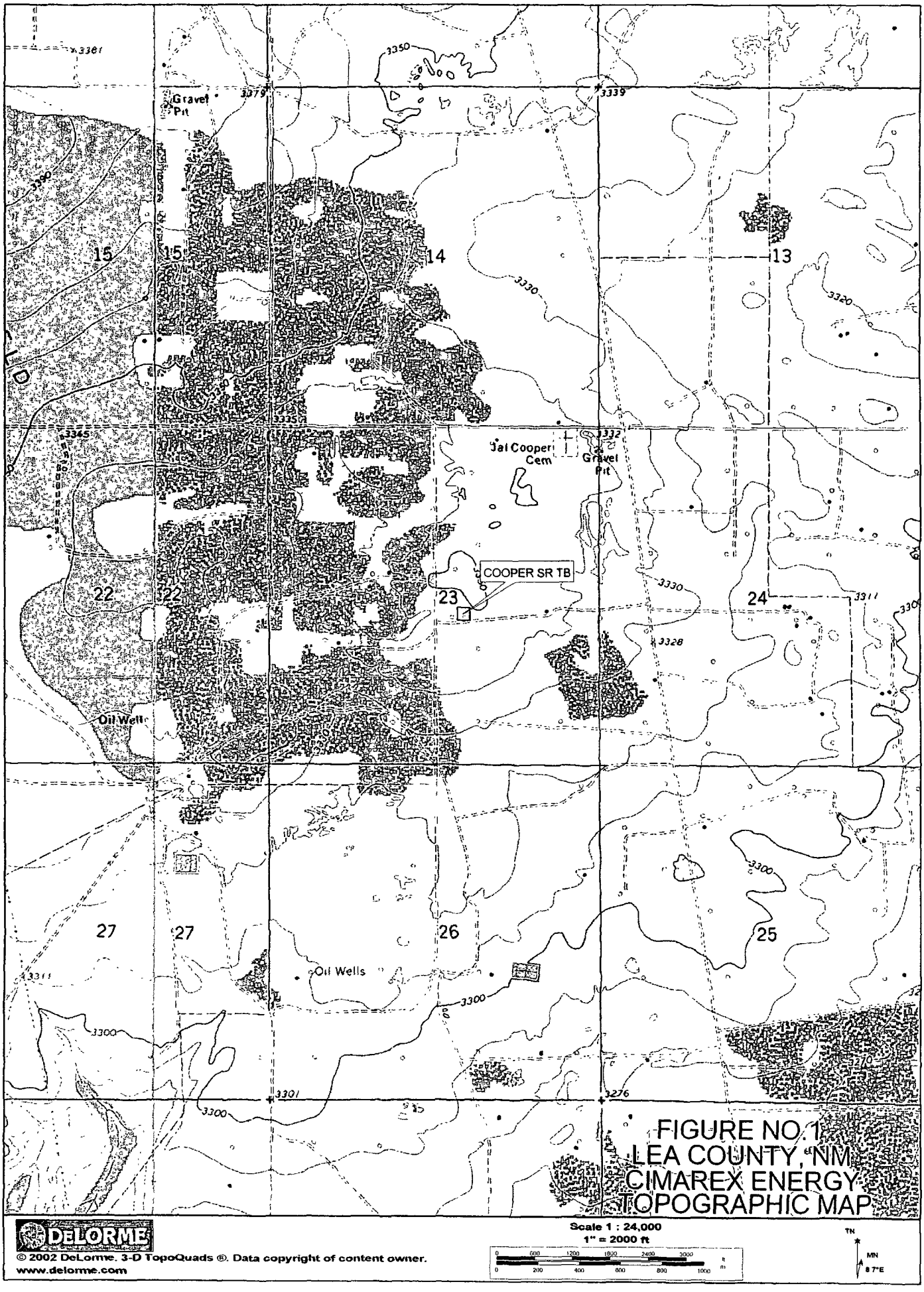
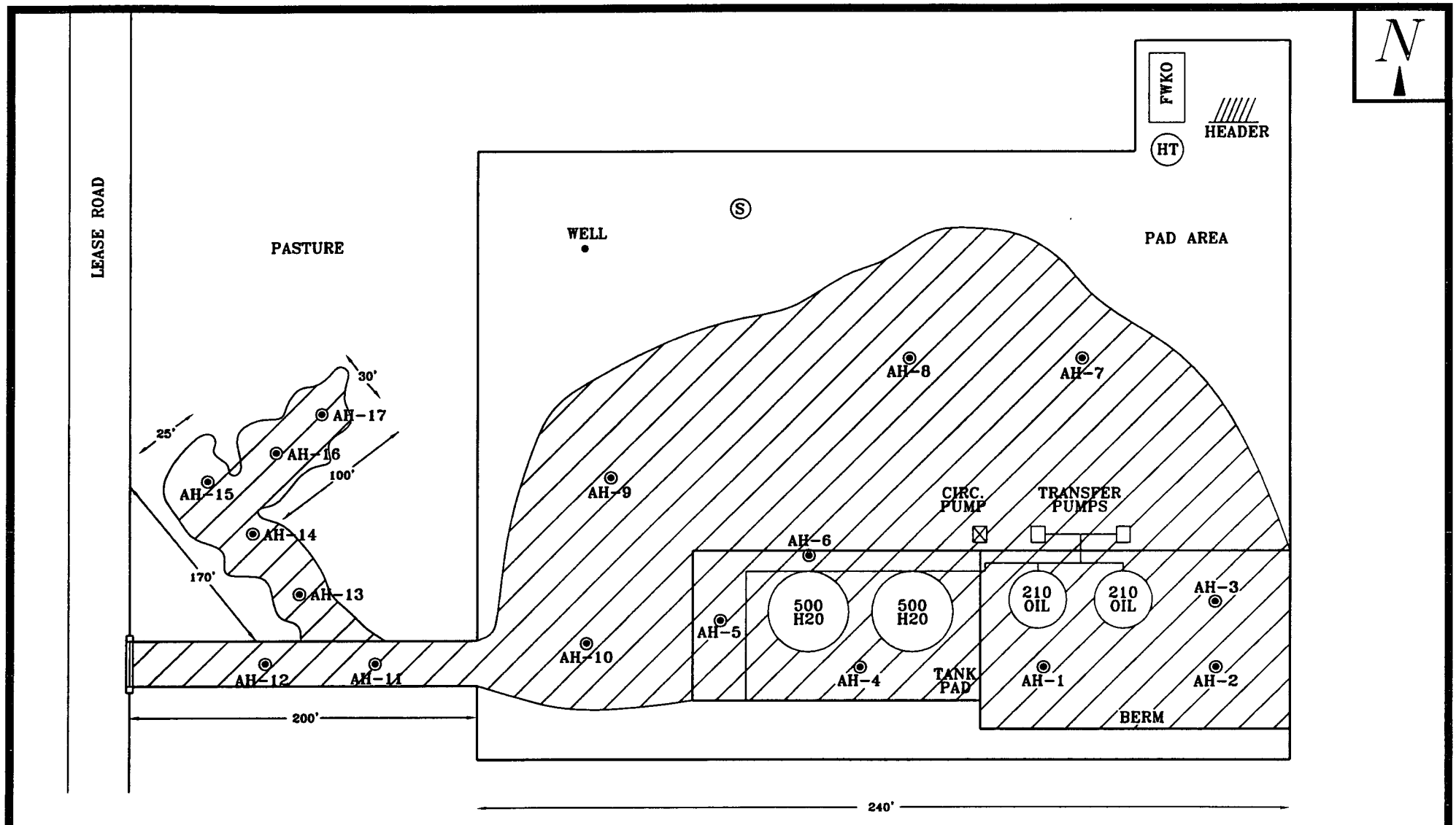


FIGURE NO. 1
LEA COUNTY, NM
CIMAREX ENERGY
TOPOGRAPHIC MAP



SPILL AREA

AUGER HOLES

NOT TO SCALE

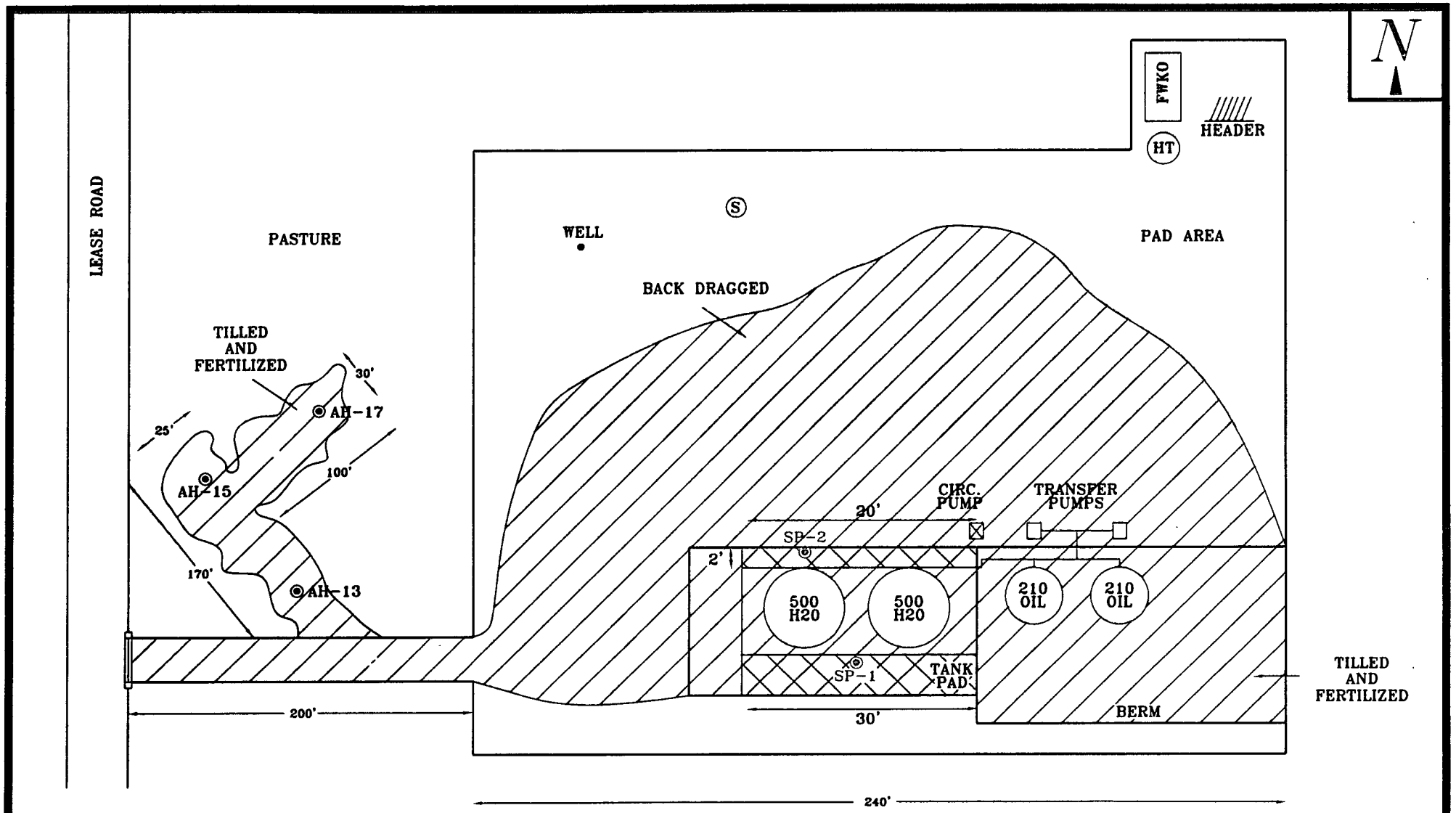
FIGURE NO. 2

LEA COUNTY, NEW MEXICO

CIMAREX ENERGY COMPANY
COOPER S.R. TB
UNIT J SEC. 23

DATE: 4/25/07
DWN. BY: RC
FILE: C:\CIMAREX\2984\COOPER S.R. TB

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



EXCAVATED AREA 1.0'

SPILL AREA

SAMPLE POINTS

AUGER HOLES

NOT TO SCALE

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

CIMAREX ENERGY COMPANY
COOPER S.R. TB (CLEAN-UP)
UNIT J SEC. 23

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 4/25/07
DWN. BY: RC
FILE: C:\CIMAREX\2984\COOPER S.R. TB

Table 1
Cimarex Energy
Cooper S.R. Tank Battery
Lea County, NM

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
AH-1	4/12/2007	0-1.0'	769	40.1	809.1	-	-	-	-	172
AH-1	4/12/2007	1'-1.5'	175	7.82	182.82	-	-	-	-	73.2
AH-2	4/12/2007	0-1.0'	1,060	343	1,403	<0.0100	<0.0100	0.0671	0.349	178
AH-2	4/12/2007	1'-1.5'	<50.0	7.03	7.03	-	-	-	-	24.7
AH-3	4/12/2007	0-1.0'	484	28.3	512.3	-	-	-	-	176
AH-3	4/12/2007	1'-1.5'	<50.0	1.03	1.03	-	-	-	-	169
AH-4	4/12/2007	0-1.0'	6,340	1,260	7,600	0.340	5.19	6.96	19.2	79.1
AH-4	4/12/2007	1'-1.5'	<50.0	7.15	7.15	-	-	-	-	16.0
AH-5	4/12/2007	0-1.0'	455	512	967	-	-	-	-	69.8
AH-5	4/12/2007	1'-1.5'	<50.0	16.9	16.9	-	-	-	-	34.0
AH-6	4/12/2007	0-1.0'	10,800	1,350	12,150	-	-	-	-	16.4
AH-6	4/12/2007	1'-1.5'	<50.0	10.6	10.6	-	-	-	-	11.1
AH-7	4/12/2007	0-0.5'	1,890	8.75	1,898.75	<0.0100	<0.0100	<0.0100	<0.0100	286
AH-8	4/12/2007	0-1.0'	1,860	3.72	1,863.72	-	-	-	-	149
AH-8	4/12/2007	1'-1.5'	367	1.45	368.45	-	-	-	-	147
AH-9	4/12/2007	0-1.0'	303	14.2	317.2	-	-	-	-	152
AH-9	4/12/2007	1'-1.5'	<50.0	1.60	1.60	-	-	-	-	20.7
AH-10	4/12/2007	0-1.0'	362	3.98	365.98	-	-	-	-	307
AH-10	4/12/2007	1'-1.5'	<50.0	1.02	1.02	-	-	-	-	372
AH-11	4/12/2007	0-1.0'	1,830	44.4	1,874.4	<0.0100	<0.0100	0.0354	0.0749	88.6
AH-11	4/12/2007	1'-1.5'	<50.0	5.46	5.46	-	-	-	-	16.6
AH-12	4/12/2007	0-1.0'	1,700	54.4	1,754.4	-	-	-	-	61.3

Cimarex Energy
Cooper S.R. Tank Battery
Lea County, NM

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
AH-12	4/12/2007	1'-1.5'	<50.0	5.11	5.11	-	-	-	-	13.2
AH-13	4/12/2007	0-0.5'	7,020	238	7,258	-	-	-	-	89.1
AH-13	4/12/2007	0.5'-1.0'	<50.0	10.5	10.5	-	-	-	-	393
AH-14	4/12/2007	0-0.5'	883	57.4	940.4	-	-	-	-	141
AH-14	4/12/2007	0.5'-1.0'	78.2	8.91	87.11	-	-	-	-	395
AH-15	4/12/2007	0-0.5'	16,100	414	16,514	<0.100	0.398	0.657	1.99	30.7
AH-15	4/12/2007	0.5'-1.0'	746	33.0	779	-	-	-	-	91.0
AH-15	4/12/2007	1.0'-1.5'	<50.0	5.73	5.73	-	-	-	-	457
AH-16	4/12/2007	0-0.5'	751	12.4	763.4	-	-	-	-	40.2
AH-16	4/12/2007	0.5'-1.0'	286	2.12	288.12	-	-	-	-	160
AH-17	4/12/2007	0-0.5'	8,640	222	8,862	-	-	-	-	17.7
AH-17	4/12/2007	0.5'-1.0'	<50.0	7.75	7.75	-	-	-	-	307

(-) Not Analyzed

Table 2
Cimarex Energy
Cooper S.R. Tank Battery
Lea County, NM

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
AH-13	5/15/2007	0-0.5'	<50.0	18.2	18.2	-	-	-	-	-
AH-15	5/15/2007	0-0.5'	2,260	221	2,481	-	-	-	-	-
AH-17	5/15/2007	0-0.5'	4,230	282	4,512	-	-	-	-	-
SP #1 (0-1.0' BEB)	6/20/2007	1.0'	<50.0	2.00	2.00	-	-	-	-	-
SP #2 (0-0.5' BEB)	6/20/2007	1.0'	<50.0	<1.00	<50.0	-	-	-	-	-
Stockpile	6/20/2007	Composite	621	52.1	673.1	<0.0200	<0.0200	0.222	0.817	<50.0

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

Water Well Data
Average Depth to Groundwater (ft)
Cimarex - J.W. Cooper #7 Tank Battery, Lea County, New Mexico

23 South 35 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

23 South 36 East

6	5	4 160	3	2	1
7	8	9	10	11	12
18	17	16 **220**	15 **149**	14	13
19	20	21	22 **400**	23 **143**	24
30	29	28	27	26	25
31 **189**	32	33	34	35	36 **127**

23 South 37 East

6 102	5	4	3 70	2 64	1
7	8	9 **100**	10 **66**	11 **68**	12
18	17	16 **115** **100**	15	14	13
19	20 **108**	21	22	23	24
30	29	28 **117**	27 **88**	26	25
31	32 **106** **97**	33 **87**	34	35	36

24 South 35 East

6	5	4	3	2	1
7	8	9	10 **300**	11	12
18	17	16	15	14	13
19	20 **97**	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South 36 East

6	5	4 **165**	3	2	1
7	8	9	10	11	12
18	17	16	15 **312**	14	13
19	20	21	22	23 **Site** **160**	24
30	29	28	27	26	25
31	32	33 **54** **53**	34	35	36

24 South 37 East

6	5 **111**	4	3	2	1
7 **119**	8 **90**	9	10 **120**	11 **64**	12 **18**
18 **124**	17	16 **67**	15	14	13
19	20	21 **69**	22	23 **94**	24 **100**
30	29	28 **70**	27 **41**	26	25 **89** **90**
31	32	33	34 **55**	35	36

25 South 35 East

6	5 **165**	4	3 **108**	2	1
7	8	9	10	11	12
18 **230**	17	16	15	14	13
19	20	21 **218**	22	23	24
30 **80**	29	28	27	26	25
31	32	33	34	35	36

25 South 36 East

6 **295**	5	4	3	2	1
7	8	9	10300 **180**	11	12
18	17	16	15 **120**	14	13
19	20	21	22	23 **53.7**	24 **455**
30	29	28	27	26	25
31	32	33	34	35	36

25 South 37 East

6	5	4	3	2	1 **60**
7	8	9	10 **50**	11	12
18 **51**	17 62	16	15 59.2	14	13 **73** **81**
19 **44** 62	20 65 **34**	21	22 **26**	23	24 **255**
30 Jal	29 **219**	28	27	26 **75**	25 **55**
31	32	33 **86**	34	35 **185**	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

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic
All

POD / Surface Data Report | Avg Depth to Water Report
Water Column Report

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AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	25S	36E	33				1	80	80	80

Record Count: 1

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

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AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	25S	37E	19				11	27	69	49
CP	25S	37E	20				7	23	70	39
CP	25S	37E	29				5	187	250	219
CP	25S	37E	35				1	185	185	185

Record Count: 24

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 23S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report
Water Column Report

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AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	23S	36E	15				1	149	149	149
CP	23S	36E	16				1	220	220	220
CP	23S	36E	22				1	400	400	400
CP	23S	36E	31				2	178	200	189
CP	23S	36E	36				5	123	133	127

Record Count: 10

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report
Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	36E	04				3	155	178	165
CP	24S	36E	15				2	173	450	312
CP	24S	36E	20				1	97	97	97
CP	24S	36E	23				1	160	160	160
CP	24S	36E	33				1	53	53	53

Record Count: 8

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

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AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	37E	05				1	106	106	106
CP	24S	37E	08				1	90	90	90
CP	24S	37E	12				1	18	18	18
CP	24S	37E	23				1	94	94	94
CP	24S	37E	24				1	100	100	100
CP	24S	37E	25				1	90	90	90
CP	24S	37E	28				1	70	70	70

Record Count: 7

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report
Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	35E	10				1	300	300	300

Record Count: 1

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 23S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 08/17/2007

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	23S	37E	09				1	100	100	100
CP	23S	37E	16				1	115	115	115
CP	23S	37E	32				1	106	106	106

Record Count: 3

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: April 24, 2007

Work Order: 7041707

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number 2984

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
121869	AH-1(0-1.0')	soil	2007-04-12	00:00	2007-04-17
121870	AH-1 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121871	AH-2 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121872	AH-2 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121873	AH-3 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121874	AH-3 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121875	AH-4 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121876	AH-4 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121878	AH-5 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121879	AH-5 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121880	AH-6 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121881	AH-6 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121882	AH-7 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121883	AH-8 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121884	AH-8 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121885	AH-9 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121886	AH-9 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121888	AH-10 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121889	AH-10 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121891	AH-11 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121892	AH-11 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121893	AH-12 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121894	AH-12 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121895	AH-13 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121896	AH-13 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121897	AH-14 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121898	AH-14 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121899	AH-15 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121900	AH-15 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121901	AH-15 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121902	AH-16 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121903	AH-16 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121905	AH-17 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121906	AH-17 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17

Sample - Field Code	BTEX Benzene (mg/Kg)	BTEX Toluene (mg/Kg)	BTEX Ethylbenzene (mg/Kg)	BTEX Xylene (mg/Kg)	MTBE MTBE (mg/Kg)	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
121869 - AH-1(0-1.0')						769	40.1
121870 - AH-1 (1.0-1.5')						175	7.82
121871 - AH-2 (0-1.0')	<0.0100	<0.0100	0.0671	0.349		1060	343
121872 - AH-2 (1.0-1.5')						<50.0	7.03
121873 - AH-3 (0-1.0')						484	28.3
121874 - AH-3 (1.0-1.5')						<50.0	1.03
121875 - AH-4 (0-1.0')	0.340	5.19	6.96	19.2		6340	1260
121876 - AH-4 (1.0-1.5')						<50 0	7.15
121878 - AH-5 (0-1.0')						455	512
121879 - AH-5 (1.0-1.5')						<50.0	16.9
121880 - AH-6 (0-1.0')						10800	1350
121881 - AH-6 (1.0-1.5')						<50.0	10.6
121882 - AH-7 (0-0.5')	<0.0100	<0.0100	<0.0100	<0 0100		1890	8.75
121883 - AH-8 (0-1.0')						1860	3.72
121884 - AH-8 (1.0-1.5')						367	1.45
121885 - AH-9 (0-1.0')						303	14.2
121886 - AH-9 (1.0-1.5')						<50 0	1.60
121888 - AH-10 (0-1.0')						362	3.98
121889 - AH-10 (1.0-1.5')						<50.0	1.02
121891 - AH-11 (0-1.0')	<0 0100	<0.0100	0.0354	0.0749		1830	44.4
121892 - AH-11 (1.0-1.5')						<50.0	5.46
121893 - AH-12 (0-1.0')						1700	54.4
121894 - AH-12 (1.0-1.5')						<50.0	5.11
121895 - AH-13 (0-0.5')						7020	238
121896 - AH-13 (0.5-1.0')						<50 0	10.5
121897 - AH-14 (0-0.5')						883	57.4
121898 - AH-14 (0.5-1.0')						78.2	8.91
121899 - AH-15 (0-0.5')	<0.100	0.398	0.657	1.99		16100	414
121900 - AH-15 (0.5-1.0')						746	33.0
121901 - AH-15 (1.0-1.5')						<50.0	5.73
121902 - AH-16 (0-0.5')						751	12.4
121903 - AH-16 (0.5-1.0')						286	2.12
121905 - AH-17 (0-0.5')						8640	222
121906 - AH-17 (0.5-1.0')						<50.0	7.75

Sample: 121869 - AH-1(0-1.0')

Param	Flag	Result	Units	RL
Chloride		172	mg/Kg	1.00

Sample: 121870 - AH-1 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		73.2	mg/Kg	1.00

Sample: 121871 - AH-2 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		178	mg/Kg	1.00

Sample: 121872 - AH-2 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**24.7**	mg/Kg	1.00

Sample: 121873 - AH-3 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**176**	mg/Kg	1.00

Sample: 121874 - AH-3 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**169**	mg/Kg	1.00

Sample: 121875 - AH-4 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**79.1**	mg/Kg	1.00

Sample: 121876 - AH-4 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**16.0**	mg/Kg	1.00

Sample: 121878 - AH-5 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**69.8**	mg/Kg	1.00

Sample: 121879 - AH-5 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**34.0**	mg/Kg	1.00

Sample: 121880 - AH-6 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**16.4**	mg/Kg	1.00

Sample: 121881 - AH-6 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**11.1**	mg/Kg	1.00

Sample: 121882 - AH-7 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**286**	mg/Kg	1.00

Sample: 121883 - AH-8 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**149**	mg/Kg	1.00

Sample: 121884 - AH-8 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**147**	mg/Kg	1.00

Sample: 121885 - AH-9 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**152**	mg/Kg	1.00

Sample: 121886 - AH-9 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**20.7**	mg/Kg	1.00

Sample: 121888 - AH-10 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**307**	mg/Kg	1.00

Sample: 121889 - AH-10 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**372**	mg/Kg	1.00

Sample: 121891 - AH-11 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**88.6**	mg/Kg	1.00

Sample: 121892 - AH-11 (1.0-1.5')

continued .

sample 121892 continued ...

Param	Flag	Result	Units	RL

Param	Flag	Result	Units	RL
Chloride		**16.6**	mg/Kg	1.00

Sample: 121893 - AH-12 (0-1.0')

Param	Flag	Result	Units	RL
Chloride		**61.3**	mg/Kg	1.00

Sample: 121894 - AH-12 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**13.2**	mg/Kg	1.00

Sample: 121895 - AH-13 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**89.1**	mg/Kg	1.00

Sample: 121896 - AH-13 (0.5-1.0')

Param	Flag	Result	Units	RL
Chloride		**393**	mg/Kg	1.00

Sample: 121897 - AH-14 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**141**	mg/Kg	1.00

Sample: 121898 - AH-14 (0.5-1.0')

Param	Flag	Result	Units	RL
Chloride		**395**	mg/Kg	1.00

Sample: 121899 - AH-15 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**30.7**	mg/Kg	1.00

Sample: 121900 - AH-15 (0.5-1.0')

Param	Flag	Result	Units	RL
Chloride		**91.0**	mg/Kg	1.00

Sample: 121901 - AH-15 (1.0-1.5')

Param	Flag	Result	Units	RL
Chloride		**457**	mg/Kg	1.00

Sample: 121902 - AH-16 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**40.2**	mg/Kg	1.00

Sample: 121903 - AH-16 (0.5-1.0')

Param	Flag	Result	Units	RL
Chloride		**160**	mg/Kg	1.00

Sample: 121905 - AH-17 (0-0.5')

Param	Flag	Result	Units	RL
Chloride		**17.7**	mg/Kg	1.00

Sample: 121906 - AH-17 (0.5-1.0')

Param	Flag	Result	Units	RL
Chloride		**307**	mg/Kg	1.00

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX. 79705

Report Date: April 24, 2007

Work Order: 7041707

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number: 2984

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
121869	AH-1(0-1.0')	soil	2007-04-12	00:00	2007-04-17
121870	AH-1 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121871	AH-2 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121872	AH-2 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121873	AH-3 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121874	AH-3 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121875	AH-4 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121876	AH-4 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121878	AH-5 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121879	AH-5 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121880	AH-6 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121881	AH-6 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121882	AH-7 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121883	AH-8 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121884	AH-8 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121885	AH-9 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121886	AH-9 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121888	AH-10 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121889	AH-10 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121891	AH-11 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121892	AH-11 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121893	AH-12 (0-1.0')	soil	2007-04-12	00:00	2007-04-17
121894	AH-12 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121895	AH-13 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121896	AH-13 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121897	AH-14 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121898	AH-14 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121899	AH-15 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121900	AH-15 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17
121901	AH-15 (1.0-1.5')	soil	2007-04-12	00:00	2007-04-17
121902	AH-16 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121903	AH-16 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
121905	AH-17 (0-0.5')	soil	2007-04-12	00:00	2007-04-17
121906	AH-17 (0.5-1.0')	soil	2007-04-12	00:00	2007-04-17

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.

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project 'Cimarex/Cooper S.R. TB' were received by TraceAnalysis, Inc. on 2007-04-17 and assigned to work order 7041707. Samples for work order 7041707 were received intact without headspace and at a temperature of 4 deg C.

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

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 occuring, however, it may not pertain to the samples for work order 7041707 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 preformed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 121869 - AH-1(0-1.0')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method	N/A
QC Batch:	36665	Date Analyzed:	2007-04-20	Analyzed By:	AR
Prep Batch:	31798	Sample Preparation:		Prepared By	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		172		mg/Kg	5	1.00

Sample: 121869 - AH-1(0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch	36556	Date Analyzed.	2007-04-17	Analyzed By:	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		769		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	427	mg/Kg	1	150	285	32.9 - 167

Sample: 121869 - AH-1(0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36525	Date Analyzed	2007-04-17	Analyzed By	ss
Prep Batch.	31685	Sample Preparation	2007-04-17	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		40.1		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.767	mg/Kg	1	1.00	77	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[2]	2.69	mg/Kg	1	1.00	269	67.5 - 140.3

Sample: 121870 - AH-1 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31744	Sample Preparation:		Prepared By.	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		73.2		mg/Kg	5	1.00

[1] High surrogate recovery due to peak interference
[2] High surrogate recovery due to peak interference

Sample: 121870 - AH-1 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed:	2007-04-17	Analyzed By:	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**175**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	285	mg/Kg	1	150	190	32.9 - 167

Sample: 121870 - AH-1 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36525	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31685	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**7.82**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.800	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.22	mg/Kg	1	1.00	122	67.5 - 140.3

Sample: 121871 - AH-2 (0-1.0')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	36524	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31685	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		**0.0671**	mg/Kg	1	0.0100
Xylene		**0.349**	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.627	mg/Kg	1	1.00	63	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.723	mg/Kg	1	1.00	72	51.1 - 119.1

[3]High surrogate recovery due to peak interference

Sample: 121871 - AH-2 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch·	36600	Date Analyzed:	2007-04-18	Analyzed By·	AR
Prep Batch:	31744	Sample Preparation:		Prepared By·	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**178**		mg/Kg	5	1.00

Sample: 121871 - AH-2 (0-1.0')

Analysis·	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed:	2007-04-17	Analyzed By.	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By.	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**1060**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[4]	364	mg/Kg	1	150	243	32.9 - 167

Sample: 121871 - AH-2 (0-1.0')

Analysis:	TPH GRO	Analytical Method·	S 8015B	Prep Method:	S 5035
QC Batch·	36562	Date Analyzed·	2007-04-18	Analyzed By·	ss
Prep Batch:	31714	Sample·Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**343**		mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		18.5	mg/Kg	20	20.0	92	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		23.7	mg/Kg	20	20.0	118	67.5 - 140.3

Sample: 121872 - AH-2 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31744	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**24.7**		mg/Kg	5	1.00

[4]High surrogate recovery due to peak interference.

Sample: 121872 - AH-2 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method	Mod 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed:	2007-04-17	Analyzed By:	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		193	mg/Kg	1	150	129	32.9 - 167

Sample: 121872 - AH-2 (1.0-1.5')

Analysis	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36525	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31685	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**7.03**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.787	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	67.5 - 140.3

Sample: 121873 - AH-3 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31744	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**176**	mg/Kg	5	1.00

Sample: 121873 - AH-3 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed:	2007-04-17	Analyzed By	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**484**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[5]	320	mg/Kg	1	150	213	32.9 - 167

Sample: 121873 - AH-3 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method	S 5035
QC Batch:	36525	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31685	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**28.3**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.812	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[6]	1.59	mg/Kg	1	1.00	159	67.5 - 140.3

Sample: 121874 - AH-3 (1.0-1.5')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31744	Sample Preparation:		Prepared By	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**169**	mg/Kg	5	1.00

Sample: 121874 - AH-3 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed	2007-04-17	Analyzed By	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		208	mg/Kg	1	150	139	32.9 - 167

Sample: 121874 - AH-3 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By.	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By.	ss

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

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**1.03**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.788	mg/Kg	1	1.00	79	32.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	67.5 - 140.3

Sample: 121875 - AH-4 (0-1.0')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method	S 5035
QC Batch	36526	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.340**	mg/Kg	10	0.0100
Toluene		**5.19**	mg/Kg	10	0.0100
Ethylbenzene		**6.96**	mg/Kg	10	0.0100
Xylene		**19.2**	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.08	mg/Kg	10	10.0	81	26 - 117.8
4-Bromofluorobenzene (4-BFB)		9.11	mg/Kg	10	10.0	91	51.1 - 119.1

Sample: 121875 - AH-4 (0-1.0')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31744	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**79.1**	mg/Kg	5	1.00

Sample: 121875 - AH-4 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36556	Date Analyzed:	2007-04-17	Analyzed By:	AG
Prep Batch:	31708	Sample Preparation:	2007-04-17	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**6340**	mg/Kg	5	50.0

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[7]	1260	mg/Kg	5	150	840	32.9 - 167

Sample: 121875 - AH-4 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method.	S 5035
QC Batch:	36567	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31719	Sample Preparation:	2007-04-18	Prepared By.	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**1260**	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		33.6	mg/Kg	50	50.0	67	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[8]	78.6	mg/Kg	50	50.0	157	67.5 - 140.3

Sample: 121876 - AH-4 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method.	E 300.0	Prep Method:	N/A
QC Batch:	36600	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch.	31744	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**16.0**	mg/Kg	5	1.00

Sample: 121876 - AH-4 (1.0-1.5')

Analysis.	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		175	mg/Kg	1	150	117	32.9 - 167

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

Sample: 121876 - AH-4 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO	B	7.15		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.785	mg/Kg	1	1.00	78	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	67.5 - 140.3

Sample: 121878 - AH-5 (0-1.0')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch.	31750	Sample Preparation:		Prepared By.	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		69.8		mg/Kg	5	1.00

Sample: 121878 - AH-5 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method	N/A
QC Batch:	36622	Date Analyzed	2007-04-18	Analyzed By	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		455		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[9]	292	mg/Kg	1	150	195	32.9 - 167

Sample: 121878 - AH-5 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch	36567	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch	31719	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		512		mg/Kg	50	1.00

[9]High surrogate recovery due to peak interference

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		45.4	mg/Kg	50	50.0	91	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		50.8	mg/Kg	50	50.0	102	67.5 - 140.3

Sample: 121879 - AH-5 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**34.0**	mg/Kg	5	1.00

Sample: 121879 - AH-5 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1	150	106	32.9 - 167

Sample: 121879 - AH-5 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**16.9**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.665	mg/Kg	1	1.00	66	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.29	mg/Kg	1	1.00	129	67.5 - 140.3

Sample: 121880 - AH-6 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		16.4	mg/Kg	5	1.00

Sample: 121880 - AH-6 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36627	Date Analyzed:	2007-04-19	Analyzed By	AG
Prep Batch:	31765	Sample Preparation:	2007-04-19	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		10800	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[10]	2030	mg/Kg	5	150	1353	32.9 - 167

Sample: 121880 - AH-6 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36567	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31719	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1350	mg/Kg	50	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		34.7	mg/Kg	50	50.0	69	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[11]	78.7	mg/Kg	50	50.0	157	67.5 - 140.3

Sample: 121881 - AH-6 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11.1	mg/Kg	5	1.00

Sample: 121881 - AH-6 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36627	Date Analyzed:	2007-04-19	Analyzed By	AG
Prep Batch:	31765	Sample Preparation:	2007-04-19	Prepared By:	AG

[10] High surrogate recovery due to peak interference
[11] High surrogate recovery due to peak interference

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		179	mg/Kg	1	150	119	32.9 - 167

Sample: 121881 - AH-6 (1.0-1.5')

Analysis	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**10.6**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.789	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.21	mg/Kg	1	1.00	121	67.5 - 140.3

Sample: 121882 - AH-7 (0-0.5')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	36526	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.919	mg/Kg	1	1.00	92	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.886	mg/Kg	1	1.00	89	51.1 - 119.1

Sample: 121882 - AH-7 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**286**	mg/Kg	50	1.00

Sample: 121882 - AH-7 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**1890**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[12]	1260	mg/Kg	1	150	840	32.9 - 167

Sample: 121882 - AH-7 (0-0.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO	[B]	**8.75**		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.810	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	67.5 - 140.3

Sample: 121883 - AH-8 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By	AR
Prep Batch:	31750	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**149**		mg/Kg	50	1.00

Sample: 121883 - AH-8 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**1860**		mg/Kg	1	50.0

[12]High surrogate recovery due to peak interference

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[13]	906	mg/Kg	1	150	604	32.9 - 167

Sample: 121883 - AH-8 (0-1.0')

Analysis	TPH GRO	Analytical Method:	S 8015B	Prep Method	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**3.72**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.828	mg/Kg	1	1.00	83	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	67.5 - 140.3

Sample: 121884 - AH-8 (1.0-1.5')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method.	N/A
QC Batch:	36604	Date Analyzed:	2007-04-18	Analyzed By	AR
Prep Batch:	31750	Sample Preparation:		Prepared By.	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**147**	mg/Kg	10	1.00

Sample: 121884 - AH-8 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By.	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**367**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[14]	444	mg/Kg	1	150	296	32.9 - 167

Sample: 121884 - AH-8 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch.	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

[13]High surrogate recovery due to peak interference.
[14]High surrogate recovery due to peak interference

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.45	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	67.5 - 140.3

Sample: 121885 - AH-9 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method	N/A
QC Batch	36604	Date Analyzed:	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation.		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		152	mg/Kg	5	1.00

Sample: 121885 - AH-9 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		303	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[15]	266	mg/Kg	1	150	177	32.9 - 167

Sample: 121885 - AH-9 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		14.2	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.789	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	67.5 - 140.3

[15]High surrogate recovery due to peak interference

Sample: 121886 - AH-9 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36604	Date Analyzed.	2007-04-18	Analyzed By:	AR
Prep Batch:	31750	Sample Preparation:		Prepared By.	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**20.7**	mg/Kg	5	1.00

Sample: 121886 - AH-9 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	32.9 - 167

Sample: 121886 - AH-9 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation	2007-04-17	Prepared By:	ss

Parameter	Flag	Result	RL Units	Dilution	RL
GRO	B	**1.60**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.794	mg/Kg	1	1.00	79	52 4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	67.5 - 140.3

Sample: 121888 - AH-10 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**307**	mg/Kg	10	1.00

Sample: 121888 - AH-10 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		362	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[16]	325	mg/Kg	1	150	217	32.9 - 167

Sample: 121888 - AH-10 (0-1.0')

Analysis	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	3.98	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.800	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	67.5 - 140.3

Sample: 121889 - AH-10 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		372	mg/Kg	10	1.00

Sample: 121889 - AH-10 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

[16] High surrogate recovery due to peak interference

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		187	mg/Kg	1	150	125	32.9 - 167

Sample: 121889 - AH-10 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**1.02**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.807	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	67.5 - 140.3

Sample: 121891 - AH-11 (0-1.0')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	36526	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		**0.0354**	mg/Kg	1	0.0100
Xylene		**0.0749**	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.930	mg/Kg	1	1.00	93	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.975	mg/Kg	1	1.00	98	51.1 - 119.1

Sample: 121891 - AH-11 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**88.6**	mg/Kg	5	1.00

Sample: 121891 - AH-11 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**1830**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[17]	531	mg/Kg	1	150	354	32.9 - 167

Sample: 121891 - AH-11 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		44.4		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.808	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[18]	2.58	mg/Kg	1	1.00	258	67.5 - 140.3

Sample: 121892 - AH-11 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**16.6**		mg/Kg	5	1.00

Sample: 121892 - AH-11 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

[17]High surrogate recovery due to peak interference
[18]High surrogate recovery due to peak interference

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		180	mg/Kg	1	150	120	32.9 - 167

Sample: 121892 - AH-11 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**5.46**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.792	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	67.5 - 140.3

Sample: 121893 - AH-12 (0-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**61.3**	mg/Kg	5	1.00

Sample: 121893 - AH-12 (0-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1700**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[19]	515	mg/Kg	1	150	343	32.9 - 167

Sample: 121893 - AH-12 (0-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

[19]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		54.4	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.743	mg/Kg	1	1.00	74	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[20]	4.24	mg/Kg	1	1.00	424	67.5 - 140.3

Sample: 121894 - AH-12 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		13.2	mg/Kg	5	1.00

Sample: 121894 - AH-12 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		209	mg/Kg	1	150	139	32.9 - 167

Sample: 121894 - AH-12 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	5.11	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.808	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.17	mg/Kg	1	1.00	117	67.5 - 140.3

[20]High surrogate recovery due to peak interference.

Sample: 121895 - AH-13 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		89.1		mg/Kg	10	1.00

Sample: 121895 - AH-13 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By.	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		7020		mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[21]	2100	mg/Kg	5	150	1400	32.9 - 167

Sample: 121895 - AH-13 (0-0.5')

Analysis.	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36567	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31719	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		238		mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.42	mg/Kg	10	10.0	84	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		12.8	mg/Kg	10	10.0	128	67.5 - 140.3

Sample: 121896 - AH-13 (0.5-1.0')

Analysis.	Chloride (IC)	Analytical Method:	E 300.0	Prep Method.	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		393		mg/Kg	10	1.00

[21] High surrogate recovery due to peak interference

Sample: 121896 - AH-13 (0.5-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch	31763	Sample Preparation	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		202	mg/Kg	1	150	135	32.9 - 167

Sample: 121896 - AH-13 (0.5-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36527	Date Analyzed:	2007-04-17	Analyzed By:	ss
Prep Batch:	31686	Sample Preparation:	2007-04-17	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		10.5	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0 809	mg/Kg	1	1.00	81	52 4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	1	1.00	103	67.5 - 140.3

Sample: 121897 - AH-14 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		141	mg/Kg	10	1.00

Sample: 121897 - AH-14 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		883	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[22]	435	mg/Kg	1	150	290	32.9 - 167

Sample: 121897 - AH-14 (0-0.5')

Analysis	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**57.4**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.809	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[23]	4.74	mg/Kg	1	1.00	474	67.5 - 140.3

Sample: 121898 - AH-14 (0.5-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method	N/A
QC Batch.	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch	31771	Sample Preparation		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**395**	mg/Kg	10	1.00

Sample: 121898 - AH-14 (0.5-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36622	Date Analyzed	2007-04-18	Analyzed By:	AG
Prep Batch	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**78.2**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		214	mg/Kg	1	150	143	32.9 - 167

Sample: 121898 - AH-14 (0.5-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation	2007-04-18	Prepared By:	ss

[22]High surrogate recovery due to peak interference
[23]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**8.91**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	67.5 - 140.3

Sample: 121899 - AH-15 (0-0.5')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	36564	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	[24]	<0.100	mg/Kg	10	0.0100
Toluene		**0.398**	mg/Kg	10	0.0100
Ethylbenzene		**0.657**	mg/Kg	10	0.0100
Xylene		**1.99**	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		7.92	mg/Kg	10	10.0	79	26 - 117.8
4-Bromofluorobenzene (4-BFB)		9.13	mg/Kg	10	10.0	91	51.1 - 119.1

Sample: 121899 - AH-15 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method	N/A
QC Batch	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**30.7**	mg/Kg	10	1.00

Sample: 121899 - AH-15 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**16100**	mg/Kg	5	50.0

[24]Sample ran at dilution due to hydrocarbons with a retention time greater than xylene

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[25]	3340	mg/Kg	5	150	2227	32.9 - 167

Sample: 121899 - AH-15 (0-0.5')

Analysis:	TPH GRO	Analytical Method	S 8015B	Prep Method	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		414	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		7.44	mg/Kg	10	10.0	74	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[26]	26.0	mg/Kg	10	10.0	260	67.5 - 140.3

Sample: 121900 - AH-15 (0.5-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		91.0	mg/Kg	10	1.00

Sample: 121900 - AH-15 (0.5-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		746	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[27]	408	mg/Kg	1	150	272	32.9 - 167

Sample: 121900 - AH-15 (0.5-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

[25] High surrogate recovery due to peak interference
[26] High surrogate recovery due to peak interference
[27] High surrogate recovery due to peak interference

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		33.0	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[28]	2.15	mg/Kg	1	1.00	215	67.5 - 140.3

Sample: 121901 - AH-15 (1.0-1.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		457	mg/Kg	10	1.00

Sample: 121901 - AH-15 (1.0-1.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		193	mg/Kg	1	150	129	32.9 - 167

Sample: 121901 - AH-15 (1.0-1.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	5.73	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.811	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.18	mg/Kg	1	1.00	118	67.5 - 140.3

[28] High surrogate recovery due to peak interference

Sample: 121902 - AH-16 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**40.2**		mg/Kg	5	1.00

Sample: 121902 - AH-16 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**751**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[29]	390	mg/Kg	1	150	260	32.9 - 167

Sample: 121902 - AH-16 (0-0.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By:	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**12.4**		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.828	mg/Kg	1	1.00	83	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.14	mg/Kg	1	1.00	114	67.5 - 140.3

Sample: 121903 - AH-16 (0.5-1.0')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**160**		mg/Kg	10	1.00

[29] High surrogate recovery due to peak interference.

Sample: 121903 - AH-16 (0.5-1.0')

Analysis:	TPH DRO	Analytical Method.	Mod. 8015B	Prep Method	N/A
QC Batch:	36623	Date Analyzed	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**286**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[30]	358	mg/Kg	1	150	239	32.9 - 167

Sample: 121903 - AH-16 (0.5-1.0')

Analysis:	TPH GRO	Analytical Method.	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed:	2007-04-18	Analyzed By	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**2.12**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.843	mg/Kg	1	1.00	84	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	67.5 - 140.3

Sample: 121905 - AH-17 (0-0.5')

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By.	AR
Prep Batch:	31771	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**17.7**	mg/Kg	5	1.00

Sample: 121905 - AH-17 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**8640**	mg/Kg	5	50.0

[30]High surrogate recovery due to peak interference

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[31]	2070	mg/Kg	5	150	1380	32.9 - 167

Sample: 121905 - AH-17 (0-0.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch	36562	Date Analyzed	2007-04-18	Analyzed By	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		222	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4 08	mg/Kg	5	5.00	82	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[32]	16.3	mg/Kg	5	5.00	326	67.5 - 140.3

Sample: 121906 - AH-17 (0.5-1.0')

Analysis	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	36632	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch.	31771	Sample Preparation:		Prepared By	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		307	mg/Kg	10	1.00

Sample: 121906 - AH-17 (0.5-1.0')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method	N/A
QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	Sample Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		206	mg/Kg	1	150	137	32.9 - 167

Sample: 121906 - AH-17 (0.5-1.0')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36562	Date Analyzed.	2007-04-18	Analyzed By.	ss
Prep Batch:	31714	Sample Preparation:	2007-04-18	Prepared By:	ss

[31] High surrogate recovery due to peak interference.
[32] High surrogate recovery due to peak interference

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	7.75	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.819	mg/Kg	1	1.00	82	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.29	mg/Kg	1	1.00	129	67.5 - 140.3

Method Blank (1) QC Batch: 36524

QC Batch: 36524 Date Analyzed: 2007-04-17 Analyzed By: ss
Prep Batch: 31685 QC Preparation: 2007-04-17 Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00110	mg/Kg	0.01
Toluene		<0.00150	mg/Kg	0.01
Ethylbenzene		<0.00160	mg/Kg	0.01
Xylene		<0.00410	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.947	mg/Kg	1	1.00	95	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.854	mg/Kg	1	1.00	85	53.9 - 125.1

Method Blank (1) QC Batch: 36525

QC Batch: 36525 Date Analyzed: 2007-04-17 Analyzed By: ss
Prep Batch: 31685 QC Preparation: 2007-04-17 Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
GRO		<0.739	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.880	mg/Kg	1	1.00	88	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.969	mg/Kg	1	1.00	97	67.5 - 140.3

Method Blank (1) QC Batch: 36526

QC Batch: 36526 Date Analyzed: 2007-04-17 Analyzed By: ss
Prep Batch: 31686 QC Preparation: 2007-04-17 Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00110	mg/Kg	0.01
Toluene		<0.00150	mg/Kg	0.01

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Parameter	Flag	MDL Result	Units	RL
Ethylbenzene		<0.00160	mg/Kg	0.01
Xylene		<0.00410	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	1	1.00	91	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.764	mg/Kg	1	1.00	76	53.9 - 125.1

Method Blank (1) QC Batch: 36527

QC Batch: 36527 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31686 | QC Preparation: 2007-04-17 | Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
GRO		0.972	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.887	mg/Kg	1	1.00	89	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.945	mg/Kg	1	1.00	94	67.5 - 140.3

Method Blank (1) QC Batch: 36556

QC Batch: 36556 | Date Analyzed: 2007-04-17 | Analyzed By: AG
Prep Batch: 31708 | QC Preparation: 2007-04-17 | Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	44.7 - 133.6

Method Blank (1) QC Batch: 36562

QC Batch: 36562 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31714 | QC Preparation: 2007-04-18 | Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
GRO		0.935	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.901	mg/Kg	1	1.00	90	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.910	mg/Kg	1	1.00	91	67.5 - 140.3

Method Blank (1) QC Batch: 36564

QC Batch 36564 | Date Analyzed 2007-04-18 | Analyzed By ss
Prep Batch: 31714 | QC Preparation 2007-04-18 | Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00110	mg/Kg	0.01
Toluene		<0.00150	mg/Kg	0.01
Ethylbenzene		<0.00160	mg/Kg	0.01
Xylene		<0.00410	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.893	mg/Kg	1	1.00	89	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.768	mg/Kg	1	1.00	77	53.9 - 125.1

Method Blank (1) QC Batch: 36567

QC Batch: 36567 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch 31719 | QC Preparation: 2007-04-18 | Prepared By: ss

Parameter	Flag	MDL Result	Units	RL
GRO		0.741	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.905	mg/Kg	1	1.00	90	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.932	mg/Kg	1	1.00	93	67.5 - 140.3

Matrix Blank (1) QC Batch: 36600

QC Batch 36600 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31744 | QC Preparation: 2007-04-18 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.04	mg/Kg	1

Matrix Blank (1) QC Batch: 36604

QC Batch: 36604 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31750 | QC Preparation: 2007-04-18 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.07	mg/Kg	1

Matrix Blank (1) QC Batch 36621

QC Batch:	36621	Date Analyzed:	2007-04-19	Analyzed By:	AR
Prep Batch:	31762	QC Preparation:	2007-04-19	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.08	mg/Kg	1

Method Blank (1) QC Batch: 36622

QC Batch	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	QC Preparation:	2007-04-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	44.7 - 133.6

Method Blank (1) QC Batch: 36623

QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	QC Preparation:	2007-04-18	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
DRO		15.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		178	mg/Kg	1	150	119	44.7 - 133.6

Method Blank (1) QC Batch: 36627

QC Batch	36627	Date Analyzed:	2007-04-19	Analyzed By:	AG
Prep Batch:	31765	QC Preparation:	2007-04-19	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		190	mg/Kg	1	150	127	44.7 - 133.6

Matrix Blank (1) QC Batch: 36632

QC Batch: 36632 Date Analyzed: 2007-04-19 Analyzed By: AR
Prep Batch: 31771 QC Preparation: 2007-04-19 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.05	mg/Kg	1

Matrix Blank (1) QC Batch: 36665

QC Batch: 36665 Date Analyzed: 2007-04-20 Analyzed By: AR
Prep Batch: 31798 QC Preparation: 2007-04-20 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		3.11	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch: 36524 Date Analyzed: 2007-04-17 Analyzed By: ss
Prep Batch: 31685 QC Preparation: 2007-04-17 Prepared By: ss

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.963	mg/Kg	1	1.00	<0.00110	96	68.6 - 123.4
Toluene	0.968	mg/Kg	1	1.00	<0.00150	97	74.6 - 119.3
Ethylbenzene	0.972	mg/Kg	1	1.00	<0.00160	97	72.3 - 126.2
Xylene	2.92	mg/Kg	1	3.00	<0.00410	97	76.5 - 121.6

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Benzene	0.972	mg/Kg	1	1.00	<0.00110	97	68.6 - 123.4	1	20
Toluene	0.978	mg/Kg	1	1.00	<0.00150	98	74.6 - 119.3	1	20
Ethylbenzene	0.980	mg/Kg	1	1.00	<0.00160	98	72.3 - 126.2	1	20
Xylene	2.95	mg/Kg	1	3.00	<0.00410	98	76.5 - 121.6	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.870	0.881	mg/Kg	1	1.00	87	88	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	0.947	0.930	mg/Kg	1	1.00	95	93	68.7 - 125.8

Laboratory Control Spike (LCS-1)

QC Batch: 36525 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31685 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
GRO	7.12	mg/Kg	1	10.0	<0.739	71	57.7 - 102.5

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
GRO	7.63	mg/Kg	1	10.0	<0.739	76	57.7 - 102.5	7	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec	Rec Limit
Trifluorotoluene (TFT)	0.816	1.02	mg/Kg	1	1.00	82	102	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	1.03	1.01	mg/Kg	1	1.00	103	101	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 36526 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31686 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
Benzene	0.898	mg/Kg	1	1.00	<0.00110	90	68.6 - 123.4
Toluene	0.901	mg/Kg	1	1.00	<0.00150	90	74.6 - 119.3
Ethylbenzene	0.887	mg/Kg	1	1.00	<0.00160	89	72.3 - 126.2
Xylene	2.67	mg/Kg	1	3.00	<0.00410	89	76.5 - 121.6

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Benzene	0.856	mg/Kg	1	1.00	<0.00110	86	68.6 - 123.4	5	20
Toluene	0.859	mg/Kg	1	1.00	<0.00150	86	74.6 - 119.3	5	20
Ethylbenzene	0.846	mg/Kg	1	1.00	<0.00160	85	72.3 - 126.2	5	20
Xylene	2.55	mg/Kg	1	3.00	<0.00410	85	76.5 - 121.6	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.828	0.849	mg/Kg	1	1.00	83	85	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	0.819	0.810	mg/Kg	1	1.00	82	81	68.7 - 125.8

Laboratory Control Spike (LCS-1)

QC Batch: 36527 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31686 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
GRO	6.96	mg/Kg	1	10.0	<0.739	70	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.74	mg/Kg	1	10.0	<0.739	77	57.7 - 102.5	11	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)	0.826	1.15	mg/Kg	1	1.00	83	115	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	1.00	0.984	mg/Kg	1	1.00	100	98	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 36556 | Date Analyzed: 2007-04-17 | Analyzed By: AG
Prep Batch: 31708 | QC Preparation: 2007-04-17 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO	243	mg/Kg	1	250	<14.6	97	47.5 - 144.1

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	256	mg/Kg	1	250	<14.6	102	47.5 - 144.1	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil	Spike Amount	LCS Rec.	LCSD Rec	Rec. Limit
n-Triacontane	164	140	mg/Kg	1	150	109	93	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 36562 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31714 | QC Preparation: 2007-04-18 | Prepared By: ss

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
GRO	7.58	mg/Kg	1	10.0	<0.739	76	57.7 - 102.5

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.93	mg/Kg	1	10.0	<0.739	79	57.7 - 102.5	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)	1.15	1.17	mg/Kg	1	1.00	115	117	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.998	0.995	mg/Kg	1	1.00	100	100	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 36564 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31714 | QC Preparation: 2007-04-18 | Prepared By: ss

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.863	mg/Kg	1	1.00	<0.00110	86	68.6 - 123.4
Toluene	0.870	mg/Kg	1	1.00	<0.00150	87	74.6 - 119.3
Ethylbenzene	0.853	mg/Kg	1	1.00	<0.00160	85	72.3 - 126.2
Xylene	2.57	mg/Kg	1	3.00	<0.00410	86	76.5 - 121.6

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Benzene	0.838	mg/Kg	1	1.00	<0.00110	84	68.6 - 123.4	3	20
Toluene	0.850	mg/Kg	1	1.00	<0.00150	85	74.6 - 119.3	2	20
Ethylbenzene	0.844	mg/Kg	1	1.00	<0.00160	84	72.3 - 126.2	1	20
Xylene	2.54	mg/Kg	1	3.00	<0.00410	85	76.5 - 121.6	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec	Rec. Limit
Trifluorotoluene (TFT)	0.824	0.849	mg/Kg	1	1.00	82	85	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	0.814	0.820	mg/Kg	1	1.00	81	82	68.7 - 125.8

Laboratory Control Spike (LCS-1)

QC Batch: 36567 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31719 | QC Preparation: 2007-04-18 | Prepared By: ss

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
GRO	7.43	mg/Kg	1	10.0	<0.739	74	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.97	mg/Kg	1	10.0	<0.739	80	57.7 - 102.5	7	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.15	1.17	mg/Kg	1	1.00	115	117	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.991	0.992	mg/Kg	1	1.00	99	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 36600 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31744 | QC Preparation: 2007-04-18 | Prepared By: AR

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
Chloride	14.8	mg/Kg	1	12.5	1.77	104	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Chloride	14.7	mg/Kg	1	12.5	1.77	104	90 - 110	0	

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: 36604 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31750 | QC Preparation: 2007-04-18 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14.9	mg/Kg	1	12.5	1.76	105	90 - 110

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	14.8	mg/Kg	1	12.5	1.76	104	90 - 110	1	

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: 36621 | Date Analyzed: 2007-04-19 | Analyzed By: AR
Prep Batch: 31762 | QC Preparation: 2007-04-19 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	14.6	mg/Kg	1	12.5	1.76	103	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Chloride	14.5	mg/Kg	1	12.5	1.76	102	90 - 110	0	

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: 36622 | Date Analyzed: 2007-04-18 | Analyzed By: AG
Prep Batch: 31763 | QC Preparation: 2007-04-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
DRO	223	mg/Kg	1	250	<14.6	89	47.5 - 144.1

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
DRO	236	mg/Kg	1	250	<14.6	94	47.5 - 144.1	6	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-Triacontane	163	155	mg/Kg	1	150	109	103	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 36623 | Date Analyzed: 2007-04-18 | Analyzed By: AG
Prep Batch: 31763 | QC Preparation: 2007-04-18 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO	283	mg/Kg	1	250	<14.6	113	47.5 - 144.1

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

Param	LCSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	285	mg/Kg	1	250	<14.6	114	47.5 - 144.1	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec	LCSD Rec	Rec Limit
n-Triacontane	193	189	mg/Kg	1	150	129	126	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 36627 | Date Analyzed: 2007-04-19 | Analyzed By: AG
Prep Batch: 31765 | QC Preparation: 2007-04-19 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
DRO	281	mg/Kg	1	250	<14.6	112	47.5 - 144.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
DRO	268	mg/Kg	1	250	<14.6	107	47.5 - 144.1	5	20

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

continued ...

control spikes continued ..

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec	LCSD Rec	Rec Limit
n-Triacontane	185	194	mg/Kg	1	150	123	129	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 36632 | Date Analyzed: 2007-04-19 | Analyzed By: AR
Prep Batch: 31771 | QC Preparation: 2007-04-19 | Prepared By: AR

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
Chloride	14.9	mg/Kg	1	12.5	1.8	105	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Chloride	15.0	mg/Kg	1	12.5	1.8	106	90 - 110	1	

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: 36665 | Date Analyzed: 2007-04-20 | Analyzed By: AR
Prep Batch: 31798 | QC Preparation: 2007-04-20 | Prepared By: AR

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride	14.9	mg/Kg	1	12.5	2.289	101	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Chloride	14.9	mg/Kg	1	12.5	2.289	101	90 - 110	0	

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

Matrix Spike (MS-1) Spiked Sample: 121871

QC Batch: 36524 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31685 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
Benzene	0.941	mg/Kg	1	1.00	<0.00110	94	64.4 - 115.7
Toluene	1.10	mg/Kg	1	1.00	<0.00150	110	57.8 - 124.4
Ethylbenzene	1.07	mg/Kg	1	1.00	0.0671	100	64.8 - 125.8
Xylene	3.46	mg/Kg	1	3.00	0.3488	104	65.2 - 121.8

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Benzene	0.930	mg/Kg	1	1.00	<0.00110	93	64.4 - 115.7	1	20
Toluene	1.07	mg/Kg	1	1.00	<0.00150	107	57.8 - 124.4	3	20
Ethylbenzene	1.06	mg/Kg	1	1.00	0.0671	99	64.8 - 125.8	1	20
Xylene	3.38	mg/Kg	1	3.00	0.3488	101	65.2 - 121.8	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.992	0.958	mg/Kg	1	1	99	96	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	1.10	1.05	mg/Kg	1	1	110	105	66.7 - 131.9

Matrix Spike (MS-1) Spiked Sample: 121858

QC Batch: 36525 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31685 | QC Preparation: 2007-04-17 | Prepared By: ss

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
GRO	[33]	24.3	mg/Kg	1	10.0	24.3	0	10 - 141.5

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

Param		MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit	RPD	RPD Limit
GRO	[34]	21.1	mg/Kg	1	10.0	24.3	0	10 - 141 5	14	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec	Rec. Limit
Trifluorotoluene (TFT)	0.618	0.659	mg/Kg	1	1	62	66	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.26	1.24	mg/Kg	1	1	126	124	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 121882

QC Batch: 36526 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31686 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
Benzene	0.806	mg/Kg	1	1.00	<0.00110	81	64.4 - 115.7
Toluene	0.850	mg/Kg	1	1.00	<0.00150	85	57.8 - 124.4
Ethylbenzene	0.900	mg/Kg	1	1.00	<0.00160	90	64.8 - 125.8
Xylene	2.74	mg/Kg	1	3.00	<0.00410	91	65.2 - 121.8

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

[33]Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control
[34]Matrix spike recovery out of control limits due to matrix interference Use LCS/LCSD to demonstrate analysis is under control

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Benzene	0.952	mg/Kg	1	1.00	<0.00110	95	64.4 - 115.7	17	20
Toluene	0.984	mg/Kg	1	1.00	<0.00150	98	57.8 - 124.4	15	20
Ethylbenzene	1.02	mg/Kg	1	1.00	<0.00160	102	64.8 - 125.8	12	20
Xylene	3.10	mg/Kg	1	3.00	<0.00410	103	65.2 - 121.8	12	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)	0.827	0.829	mg/Kg	1	1	83	83	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	0.873	0.859	mg/Kg	1	1	87	86	66.7 - 131.9

Matrix Spike (MS-1) Spiked Sample: 121874

QC Batch: 36527 | Date Analyzed: 2007-04-17 | Analyzed By: ss
Prep Batch: 31686 | QC Preparation: 2007-04-17 | Prepared By: ss

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec Limit
GRO	6.15	mg/Kg	1	10.0	1.03	51	10 - 141.5

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
GRO	7.07	mg/Kg	1	10.0	1.03	60	10 - 141.5	14	20

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

Surrogate	MS Result	MSD Result	Units	Dil	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.686	0.987	mg/Kg	1	1	69	99	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.09	1.09	mg/Kg	1	1	109	109	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 121864

QC Batch: 36556 | Date Analyzed: 2007-04-17 | Analyzed By: AG
Prep Batch: 31708 | QC Preparation: 2007-04-17 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
DRO [35]	721	mg/Kg	1	250	721	0	11.7 - 152.3

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
DRO [36]	1340	mg/Kg	1	250	721	230	11.7 - 152.3	60	20

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

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec	Rec. Limit
n-Triacontane	[37] [38]	290	486	mg/Kg	1	150	193	324	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 121898

QC Batch: 36562 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31714 | QC Preparation: 2007-04-18 | Prepared By: ss

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
GRO	[39]	8.64	mg/Kg	1	10.0	8.64	0	10 - 141.5

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

Param		MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
GRO	[40]	6.81	mg/Kg	1	10.0	8.64	0	10 - 141.5	24	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)	0.732	0.755	mg/Kg	1	1	73	76	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.17	1.19	mg/Kg	1	1	117	119	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 121917

QC Batch: 36564 | Date Analyzed: 2007-04-18 | Analyzed By: ss
Prep Batch: 31714 | QC Preparation: 2007-04-18 | Prepared By: ss

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
Benzene	0.881	mg/Kg	1	1.00	<0.00110	88	64.4 - 115.7
Toluene	0.916	mg/Kg	1	1.00	<0.00150	92	57.8 - 124.4
Ethylbenzene	0.931	mg/Kg	1	1.00	<0.00160	93	64.8 - 125.8
Xylene	2.82	mg/Kg	1	3.00	0.0151	93	65.2 - 121.8

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
Benzene	0.888	mg/Kg	1	1.00	<0.00110	89	64.4 - 115.7	1	20
Toluene	0.938	mg/Kg	1	1.00	<0.00150	94	57.8 - 124.4	2	20
Ethylbenzene	0.977	mg/Kg	1	1.00	<0.00160	98	64.8 - 125.8	5	20
Xylene	2.97	mg/Kg	1	3.00	0.0151	98	65.2 - 121.8	5	20

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

[37] High surrogate recovery due to peak interference
[38] High surrogate recovery due to peak interference
[39] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control
[40] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control

Surrogate	MS Result	MSD Result	Units	Dil	Spike Amount	MS Rec	MSD Rec.	Rec Limit
Trifluorotoluene (TFT)	0.823	0.888	mg/Kg	1	1	82	89	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	0.868	0.875	mg/Kg	1	1	87	88	66.7 - 131.9

Matrix Spike (MS-1) Spiked Sample: 121867

QC Batch: 36600 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31744 | QC Preparation: 2007-04-18 | Prepared By: AR

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
Chloride [41]	830	mg/Kg	50	625	100.879	117	90 - 110

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	695	mg/Kg	50	625	100.879	95	90 - 110	18	

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

Matrix Spike (MS-1) Spiked Sample: 121882

QC Batch: 36604 | Date Analyzed: 2007-04-18 | Analyzed By: AR
Prep Batch: 31750 | QC Preparation: 2007-04-18 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
Chloride	884	mg/Kg	50	625	285.942	96	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	890	mg/Kg	50	625	285.942	97	90 - 110	1	

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

Matrix Spike (MS-1) Spiked Sample: 121897

QC Batch: 36621 | Date Analyzed: 2007-04-19 | Analyzed By: AR
Prep Batch: 31762 | QC Preparation: 2007-04-19 | Prepared By: AR

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride [42]	408	mg/Kg	10	125	141.25	213	90 - 110

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

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	258	mg/Kg	10	125	141.25	93	90 - 110	45	

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

Matrix Spike (MS-1) Spiked Sample: 121888

QC Batch:	36622	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	QC Preparation:	2007-04-18	Prepared By:	AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO [43]	782	mg/Kg	1	250	362	168	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO [44]	869	mg/Kg	1	250	362	203	11.7 - 152.3	10	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane [45] [46]	372	452	mg/Kg	1	150	248	301	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 121909

QC Batch:	36623	Date Analyzed:	2007-04-18	Analyzed By:	AG
Prep Batch:	31763	QC Preparation:	2007-04-18	Prepared By:	AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
DRO	271	mg/Kg	1	250	<14.6	108	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	248	mg/Kg	1	250	<14.6	99	11.7 - 152.3	9	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	190	178	mg/Kg	1	150	127	119	17 - 163.1

[43] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[44] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[45] High surrogate recovery due to peak interference.
[46] High surrogate recovery due to peak interference.

Matrix Spike (MS-1) Spiked Sample: 121939

QC Batch: 36627 | Date Analyzed 2007-04-19 | Analyzed By: AG
Prep Batch: 31765 | QC Preparation: 2007-04-19 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit
DRO	316	mg/Kg	1	250	<14.6	126	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec Limit	RPD	RPD Limit
DRO	301	mg/Kg	1	250	<14.6	120	11.7 - 152.3	5	20

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

Surrogate	MS Result	MSD Result	Units	Dil	Spike Amount	MS Rec	MSD Rec	Rec. Limit
n-Triacontane	196	180	mg/Kg	1	150	131	120	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 121908

QC Batch 36632 | Date Analyzed 2007-04-19 | Analyzed By: AR
Prep Batch: 31771 | QC Preparation: 2007-04-19 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride	3910	mg/Kg	100	1250	2692.32	97	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	3900	mg/Kg	100	1250	2692.32	97	90 - 110	0	

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

Matrix Spike (MS-1) Spiked Sample: 121911

QC Batch: 36665 | Date Analyzed: 2007-04-20 | Analyzed By: AR
Prep Batch. 31798 | QC Preparation. 2007-04-20 | Prepared By: AR

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit
Chloride [47]	171	mg/Kg	50	625	671.223	-80	90 - 110

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit	RPD	RPD Limit
Chloride	1360	mg/Kg	50	625	671.223	110	90 - 110	155	

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

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

Standard (ICV-1)

QC Batch: 36524 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0975	98	85 - 115	2007-04-17
Toluene		mg/Kg	0.100	0.0975	98	85 - 115	2007-04-17
Ethylbenzene		mg/Kg	0.100	0.0991	99	85 - 115	2007-04-17
Xylene		mg/Kg	0.300	0.300	100	85 - 115	2007-04-17

Standard (CCV-1)

QC Batch: 36524 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0892	89	85 - 115	2007-04-17
Toluene		mg/Kg	0.100	0.0894	89	85 - 115	2007-04-17
Ethylbenzene		mg/Kg	0.100	0.0877	88	85 - 115	2007-04-17
Xylene		mg/Kg	0.300	0.264	88	85 - 115	2007-04-17

Standard (ICV-1)

QC Batch: 36525 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	ICVs True Conc	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.868	87	85 - 115	2007-04-17

Standard (CCV-1)

QC Batch: 36525 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.01	101	85 - 115	2007-04-17

Standard (ICV-1)

QC Batch: 36526 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	ICVs True Conc	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0880	88	85 - 115	2007-04-17
Toluene		mg/Kg	0.100	0.0890	89	85 - 115	2007-04-17

continued ..

standard continued ..

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/Kg	0.100	0.0875	88	85 - 115	2007-04-17
Xylene		mg/Kg	0.300	0.263	88	85 - 115	2007-04-17

Standard (CCV-1)

QC Batch: 36526 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	CCVs True Conc	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0927	93	85 - 115	2007-04-17
Toluene		mg/Kg	0.100	0.0936	94	85 - 115	2007-04-17
Ethylbenzene		mg/Kg	0.100	0.0915	92	85 - 115	2007-04-17
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2007-04-17

Standard (ICV-1)

QC Batch: 36527 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1 00	1.10	110	85 - 115	2007-04-17

Standard (CCV-1)

QC Batch: 36527 Date Analyzed: 2007-04-17 Analyzed By: ss

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.05	105	85 - 115	2007-04-17

Standard (CCV-1)

QC Batch: 36556 Date Analyzed: 2007-04-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	228	91	85 - 115	2007-04-17

Standard (CCV-2)

QC Batch: 36556 Date Analyzed: 2007-04-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	252	101	85 - 115	2007-04-17

Standard (CCV-3)

QC Batch: 36556 Date Analyzed: 2007-04-17 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	220	88	85 - 115	2007-04-17

Standard (ICV-1)

QC Batch: 36562 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.09	109	85 - 115	2007-04-18

Standard (CCV-1)

QC Batch: 36562 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.874	87	85 - 115	2007-04-18

Standard (ICV-1)

QC Batch: 36564 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0864	86	85 - 115	2007-04-18
Toluene		mg/Kg	0.100	0.0882	88	85 - 115	2007-04-18
Ethylbenzene		mg/Kg	0.100	0.0867	87	85 - 115	2007-04-18
Xylene		mg/Kg	0.300	0.262	87	85 - 115	2007-04-18

Standard (CCV-1)

QC Batch: 36564 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0888	89	85 - 115	2007-04-18
Toluene		mg/Kg	0.100	0.0898	90	85 - 115	2007-04-18
Ethylbenzene		mg/Kg	0.100	0.0887	89	85 - 115	2007-04-18
Xylene		mg/Kg	0.300	0.266	89	85 - 115	2007-04-18

Standard (ICV-1)

QC Batch: 36567 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2007-04-18

Standard (CCV-1)

QC Batch 36567 Date Analyzed: 2007-04-18 Analyzed By: ss

Param	Flag	Units	CCVs True Conc	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.04	104	85 - 115	2007-04-18

Standard (ICV-1)

QC Batch: 36600 Date Analyzed: 2007-04-18 Analyzed By AR

Param	Flag	Units	ICVs True Conc	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-18

Standard (CCV-1)

QC Batch: 36600 Date Analyzed: 2007-04-18 Analyzed By AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-18

Standard (ICV-1)

QC Batch: 36604 Date Analyzed: 2007-04-18 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-18

Standard (CCV-1)

QC Batch: 36604 Date Analyzed: 2007-04-18 Analyzed By: AR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-18

Standard (ICV-1)

QC Batch: 36621 Date Analyzed: 2007-04-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-19

Standard (CCV-1)

QC Batch: 36621 Date Analyzed 2007-04-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-04-19

Standard (ICV-1)

QC Batch: 36622 Date Analyzed: 2007-04-18 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	275	110	85 - 115	2007-04-18

Standard (CCV-1)

QC Batch: 36622 Date Analyzed: 2007-04-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	95	85 - 115	2007-04-18

Standard (CCV-2)

QC Batch: 36622 Date Analyzed: 2007-04-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	283	113	85 - 115	2007-04-18

Standard (CCV-3)

QC Batch: 36622 Date Analyzed 2007-04-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	279	112	85 - 115	2007-04-18

Standard (ICV-1)

QC Batch: 36623 Date Analyzed: 2007-04-18 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	287	115	85 - 115	2007-04-18

Standard (CCV-1)

QC Batch: 36623 Date Analyzed: 2007-04-18 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	85 - 115	2007-04-18

Standard (ICV-1)

QC Batch: 36627 Date Analyzed: 2007-04-19 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	260	104	85 - 115	2007-04-19

Standard (CCV-1)

QC Batch: 36627 Date Analyzed: 2007-04-19 Analyzed By AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	285	114	85 - 115	2007-04-19

Standard (ICV-1)

QC Batch: 36632 Date Analyzed: 2007-04-19 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-04-19

Standard (CCV-1)

QC Batch: 36632 Date Analyzed: 2007-04-19 Analyzed By: AR

Param	Flag	Units	CCVs True Conc	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	100	90 - 110	2007-04-19

Standard (ICV-1)

QC Batch: 36665 Date Analyzed: 2007-04-20 Analyzed By: AR

Param	Flag	Units	ICVs True Conc	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-04-20

Standard (CCV-1)

QC Batch: 36665 Date Analyzed: 2007-04-20 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-04-20

7041707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

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

PAGE: OF: 4

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121869	4/12/07		S		X	AH-1 (0-1.0')	1				X				X											X			
70			S		X	AH-1 (1.0'-1.5')	1				X				X											X			
71			S		X	AH-2 (0-1.0')	1				X		X		X											X			
72			S		X	AH-2 (1.0'-1.5')	1				X				X											X			
73			S		X	AH-3 (0-1.0')	1				X				X											X			
74			S		X	AH-3 (1.0'-1.5')	1				X				X											X			
75			S		X	AH-4 (0-1.0')	1				X		X		X											X			
76			S		X	AH-4 (1.0'-1.5')	1				X				X											X			
77			S		X	AH-4 (2.0'-2.5')	1				X				Hold														
78			S		X	AH-5 (0-1.0')	1				X				X											X			

RELINQUISHED BY: (Signature) [signature] Date: 4/17/07 Time: 9:15
RECEIVED BY: (Signature) [signature] Date: 4-17-07 Time: 9:15
SAMPLED BY: (Print & Sign) Ray Taylor / Kolt Harrison Date: 4/13/07 Time:

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

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

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: all tests - Midland

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

7041707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 2 OF: 4

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 / 8015 Mod. / TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121879	4/12/07		S		X	AH-5 (1.0'-1.5')	1				X				X											X			
80			S		X	AH-6 (0-1.0')	1				X				X											X			
81			S		X	AH-6 (1.0'-1.5')	1				X				X											X			
82			S		X	AH-7 (0-0.5')	1				X		X		X											X			
83			S		X	AH-8 (0-1.0')	1				X				X											X			
84			S		X	AH-8 (1.0'-1.5')	1				X				X											X			
85			S		X	AH-9 (0-1.0')	1				X				X											X			
86			S		X	AH-9 (1.0'-1.5')	1				X				X											X			
87			S		X	AH-9 (2.0'-2.5')	1				X																		
88	↓		S		X	AH-10 (0-1.0')	1				X				X											X			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Robert Garcia Date: 4/17/07 Time: 9:15

RECEIVED BY: (Signature) Date: 4.17.0 Time: 915

SAMPLED BY: (Print & Sign) Ray Taylor / Rolf Harrison Date: 4/13/07 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS:

Please Fill out all copies -- Laboratory retains yellow copy -- Return original copy to Highlander Environmental Corp. -- Project Manager retains pink copy -- Accounting receives Gold copy.

7041707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.B. TB Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8021/602	MTBE 8021/602	TPH: 8015 MOD. TX1005	418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	VOC	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121889	4/12/07		S		X	AH-10 (1.0'-1.5')	1				X				X												X			
90			S		X	AH-10 (2.0'-2.5')	1				X				Hold															
91			S		X	AH-11 (0-1.0')	1				X		X		X												X			
92			S		X	AH-11 (1.0'-1.5')	1				X				X												X			
93			S		X	AH-12 (0-1.0')	1				X				X												X			
94			S		X	AH-12 (1.0'-1.5')	1				X				X												X			
95			S		X	AH-13 (0-0.5')	1				X				X												X			
96			S		X	AH-13 (0.5'-1.0')	1				X				X												X			
97			S		X	AH-14 (0-0.5')	1				X				X												X			
98			S		X	AH-14 (0.5'-1.0')	1				X				X												X			

RELINQUISHED BY: (Signature) Date: 4/17/07 Time: 9:15
RECEIVED BY: (Signature) Date: 4.17.07 Time: 915

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

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

SAMPLED BY: (Print & Sign) Ray Taylor / Kelt Harrison Date: 4/13/07 Time:

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

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

RECEIVED BY: (Signature)
DATE: TIME:

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

704707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8020/602	MTBE 8020/608	TPH 418.1 / 8015 Mod. / TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121899	4/12/07		S		X	AH-15 (0-0.5')	1				X		X	X												X			
900			S		X	AH-15 (0.5'-1.0')	1				X			X												X			
901			S		X	AH-15 (1.0'-1.5')	1				X			X												X			
902			S		X	AH-16 (0-0.5')	1				X			X												X			
903			S		X	AH-16 (0.5'-1.0')	1				X			X												X			
904			S		X	AH-16 (1.0'-1.5')	1				X			Hold															
905			S		X	AH-17 (0-0.5')	1				X			X												X			
906			S		X	AH-17 (0.5'-1.0')	1				X			X												X			
907			S		X	AH-17 (1.0'-1.5')	1				X			Hold															

RELINQUISHED BY: (Signature) Date: 4/17/07 Time: 915
RECEIVED BY: (Signature) Date: 4.17.07 Time: 915
SAMPLED BY: (Print & Sign) Ray Taylor / Ralf Harrison Date: 4/13/07 Time:

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

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

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°

MATRIX: W–Water A–Air SD–Solid (S–Soil) SL–Sludge O–Other

REMARKS:

D

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Environmental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

7041707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 4

CLIENT NAME: Cimarex

SITE MANAGER: IKe Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/608	TPH 418.1	8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121869	4/12/07		S		X	AH-1 (0-1.0')	1				X				X												X		
70			S		X	AH-1 (1.0'-1.5')	1				X				X												X		
71			S		X	AH-2 (0-1.0')	1				X		X		X												X		
72			S		X	AH-2 (1.0'-1.5')	1				X				X												X		
73			S		X	AH-3 (0-1.0')	1				X				X												X		
74			S		X	AH-3 (1.0'-1.5')	1				X				X												X		
75			S		X	AH-4 (0-1.0')	1				X		X		X												X		
76			S		X	AH-4 (1.0'-1.5')	1				X				X												X		
77			S		X	AH-4 (2.0'-2.5')	1				X				Hold														
78			S		X	AH-5 (0-1.0')	1				X				X												X		

RELINQUISHED BY: (Signature) Kelly Harrison Date: 4/17/07 Time: 9:15

RECEIVED BY: (Signature) ARDR Date: 4.17.07 Time: 915

SAMPLED BY: (Print & Sign) Ray Taylor / Kelly Harrison Date: 4/13/07 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace

ADDRESS: Midland CITY: STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) DATE: TIME:

HIGHLANDER CONTACT PERSON: IKe Tavarez

Results by:

RUSH Charges Authorized: Yes (No)

SAMPLE CONDITION WHEN RECEIVED: 4° / Good / Intact

MATRIX: W-Water (S-Soil) A-Air SL-Sludge SD-Solid O-Other

REMARKS: all tests - Midland

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

4/24 KP

104107

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Cimarex
SITE MANAGER: Ike Tavarez
PROJECT NO.: 2984
PROJECT NAME: Cimarex / Cooper S.R. TB Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8020/602	MTBE 8020/602	TPH 418.1	TX1005 (8015 MOD)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121879	4/12/09		S		X	AH-5 (1.0'-1.5')	1				X				X	X											X			
80			S		X	AH-6 (0-1.0')	1				X				X	X											X			
81			S		X	AH-6 (1.0'-1.5')	1				X				X	X											X			
82			S		X	AH-7 (0-0.5')	1				X		X		X	X											X			
83			S		X	AH-8 (0-1.0')	1				X				X	X											X			
84			S		X	AH-8 (1.0'-1.5')	1				X				X	X											X			
85			S		X	AH-9 (0-1.0')	1				X				X	X											X			
86			S		X	AH-9 (1.0'-1.5')	1				X				X	X											X			
87			S		X	AH-9 (2.0'-2.5')	1				X																			
88			S		X	AH-10 (0-1.0')	1				X				X	X											X			

RELINQUISHED BY: (Signature) Date: 4/17/09 Time: 9:15
RECEIVED BY: (Signature) Date: 4.17.09 Time: 915
SAMPLED BY: (Print & Sign) Ray Taylor / Rolf Harrison Date: 4/13/09 Time:

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

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

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

HIGHLANDER CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes (No)

SAMPLE CONDITION WHEN RECEIVED: 4° / Good / Intact
MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other
REMARKS: all tests - Midland

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

704707

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 3 OF: 4

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	ANALYSIS REQUEST (Circle or Specify Method No.): STEX 8020/602	MTBE 8020/602	TPH 418.1 / 8015 MOD. / TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121889	4/12/07		S		X	AH-10 (1.0'-1.5')	1				X				X											X			
90			S		X	AH-10 (2.0'-2.5')	1				X				Hold														
91			S		X	AH-11 (0-1.0')	1				X		X		X											X			
92			S		X	AH-11 (1.0'-1.5')	1				X				X											X			
93			S		X	AH-12 (0-1.0')	1				X				X											X			
94			S		X	AH-12 (1.0'-1.5')	1				X				X											X			
95			S		X	AH-13 (0-0.5')	1				X				X											X			
96			S		X	AH-13 (0.5'-1.0')	1				X				X											X			
97			S		X	AH-14 (0-0.5')	1				X				X											X			
98			S		X	AH-14 (0.5'-1.0')	1				X				X											X			

RELINQUISHED BY: (Signature) Nate Hanson — Date: 4/17/07 Time: 9:15
RECEIVED BY: (Signature) [illegible] — Date: 4-17-07 Time: 915

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

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

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

SAMPLED BY: (Print & Sign) Ray Taylor / Kolt Harrison — Date: 4/13/07 Time:

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes (No)

SAMPLE CONDITION WHEN RECEIVED: 4° / Good / Intact

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: all tests - Midland

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

T047101

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 4 OF: 4

CLIENT NAME: Cimarex

SITE MANAGER: Iko Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/608	TPH 418.1 / TX1005 (8015 MOD.)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
121899	4/12/07		S		X	AH-15 (0-0.5')	1				X		X	X	X											X			
900			S		X	AH-15 (0.5'-1.0')	1				X				X											X			
901			S		X	AH-15 (1.0'-1.5')	1				X				X											X			
902			S		X	AH-16 (0-0.5')	1				X				X											X			
903			S		X	AH-16 (0.5'-1.0')	1				X				X											X			
904			S		X	AH-16 (1.0'-1.5')	1				X				Hold														
905			S		X	AH-17 (0-0.5')	1				X				X											X			
906			S		X	AH-17 (0.5'-1.0')	1				X				X											X			
907			S		X	AH-17 (1.0'-1.5')	1				X				Hold														

RELINQUISHED BY: (Signature) Rolf Harrison Date: 4/17/07 Time: 915

RECEIVED BY: (Signature) ARCO Date: 4-17-07 Time: 915

SAMPLED BY: (Print & Sign) Ray Taylor / Rolf Harrison Date: 4/13/07 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Trace

ADDRESS:

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

HIGHLANDER CONTACT PERSON: Iko Tavarez

Results by:

RUSH Charges Authorised: Yes (No)

SAMPLE CONDITION WHEN RECEIVED: 4° / Good / Intact

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: all test - Midland

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 22, 2007

Work Order: 7051845

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number: 2984

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
124619	AH-13 (0-0.5')	soil	2007-05-15	00:00	2007-05-18
124620	AH-15 (0-0.5')	soil	2007-05-15	00:00	2007-05-18
124621	AH-17 (0-0.5')	soil	2007-05-15	00:00	2007-05-18

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
124619 - AH-13 (0-0.5')	<50.0	**18.2**
124620 - AH-15 (0-0.5')	**2260**	**221**
124621 - AH-17 (0-0.5')	**4230**	**282**

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: May 22, 2007

Work Order: 7051845

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number: 2984

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
124619	AH-13 (0-0.5')	soil	2007-05-15	00:00	2007-05-18
124620	AH-15 (0-0.5')	soil	2007-05-15	00:00	2007-05-18
124621	AH-17 (0-0.5')	soil	2007-05-15	00:00	2007-05-18

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

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Cimarex/Cooper S.R. TB were received by TraceAnalysis, Inc. on 2007-05-18 and assigned to work order 7051845. Samples for work order 7051845 were received intact at a temperature of 4 deg C.

Samples were analyzed for the following tests using their respective methods

Test	Method
TPH DRO	Mod 8015B
TPH GRO	S 8015B

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 7051845 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: 124619 - AH-13 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	37338	Date Analyzed:	2007-05-18	Analyzed By:	AG
Prep Batch:	32379	Sample Preparation:	2007-05-18	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		172	mg/Kg	1	150	115	61.7 - 143.2

Sample: 124619 - AH-13 (0-0.5')

Analysis:	TPH GRO	Analytical Method	S 8015B	Prep Method:	S 5035
QC Batch:	37363	Date Analyzed:	2007-05-20	Analyzed By:	AG
Prep Batch:	32393	Sample Preparation:	2007-05-18	Prepared By.	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**18.2**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.786	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.29	mg/Kg	1	1.00	129	67.5 - 140.3

Sample: 124620 - AH-15 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	37338	Date Analyzed.	2007-05-18	Analyzed By:	AG
Prep Batch:	32379	Sample Preparation:	2007-05-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**2260**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	307	mg/Kg	1	150	205	61.7 - 143.2

Sample: 124620 - AH-15 (0-0.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	37381	Date Analyzed:	2007-05-21	Analyzed By:	AG
Prep Batch:	32408	Sample Preparation:	2007-05-21	Prepared By:	AG

[1] High surrogate recovery due to peak interference

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**221**	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.34	mg/Kg	10	10.0	83	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[2]	14.2	mg/Kg	10	10.0	142	67.5 - 140.3

Sample: 124621 - AH-17 (0-0.5')

Analysis:	TPH DRO	Analytical Method:	Mod 8015B	Prep Method:	N/A
QC Batch:	37338	Date Analyzed:	2007-05-18	Analyzed By:	AG
Prep Batch:	32379	Sample Preparation:	2007-05-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**4230**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	702	mg/Kg	1	150	468	61.7 - 143.2

Sample: 124621 - AH-17 (0-0.5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	37363	Date Analyzed:	2007-05-20	Analyzed By:	AG
Prep Batch	32393	Sample Preparation:	2007-05-18	Prepared By	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**282**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.72	mg/Kg	5	5.00	74	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[4]	21.8	mg/Kg	5	5.00	436	67.5 - 140.3

Method Blank (1) QC Batch: 37338

QC Batch:	37338	Date Analyzed:	2007-05-18	Analyzed By:	AG
Prep Batch:	32379	QC Preparation:	2007-05-18	Prepared By	AG

Parameter	Flag	MDL Result	Units	RL
DRO		<13.4	mg/Kg	50

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		134	mg/Kg	1	150	89	61.7 - 143.2

Method Blank (1) QC Batch: 37363

QC Batch: 37363 Date Analyzed: 2007-05-20 Analyzed By: AG
Prep Batch: 32393 QC Preparation: 2007-05-18 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.739	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.892	mg/Kg	1	1.00	89	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.912	mg/Kg	1	1.00	91	67.5 - 140.3

Method Blank (1) QC Batch: 37381

QC Batch: 37381 Date Analyzed: 2007-05-21 Analyzed By: AG
Prep Batch: 32408 QC Preparation: 2007-05-21 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.739	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.865	mg/Kg	1	1.00	86	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.874	mg/Kg	1	1.00	87	67.5 - 140.3

Laboratory Control Spike (LCS-1)

QC Batch: 37338 Date Analyzed: 2007-05-18 Analyzed By: AG
Prep Batch: 32379 QC Preparation: 2007-05-18 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec Limit
DRO	177	mg/Kg	1	250	<13.4	71	62.5 - 135.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	207	mg/Kg	1	250	<13.4	83	62.5 - 135.4	16	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-Triacontane	126	155	mg/Kg	1	150	84	103	66.6 - 140.9

Laboratory Control Spike (LCS-1)

QC Batch: 37363 | Date Analyzed: 2007-05-20 | Analyzed By AG
Prep Batch: 32393 | QC Preparation: 2007-05-18 | Prepared By AG

Param	LCS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec Limit
GRO	7 48	mg/Kg	1	10.0	<0.739	75	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.63	mg/Kg	1	10.0	<0.739	76	57.7 - 102.5	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec	LCSD Rec.	Rec Limit
Trifluorotoluene (TFT)	1.13	1.14	mg/Kg	1	1.00	113	114	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.996	0.990	mg/Kg	1	1.00	100	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 37381 | Date Analyzed: 2007-05-21 | Analyzed By: AG
Prep Batch: 32408 | QC Preparation: 2007-05-21 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.73	mg/Kg	1	10.0	<0.739	77	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.05	mg/Kg	1	10.0	<0.739	80	57.7 - 102.5	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 12	1.00	mg/Kg	1	1.00	112	100	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.958	0.964	mg/Kg	1	1.00	96	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 124619

QC Batch: 37338 | Date Analyzed: 2007-05-18 | Analyzed By: AG
Prep Batch: 32379 | QC Preparation: 2007-05-18 | Prepared By: AG

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	339	mg/Kg	1	250	<13.4	136	29.7 - 168.6

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPD Limit
DRO	334	mg/Kg	1	250	<13.4	134	29.7 - 168.6	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-Triacontane	141	152	mg/Kg	1	150	94	101	43.4 - 193.9

Matrix Spike (MS-1) Spiked Sample: 124319

QC Batch: 37363 | Date Analyzed: 2007-05-20 | Analyzed By: AG
Prep Batch: 32393 | QC Preparation: 2007-05-18 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec	Rec. Limit
GRO	6.06	mg/Kg	1	10.0	<0.739	61	10 - 141.5

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

Param	MSD Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	6.53	mg/Kg	1	10.0	<0.739	65	10 - 141.5	8	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)	0.676	0.649	mg/Kg	1	1	68	65	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.08	1.09	mg/Kg	1	1	108	109	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 124763

QC Batch: 37381 | Date Analyzed: 2007-05-21 | Analyzed By: AG
Prep Batch: 32408 | QC Preparation: 2007-05-21 | Prepared By: AG

Param	MS Result	Units	Dil	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.14	mg/Kg	1	10.0	3.97	32	10 - 141.5

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	6.88	mg/Kg	1	10.0	3.97	29	10 - 141.5	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec	MSD Rec	Rec. Limit
Trifluorotoluene (TFT)	0.658	0.666	mg/Kg	1	1	66	67	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.13	1.09	mg/Kg	1	1	113	109	86.7 - 144.5

Standard (ICV-1)

QC Batch: 37338 Date Analyzed. 2007-05-18 Analyzed By AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	284	114	85 - 115	2007-05-18

Standard (CCV-1)

QC Batch: 37338 Date Analyzed: 2007-05-18 Analyzed By AG

Param	Flag	Units	CCVs True Conc	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	284	114	85 - 115	2007-05-18

Standard (ICV-1)

QC Batch: 37363 Date Analyzed: 2007-05-20 Analyzed By AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.945	94	85 - 115	2007-05-20

Standard (CCV-1)

QC Batch: 37363 Date Analyzed: 2007-05-20 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.996	100	85 - 115	2007-05-20

Standard (ICV-1)

QC Batch: 37381 Date Analyzed: 2007-05-21 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.888	89	85 - 115	2007-05-21

Standard (CCV-1)

QC Batch: 37381 | Date Analyzed: 2007-05-21 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.03	103	85 - 115	2007-05-21

Work order# 7051845

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea County, NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 / 8015 MOD. / TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
124619	5/15/07		S		X	AH-13 (0-0.5')	1				X				X														
124620	"		S		X	AH-15 (0-0.5')	1				X				X														
124621	"		S		X	AH-17 (0-0.5')	1				X				X														

RELINQUISHED BY: (Signature) Date: 5/18/07 Time: 15:30
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Keith Harrison / Date: 5/15/07 Time:

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

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

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Texas ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 5-18-07 TIME: 1530

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:
RUSH Charges Authorised: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°C

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: All tests - Midland

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Environmental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

work order# 0518415

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Cimarex

SITE MANAGER: IKe Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex / Cooper S.R. TB
Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 (8015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
124619	5/15/07		S		X	AH-13 (0-0.5')	1				X				X														
124620	"		S		X	AH-15 (0-0.5')	1				X				X														
124621	"		S		X	AH-17 (0-0.5')	1				X				X														

RELINQUISHED BY: (Signature) Kelli Harrison Date: 5/18/07 Time: 15:30
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Kelli Harrison / Kelli Harrison Date: 5/18/07 Time:

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

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

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Texas ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 5-18-07 TIME: 1530

HIGHLANDER CONTACT PERSON: IKe Tavarez

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4°C

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS: All tests - Midland

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

5/2260

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: June 27, 2007

Work Order: 7062103

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number: 2984

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
128000	SP#1 (0-1.0') BEB 1.0'	soil	2007-06-20	00:00	2007-06-20
128001	SP#2 (0-0.5') BEB 1.0'	soil	2007-06-20	00:00	2007-06-20
128002	Stockpile	soil	2007-06-20	00:00	2007-06-20

	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
128000 - SP#1 (0-1.0') BEB 1.0'						<50.0	**2.00**
128001 - SP#2 (0-0.5') BEB 1.0'						<50.0	<1.00
128002 - Stockpile	<0.0200	<0.0200	**0.222**	**0.817**		**621**	**52.1**

Sample: 128002 - Stockpile

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: June 27, 2007

Work Order: 7062103

Project Location: Lea County, NM
Project Name: Cimarex/Cooper S.R. TB
Project Number: 2984

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
128000	SP#1 (0-1.0') BEB 1.0'	soil	2007-06-20	00:00	2007-06-20
128001	SP#2 (0-0.5') BEB 1.0'	soil	2007-06-20	00:00	2007-06-20
128002	Stockpile	soil	2007-06-20	00:00	2007-06-20

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

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 128000 - SP#1 (0-1.0') BEB 1.0'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38462	Date Analyzed:	2007-06-21	Analyzed By:	AG
Prep Batch:	33285	Sample Preparation:	2007-06-21	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		156	mg/Kg	1	150	104	32.9 - 167

Sample: 128000 - SP#1 (0-1.0') BEB 1.0'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38523	Date Analyzed:	2007-06-25	Analyzed By:	JW
Prep Batch:	33316	Sample Preparation:		Prepared By:	JW

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO	B	**2.00**		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.702	mg/Kg	1	1.00	70	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.927	mg/Kg	1	1.00	93	67.5 - 140.3

Sample: 128001 - SP#2 (0-0.5') BEB 1.0'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38462	Date Analyzed:	2007-06-21	Analyzed By:	AG
Prep Batch:	33285	Sample Preparation:	2007-06-21	Prepared By:	AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	32.9 - 167

Sample: 128001 - SP#2 (0-0.5') BEB 1.0'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38523	Date Analyzed:	2007-06-25	Analyzed By:	JW
Prep Batch:	33316	Sample Preparation:		Prepared By:	JW

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.735	mg/Kg	1	1.00	74	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.825	mg/Kg	1	1.00	82	67.5 - 140.3

Sample: 128002 - Stockpile

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	38524	Date Analyzed:	2007-06-25	Analyzed By:	JW
Prep Batch:	33317	Sample Preparation:		Prepared By:	JW

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		<0.0200	mg/Kg	2	0.0100
Ethylbenzene		**0.222**	mg/Kg	2	0.0100
Xylene		**0.817**	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.51	mg/Kg	2	2.00	76	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.89	mg/Kg	2	2.00	94	51.1 - 119.1

Sample: 128002 - Stockpile

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	38502	Date Analyzed:	2007-06-25	Analyzed By:	AR
Prep Batch:	33319	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

Sample: 128002 - Stockpile

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38462	Date Analyzed:	2007-06-21	Analyzed By:	AG
Prep Batch:	33285	Sample Preparation:	2007-06-21	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**621**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		238	mg/Kg	1	150	159	32.9 - 167

Sample: 128002 - Stockpile

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38523	Date Analyzed:	2007-06-25	Analyzed By:	JW
Prep Batch:	33316	Sample Preparation:		Prepared By:	JW

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**52.1**	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.44	mg/Kg	2	2.00	72	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[1]	3.31	mg/Kg	2	2.00	166	67.5 - 140.3

Method Blank (1) QC Batch: 38462

QC Batch:	38462	Date Analyzed:	2007-06-21	Analyzed By:	AG
Prep Batch:	33285	QC Preparation:	2007-06-21	Prepared By:	

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		200	mg/Kg	1	150	133	44.7 - 133.6

Method Blank (1) QC Batch: 38502

QC Batch:	38502	Date Analyzed:	2007-06-25	Analyzed By:	AR
Prep Batch:	33319	QC Preparation:	2007-06-25	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 38523

QC Batch:	38523	Date Analyzed:	2007-06-25	Analyzed By:	JW
Prep Batch:	33316	QC Preparation:	2007-06-25	Prepared By:	JW

Parameter	Flag	MDL Result	Units	RL
GRO		0.781	mg/Kg	1

[1] High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.801	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.771	mg/Kg	1	1.00	77	67.5 - 140.3

Method Blank (1) QC Batch: 38524

QC Batch: 38524 | Date Analyzed: 2007-06-25 | Analyzed By: JW
Prep Batch: 33317 | QC Preparation: 2007-06-25 | Prepared By: JW

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00110	mg/Kg	0.01
Toluene		<0.00150	mg/Kg	0.01
Ethylbenzene		<0.00160	mg/Kg	0.01
Xylene		<0.00410	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.766	mg/Kg	1	1.00	77	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.781	mg/Kg	1	1.00	78	53.9 - 125.1

Laboratory Control Spike (LCS-1)

QC Batch: 38462 | Date Analyzed: 2007-06-21 | Analyzed By: AG
Prep Batch: 33285 | QC Preparation: 2007-06-21 | Prepared By:

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	300	mg/Kg	1	250	<14.6	120	47.5 - 144.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	286	mg/Kg	1	250	<14.6	114	47.5 - 144.1	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	159	164	mg/Kg	1	150	106	109	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 38502 | Date Analyzed: 2007-06-25 | Analyzed By: AR
Prep Batch: 33319 | QC Preparation: 2007-06-25 | Prepared By: AR

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.2	mg/Kg	1	100	<0.500	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<0.500	100	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: 38523 | Date Analyzed: 2007-06-25 | Analyzed By: JW
Prep Batch: 33316 | QC Preparation: 2007-06-25 | Prepared By: JW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.08	mg/Kg	1	10.0	<0.739	71	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.25	mg/Kg	1	10.0	<0.739	72	57.7 - 102.5	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)	0.717	0.708	mg/Kg	1	1.00	72	71	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.824	0.821	mg/Kg	1	1.00	82	82	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 38524 | Date Analyzed: 2007-06-25 | Analyzed By: JW
Prep Batch: 33317 | QC Preparation: 2007-06-25 | Prepared By: JW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.894	mg/Kg	1	1.00	<0.00110	89	68.6 - 123.4
Toluene	0.915	mg/Kg	1	1.00	<0.00150	92	74.6 - 119.3
Ethylbenzene	0.891	mg/Kg	1	1.00	<0.00160	89	72.3 - 126.2
Xylene	2.69	mg/Kg	1	3.00	<0.00410	90	76.5 - 121.6

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.928	mg/Kg	1	1.00	<0.00110	93	68.6 - 123.4	4	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Toluene	0.957	mg/Kg	1	1.00	<0.00150	96	74.6 - 119.3	4	20
Ethylbenzene	0.929	mg/Kg	1	1.00	<0.00160	93	72.3 - 126.2	4	20
Xylene	2.81	mg/Kg	1	3.00	<0.00410	94	76.5 - 121.6	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)	0.653	0.661	mg/Kg	1	1.00	65	66	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	0.792	0.781	mg/Kg	1	1.00	79	78	68.7 - 125.8

Matrix Spike (MS-1) Spiked Sample: 127992

QC Batch: 38462 | Date Analyzed: 2007-06-21 | Analyzed By: AG
Prep Batch: 33285 | QC Preparation: 2007-06-21 | Prepared By:

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	284	mg/Kg	1	250	92.9	76	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	291	mg/Kg	1	250	92.9	79	11.7 - 152.3	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-Triacontane	146	151	mg/Kg	1	150	97	101	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 128044

QC Batch: 38502 | Date Analyzed: 2007-06-25 | Analyzed By: AR
Prep Batch: 33319 | QC Preparation: 2007-06-25 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride [2]	5980	mg/Kg	25	2500	3474.7	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	6010	mg/Kg	25	2500	3474.7	101	85 - 115	0	20

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

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

Matrix Spike (MS-1) Spiked Sample: 128067

QC Batch: 38523 | Date Analyzed: 2007-06-25 | Analyzed By: JW
Prep Batch: 33316 | QC Preparation: 2007-06-25 | Prepared By: JW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.96	mg/Kg	1	10.0	6.01	20	10 - 141.5

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.41	mg/Kg	1	10.0	6.01	14	10 - 141.5	7	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.633	0.614	mg/Kg	1	1	63	61	40 - 125.3
4-Bromofluorobenzene (4-BFB)	0.947	0.962	mg/Kg	1	1	95	96	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 128067

QC Batch: 38524 | Date Analyzed: 2007-06-25 | Analyzed By: JW
Prep Batch: 33317 | QC Preparation: 2007-06-25 | Prepared By: JW

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[3]	0.186	mg/Kg	1	1.00	<0.00110	19	64.4 - 115.7
Toluene		1.02	mg/Kg	1	1.00	<0.00150	102	57.8 - 124.4
Ethylbenzene	[4]	0.267	mg/Kg	1	1.00	<0.00160	27	64.8 - 125.8
Xylene	[5]	1.30	mg/Kg	1	3.00	0.0265	42	65.2 - 121.8

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

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[6]	0.115	mg/Kg	1	1.00	<0.00110	12	64.4 - 115.7	47	20
Toluene		0.911	mg/Kg	1	1.00	<0.00150	91	57.8 - 124.4	11	20
Ethylbenzene	[7]	0.203	mg/Kg	1	1.00	<0.00160	20	64.8 - 125.8	27	20
Xylene	[8]	1.10	mg/Kg	1	3.00	0.0265	36	65.2 - 121.8	17	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)	0.701	0.720	mg/Kg	1	1	70	72	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	0.806	0.829	mg/Kg	1	1	81	83	66.7 - 131.9

[3]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-1)

QC Batch: 38462 Date Analyzed: 2007-06-21 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	287	115	85 - 115	2007-06-21

Standard (CCV-2)

QC Batch: 38462 Date Analyzed: 2007-06-21 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	264	106	85 - 115	2007-06-21

Standard (CCV-3)

QC Batch: 38462 Date Analyzed: 2007-06-21 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	243	97	85 - 115	2007-06-21

Standard (ICV-1)

QC Batch: 38502 Date Analyzed: 2007-06-25 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-06-25

Standard (CCV-1)

QC Batch: 38502 Date Analyzed: 2007-06-25 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2007-06-25

Standard (ICV-1)

QC Batch: 38523 Date Analyzed: 2007-06-25 Analyzed By: JW

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.10	110	85 - 115	2007-06-25

Standard (CCV-1)

QC Batch: 38523 Date Analyzed: 2007-06-25 Analyzed By: JW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.03	103	85 - 115	2007-06-25

Standard (ICV-1)

QC Batch: 38524 Date Analyzed: 2007-06-25 Analyzed By: JW

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0923	92	85 - 115	2007-06-25
Toluene		mg/Kg	0.100	0.0943	94	85 - 115	2007-06-25
Ethylbenzene		mg/Kg	0.100	0.0914	91	85 - 115	2007-06-25
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2007-06-25

Standard (CCV-1)

QC Batch: 38524 Date Analyzed: 2007-06-25 Analyzed By: JW

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0849	85	85 - 115	2007-06-25
Toluene		mg/Kg	0.100	0.0914	91	85 - 115	2007-06-25
Ethylbenzene	[9]	mg/Kg	0.100	0.0837	84	85 - 115	2007-06-25
Xylene		mg/Kg	0.300	0.254	85	85 - 115	2007-06-25

[9]ETHYLBENZENE outside of control limits on CCV(ICV) CCV(ICV) component average is 0 085 which is within acceptable range. This is acceptable by Method 8000.

WO# 7062103

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

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

PAGE: OF:

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: Cimarex

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2984

PROJECT NAME: Cimarex/Cooper S.R. TB
Lea Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 8015 MOD. TX1005 / 418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr 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	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
128000	6/20/07		S		X	SP # 1 (0-1.0') BEB 1.0'	1				X				X														
128001	"		S		X	SP # 2 (0-0.5') BEB 1.0'	1				X				X														
128002	"		S	X		Stockpile	1				X		X		X											X			

RELINQUISHED BY: (Signature) Kolt Harrison — Date: 6/21/07 Time: 17:05
RECEIVED BY: (Signature) — Date: — Time:
SAMPLED BY: (Print & Sign) Ray Taylor / Kolt Harrison — Date: 6/20/07 Time:

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

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

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: Midland STATE: Texas ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Kelly Walton
DATE: 6/21/07 TIME: 1705

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Iced/cool/3.5°C

MATRIX: W—Water A—Air SD—Solid S—Soil SL—Sludge O—Other

REMARKS: all tests - Midland

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

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 June 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 : Cimarex Energy Co. of Colorado	Contact: Hugo Naegele, Jr.
Address: 300 Texas Ave. Box 1237, Eunice, NM	Telephone No.: (505) 394-9394
Facility Name: S.R. Cooper	Facility Type: Oil and Gas facility

Surface Owner: Randy Crawford	Mineral Owner:	Lease No. 30-025-25233

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	23	24S	36E					Lea

NATURE OF RELEASE

Type of Release: Oil and Water	Volume of Release: 130 barrels	Volume Recovered: 130 barrels
Source of Release: Water tank	Date and Hour of Occurrence 3/15/07	Date and Hour of Discovery 11:30 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD – Larry Johnson	
By Whom? : Hugo Naegele, Jr.	Date and Hour: 3/26/07 7:40 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* (See Attached Initial C-141)

Transfer pump was left off causing the water tank to overflow. The fluids from the release were immediately pickup and the impacted soil was excavated and placed on plastic onsite.

Describe Area Affected and Cleanup Action Taken.*
The release impacted the area inside tank battery dike and pad. Some fluid migrated into pasture. The impacted areas were assessed by collected soil samples. Based on the results, the impacted areas exceeding the NMOCD RRAL were excavated to below regulatory levels. A Closure Report was submitted the NMOCD for review.

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

Signature: Evan T Waubob	OIL CONSERVATION DIVISION	
Printed Name: Evan L Waubob	Approved by District Supervisor: ENVIRONMENTAL ENGINEER	
Title: Prod. Superintendant	Approval Date: 9.25.07	Expiration Date: —
E-mail Address: ewaubob@cimarex.com	Conditions of Approval: —	Attached ☐ —
Date: 9/6/07 Phone: 432-571 7848		

* Attach Additional Sheets If Necessary

RP# 1590

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 Cimarex Energy Co.	Contact Hugo Naegele
Address 300 Texas P.O. Box 1237 Eunice, NM	Telephone No. 505-390-9394
Facility Name SR. Cooper	Facility Type Oil & Gas Facility

Surface Owner Crawford Ranch Randy Crawford	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	23	24S	36E					LEA

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release Oil & Water	Volume of Release 130 / Volume Recovered 130
Source of Release Water Tank	Date and Hour of Occurrence 3/25/07 / Date and Hour of Discovery 11:30am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson (NMOCD)
By Whom? Hugo Naegele	Date and Hour 7:40am 3/26/07
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The transfer pump was left off. Had a storm that knocked the power out the night before and the power was restored Sat. afternoon. The pumper thought the electricians were going to turn everything back on and they didn't. Causing to water tank to run over. Had vacuum truck to pick up spill. Had backhoe to pick up contaminated soil & put it on plastic. Also sprayed micro blaze on area.

Describe Area Affected and Cleanup Action Taken.* Most of the release was contained in the dike, but we did have some in the pasture (est 3-5 bbls). Picked up contaminated soil, put on plastic. Sprayed micro blaze & used vacuum truck to pick up release.

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: Hnaegele Jr	OIL CONSERVATION DIVISION
Printed Name: Hugo Naegele Jr	Approved by District Supervisor:
Title: Production Foreman	Approval Date: / Expiration Date:
E-mail Address: hnaegele@cimarex.com	Conditions of Approval: / Attached ☐
Date: 3-26-07 Phone: 505 390-9394	

* Attach Additional Sheets If Necessary