1RP-1664

Assessment and closure Report

DATE:
Oct. 2009

TETRA TECH

October 12, 2009

Mr. Glenn von Gonten
Senior Hydrologist/Acting Environmental Bureau Chief
Environmental Bureau
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Assessment and Closure Report for the Pit Located at the Rock Queen Unit Tract #33 Tank Battery, Unit Letter F, Section 23, Township 13 South, Range 31 East, Chaves County, New Mexico, Operated by Celero Energy II, LP (NMOCD 1RP#1664)

Dear Mr. von Gonten:

Tetra Tech was contacted by Celero Energy (Celero) to assist in the closure of a pit at the Rock Queen Unit Tract #33 Tank Battery, located in Unit Letter F, Section 23, Township 13 South, Range 31 East, Chaves County, New Mexico (Site). The pit coordinates are N 33.17611° W 103.79611°. Both the State of New Mexico C-141 and C-144 (Initial and Final) are included in Appendix C. The Site is shown on Figures 1 and 2.

Background

On October 8, 2007, Highlander submitted an Investigation and Characterization work plan (ICP) for an open pit at this site. The ICP was approved by the New Mexico Oil Conservation Division (NMOCD). On November 5, 2007, Highlander submitted an additional report entitled Workplan for Capping and Site Closure for the Pit at this site.

The Tract 33 Tank Battery pit was dewatered and the residual sludge, tank bottom materials, and liner removed in September 2007. Removed fluids were placed into an existing SWD system or taken to disposal, while the sludge, tank bottom materials, and liner were disposed of at Gandy-Marley, Inc. landfill site of Lovington, New Mexico. Upon completion of the removal of the fluids, sludge and liner, the underlying soils were visually inspected for obvious signs of impact. Approximately 460 cubic yards of soil were excavated and hauled to

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Gandy-Marley, Inc. for disposal. The pit was excavated to a point where the subsoil would support a soil boring rig.

Background

Neither the New Mexico State Engineer's Office database nor the USGS database show any wells in Section 23, Township 13 South, Range 31 East. Monitor wells installed near this site had depths of groundwater of greater than 100 feet.

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

On October 23, 2007, Highlander supervised the installation of soil borings at the pit. Prior to the installation of the borings, a visual inspection was performed around the perimeter of the pit. The area of the pit excavation measured approximately 93 feet by 105 feet. One soil boring (SB-1) was installed in the center of the pit. The remaining boreholes (SB-2 through SB-7) were installed outside the edges of the pit. The boring locations and the approximate edge of the pit are shown in Figure 3.

The borings were installed using an air-rotary type drilling rig. Soil samples from soil boring SB-1 were collected at 5 foot intervals to 20 feet and then 10 foot intervals thereafter during drilling operations. The samples were field screened for hydrocarbons with a PID, and field screened for chlorides. Soil samples from the remaining soil borings were collected at 10 foot intervals to depths up to 100 feet below ground surface (bgs).

The soil samples were field screened for chlorides to determine if impacts showed a distinctive decline with depth. Select soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) by method modified 8015 DRO/GRO, benzene, toluene, ethylbenzene, and xylene (BTEX) by method 8021B and chloride by method 4500 Cl-B. All samples were collected and preserved in

laboratory prepared sample containers with standard QA/QC procedures. All samples were shipped under proper chain-of-custody control and analyzed within the standard holding times. The results of the sampling are shown in Table 1. The laboratory reports and chain-of-custody are included in Appendix A.

All down hole equipment was washed between boreholes or sampling events using a potable water and laboratory grade detergent. All down hole equipment (i.e., drill rods, drill bits, etc.) were thoroughly decontaminated between each use with a high-pressure hot water wash and rinse. Soil cuttings from drilling were stockpiled adjacent to the borehole. Following the completion of the drilling activities, all boreholes were grouted to the surface.

Referring to Table 1, the samples selected for TPH and BTEX analysis were all below the reporting limits. Chloride impact was found throughout SB-1. Horizontal chloride impact was defined inside the perimeter boreholes.

Soil Capping

During the week of December 22, 2007, Gandy-Marley Corporation of Lovington, New Mexico was onsite to install a 1 foot thick clay liner for the pit. The pit area was further extended out approximately 50 feet south and west of the original dimensions based upon the results of the borehole sample. See Figure 3 for pit liner dimensions. The soils were excavated to a depth of 4 feet bgs. The soils excavated were placed back into the center of the original excavation in order to bring the excavation up to a depth of 4 feet bgs. Upon completion of the clay liner, overburden material stripped from the expansion of the pit was utilized as backfill for the site and brought up to grade. A copy of the sieve analysis/permeability data for the clay is included in Appendix B.

Proposed Monitor Well

One monitor well will be installed at the site to evaluate groundwater quality in the vicinity of the closed pit area. During the installation of the monitor well, the entire screened interval will be placed entirely below the water table. If the sampling data indicates the necessity for additional monitor wells, they will be installed accordingly, in order to complete delineation.

Conclusions

Between October and December 2007, the pit area was excavated to dimensions of 110 feet by 135 feet. Approximately 460 cubic yards of soil were excavated and transported offsite for disposal at Gandy-Marley of Lovington, New Mexico. A clay liner was placed at 4 feet bgs in the excavation in order to impeded the remaining chlorides at the site from migrating to the underlying

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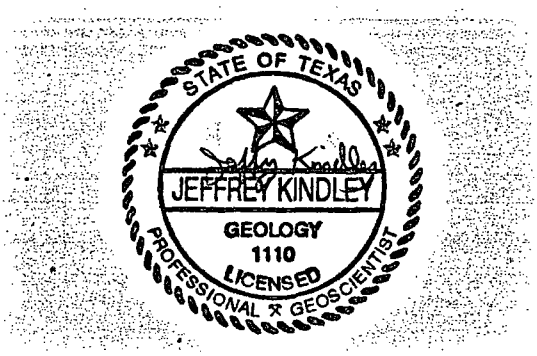
groundwater. Upon completion of the clay liner, the site was backfilled with overburden material and brought up to surface grade.

Based upon the results of the pit closure work performed at the site, Celero Energy requests consideration of this pit for closure. 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,
Tetra Tech

Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: Bruce Woodard – Celero Energy II LP
Larry Johnson – NMOCD – Hobbs, NM

FIGURES

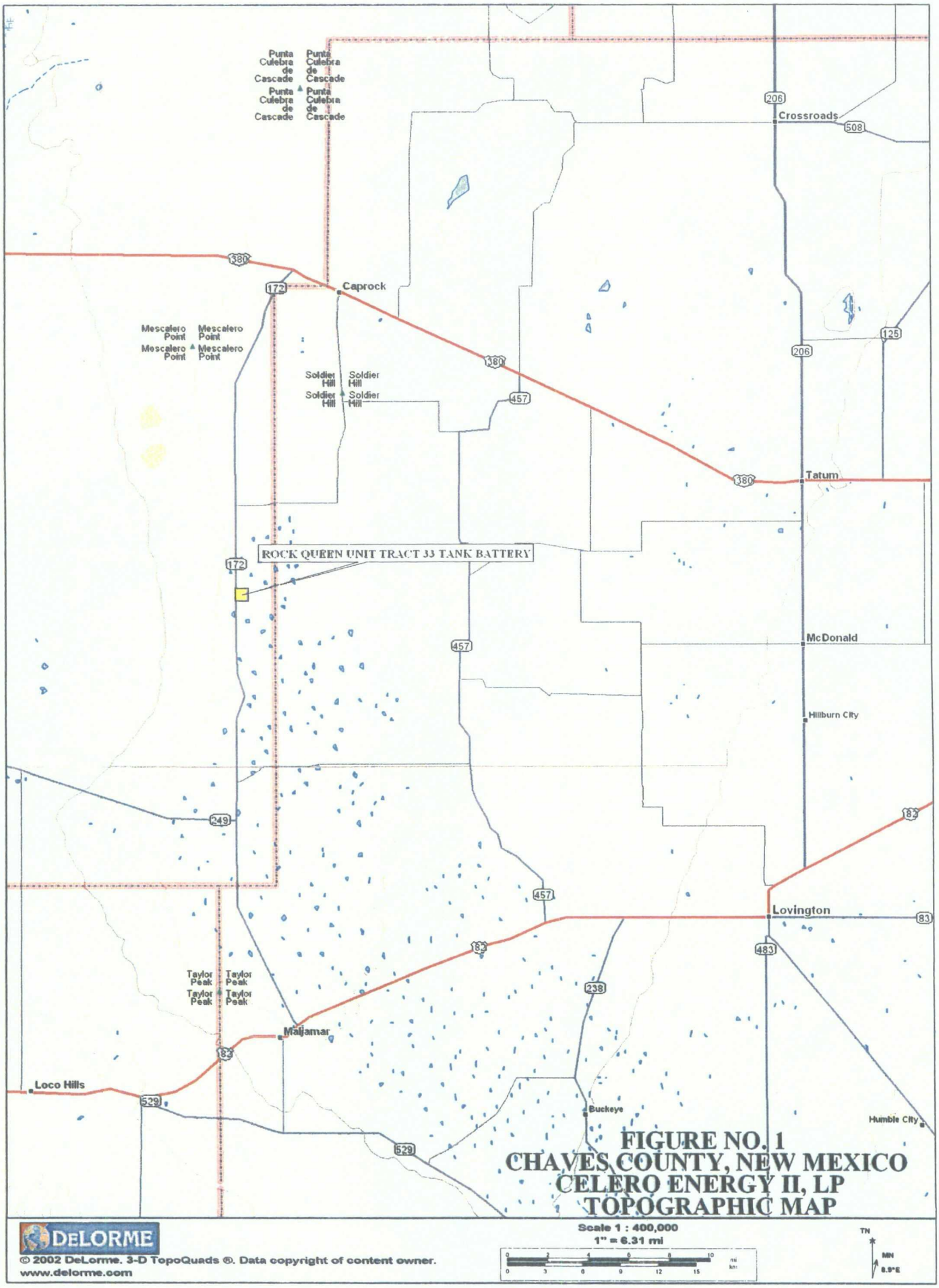


FIGURE NO. 1
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY II, LP
TOPOGRAPHIC MAP

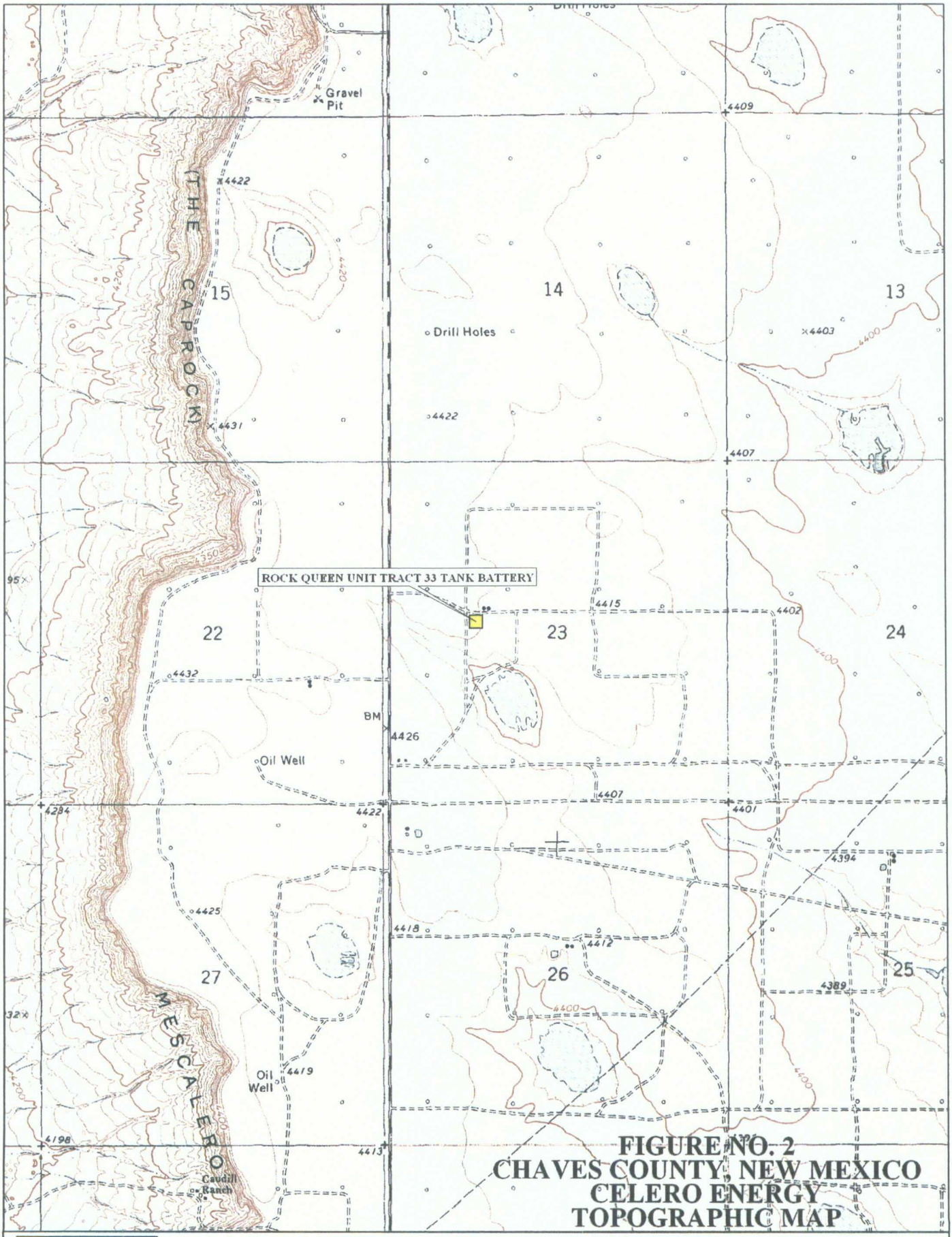


FIGURE NO. 2
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY
TOPOGRAPHIC MAP

DeLORME

Scale 1 : 24,000
1" = 2000 ft

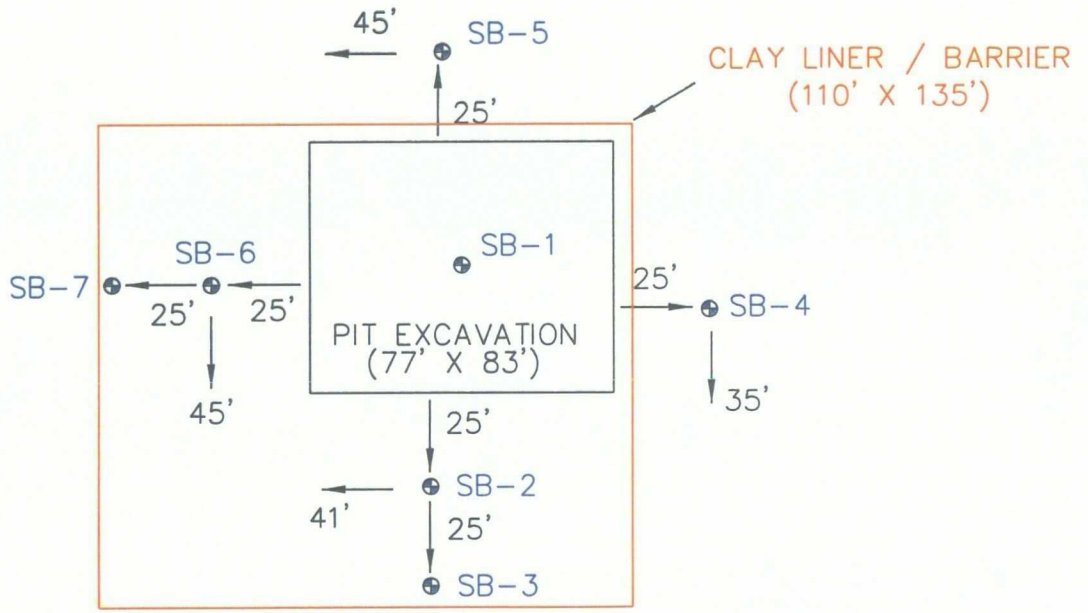


FIGURE NO. 3

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
ROCK QUEEN UNIT TRACT #33
SOIL BORING / CLAY LINER LOCATIONS

DATE: 10/30/07
DWN. BY: RC
FILE: C:\CELERO\3133\R O UNIT 33

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NOT TO SCALE

TABLES

Table 1
Celero Energy
Rock Queen Unit Tract #33
Chaves County, New Mexico

Sample ID	Date Sampled	Excavation Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
SB-1	10/23/2007	(3-5')	<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	**5130**
	10/23/2007	(8-10')	<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	**6240**
	10/23/2007	(13-15')	-	-	-	-	-	-	-	**9450**
	10/23/2007	(18-20')	-	-	-	-	-	-	-	**8140**
	10/23/2007	(28-30')	-	-	-	-	-	-	-	**8460**
	10/23/2007	(38-40')	-	-	-	-	-	-	-	**4900**
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**8060**
	10/23/2007	(58-60')	-	-	-	-	-	-	-	**6450**
	10/23/2007	(68-70')	-	-	-	-	-	-	-	**4500**
	10/23/2007	(78-80')	-	-	-	-	-	-	-	**3800**
	10/23/2007	(88-90')	-	-	-	-	-	-	-	**4150**
	10/23/2007	(98-100')	-	-	-	-	-	-	-	**4720**
SB-2	10/23/2007	(8-10')	-	-	-	-	-	-	-	**1630**
	10/23/2007	(18-20')	-	-	-	-	-	-	-	**1320**
	10/23/2007	(28-30')	-	-	-	-	-	-	-	**3600**
	10/23/2007	(38-40')	-	-	-	-	-	-	-	**3890**
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**2510**
SB-3	10/23/2007	(8-10')	-	-	-	-	-	-	-	**347**
	10/23/2007	(18-20')	-	-	-	-	-	-	-	**1010**
	10/23/2007	(28-30')	-	-	-	-	-	-	-	**972**
	10/23/2007	(38-40')	-	-	-	-	-	-	-	**1050**
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**738**
SB-4	10/23/2007	(8-10')	-	-	-	-	-	-	-	<100
	10/23/2007	(18-20')	-	-	-	-	-	-	-	<100
	10/23/2007	(28-30')	-	-	-	-	-	-	-	<100
	10/23/2007	(38-40')	-	-	-	-	-	-	-	<100
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**188**
SB-5	10/23/2007	(8-10')	-	-	-	-	-	-	-	<100
	10/23/2007	(18-20')	-	-	-	-	-	-	-	<100
	10/23/2007	(28-30')	-	-	-	-	-	-	-	<100
	10/23/2007	(38-40')	-	-	-	-	-	-	-	<100
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**140**

Table 1
Celero Energy
Rock Queen Unit Tract #33
Chaves County, New Mexico

Sample ID	Date Sampled	Excavation Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
SB-6	10/23/2007	(8-10')	-	-	-	-	-	-	-	**1510**
	10/23/2007	(18-20')	-	-	-	-	-	-	-	**7780**
	10/23/2007	(28-30')	-	-	-	-	-	-	-	**6680**
	10/23/2007	(38-40')	-	-	-	-	-	-	-	**4660**
	10/23/2007	(48-50')	-	-	-	-	-	-	-	**3340**
SB-7	10/24/2007	(8-10')	-	-	-	-	-	-	-	**2640**
	10/24/2007	(18-20')	-	-	-	-	-	-	-	**3100**
	10/24/2007	(28-30')	-	-	-	-	-	-	-	**529**
	10/24/2007	(38-40')	-	-	-	-	-	-	-	<100
	10/24/2007	(48-50')	-	-	-	-	-	-	-	<100

(-) Not Analyzed

APPENDIX A
LABORATORY ANALYTICAL

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: November 5, 2007

Work Order: 7102426

Project Name: Celero-Rock Queen Unit 33
Project Number: 3133

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
140213	SB-1 (3-5')	soil	2007-10-23	00:00	2007-10-24
140214	SB-1 (8-10')	soil	2007-10-23	00:00	2007-10-24
140215	SB-1 (13-15')	soil	2007-10-23	00:00	2007-10-24
140216	SB-1 (18-20')	soil	2007-10-23	00:00	2007-10-24
140217	SB-1 (28-30')	soil	2007-10-23	00:00	2007-10-24
140218	SB-1 (38-40')	soil	2007-10-23	00:00	2007-10-24
140219	SB-1 (48-50')	soil	2007-10-23	00:00	2007-10-24
140220	SB-1 (58-60')	soil	2007-10-23	00:00	2007-10-24
140221	SB-1 (68-70')	soil	2007-10-23	00:00	2007-10-24
140222	SB-1 (78-80')	soil	2007-10-23	00:00	2007-10-24
140223	SB-1 (88-90')	soil	2007-10-23	00:00	2007-10-24
140224	SB-1 (98-100')	soil	2007-10-23	00:00	2007-10-24
140225	SB-2 (8-10')	soil	2007-10-23	00:00	2007-10-24
140226	SB-2 (18-20')	soil	2007-10-23	00:00	2007-10-24
140227	SB-2 (28-30')	soil	2007-10-23	00:00	2007-10-24
140228	SB-2 (38-40')	soil	2007-10-23	00:00	2007-10-24
140229	SB-2 (48-50')	soil	2007-10-23	00:00	2007-10-24
140230	SB-3 (8-10')	soil	2007-10-23	00:00	2007-10-24
140231	SB-3 (18-20')	soil	2007-10-23	00:00	2007-10-24
140232	SB-3 (28-30')	soil	2007-10-23	00:00	2007-10-24
140233	SB-3 (38-40')	soil	2007-10-23	00:00	2007-10-24
140234	SB-3 (48-50')	soil	2007-10-23	00:00	2007-10-24
140235	SB-4 (8-10')	soil	2007-10-23	00:00	2007-10-24
140236	SB-4 (18-20')	soil	2007-10-23	00:00	2007-10-24

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
140237	SB-4 (28-30')	soil	2007-10-23	00:00	2007-10-24
140238	SB-4 (38-40')	soil	2007-10-23	00:00	2007-10-24
140239	SB-4 (48-50')	soil	2007-10-23	00:00	2007-10-24
140240	SB-5 (8-10')	soil	2007-10-23	00:00	2007-10-24
140241	SB-5 (18-20')	soil	2007-10-23	00:00	2007-10-24
140242	SB-5 (28-30')	soil	2007-10-23	00:00	2007-10-24
140243	SB-5 (38-40')	soil	2007-10-23	00:00	2007-10-24
140244	SB-5 (48-50')	soil	2007-10-23	00:00	2007-10-24
140245	SB-6 (8-10')	soil	2007-10-23	00:00	2007-10-24
140246	SB-6 (18-20')	soil	2007-10-23	00:00	2007-10-24
140247	SB-6 (28-30')	soil	2007-10-23	00:00	2007-10-24
140248	SB-6 (38-40')	soil	2007-10-23	00:00	2007-10-24
140249	SB-6 (48-50')	soil	2007-10-23	00:00	2007-10-24

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

Blair Leftwich

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 140213 - SB-1 (3-5')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	42473	Date Analyzed:	2007-10-26	Analyzed By:	DC
Prep Batch:	36635	Sample Preparation:	2007-10-26	Prepared By:	DC

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)		0.732	mg/Kg	1	1.00	73	39.6 - 116
4-Bromofluorobenzene (4-BFB)		0.626	mg/Kg	1	1.00	63	47.3 - 144.2

Sample: 140213 - SB-1 (3-5')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42631	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36787	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5130**	mg/Kg	50	2.00

Sample: 140213 - SB-1 (3-5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	42445	Date Analyzed:	2007-10-26	Analyzed By:	LD
Prep Batch:	36624	Sample Preparation:	2007-10-26	Prepared By:	LD

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		188	mg/Kg	1	150	125	17.3 - 169.6

Sample: 140213 - SB-1 (3-5')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42485	Date Analyzed:	2007-10-26	Analyzed By:	DC
Prep Batch:	36635	Sample Preparation:	2007-10-26	Prepared By:	DC

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)		0.693	mg/Kg	1	1.00	69	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		0.670	mg/Kg	1	1.00	67	51.2 - 107.4

Sample: 140214 - SB-1 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	42473	Date Analyzed:	2007-10-26	Analyzed By:	DC
Prep Batch:	36635	Sample Preparation:	2007-10-26	Prepared By:	DC

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)		0.741	mg/Kg	1	1.00	74	39.6 - 116
4-Bromofluorobenzene (4-BFB)		0.624	mg/Kg	1	1.00	62	47.3 - 144.2

Sample: 140214 - SB-1 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42631	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36787	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6240**	mg/Kg	50	2.00

Sample: 140214 - SB-1 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	42482	Date Analyzed:	2007-10-29	Analyzed By:	LD
Prep Batch:	36666	Sample Preparation:	2007-10-29	Prepared By:	LD

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		142	mg/Kg	1	150	95	17.3 - 169.6

Sample: 140214 - SB-1 (8-10')

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42485	Date Analyzed:	2007-10-26	Analyzed By:	DC
Prep Batch:	36635	Sample Preparation:	2007-10-26	Prepared By:	DC

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)		0.702	mg/Kg	1	1.00	70	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		0.699	mg/Kg	1	1.00	70	51.2 - 107.4

Sample: 140215 - SB-1 (13-15')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42631	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36787	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**9450**	mg/Kg	50	2.00

Sample: 140216 - SB-1 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42631	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36787	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8140**	mg/Kg	50	2.00

Sample: 140217 - SB-1 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8460**	mg/Kg	50	2.00

Sample: 140218 - SB-1 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4900**	mg/Kg	50	2.00

Sample: 140219 - SB-1 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**8060**	mg/Kg	50	2.00

Sample: 140220 - SB-1 (58-60')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6450**	mg/Kg	50	2.00

Sample: 140221 - SB-1 (68-70')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4500**	mg/Kg	50	2.00

Sample: 140222 - SB-1 (78-80')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

continued ...

sample 140222 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3800**	mg/Kg	50	2.00

Sample: 140223 - SB-1 (88-90')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4150**	mg/Kg	50	2.00

Sample: 140224 - SB-1 (98-100')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4720**	mg/Kg	50	2.00

Sample: 140225 - SB-2 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1630**	mg/Kg	50	2.00

Sample: 140226 - SB-2 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42632	Date Analyzed:	2007-11-01	Analyzed By:	AR
Prep Batch:	36790	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1320**	mg/Kg	50	2.00

Sample: 140227 - SB-2 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3600**		mg/Kg	50	2.00

Sample: 140228 - SB-2 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**3890**		mg/Kg	50	2.00

Sample: 140229 - SB-2 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2510**		mg/Kg	50	2.00

Sample: 140230 - SB-3 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**347**		mg/Kg	50	2.00

Sample: 140231 - SB-3 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

continued ...

sample 140231 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1010**	mg/Kg	50	2.00

Sample: 140232 - SB-3 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**972**	mg/Kg	50	2.00

Sample: 140233 - SB-3 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1050**	mg/Kg	50	2.00

Sample: 140234 - SB-3 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**738**	mg/Kg	50	2.00

Sample: 140235 - SB-4 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

Sample: 140236 - SB-4 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42672	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36819	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<100		mg/Kg	50	2.00

Sample: 140237 - SB-4 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<100		mg/Kg	50	2.00

Sample: 140238 - SB-4 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		<100		mg/Kg	50	2.00

Sample: 140239 - SB-4 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**188**		mg/Kg	50	2.00

Sample: 140240 - SB-5 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

continued ...

sample 140240 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

Sample: 140241 - SB-5 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

Sample: 140242 - SB-5 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

Sample: 140243 - SB-5 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

Sample: 140244 - SB-5 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**140**	mg/Kg	50	2.00

Sample: 140245 - SB-6 (8-10')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1510**	mg/Kg	50	2.00

Sample: 140246 - SB-6 (18-20')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42673	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36820	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7780**	mg/Kg	50	2.00

Sample: 140247 - SB-6 (28-30')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42674	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36821	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**6680**	mg/Kg	50	2.00

Sample: 140248 - SB-6 (38-40')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42674	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36821	Sample Preparation:		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4660**	mg/Kg	50	2.00

Sample: 140249 - SB-6 (48-50')

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42674	Date Analyzed:	2007-11-02	Analyzed By:	AR
Prep Batch:	36821	Sample Preparation:		Prepared By:	AR

continued ...

sample 140249 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3340**	mg/Kg	50	2.00

Method Blank (1) QC Batch: 42445

QC Batch: 42445 Date Analyzed: 2007-10-26 Analyzed By: LD
Prep Batch: 36624 QC Preparation: 2007-10-26 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		19.4	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	85	32.9 - 156.1

Method Blank (1) QC Batch: 42473

QC Batch: 42473 Date Analyzed: 2007-10-26 Analyzed By: DC
Prep Batch: 36635 QC Preparation: 2007-10-26 Prepared By: DC

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)		0.694	mg/Kg	1	1.00	69	58.2 - 121.3
4-Bromofluorobenzene (4-BFB)		0.456	mg/Kg	1	1.00	46	25 - 123.7

Method Blank (1) QC Batch: 42482

QC Batch: 42482 Date Analyzed: 2007-10-29 Analyzed By: LD
Prep Batch: 36666 QC Preparation: 2007-10-29 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<13.4	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		95.0	mg/Kg	1	150	63	32.9 - 156.1

Method Blank (1) QC Batch: 42485

QC Batch: 42485 | Date Analyzed: 2007-10-26 | Analyzed By: DC
Prep Batch: 36635 | QC Preparation: 2007-10-26 | Prepared By: DC

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)		0.714	mg/Kg	1	1.00	71	67.8 - 103
4-Bromofluorobenzene (4-BFB)		0.490	mg/Kg	1	1.00	49	24.6 - 123

Method Blank (1) QC Batch: 42631

QC Batch: 42631 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36787 | QC Preparation: 2007-11-01 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 42632

QC Batch: 42632 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36790 | QC Preparation: 2007-11-01 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 42672

QC Batch: 42672 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36819 | QC Preparation: 2007-11-02 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 42673

QC Batch: 42673 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36820 | QC Preparation: 2007-11-02 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Method Blank (1) QC Batch: 42674

QC Batch: 42674 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36821 | QC Preparation: 2007-11-02 | Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch: 42445 | Date Analyzed: 2007-10-26 | Analyzed By: LD
Prep Batch: 36624 | QC Preparation: 2007-10-26 | Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	230	mg/Kg	1	250	<13.4	92	49.1 - 142.3

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	248	mg/Kg	1	250	<13.4	99	49.1 - 142.3	8	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	183	163	mg/Kg	1	150	122	109	49 - 133.2

Laboratory Control Spike (LCS-1)

QC Batch: 42473 | Date Analyzed: 2007-10-26 | Analyzed By: DC
Prep Batch: 36635 | QC Preparation: 2007-10-26 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.858	mg/Kg	1	1.00	<0.00110	86	71.2 - 119
Toluene	0.904	mg/Kg	1	1.00	<0.00150	90	76.3 - 116.5
Ethylbenzene	0.915	mg/Kg	1	1.00	<0.00160	92	77.6 - 114
Xylene	2.78	mg/Kg	1	3.00	<0.00410	93	78.8 - 113.9

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	0.817	mg/Kg	1	1.00	<0.00110	82	71.2 - 119	5	20
Toluene	0.866	mg/Kg	1	1.00	<0.00150	87	76.3 - 116.5	4	20
Ethylbenzene	0.882	mg/Kg	1	1.00	<0.00160	88	77.6 - 114	4	20
Xylene	2.68	mg/Kg	1	3.00	<0.00410	89	78.8 - 113.9	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)	0.658	0.653	mg/Kg	1	1.00	66	65	56.1 - 107.8
4-Bromofluorobenzene (4-BFB)	0.610	0.612	mg/Kg	1	1.00	61	61	56.2 - 118.8

Laboratory Control Spike (LCS-1)

QC Batch: 42482 | Date Analyzed: 2007-10-29 | Analyzed By: LD
Prep Batch: 36666 | QC Preparation: 2007-10-29 | Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	290	mg/Kg	1	250	<13.4	116	49.1 - 142.3

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	273	mg/Kg	1	250	<13.4	109	49.1 - 142.3	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	104	101	mg/Kg	1	150	69	67	49 - 133.2

Laboratory Control Spike (LCS-1)

QC Batch: 42485 | Date Analyzed: 2007-10-26 | Analyzed By: DC
Prep Batch: 36635 | QC Preparation: 2007-10-26 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.94	mg/Kg	1	10.0	<0.739	79	56 - 105.2

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.48	mg/Kg	1	10.0	<0.739	75	56 - 105.2	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
Trifluorotoluene (TFT)	0.836	0.854	mg/Kg	1	1.00	84	85	61.1 - 148.1

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.714	0.697	mg/Kg	1	1.00	71	70	67.2 - 119.2

Laboratory Control Spike (LCS-1)

QC Batch: 42631 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36787 | QC Preparation: 2007-11-01 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<0.500	101	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<0.500	102	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: 42632 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36790 | QC Preparation: 2007-11-01 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	95.8	mg/Kg	1	100	<0.500	96	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	96.7	mg/Kg	1	100	<0.500	97	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: 42672 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36819 | QC Preparation: 2007-11-02 | Prepared By: AR

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: 42673 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36820 | QC Preparation: 2007-11-02 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.3	mg/Kg	1	100	<0.500	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.2	mg/Kg	1	100	<0.500	99	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: 42674 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36821 | QC Preparation: 2007-11-02 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<0.500	101	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<0.500	102	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 140213

QC Batch: 42445 | Date Analyzed: 2007-10-26 | Analyzed By: LD
Prep Batch: 36624 | QC Preparation: 2007-10-26 | Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	292	mg/Kg	1	250	<13.4	117	30.2 - 201.4

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	278	mg/Kg	1	250	<13.4	111	30.2 - 201.4	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	154	137	mg/Kg	1	150	103	91	10 - 194

Matrix Spike (MS-1) Spiked Sample: 140179

QC Batch: 42473 | Date Analyzed: 2007-10-26 | Analyzed By: DC
Prep Batch: 36635 | QC Preparation: 2007-10-26 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.874	mg/Kg	1	1.00	<0.00110	87	65.7 - 119.1
Toluene	0.950	mg/Kg	1	1.00	<0.00150	95	47.7 - 153.8
Ethylbenzene	1.01	mg/Kg	1	1.00	<0.00160	101	73.5 - 126.3
Xylene	3.08	mg/Kg	1	3.00	<0.00410	103	73.6 - 125.9

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	0.828	mg/Kg	1	1.00	<0.00110	83	65.7 - 119.1	5	20
Toluene	0.902	mg/Kg	1	1.00	<0.00150	90	47.7 - 153.8	5	20
Ethylbenzene	0.963	mg/Kg	1	1.00	<0.00160	96	73.5 - 126.3	5	20
Xylene	2.94	mg/Kg	1	3.00	<0.00410	98	73.6 - 125.9	5	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.660	0.655	mg/Kg	1	1	66	66	51 - 109.6
4-Bromofluorobenzene (4-BFB)	0.668	0.660	mg/Kg	1	1	67	66	60.3 - 124.3

Matrix Spike (MS-1) Spiked Sample: 140214

QC Batch: 42482 | Date Analyzed: 2007-10-29 | Analyzed By: LD
Prep Batch: 36666 | QC Preparation: 2007-10-29 | Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	252	mg/Kg	1	250	<13.4	101	30.2 - 201.4

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	289	mg/Kg	1	250	<13.4	116	30.2 - 201.4	14	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	156	146	mg/Kg	1	150	104	97	10 - 194

Matrix Spike (MS-1) Spiked Sample: 140166

QC Batch: 42485 | Date Analyzed: 2007-10-26 | Analyzed By: DC
Prep Batch: 36635 | QC Preparation: 2007-10-26 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.20	mg/Kg	1	10.0	<0.739	72	10 - 102.2

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	6.74	mg/Kg	1	10.0	<0.739	67	10 - 102.2	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)	0.537	0.538	mg/Kg	1	1	54	54	47.2 - 84.2
4-Bromofluorobenzene (4-BFB)	0.846	0.830	mg/Kg	1	1	85	83	58 - 162.6

Matrix Spike (MS-1) Spiked Sample: 140216

QC Batch: 42631 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36787 | QC Preparation: 2007-11-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12900	mg/Kg	50	5000	8144.33	95	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	12900	mg/Kg	50	5000	8144.33	95	85 - 115	0	20

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

Matrix Spike (MS-1) Spiked Sample: 140226

QC Batch: 42632 | Date Analyzed: 2007-11-01 | Analyzed By: AR
Prep Batch: 36790 | QC Preparation: 2007-11-01 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride [1]	5490	mg/Kg	50	5000	1320.93	83	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 [2]	5540	mg/Kg	50	5000	1320.93	84	85 - 115	1	20

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

[1] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[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: 140236

QC Batch: 42672 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36819 | QC Preparation: 2007-11-02 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	4880	mg/Kg	50	5000	<25.0	98	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	4930	mg/Kg	50	5000	<25.0	99	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 140246

QC Batch: 42673 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36820 | QC Preparation: 2007-11-02 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12400	mg/Kg	50	5000	7777.24	92	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12400	mg/Kg	50	5000	7777.24	92	85 - 115	0	20

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

Matrix Spike (MS-1) Spiked Sample: 140530

QC Batch: 42674 | Date Analyzed: 2007-11-02 | Analyzed By: AR
Prep Batch: 36821 | QC Preparation: 2007-11-02 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	8150	mg/Kg	50	5000	3331.78	96	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	8200	mg/Kg	50	5000	3331.78	97	85 - 115	1	20

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

Standard (ICV-1)

QC Batch: 42445 | Date Analyzed: 2007-10-26 | Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	85 - 115	2007-10-26

Standard (CCV-1)

QC Batch: 42445 Date Analyzed: 2007-10-26 Analyzed By: LD

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	2007-10-26

Standard (ICV-1)

QC Batch: 42473 Date Analyzed: 2007-10-26 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0855	86	85 - 115	2007-10-26
Toluene		mg/Kg	0.100	0.0882	88	85 - 115	2007-10-26
Ethylbenzene		mg/Kg	0.100	0.0906	91	85 - 115	2007-10-26
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2007-10-26

Standard (CCV-1)

QC Batch: 42473 Date Analyzed: 2007-10-26 Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0874	87	85 - 115	2007-10-26
Toluene		mg/Kg	0.100	0.0899	90	85 - 115	2007-10-26
Ethylbenzene		mg/Kg	0.100	0.0904	90	85 - 115	2007-10-26
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2007-10-26

Standard (ICV-1)

QC Batch: 42482 Date Analyzed: 2007-10-29 Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	270	108	85 - 115	2007-10-29

Standard (CCV-1)

QC Batch: 42482 Date Analyzed: 2007-10-29 Analyzed By: LD

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	2007-10-29

Standard (ICV-1)

QC Batch: 42485 Date Analyzed: 2007-10-26 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.986	99	85 - 115	2007-10-26

Standard (CCV-1)

QC Batch: 42485 Date Analyzed: 2007-10-26 Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.09	109	85 - 115	2007-10-26

Standard (ICV-1)

QC Batch: 42631 Date Analyzed: 2007-11-01 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.9	97	85 - 115	2007-11-01

Standard (CCV-1)

QC Batch: 42631 Date Analyzed: 2007-11-01 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2007-11-01

Standard (ICV-1)

QC Batch: 42632 Date Analyzed: 2007-11-01 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2007-11-01

Standard (CCV-1)

QC Batch: 42632 Date Analyzed: 2007-11-01 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.7	98	85 - 115	2007-11-01

Standard (ICV-1)

QC Batch: 42672 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.9	99	85 - 115	2007-11-02

Standard (CCV-1)

QC Batch: 42672 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-11-02

Standard (ICV-1)

QC Batch: 42673 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2007-11-02

Standard (CCV-1)

QC Batch: 42673 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-11-02

Standard (ICV-1)

QC Batch: 42674 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.8	97	85 - 115	2007-11-02

Standard (CCV-1)

QC Batch: 42674 Date Analyzed: 2007-11-02 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2007-11-02

Work order: 7102426

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: Celero

SITE MANAGER: Ike Tavarez / Jeff Kindley

PROJECT NO.: 31 33

PROJECT NAME: Rock Queen Unit 33

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	8015 MOD. TX1005 TPH	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)
140213	10/23/07		S		✓	SB-1 (3-5')	1				✓	✓	✓		✓											✓			
214	10/23/07		S		✓	SB-1 (8-10')	1				✓	✓	✓		✓											✓			
215	10/23/07		S		✓	SB-1 (13-15')	1				✓	✓														✓			
216	10/23/07		S		✓	SB-1 (18-20')	1				✓	✓														✓			
217	10/23/07		S		✓	SB-1 (28-30')	1				✓	✓														✓			
218	10/23/07		S		✓	SB-1 (38-40')	1				✓	✓														✓			
219	10/23/07		S		✓	SB-1 (48-50')	1				✓	✓														✓			
220	10/23/07		S		✓	SB-1 (58-60')	1				✓	✓														✓			
221	10/23/07		S		✓	SB-1 (68-70')	1				✓	✓														✓			
222	10/23/07		S		✓	SB-1 (78-80')	1				✓	✓														✓			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 10-24-07 Time: 4:00
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign). Jeff Kindley Jeff Kindley Date: October 23, 2007 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle)

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

RECEIVING LABORATORY: Trau Analysis
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 10.24.07 TIME: 16:00
HIGHLANDER CONTACT PERSON: Ike Tavarez / Jeff Kindley
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2-1° C 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.

Work order: 7102426

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: Celero

SITE MANAGER: Ike Tavarez / Jeff Kindley

PROJECT NO.: 3133

PROJECT NAME: Rock Queen Unit 33

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	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)
140223	10/23/07		S		✓	SB-1 (88-90')	1				✓	✓														✓			
224	10/23/07		S		✓	SB-1 (98-100')	1				✓	✓														✓			
225	10/23/07		S		✓	SB-2 (8-10')	1				✓	✓														✓			
226	10/23/07		S		✓	SB-2 (18-20')	1				✓	✓														✓			
227	10/23/07		S		✓	SB-2 (28-30')	1				✓	✓														✓			
228	10/23/07		S		✓	SB-2 (38-40')	1				✓	✓														✓			
229	10/23/07		S		✓	SB-2 (48-50')	1				✓	✓														✓			
230	10/23/07		S		✓	SB-3 (8-10')	1				✓	✓														✓			
231	10/23/07		S		✓	SB-3 (18-20')	1				✓	✓														✓			
232	10/23/07		S		✓	SB-3 (28-30')	1				✓	✓														✓			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 10-24-07 Time: 4:00
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Jeffrey Kindley Jeffrey Kindley Date: October 23, 2007 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLES SHIPPED BY: (Circle)

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

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 10-24-07 TIME: 16:30
HIGHLANDER CONTACT PERSON: Ike Tavarez / Jeff Kindley
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2.1° C 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.

Work order: 7102426

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: Celero

SITE MANAGER: Ike Tavarez / Zeff Kindley

PROJECT NO.: 3133

PROJECT NAME: Rock Queen Unit 33

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
140233	10/23/07		S		✓	SB-3 (38-40')	1				✓	✓
234	10/23/07		S		✓	SB-3 (48-50')	1				✓	✓
235	10/23/07		S		✓	SB-4 (8-10')	1				✓	✓
236	10/23/07		S		✓	SB-4 (18-20')	1				✓	✓
237	10/23/07		S		✓	SB-4 (28-30')	1				✓	✓
238	10/23/07		S		✓	SB-4 (38-40')	1				✓	✓
239	10/23/07		S		✓	SB-4 (48-50')	1				✓	✓
240	10/23/07		S		✓	SB-5 (8-10')	1				✓	✓
241	10/23/07		S		✓	SB-5 (18-20')	1				✓	✓
242	10/23/07		S		✓	SB-5 (28-30')	1				✓	✓

ANALYSIS REQUEST (Circle or Specify Method No.)

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, Chlorides | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos)

RELINQUISHED BY: (Signature)	Date: 10-24-07 Time: 4:00	RECEIVED BY: (Signature)	Date: Time:	SAMPLED BY: (Print & Sign) Jeffrey Kindley Jeffy Kindley	Date: October 23, 2007 Time:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:	SAMPLE SHIPPED BY: (Circle)	
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:	FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:	
RECEIVING LABORATORY: Trace Analysis		RECEIVED BY: (Signature)		HIGHLANDER CONTACT PERSON: Ike Tavarez / Zeff Kindley	Results by:
ADDRESS: CITY: Midland STATE: Tx ZIP: CONTACT: PHONE:		DATE: 10-24-07	TIME: 16:00		RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2.1° C 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.

work order: 7102426

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: Celero

SITE MANAGER: Ike Tavarez / Jeff Kindley

PROJECT NO.: 3133

PROJECT NAME: Rod

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. 608/808	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
140243	10/23/07		S		✓	SB-5 (38-40')	1				✓	✓														✓			
244	10/23/07		S		✓	SB-5 (48-50')	1				✓	✓														✓			
245	10/23/07		S		✓	SB-6 (8-10')	1				✓	✓														✓			
246	10/23/07		S		✓	SB-6 (18-20')	1				✓	✓														✓			
247	10/23/07		S		✓	SB-6 (28-30')	1				✓	✓														✓			
248	10/23/07		S		✓	SB-6 (38-40')	1				✓	✓														✓			
249	10/23/07		S		✓	SB-6 (48-50')	1				✓	✓														✓			

RELINQUISHED BY: (Signature) Date: 10-24-07 Time: 4:00
RECEIVED BY: (Signature) Date: Time:

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

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

SAMPLED BY: (Print & Sign) Jeffrey Kindley Jeffrey Kindley Date: October 23, 2007 Time:

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

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Midland STATE: Tx ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 10-24-07 TIME: 16:00

HIGHLANDER CONTACT PERSON: Ike Tavarez / Jeff Kindley

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 2.1°C 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.

APPENDIX B
PERMEABILITY/SIEVE ANALYSIS

Hines, Joleen

From: Hines, Joleen
Sent: Monday, September 26, 2005 3:46 PM
To: 'John P Pellicer'
Subject: Cover Bucket Density & Clay K-Sat

John,

I have attached the results for the density of the cover material 'as-is' in the 5-gal bucket, and the saturated hydraulic conductivity for the clay (remolded at 90%). Please let me know how to proceed.

Thank you,

Joleen

Joleen Hines
Daniel B. Stephens & Associates Laboratory
5640 Osuna Rd., NE
Albuquerque, NM 87109

505.889.7752
505.889.0258(fax)
jhines@dbstephens.com
www.dbstephens.com

9/26/2005

Daniel B. Stephens & Associates, Inc.

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: Gandy Marley
Job Number: LB05.0208.00
Sample Number: Cover (Bucket)
Ring Number: N/A
Depth: N/A
Test Date: 23-Sep-05

Field weight of sample (g):* 21536.00
Tare weight, ring (g): 0.00
Tare weight, cap/plate/epoxy (g): 0.00

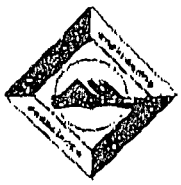
Dry weight of sample (g): 20511.00
Sample volume (cm³): 14884.53
Assumed particle density: 2.65

Initial Volumetric Moisture Content (% vol): 6.9
Initial Gravimetric Moisture Content (% g/g): 5.0
Dry bulk density (g/cm³): 1.38
Wet bulk density (g/cm³): 1.45
Calculated Porosity (% vol): 48.0
Percent Saturation: 14.3

Comments:

* Weight including tares
NA = Not analyzed

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: J. Hines



Daniel B. Stephens & Associates, Inc.

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Method of Analysis	
		Constant Head Flexible Wall	Falling Head Flexible Wall
Clay	1.5E-08		X

Daniel B. Stephens & Associates, Inc.

SAMPLE RECEIPT FORM

CLIENT: Gandy Marley, Inc. DATE RECEIVED: 9/16/05

PROJECT #: _____

DBS&A
PROJECT #: _____

1) Are the custody seals on the cooler intact?	NA
2) Are the custody seals on the sample containers intact?	Yes
3) Are there Chain of Custody(COC), or other directive shipping papers?	Yes
4) Is the COC complete?	See Notes
5) Is the COC in agreement with the samples received?	See Notes
6) Did all the samples arrive intact?	Yes
7) Comments	

Three samples arrived, each in full 5-gallon buckets, in good condition. The clay sample is being prepared today and testing will begin soon. Will await further instuction on the Cover and Caliche samples. Also awaiting in-situ clay core sample.

If you have any questions or concerns please contact Joleen Hines at (505) 889-7752.

NOTE: Samples will be held for a period of 30 days after the completion of testing. After 30 days samples will be disposed of locally unless DBS&A receives other instructions.

Signature: _____

5640 OSUNA RD NE, ALBUQUERQUE, NM 87109
(505) 889-7752 FAX (505) 889-0258

APPENDIX C
INITIAL/FINAL C-141 & C-144

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

(AMENDED)

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Celero Energy II, LP	Contact: Bruce Woodard
Address: 400 W. Illinois, Suite 1601, Midland, TX 79701	Telephone No. 432-686-1883
Facility Name: Rock Queen Unit Tract #33 Tank Battery	Facility Type: Pit at Tank Battery

Surface Owner Private	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
F	23	13S	31E					Chaves

Latitude 33.17611° **Longitude** 103.79611°

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release	Date and Hour of Occurrence Unknown	Date and Hour of Discovery N/A
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson, NMOCD	
By Whom? Bruce Woodard	Date and Hour	
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.*
This is an historic pit location. Celero acquired from Palisades and is in the process of closing.

Describe Area Affected and Cleanup Action Taken.*
Pit has been dewatered and visually impacted soil removed as per Investigation and Characterization Plan. Soil borings have been placed in and around pit.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Bruce Woodard	Approved by District Supervisor:	
Title: Engineer	Approval Date:	Expiration Date:
E-mail Address: bwoodard@celeroenergy.com	Conditions of Approval:	Attached ☐
Date: Phone: (432) 686-1883		

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

(AMENDED)

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Celero Energy II, LP	Contact: Bruce Woodard
Address: 400 W. Illinois, Suite 1601, Midland, TX 79701	Telephone No. 432-686-1883
Facility Name: Rock Queen Unit Tract #33 Tank Battery	Facility Type: Pit at Tank Battery

Surface Owner Private	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
F	23	13S	31E					Chaves

Latitude 33.17611° **Longitude** 103.79611°

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release	Date and Hour of Occurrence Unknown	Date and Hour of Discovery N/A
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson, NMOCD	
By Whom? Bruce Woodard	Date and Hour	
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.*
This is an historic pit location. Celero acquired from Palisades and is in the process of closing.

Describe Area Affected and Cleanup Action Taken.*
Pit has been dewatered and visually impacted soil removed as per Investigation and Characterization Plan. Soil borings have been placed in and around pit. A one foot thick clay liner was installed at four feet bgs and the site brought up to surface grade.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Bruce Woodard	Approved by District Supervisor:	
Title: Engineer	Approval Date:	Expiration Date:
E-mail Address: bwoodard@celeroenergy.com	Conditions of Approval:	Attached ☐
Date: Phone: (432) 686-1883		

Attach Additional Sheets If Necessary

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Energy Minerals and Natural Resources

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Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator Celero Energy II, LP Telephone: (432) 686-1883 e-mail address: bwoodard@celeroenergy.com
Address: 400 West Illinois, Suite 1601, Midland, Texas 79701
Facility or well name: Rock Queen Unit Tract 33 Tank Battery API #: _____ U/L or Qtr/Qtr F Sec 23 T-13-S R-31-E
County: Chaves Latitude 33.17611 N Longitude 103.79611 W NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☐ Production ☐ Disposal ☐ Workover ☐ Emergency ☒ Lined ☒ Unlined ☐ Liner type: None Thickness **Unknown** mil Clay ☐ Pit Volume 2,500 bbl	Volume: ____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	0

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: This registration is for information purposes only. This pit was constructed in the 1960's and was never inventoried or registered.
This pit is out of service and a work plan for closure is being prepared.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐. See above ☒**

Date: **6-15-2007**
Printed Name/Title **Bruce Woodard, Engineer** Signature _____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title _____ Signature _____ Date: _____

District I
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Celero Energy II. LP Telephone: (432) 686-1883 e-mail address: bwoodward@celeroenergy.com
Address: 400 West Illinios, Suite 1601, Midland, Texas 79701
Facility or well name: Rock Queen Unit Tract 33 Tank Battery API #: U/L or Qtr/Qtr F Sec 23 T 13-S R 31-E
County: Chaves Latitude 33.17611 N Longitude 103.79611 NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☐ Production ☐ Disposal ☐ Workover ☐ Emergency ☒ Lined ☐ Unlined ☒ Liner type: None Thickness Unknown Clay ☐ Pit Volume 2,500 bbl	Volume: bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) approximately 110 feet	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) **0**
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) **0**
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) **0**
	Ranking Score (Total Points)	**0**

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☒ If offsite, name of facility Gandy-Marley Landfill, Lovington, NM. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Pit was constructed in the 1960s and was never inventoried or registered. This pit is out of service and a work plan has been completed and approved for closure. In September 2007 fluids were removed from site and placed into an existing SWD system. The site was excavated and sludge, tank bottoms and the liner were Disposed of at Gandy-Marley, Inc. landfill in Lovington, New Mexico. Upon completion of the removal of the fluids the underlying soils were visually inspected for obvious signs of impact. Approximately 460 cubic yards of soil were transported to Gandy-Marley for disposal. On October 23, 2007, one soil boring was placed within the pit and six along the perimeter to delineate the chlorides. See attached map/table showing depths and concentrations of chlorides remaining within the pit. A one foot clay liner measuring approximately 110 feet by 135 feet was placed in the pit to a depth of 4.0 feet below the ground level to prevent further vertical migration of the chlorides. The site was then backfilled with clean soil and brought up to surface grade.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date:
Printed Name/Title Bruce Woodward, Engineer Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Signature Date: