

1RP-1661

**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
Santa Fe, New Mexico 87505
Hobbs, New Mexico 88240

RE: Assessment and Closure Report for the Pit Located at the Drickey Queen Unit Saltwater Plant #1, Unit Letter I, Section 3, Township 14 South, Range 31 East, Chaves County, New Mexico, Operated by Celero Energy II, LP (NMOCD 1RP#1661)

Dear Mr. von Gonten:

Tetra Tech was contacted by Celero Energy (Celero) to assist in the closure of a pit at the Drickey Queen Unit Saltwater Plant #1, located in Unit Letter I, Section 3, Township 14 South, Range 31 East, Chaves County, New Mexico (Site). The pit coordinates are N 33.13043° W 103.80167°. Both the State of New Mexico C-141 and C-144 (Initial and Final) are included in Appendix D. The Site is shown on Figures 1 and 2.

Background

On October 11, 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 13, 2007, Highlander submitted an additional report entitled Workplan for Capping and Site Closure for the Pit at this site.

Saltwater Plant #1 pit was dewatered and the residual sludge, tank bottom materials, and liner were 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 1,980 cubic yards of soil were excavated and transported to

Tetra Tech

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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 3, Township 14 South, Range 31 East. Monitor wells installed near this site had depths of groundwater of greater than 100 feet below ground surface (bgs).

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 25, 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 118 feet by 126 feet. Two soil borings (SB-1 and SB-2) were installed in the center of the pit. The remaining boreholes (SB-3 through SB-8) were installed outside the edges of the pit. The boring locations and the approximate edge of the pit are shown on Figure 3.

The borings were installed using an air-rotary type drilling rig. Soil samples from soil borings SB-1 and SB-2 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 of 50 feet 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 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 declined in SB-1 to less than 100 mg/kg in the 28 foot to 30 foot sample, and was less than 100 mg/kg throughout SB-2. Horizontal chloride impact was defined inside the perimeter boreholes, with the exception of SB-8, located on the east fence line adjacent to Highway 172. The shallow samples from SB-7 were less than 100 mg/kg from 38 feet to 40 feet, where chloride levels increased, indicating some horizontal impact at depth.

Soil Capping

During the week of January 8, 2008, 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 20 feet east, 25 feet west, and 50 feet south of the original dimensions based upon the results of the borehole samples. 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 original 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.

Monitor Well Installation

On October 31, 2007, Tetra Tech was onsite to oversee the installation of temporary monitor well TMW-1, which was installed at the southeast corner of the proposed soil capping. The monitor well was drilled to a depth of 160 feet and installed with 80 feet of 0.02" slotted screen at the bottom and 85 feet of schedule 40 blank PVC at the top of the boring. The monitor well was dry. A copy of the boring log and monitor well installation diagram are included in Appendix C.

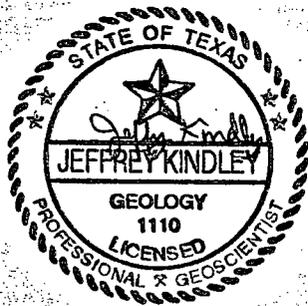


TETRA TECH

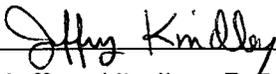
Conclusions

Between September 2007 and January 2008, the pit area was excavated to dimensions of 175 feet by 110 feet. Approximately 1,980 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 impede the remaining chlorides at the site from migrating to the underlying 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 Site 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.



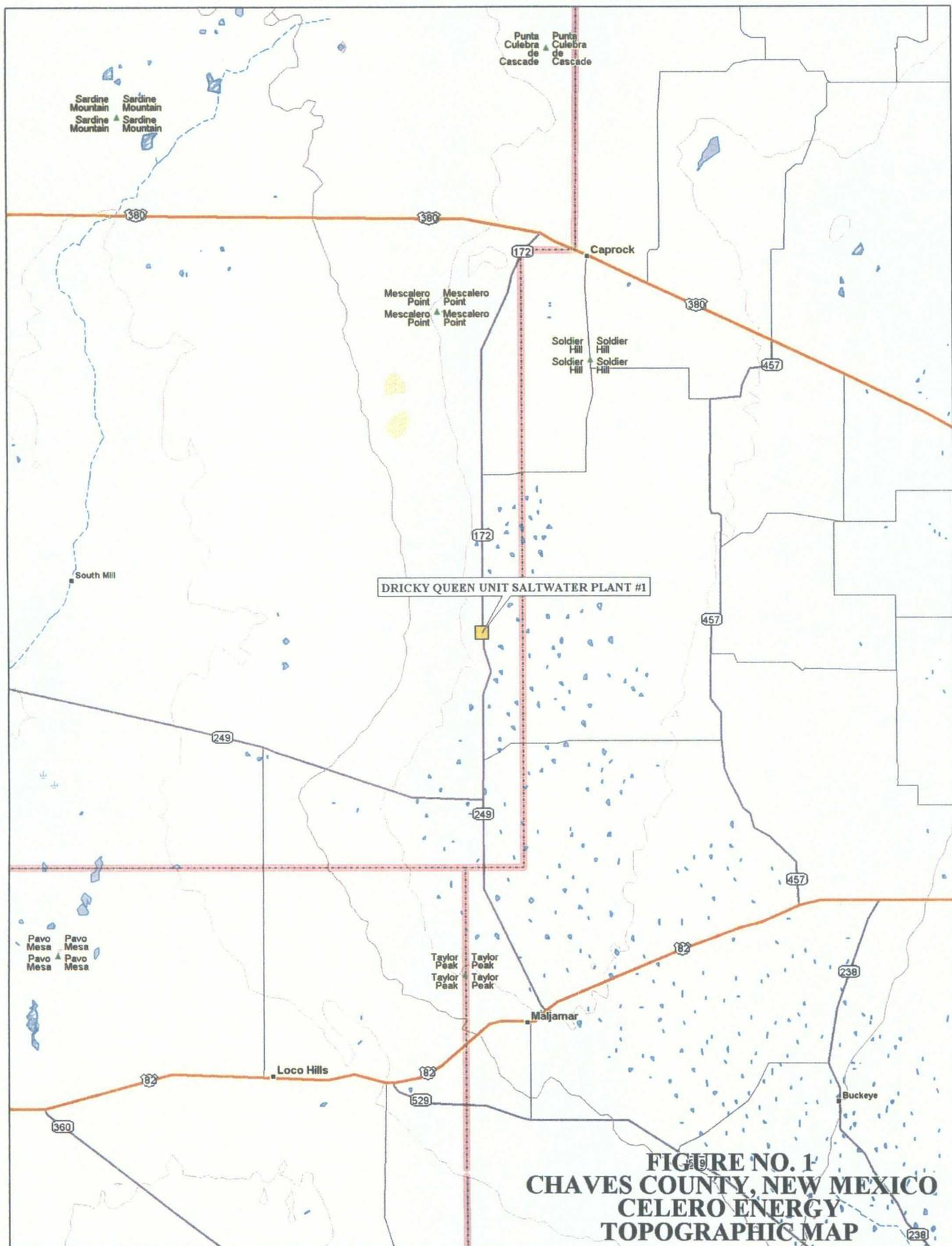
Respectfully submitted,
Tetra Tech


Jeffrey Kindley, P.G.

Senior Environmental Geologist

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

FIGURES



DRICKY QUEEN UNIT SALTWATER PLANT #1

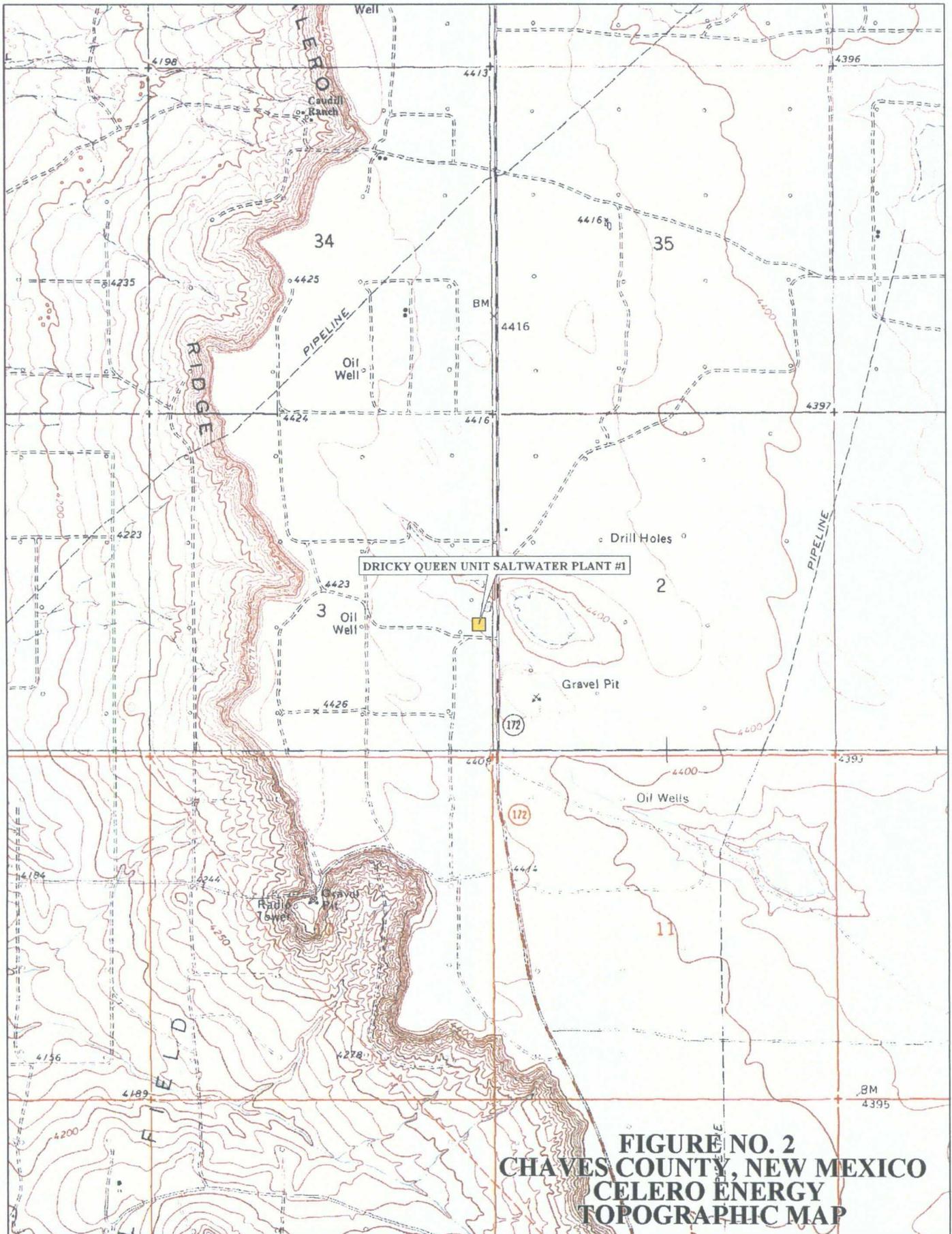
**FIGURE NO. 1
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY
TOPOGRAPHIC MAP**



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Scale 1 : 400,000
1" = 6.31 mi

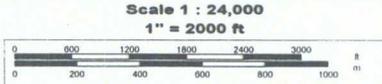




**FIGURE NO. 2
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY
TOPOGRAPHIC MAP**



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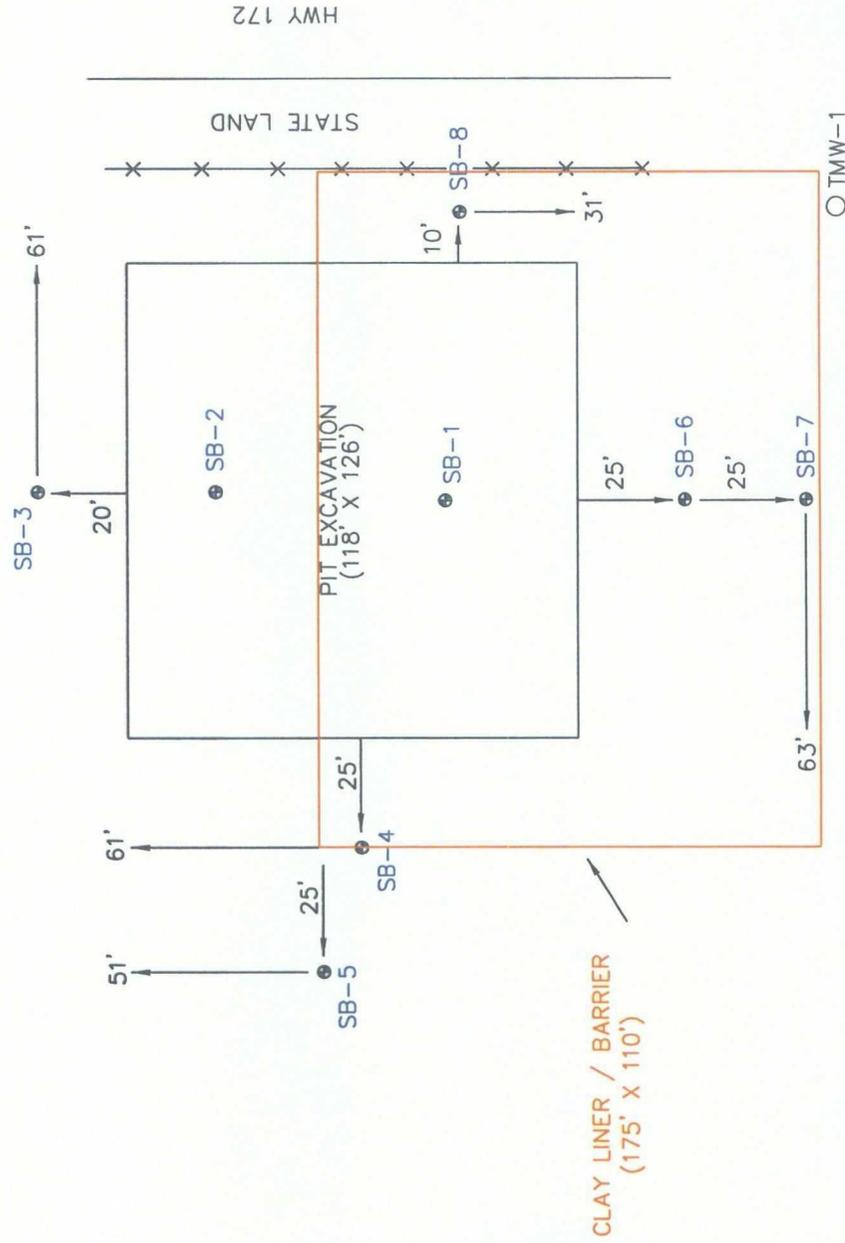


FIGURE NO. 3

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
DRICKEY QUEEN UNIT TRACT #1
SOIL BORING / CLAY LINER LOCATIONS

TETRA TECH
MIDLAND, TEXAS

DATE: 11/5/07
DRAWN BY: RC
FILE: 01000A31301
P. 0 OF 11

NOT TO SCALE

TABLES

Table 1
 Celero Energy
 Drickey Queen Unit Saltwater Plant #1
 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					
SB-6	10/25/2007	(18-20')							<100
SB-6	10/25/2007	(28-30')							<100
SB-6	10/25/2007	(38-40')							967
SB-6	10/25/2007	(48-50')							2,410
SB-7	10/25/2007	(8-10')							<100
SB-7	10/25/2007	(18-20')							<100
SB-7	10/25/2007	(28-30')							<100
SB-7	10/25/2007	(38-40')							2,130
SB-7	10/25/2007	(48-50')							3,520
SB-8	10/25/2007	(8-10')							2,720
SB-8	10/25/2007	(18-20')							3,640
SB-8	10/25/2007	(28-30')							5,450
SB-8	10/25/2007	(38-40')							3,800
SB-8	10/25/2007	(48-50')							5,970

(-) Not Analyzed

APPENDIX A
LABORATORY ANALYTICAL



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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 9, 2007

Work Order: 7102940



Project Name: Drickey Queen Unit #1
Project Number: 3135

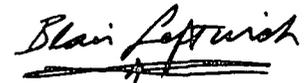
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
140967	SB-1 (3-5')	soil	2007-10-25	00:00	2007-10-29
140968	SB-1 (8-10')	soil	2007-10-25	00:00	2007-10-29
140969	SB-1 (13-15')	soil	2007-10-25	00:00	2007-10-29
140970	SB-1 (18-20')	soil	2007-10-25	00:00	2007-10-29
140971	SB-1 (28-30')	soil	2007-10-25	00:00	2007-10-29
140972	SB-1 (38-40')	soil	2007-10-25	00:00	2007-10-29
140973	SB-1 (48-50')	soil	2007-10-25	00:00	2007-10-29
140974	SB-1 (58-60')	soil	2007-10-25	00:00	2007-10-29
140975	SB-1 (68-70')	soil	2007-10-25	00:00	2007-10-29
140976	SB-2 (3-5')	soil	2007-10-25	00:00	2007-10-29
140977	SB-2 (8-10')	soil	2007-10-25	00:00	2007-10-29
140978	SB-2 (13-15')	soil	2007-10-25	00:00	2007-10-29
140979	SB-2 (18-20')	soil	2007-10-25	00:00	2007-10-29
140980	SB-2 (28-30')	soil	2007-10-25	00:00	2007-10-29
140981	SB-2 (38-40')	soil	2007-10-25	00:00	2007-10-29
140982	SB-2 (48-50')	soil	2007-10-25	00:00	2007-10-29
140983	SB-2 (58-60')	soil	2007-10-25	00:00	2007-10-29
140984	SB-2 (68-70')	soil	2007-10-25	00:00	2007-10-29
140985	SB-3 (8-10')	soil	2007-10-25	00:00	2007-10-29
140986	SB-3 (18-20')	soil	2007-10-25	00:00	2007-10-29
140987	SB-3 (28-30')	soil	2007-10-25	00:00	2007-10-29
140988	SB-3 (38-40')	soil	2007-10-25	00:00	2007-10-29
140989	SB-3 (48-50')	soil	2007-10-25	00:00	2007-10-29
140990	SB-4 (8-10')	soil	2007-10-25	00:00	2007-10-29

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
140991	SB-4 (18-20')	soil	2007-10-25	00:00	2007-10-29
140992	SB-4 (28-30')	soil	2007-10-25	00:00	2007-10-29
140993	SB-4 (38-40')	soil	2007-10-25	00:00	2007-10-29
140994	SB-4 (48-50')	soil	2007-10-25	00:00	2007-10-29
140995	SB-5 (8-10')	soil	2007-10-25	00:00	2007-10-29
140996	SB-5 (18-20')	soil	2007-10-25	00:00	2007-10-29
140997	SB-5 (28-30')	soil	2007-10-25	00:00	2007-10-29
140998	SB-5 (38-40')	soil	2007-10-25	00:00	2007-10-29
140999	SB-5 (48-50')	soil	2007-10-25	00:00	2007-10-29
141000	SB-6 (8-10')	soil	2007-10-26	00:00	2007-10-29
141001	SB-6 (18-20')	soil	2007-10-26	00:00	2007-10-29
141002	SB-6 (28-30')	soil	2007-10-26	00:00	2007-10-29
141003	SB-6 (38-40')	soil	2007-10-26	00:00	2007-10-29
141004	SB-6 (48-50')	soil	2007-10-26	00:00	2007-10-29
141005	SB-7 (8-10')	soil	2007-10-26	00:00	2007-10-29
141006	SB-7 (18-20')	soil	2007-10-26	00:00	2007-10-29
141007	SB-7 (28-30')	soil	2007-10-26	00:00	2007-10-29
141008	SB-7 (38-40')	soil	2007-10-26	00:00	2007-10-29
141009	SB-7 (48-50')	soil	2007-10-26	00:00	2007-10-29
141010	SB-8 (8-10')	soil	2007-10-26	00:00	2007-10-29
141011	SB-8 (18-20')	soil	2007-10-26	00:00	2007-10-29
141012	SB-8 (28-30')	soil	2007-10-26	00:00	2007-10-29
141013	SB-8 (38-40')	soil	2007-10-26	00:00	2007-10-29
141014	SB-8 (48-50')	soil	2007-10-26	00:00	2007-10-29

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 30 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.

Analytical Report

Sample: 140967 - SB-1 (3-5')

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 42856	Date Analyzed: 2007-11-07	Analyzed By: DC
Prep Batch: 36977	Sample Preparation: 2007-11-07	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.100	mg/Kg	10	0.0100
Toluene		<0.100	mg/Kg	10	0.0100
Ethylbenzene		<0.100	mg/Kg	10	0.0100
Xylene		0.378	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		11.6	mg/Kg	10	10.0	116	39.6 - 116
4-Bromofluorobenzene (4-BFB)	1	15.5	mg/Kg	10	10.0	155	47.3 - 144.2

Sample: 140967 - SB-1 (3-5')

Analysis: Chloride (Titration)	Analytical Method: SM 4500-Cl B	Prep Method: N/A
QC Batch: 42816	Date Analyzed: 2007-11-06	Analyzed By: AR
Prep Batch: 36942	Sample Preparation:	Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3420	mg/Kg	50	2.00

Sample: 140967 - SB-1 (3-5')

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 42638	Date Analyzed: 2007-11-01	Analyzed By: LD
Prep Batch: 36760	Sample Preparation: 2007-11-01	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1570	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	400	mg/Kg	1	150	267	17.3 - 169.6

Sample: 140967 - SB-1 (3-5')

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 42865	Date Analyzed: 2007-11-07	Analyzed By: DC
Prep Batch: 36977	Sample Preparation: 2007-11-07	Prepared By: DC

¹High surrogate recovery due to peak interference.

²High surrogate recovery due to peak interference.

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)		8.01	mg/Kg	10	10.0	80	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	³	17.6	mg/Kg	10	10.0	176	51.2 - 107.4

Sample: 140968 - SB-1 (8-10')

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 42856	Date Analyzed: 2007-11-07	Analyzed By: DC
Prep Batch: 36977	Sample Preparation: 2007-11-07	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		<0.0200	mg/Kg	2	0.0100
Ethylbenzene		<0.0200	mg/Kg	2	0.0100
Xylene		<0.0200	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.22	mg/Kg	2	2.00	111	39.6 - 116
4-Bromofluorobenzene (4-BFB)		2.88	mg/Kg	2	2.00	144	47.3 - 144.2

Sample: 140968 - SB-1 (8-10')

Analysis: Chloride (Titration)	Analytical Method: SM 4500-Cl B	Prep Method: N/A
QC Batch: 42816	Date Analyzed: 2007-11-06	Analyzed By: AR
Prep Batch: 36942	Sample Preparation:	Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2670	mg/Kg	50	2.00

Sample: 140968 - SB-1 (8-10')

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 42638	Date Analyzed: 2007-11-01	Analyzed By: LD
Prep Batch: 36760	Sample Preparation: 2007-11-01	Prepared By: LD

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

³High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	17.3 - 169.6

Sample: 140968 - SB-1 (8-10')

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 42865 Date Analyzed: 2007-11-07 Analyzed By: DC
 Prep Batch: 36977 Sample Preparation: 2007-11-07 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		12.0	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.60	mg/Kg	2	2.00	80	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	4	2.64	mg/Kg	2	2.00	132	51.2 - 107.4

Sample: 140969 - SB-1 (13-15')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		778	mg/Kg	50	2.00

Sample: 140970 - SB-1 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		259	mg/Kg	50	2.00

Sample: 140971 - SB-1 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 Sample Preparation: Prepared By: AR

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

⁴High surrogate recovery due to peak interference.

Sample: 140972 - SB-1 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 Sample Preparation: Prepared By: AR

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

Sample: 140973 - SB-1 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 Sample Preparation: Prepared By: AR

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

Sample: 140974 - SB-1 (58-60')

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 42856 Date Analyzed: 2007-11-07 Analyzed By: DC
 Prep Batch: 36977 Sample Preparation: 2007-11-07 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)		1.16	mg/Kg	1	1.00	116	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.42	mg/Kg	1	1.00	142	47.3 - 144.2

Sample: 140974 - SB-1 (58-60')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140974 - SB-1 (58-60')

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 42638	Date Analyzed: 2007-11-01	Analyzed By: LD
Prep Batch: 36760	Sample Preparation: 2007-11-01	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		164	mg/Kg	1	150	109	17.3 - 169.6

Sample: 140974 - SB-1 (58-60')

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 42865	Date Analyzed: 2007-11-07	Analyzed By: DC
Prep Batch: 36977	Sample Preparation: 2007-11-07	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	4.46	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	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	5	1.33	mg/Kg	1	1.00	133	51.2 - 107.4

Sample: 140975 - SB-1 (68-70')

Analysis: Chloride (Titration)	Analytical Method: SM 4500-Cl B	Prep Method: N/A
QC Batch: 42817	Date Analyzed: 2007-11-07	Analyzed By: AR
Prep Batch: 36943	Sample Preparation:	Prepared By: AR

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

Sample: 140976 - SB-2 (3-5')

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 42856	Date Analyzed: 2007-11-07	Analyzed By: DC
Prep Batch: 36977	Sample Preparation: 2007-11-07	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

⁵High surrogate recovery due to peak interference.

continued ...

sample 140976 continued ...

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.16	mg/Kg	1	1.00	116	39.6 - 116
4-Bromofluorobenzene (4-BFB)	⁶	1.45	mg/Kg	1	1.00	145	47.3 - 144.2

Sample: 140976 - SB-2 (3-5')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140976 - SB-2 (3-5')

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 42638 Date Analyzed: 2007-11-01 Analyzed By: LD
 Prep Batch: 36760 Sample Preparation: 2007-11-01 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		156	mg/Kg	1	150	104	17.3 - 169.6

Sample: 140976 - SB-2 (3-5')

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 42865 Date Analyzed: 2007-11-07 Analyzed By: DC
 Prep Batch: 36977 Sample Preparation: 2007-11-07 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	^B	4.24	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.802	mg/Kg	1	1.00	80	50.2 - 89.3

continued ...

⁶High surrogate recovery. Sample non-detect, result bias high.

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)	⁷	1.35	mg/Kg	1	1.00	135	51.2 - 107.4

Sample: 140977 - SB-2 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140978 - SB-2 (13-15')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140979 - SB-2 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140980 - SB-2 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

⁷High surrogate recovery due to peak interference.

Sample: 140981 - SB-2 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140982 - SB-2 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140983 - SB-2 (58-60')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 Sample Preparation: Prepared By: AR

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

Sample: 140984 - SB-2 (68-70')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

Sample: 140985 - SB-3 (8-10')

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 42856 Date Analyzed: 2007-11-07 Analyzed By: DC
Prep Batch: 36977 Sample Preparation: 2007-11-07 Prepared By: DC

continued ...

sample 140985 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.115	mg/Kg	1	0.0100
Xylene		0.146	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	39.6 - 116
4-Bromofluorobenzene (4-BFB)	⁸	1.70	mg/Kg	1	1.00	170	47.3 - 144.2

Sample: 140985 - SB-3 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

Sample: 140985 - SB-3 (8-10')

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 42638 Date Analyzed: 2007-11-01 Analyzed By: LD
 Prep Batch: 36760 Sample Preparation: 2007-11-01 Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		654	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁹	261	mg/Kg	1	150	174	17.3 - 169.6

Sample: 140985 - SB-3 (8-10')

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 42865 Date Analyzed: 2007-11-07 Analyzed By: DC
 Prep Batch: 36977 Sample Preparation: 2007-11-07 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		32.2	mg/Kg	1	1.00

⁸High surrogate recovery due to peak interference.

⁹High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.776	mg/Kg	1	1.00	78	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	¹⁰	1.92	mg/Kg	1	1.00	192	51.2 - 107.4

Sample: 140986 - SB-3 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-C1 B Prep Method: N/A
 QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

Sample: 140987 - SB-3 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-C1 B Prep Method: N/A
 QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

Sample: 140988 - SB-3 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-C1 B Prep Method: N/A
 QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

Sample: 140989 - SB-3 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-C1 B Prep Method: N/A
 QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36944 Sample Preparation: Prepared By: AR

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

¹⁰High surrogate recovery due to peak interference.

Sample: 140990 - SB-4 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		449	mg/Kg	50	2.00

Sample: 140991 - SB-4 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3710	mg/Kg	50	2.00

Sample: 140992 - SB-4 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2050	mg/Kg	50	2.00

Sample: 140993 - SB-4 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2110	mg/Kg	50	2.00

Sample: 140994 - SB-4 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

continued ...

sample 140994 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1560	mg/Kg	50	2.00

Sample: 140995 - SB-5 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		120	mg/Kg	50	2.00

Sample: 140996 - SB-5 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		104	mg/Kg	50	2.00

Sample: 140997 - SB-5 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 140998 - SB-5 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 140999 - SB-5 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 141000 - SB-6 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 141001 - SB-6 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 141002 - SB-6 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

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

Sample: 141003 - SB-6 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 Sample Preparation: Prepared By: AR

continued . . .

sample 141003 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		967	mg/Kg	50	2.00

Sample: 141004 - SB-6 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2410	mg/Kg	50	2.00

Sample: 141005 - SB-7 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

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

Sample: 141006 - SB-7 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

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

Sample: 141007 - SB-7 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

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

Sample: 141008 - SB-7 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2130	mg/Kg	50	2.00

Sample: 141009 - SB-7 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3520	mg/Kg	50	2.00

Sample: 141010 - SB-8 (8-10')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2720	mg/Kg	50	2.00

Sample: 141011 - SB-8 (18-20')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3640	mg/Kg	50	2.00

Sample: 141012 - SB-8 (28-30')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 Sample Preparation: Prepared By: AR

continued ...

sample 141012 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5450	mg/Kg	50	2.00

Sample: 141013 - SB-8 (38-40')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36946 Sample Preparation: Prepared By: AR

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

Sample: 141014 - SB-8 (48-50')

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 42821 Date Analyzed: 2007-11-07 Analyzed By: AR
 Prep Batch: 36947 Sample Preparation: Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5970	mg/Kg	50	2.00

Method Blank (1) QC Batch: 42638

QC Batch: 42638 Date Analyzed: 2007-11-01 Analyzed By: LD
 Prep Batch: 36760 QC Preparation: 2007-11-01 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		22.4	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		62.1	mg/Kg	1	150	41	32.9 - 156.1

Method Blank (1) QC Batch: 42816

QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
 Prep Batch: 36942 QC Preparation: 2007-11-06 Prepared By: AR

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

Method Blank (1) QC Batch: 42817

QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 QC Preparation: 2007-11-07 Prepared By: AR

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

Method Blank (1) QC Batch: 42818

QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 QC Preparation: 2007-11-07 Prepared By: AR

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

Method Blank (1) QC Batch: 42819

QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36945 QC Preparation: 2007-11-07 Prepared By: AR

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

Method Blank (1) QC Batch: 42820

QC Batch: 42820 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36946 QC Preparation: 2007-11-07 Prepared By: AR

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

Method Blank (1) QC Batch: 42821

QC Batch: 42821 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36947 QC Preparation: 2007-11-07 Prepared By: AR

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

Method Blank (1) QC Batch: 42856

QC Batch: 42856 Date Analyzed: 2007-11-07 Analyzed By: DC
Prep Batch: 36977 QC Preparation: 2007-11-07 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)		0.990	mg/Kg	1	1.00	99	58.2 - 121.3
4-Bromofluorobenzene (4-BFB)		0.522	mg/Kg	1	1.00	52	25 - 123.7

Method Blank (1) QC Batch: 42865

QC Batch: 42865 Date Analyzed: 2007-11-07 Analyzed By: DC
Prep Batch: 36977 QC Preparation: 2007-11-07 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.933	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.784	mg/Kg	1	1.00	78	67.8 - 103
4-Bromofluorobenzene (4-BFB)		0.491	mg/Kg	1	1.00	49	24.6 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 42638 Date Analyzed: 2007-11-01 Analyzed By: LD
Prep Batch: 36760 QC Preparation: 2007-11-01 Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	288	mg/Kg	1	250	<13.4	115	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	256	mg/Kg	1	250	<13.4	102	49.1 - 142.3	12	20

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.03	mg/Kg	1	1.00	<0.00110	103	71.2 - 119
Toluene	1.03	mg/Kg	1	1.00	<0.00150	103	76.3 - 116.5
Ethylbenzene	0.979	mg/Kg	1	1.00	<0.00160	98	77.6 - 114
Xylene	2.90	mg/Kg	1	3.00	<0.00410	97	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	1.04	mg/Kg	1	1.00	<0.00110	104	71.2 - 119	1	20
Toluene	1.02	mg/Kg	1	1.00	<0.00150	102	76.3 - 116.5	1	20
Ethylbenzene	0.964	mg/Kg	1	1.00	<0.00160	96	77.6 - 114	2	20
Xylene	2.85	mg/Kg	1	3.00	<0.00410	95	78.8 - 113.9	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.00	mg/Kg	1	1.00	102	100	56.1 - 107.8
4-Bromofluorobenzene (4-BFB)	0.997	0.973	mg/Kg	1	1.00	100	97	56.2 - 118.8

Laboratory Control Spike (LCS-1)

QC Batch: 42865
Prep Batch: 36977

Date Analyzed: 2007-11-07
QC Preparation: 2007-11-07

Analyzed By: DC
Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.76	mg/Kg	1	10.0	<0.739	88	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	9.28	mg/Kg	1	10.0	<0.739	93	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)	0.870	0.885	mg/Kg	1	1.00	87	88	61.1 - 148.1
4-Bromofluorobenzene (4-BFB)	0.693	0.676	mg/Kg	1	1.00	69	68	67.2 - 119.2

Matrix Spike (MS-1) Spiked Sample: 140718

QC Batch: 42638
Prep Batch: 36760

Date Analyzed: 2007-11-01
QC Preparation: 2007-11-01

Analyzed By: LD
Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	256	mg/Kg	1	250	<13.4	102	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	292	mg/Kg	1	250	<13.4	117	30.2 - 201.4	13	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	161	181	mg/Kg	1	150	107	121	10 - 194

Matrix Spike (MS-1) Spiked Sample: 140973

QC Batch: 42816 Date Analyzed: 2007-11-06 Analyzed By: AR
Prep Batch: 36942 QC Preparation: 2007-11-06 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	5030	mg/Kg	50	5000	<25.0	101	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	5090	mg/Kg	50	5000	<25.0	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: 140983

QC Batch: 42817 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36943 QC Preparation: 2007-11-07 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	5010	mg/Kg	50	5000	<25.0	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	5060	mg/Kg	50	5000	<25.0	101	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: 140993

QC Batch: 42818 Date Analyzed: 2007-11-07 Analyzed By: AR
Prep Batch: 36944 QC Preparation: 2007-11-07 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	7040	mg/Kg	50	5000	2109.33	99	85 - 115

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

Matrix Spike (MS-1) Spiked Sample: 140985

QC Batch: 42856
Prep Batch: 36977

Date Analyzed: 2007-11-07
QC Preparation: 2007-11-07

Analyzed By: DC
Prepared By: DC

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	¹¹	1.28	mg/Kg	1	1.00	<0.00110	128	65.7 - 119.1
Toluene		1.35	mg/Kg	1	1.00	<0.00150	135	47.7 - 153.8
Ethylbenzene	¹²	1.50	mg/Kg	1	1.00	0.1152	138	73.5 - 126.3
Xylene	¹³	4.54	mg/Kg	1	3.00	0.146	146	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	¹⁴	0.846	mg/Kg	1	1.00	<0.00110	85	65.7 - 119.1	41	20
Toluene	¹⁵	0.907	mg/Kg	1	1.00	<0.00150	91	47.7 - 153.8	39	20
Ethylbenzene	¹⁶	1.04	mg/Kg	1	1.00	0.1152	92	73.5 - 126.3	36	20
Xylene	¹⁷	3.08	mg/Kg	1	3.00	0.146	98	73.6 - 125.9	38	20

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)		1.02	1.01	mg/Kg	1	1	102	101	51 - 109.6
4-Bromofluorobenzene (4-BFB)	¹⁸ ¹⁹	1.79	1.26	mg/Kg	1	1	179	126	60.3 - 124.3

Standard (CCV-1)

QC Batch: 42638

Date Analyzed: 2007-11-01

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	85 - 115	2007-11-01

Standard (CCV-2)

QC Batch: 42638

Date Analyzed: 2007-11-01

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	110	85 - 115	2007-11-01

¹¹Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
¹²Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
¹³Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
¹⁴RPD out of control limits due to extraction process. Use LCS/LCSD to show that method is in control. •
¹⁵RPD out of control limits due to extraction process. Use LCS/LCSD to show that method is in control. •
¹⁶RPD out of control limits due to extraction process. Use LCS/LCSD to show that method is in control. •
¹⁷RPD out of control limits due to extraction process. Use LCS/LCSD to show that method is in control. •
¹⁸Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
¹⁹High surrogate recovery due to peak interference.

Standard (CCV-1)

QC Batch: 42865

Date Analyzed: 2007-11-07

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	1.01	101	85 - 115	2007-11-07

Work order: 7102940

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: Iké Tavey / Jeffrey Kindley

PROJECT NO.: 3135 PROJECT NAME: Dricky Queen Vint #1

LAB I.D. NUMBER DATE TIME MATRIX COMP. GRAB SAMPLE IDENTIFICATION

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION
977	10/25/07		S	✓	✓	SB-2 (8-10')
978	10/25/07		S	✓	✓	SB-2 (13-15')
979	10/25/07		S	✓	✓	SB-2 (18-20')
980	10/25/07		S	✓	✓	SB-2 (25-30')
981	10/25/07		S	✓	✓	SB-2 (38-40')
982	10/25/07		S	✓	✓	SB-2 (48-50')
983	10/25/07		S	✓	✓	SB-2 (58-60')
984	10/25/07		S	✓	✓	SB-2 (68-70')
985	10/25/07		S	✓	✓	SB-3 (8-10')
986	10/25/07		S	✓	✓	SB-3 (18-20')

RELINQUISHED BY: (Signature) [Signature] DATE: 10-29-07 TIME: 2:15 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: _____

RECEIVING LABORATORY: Texas Analytica ADDRESS: Midland STATE: TX ZIP: _____

CITY: Midland PHONE: _____ DATE: 10/29/07 TIME: 14:15

SAMPLE CONDITION WHEN RECEIVED: 2.1°C intact MATRIX: W-Water (6-Ball) A-Air SL-Sludge SD-Solid O-Other

REMARKS: * Run this only if TPA > 5000ppm, BTEX > 500ppm, Benzene > 100ppm

RELINQUISHED BY: (Signature) [Signature] DATE: _____ TIME: _____ 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: _____

RELINQUISHED BY: (Signature) _____ DATE: _____ TIME: _____ RECEIVED BY: (Signature) _____ DATE: _____ TIME: _____

RELINQUISHED BY: (Signature) _____ DATE: _____ TIME: _____ RECEIVED BY: (Signature) _____ DATE: _____ TIME: _____

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RELINQUISHED BY: (Signature) _____ DATE: _____ TIME: _____ RECEIVED BY: (Signature) _____ DATE: _____ TIME: _____

RELINQUISHED BY: (Signature) _____ DATE: _____ TIME: _____ RECEIVED BY: (Signature) _____ DATE: _____ TIME: _____

ANALYSIS REQUEST (Circle or Specify Method No.)

Method No.	Method Name	Result
RTX 8020/802	RTX 8020/802	✓
MTE 8020/802	MTE 8020/802	✓
TPH 481	TPH 481	✓
TPH 8015 MOD	TPH 8015 MOD	✓
PAH 8270	PAH 8270	✓
RCRA Metals Ag As Ba Cd Cr Pb Hg Se	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	✓
TCIP Volatiles	TCIP Volatiles	✓
TCIP Semi Volatiles	TCIP Semi Volatiles	✓
RCI	RCI	✓
GCMS Vol. B240/B280/B24	GCMS Vol. B240/B280/B24	✓
GCMS Semi Vol. B270/B25	GCMS Semi Vol. B270/B25	✓
PCB# B080/808	PCB# B080/808	✓
Pest. B08/808	Pest. B08/808	✓
BOD, TSS, pH, TDS, Chloride	BOD, TSS, pH, TDS, Chloride	✓
Germs Spec.	Germs Spec.	✓
Alpha Beta (Air)	Alpha Beta (Air)	✓
PLM (Asbestos)	PLM (Asbestos)	✓

SAMPLED BY: (Print & Sign) Jeffrey Kindley DATE: October 25, 2007

RELINQUISHED BY: (Signature) [Signature] DATE: _____ TIME: _____

RELINQUISHED BY: (Signature) _____ DATE: _____ TIME: _____

REMARKS: Iké Tavey / Jeff Kindley

REMARKS: ICR > 5000ppm, BTEX > 500ppm, Benzene > 100ppm

REMARKS: All tests - Midland

REMARKS: _____

RESULTS BY: _____ RUSH CHARGES AUTHORIZED: Yes No

AIRBILL # _____ OTHER: _____

HIGHLANDER CONTACT PERSON: _____

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: 7102940

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: Pike Farvey / Jeff Kindley

PROJECT NO.: 3135 PROJECT NAME: Drakey @ Green Unit #1

LAB ID. NUMBER DATE TIME MATRIX COMP. GRAB SAMPLE IDENTIFICATION

LAB ID. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION
141997	10/25/07		S	✓	✓	SB-5 (28-30')
1998	10/25/07		S	✓	✓	SB-5 (38-40')
999	10/25/07		S	✓	✓	SB-5 (48-50')
141000	10/24/07		S	✓	✓	SB-6 (8-10')
001	10/24/07		S	✓	✓	SB-6 (18-20')
002	10/24/07		S	✓	✓	SB-6 (28-30')
003	10/24/07		S	✓	✓	SB-6 (38-40')
004	10/24/07		S	✓	✓	SB-6 (48-50')
005	10/24/07		S	✓	✓	SB-7 (9-10')
006	10/24/07		S	✓	✓	SB-7 (18-20')

RELINQUISHED BY: (Signature) [Signature] Date: 10/29/07 Time: 2:15 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: _____

RECEIVING LABORATORY: Trace Analy's ADDRESS: _____ CITY: Midland STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____ DATE: 10/20/07 TIME: 14:15

SAMPLE CONDITION WHEN RECEIVED: 2.1' c intact MATRIX: Water Soil A-Air S-Sludge SD-Solid O-Other

REMARKS: All tags - Midland

HIGHLANDER CONTACT PERSON: Pike Farvey / Jeff Kindley

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

RUSH CHARGES AUTHORIZED: Yes No

(Circle or Specify Method No.)

ANALYSIS REQUEST	DATE	TIME
BTEX 8020/808	✓	
MTR 8020/808	✓	
TPH 4181 (8016 MOD) TK1005	✓	
PAH 8270	✓	
RCRA Metals Ag As Ba Cd Cr Pb Hg Se	✓	
TCIP Volatiles	✓	
TCIP Semi Volatiles	✓	
RCI	✓	
GCMS Vol. 8240/8260/824	✓	
GCMS Semi Vol. 8270/825	✓	
PCB's 8080/808	✓	
Perf. 808/808	✓	
BOD, TSS, pH, TDS (Chloride)	✓	
Gamma Spec	✓	
Alpha Beta (Air)	✓	
PLM (Asbestos)	✓	

SAMPLED BY: (Print & Sign) Pike Farvey / Jeff Kindley Date: 10/24/07 Time: _____

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

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

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

RECEIVING LABORATORY: Trace Analy's ADDRESS: _____ CITY: Midland STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____ DATE: 10/20/07 TIME: 14:15

SAMPLE CONDITION WHEN RECEIVED: 2.1' c intact MATRIX: Water Soil A-Air S-Sludge SD-Solid O-Other

REMARKS: All tags - Midland

HIGHLANDER CONTACT PERSON: Pike Farvey / Jeff Kindley

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

RUSH CHARGES AUTHORIZED: Yes No

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: 7102940

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: The Toney / Jeff Kindley

PRESERVATIVE METHOD

NUMBER OF CONTAINERS

DATE

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

DATE

TIME

RECEIVED BY: (Signature)

DATE

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
5840 Osuna Rd., NE
Albuquerque, NM 87108

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: 2.85

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.
PROJECT #: _____

DATE RECEIVED: 9/16/05

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: *Joleen Hines*

5840 OSUNA RD NE, ALBUQUERQUE, NM 87109
(505) 889-7752 FAX (505) 889-0258

Disclaimer:

Interpretations of test results, interim reports of laboratory work, and research and development of special equipment or test procedures will be charged at our regular schedule of professional services fees, which is available upon request. The testing utilized to generate laboratory reports follows methods that are standard for the industry. The results do not constitute a professional or expert opinion by DBS&A, nor can the results affect any professional or expert opinions rendered with respect thereto by DBS&A. All testing undertaken by DBS&A, and any and all reports provided from said testing, constitute mere test results using standardized methods, and cannot be used to disqualify DBS&A from rendering any professional or expert opinion. Because of the nature of the results of our testing, and the limited scope of the Lab's undertaking, you hereby waive any claim of conflict of interest by DBS&A in the event professional or expert opinion is requested of qualified professionals or experts within DBS&A, for or against any party. Other than the express warranty that the testing utilized under this Contract uses standard methods, DBS&A disclaims any and all other warranties of any kind whatsoever.

APPENDIX C
BORING LOGS/MONITOR WELL
CONSTRUCTION DIAGRAM

SAMPLE LOG

Boring/Well: SB-1
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 70
Date Installed: 10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	570.0	Black hydrocarbon stained limestone with strong odor
5-10	102.0	Yellow silty sand with hydrocarbon odor
10-15	7.0	Yellow well sorted sand with slight odor
15-20	5.3	Yellow well sorted sand with slight odor
25-30	16.3	Tan fine grain sand with slight odor
35-40	7.8	Tan fine grain sand
45-50	4.2	Tan fine grain sand
55-60	30.0	Tan fine grain sand with slight odor
65-70	2.7	Tan fine grain sand (wet)

Total Depth is 70 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-2
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 70
Date Installed: 10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	146.0	Gray calcareous sand with hydrocarbon odor and staining
5-10	42.0	Gray calcareous sand with hydrocarbon odor and staining
10-15	8.0	Gray calcareous sand with hydrocarbon odor and staining
15-20	20.0	Tan fine grain sandy clay with slight odor
25-30	5.8	Tan fine grain sand with slight odor
35-40	5.0	Tan fine grain sand
45-50	5.0	Tan fine grain sand
55-60	5.8	Tan fine grain sand
65-70	4.2	Tan fine grain sand

Total Depth is 70 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-3
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	95.0	Tan/black hydrocarbon stained sand
15-20	28.0	Tan fine grain sand
25-30	32.0	Tan fine grain sand
35-40	26.0	Tan fine grain sand
45-50	3.8	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-4
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	4.0	Hard limestone with chert
15-20	2.8	Tan fine grain sand
25-30	2.9	Tan fine grain sand
35-40	3.2	Tan fine grain sand
45-50	2.8	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-5
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	2.1	Tan limestone with chert/sand
15-20	2.2	Buff limestone with chert
25-30	2.2	Tan fine grain calcareous sand
35-40	2.4	Tan fine grain sand
45-50	2.6	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-6
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/26/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	2.6	Tan limestone with chert/sand
15-20	2.4	Buff sandy limestone
25-30	1.9	Tan fine grain calcareous sand
35-40	2.3	Tan fine grain sand
45-50	2.1	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-7
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/26/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	2.1	Buff/tan limestone with chert/sand
15-20	2.1	Buff calcareous sand
25-30	2.3	Tan fine grain sand
35-40	1.9	Tan fine grain sand
45-50	2.0	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

Boring/Well: SB-8
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 50
Date Installed: 10/26/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	2.1	Buff/tan limestone with chert intermixed
15-20	2.2	Buff calcareous sand
25-30	1.9	Tan fine grain sand
35-40	1.9	Tan fine grain sand
45-50	2.2	Tan fine grain sand

Total Depth is 50 feet No Groundwater encountered during drilling

SAMPLE LOG

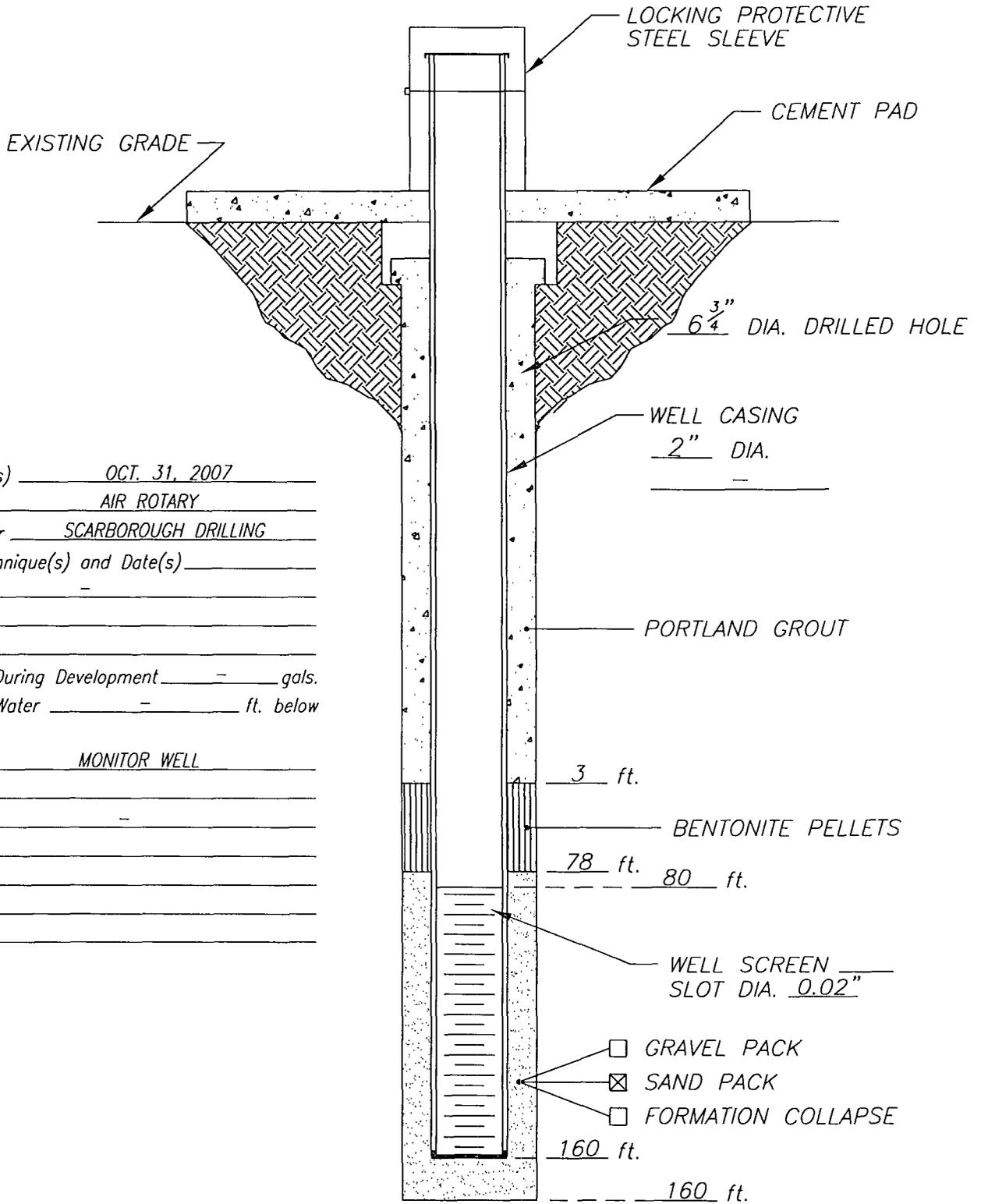
Boring/Well: MW-1
Project Number: 3135
Client: Celero Energy
Site Location: Drickey Queen Unit SWD Plant #1
Location: Chavez County, New Mexico
Total Depth: 160
Date Installed: 10/31/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	NA	Tan/buff limestone with chert and sand intermixed
15-20	NA	Tan/buff limestone with chert and sand intermixed
25-30	NA	Tan fine grain calcareous sand
35-40	NA	Tan fine grain calcareous sand
45-50	NA	Tan fine grain well sorted sand
55-60	NA	Tan fine grain well sorted sand
65-70	NA	Tan fine grain well sorted sand
75-80	NA	Tan fine grain well sorted clayey sand
85-90	NA	Tan fine grain well sorted clayey sand
95-100	NA	Tan fine grain well sorted sand with sandstone intermixed
105-110	NA	Tan fine grain well sorted sand with sandstone intermixed
115-120	NA	Tan fine grain well sorted clayey sand
125-130	NA	Tan fine grain sand
135-140	NA	Tan fine grain sand
145-150	NA	Tan fine grain sand
155-160	NA	Tan fine grain sand

Total Depth is 160 feet Groundwater encountered at approximately 90 feet below ground surface

NA - Not available due to utilizing water to drill well.

WELL CONSTRUCTION LOG



Installation Date(s) OCT. 31, 2007
 Drilling Method AIR ROTARY
 Drilling Contractor SCARBOROUGH DRILLING
 Development Technique(s) and Date(s) _____

Water Removed During Development — gals.
 Static Depth to Water — ft. below
 Ground Level
 Well Purpose MONITOR WELL

Remarks _____

DATE: NOV. 7, 2007

**TETRA
TECH**

CLIENT: *CELERO ENERGY II LLC*
 PROJECT: *DRICKEY QUEEN UNIT #1*
 LOCATION: *CHAVES COUNTY, NM*

WELL NO.

MW-1

APPENDIX D
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: Drickey Queen Unit Salt Water Plant #1	Facility Type: Pit at Facility

Surface Owner State	Mineral Owner	Lease No.
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LOCATION OF RELEASE

Unit Letter	Section\	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	3	14S	31E					Chaves

Latitude 33.13043° Longitude 103.80167°

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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson, NMOCD	
By Whom? Bruce Woodard	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

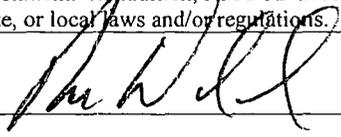
Describe Cause of Problem and Remedial Action Taken.*

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 <input type="checkbox"/>
Date: Phone: (432) 686-1883		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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-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: Celero Energy II, LP	Contact: Bruce Woodard	
Address: 400 W. Illinois, Suite 1601, Midland, TX 79701	Telephone No. 432-686-1883	
Facility Name: Drickey Queen Unit Salt Water Plant #1	Facility Type: Pit at Facility	
Surface Owner State	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
I	3	14S	31E					Chaves

Latitude 33.13043° Longitude 103.80167°

NATURE OF RELEASE

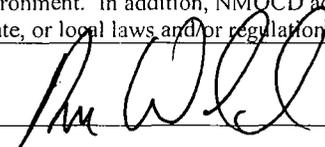
Type of Release Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release	Date and Hour of Occurrence Unknown	Date and Hour of Discovery N/A
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson, NMOCD	
By Whom? Bruce Woodard	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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. Site was excavated to a depth of 4 feet below ground surface and a one foot clay liner installed to dimensions of 175 feet by 110 feet. Site was backfilled with over excavated soils from surrounding the pit and 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 <input type="checkbox"/>
Date: _____ Phone: (432) 686-1883		

Attach Additional Sheets If Necessary

District I
 4625 N. Francis Dr., Hobbs, NM 88240
 District II
 3304 W. Grand Avenue, Artesia, NM 88210
 District III
 1100 Rio Grande Road, Aztec, NM 87410
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy Minerals and Natural Resources

Form C-144
 June 1, 2004

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

For drilling and production facilities, submit to appropriate NMOC 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) 686-4683 e-mail address: bwoodard@celeroenergy.com
 Address: 400 West Illinois, Suite 1601, Midland, Texas 79701
 Facility or well name: Drilkey-Cover 4 Well Subwater Plant # 1 API #: _____ Oil or Gas/Other: 1 Sec: 3 T-14-S R-11-1
 County: Chaves Latitude: 33.25093 N Longitude: 103.80167 W NAD: 1927 1983
 Surface Owner: Federal State Private Indian

Pit Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Wellbore: <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input checked="" type="checkbox"/> * Liner Type: None <input type="checkbox"/> Thickness: Unknown <input type="checkbox"/> mil Clay <input type="checkbox"/> Pit Volume: 25,000 bbl	Below grade tank: Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> 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 (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points) 0
Wellhead protection zone (Less than 200 feet from nearest domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No (0 points) 0
Distance to surface water (horizontal distance to all wetlands, gullies, creeks, rivers, streams, ditches, and potential and captured water courses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 10 1000 feet or more (0 points)
Ranking Score (Total Points)	10

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 you 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 were inventoried, but never registered in 1997.
 This pit is out of service and a work plan for closure is being prepared.
 * Correction - Pit appears to be lined.

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 or will be constructed or closed according to NMOC guidelines , a general permit , or an (attached) alternative OCD-approved plan . See above

Date: 6-15-2007
 Printed Name/Title: Bruce Woodard, Engineer Signature: *Bruce Woodard*
 Your certification and NMOC 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

Form C-144
June 1, 2004

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

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

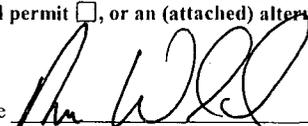
Operator: Celero Energy II, LP Telephone: (432) 686-1883 e-mail address: bwoodward@celeroenergy.com
Address: 400 West Illinios, Suite 1601, Midland, Texas 79701
Facility or well name: Drickey Queen Unit Saltwater Plant #1 API #: _____ U/L or Qtr/Qtr I Sec 3 T 14-S R 31-E
County: Chaves Latitude 33.13043 N Longitude 103.80167 W NAD: 1927 1983
Surface Owner: Federal State Private Indian

Pit	Below-grade tank	
Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Unknown Thickness Unknown Clay <input type="checkbox"/> Pit Volume <u>25,000</u> bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) approximately <u>110</u> 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) 10 (0 points)
Ranking Score (Total Points)		10

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 you 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 inventoried in 1997 but not 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 the sludge and 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 1,980 cubic yards of soil were transported to Gandy-Marley for disposal. On October 25, 2007, two soil borings were 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 175 feet by 110 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: _____