1RP-1661

Assessment and Closure Report

DATE: Oct. 2009



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October 12, 2009

Mr. Glenn von Gonten Senior Hydrologist/Acting Enviromental 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

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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 CI-B. All samples were collected and preserved in



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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 installation diagram are included in Appendix C.



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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 1000 C Streep to **FIGURES** Strike + 100 m 100 m 10 - 10 - 144 5 CT No. of Street, or Stre 314 × 3 See the first







TABLES

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Sample	Date	Excavation		PH (mg/kg		Benzene	Toluene	Ethlybenzene	Xvlene	Chloride
	Sampled	Depth (ft)	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-1	10/25/2007	(3-5')	1570	414	1984	<0.100	<0.100	<0.100	0.378	3,420
SB-1	10/25/2007	(8-10')	<50.0	12.0	12.0	<0.0200	<0.0200	<0.0200	<0.0200	2,670
SB-1	10/25/2007	(13-15')								778
SB-1	10/25/2007	(18-20')								259
SB-1	10/25/2007	(28-30')								<100
SB-1	10/25/2007	(38-40')								<100
SB-1	10/25/2007	(48-50')								<100
SB-1	10/25/2007	(58-60')	<50.0	4.46	4.46	<0.0100	<0.0100	<0.0100	<0.0100	<100
SB-1	10/25/2007	(68-70')								<100
SB-2	10/25/2007	(3-5')	<50.0	4.24	4.24	<0.0100	<0.0100	<0.0100	<0.0100	<100
SB-2	10/25/2007	(8-10')							-	<100
SB-2	10/25/2007	(13-15')								<100
SB-2	10/25/2007	(18-20')								<100
SB-2	10/25/2007	(28-30')								<100
SB-2	10/25/2007	(38-40')								<100
SB-2	10/25/2007	(48-50')								<100
SB-2	10/25/2007	(58-60')								<100
SB-2	10/25/2007	(68-70')								<100
SB-3	10/25/2007	(8-10')	654	32.2	686.2	<0.0100	<0.0100	0.115	0.146	<100
SB-3	10/25/2007	(18-20')								<100
SB-3	10/25/2007	(28-30')								<100
SB-3	10/25/2007	(38-40')								<100
SB-3	10/25/2007	(48-50')								<100
SB-4	10/25/2007	(8-10')								449
SB-4	10/25/2007	(18-20')								3,710
SB-4	10/25/2007	(28-30')								2,050
SB-4	10/25/2007	(38-40')								2,110
SB-4	10/25/2007	(48-50')								1,560
SB-5	10/25/2007	(8-10')								120
SB-5	10/25/2007	(18-20')								104
SB-5	10/25/2007	(28-30')								<100
SB-5	10/25/2007	(38-40')								<100
SB-5	10/25/2007	(48-50')								<100
SB-6	10/25/2007	(8-10')							-	<100

Table 1 Celero Energy Drickey Queen Unit Saltwater Plant #1 Chaves County New Mexico

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Chloride	(mg/kg)	<100	<100	296	2,410	<100	<100	<100	2,130	3,520	2,720	3,640	5,450	3,800	5,970		
Xylene	(mg/kg)																
Ethlybenzene	(mg/kg)																
Toluene	(mg/kg)																
Benzene	(mg/kg)																
g)	lotal																
TPH (mg/k	GKC																
	DYU DYU															-	
Excavation	Ueptn (ft)	(18-20')	(28-30')	(38-40')	(48-50')	(8-10')	(18-20')	(28-30')	(38-40')	(48-50')	(8-10')	(18-20')	(28-30')	(38-40')	(48-50')		
Date	Sampled	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007	10/25/2007		
Sample		SB-6	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7	SB-7	SB-7	SB-8	SB-8	SB-8	SB-8	SB-8		

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Table 1 Celero Energy Drickey Queen Unit Saltwater Plant #1 Chaves County, New Mexico

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MULLIUM TRACEANALYSIS, INC. MULLIUM

6701 Aberdeen Avenue, Suite 9Lubbnck, Texas 79424200 East Sunset Road, Suite EEl Paso, Texas 799225002 Basin Street, Suite A1Midland, Texas 797036015 Harris Parkway, Suite 110Ft. Worth, Texas 76132

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 FAX 806 • 794 • 1298

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Analytical and Quality Control Report

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

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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.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	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.

Blain Lepturch #

Dr. Blair Leftwich, Director

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

Page 2 of 30

Analytical Report

Sample: 140	0967 - SB-1 (3-5	')		<i>r</i>				
Analysis:	BTEX		Analytical N	lethod:	S 8021B		Prep M	ethod: S 503
QC Batch:	42856		Date Analyz	zed:	2007-11-07		Analyze	d By: DC
Prep Batch:	36977		Sample Prep	paration:	2007-11-07		Prepare	d By: DC
Parameter	Fla	σ	RL Result		Units		Dilution	R
Renzene	I la	5					10	0.010
Toluene			<0.100		mg/Kg		10	0.010
Ethylbenzene	1		<0.100		mg/Kg		10	0.010
Xylene	·		0.378		mg/Kg		10	0.010
a						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT) (1 PDD)	1	11.6	mg/Kg	10	10.0	116	39.6 - 116
4-Bromonuor	obenzene (4-BFB)		15.5	_mg/Kg	10	10.0	155	47.3 - 144.
Sample: 14(0967 - SB-1 (3-5	')						
Analysis:	Chloride (Titratic	on)	Analy	tical Meth	nod: SM 4	500-Cl B	Prep	Method: N/.
QC Batch:	42816		Date .	Analyzed:	2007-	11-06	Analy	zed By: AR
Prep Batch:	36942		Sampl	le Prepara	tion:		Prepa	red By: AR
			RL					_
Parameter	Flag	<u>.</u>	Result		Units		Dilution	R
Chloride	, <u></u> .	· <u>···</u> · · · · · ·	3420		mg/Kg		50	2.0
Sample: 14	0967 - SB-1 (3-5	')						
Analysis:	TPH DRO		Analytica	l Method:	Mod. 801	5B	Prep	Method: N/.
QC Batch:	42638		Date Ana	lyzed:	2007-11-0	1	Analy	zed By: LD
Prep Batch:	36760		Sample P	reparation	n: 2007-11-0	91	Prepa	ared By: LD
_			RL					
Parameter	Flag		Result		Units		Dilution	R
DRO	. <u></u>		1570		mg/Kg		1	50.
Surrogate	Elau.	Result	Unite	Dil	ution	Spike Amount	Percent	Recovery
n-Triacontane	2 2	400	mg/Kg		1	150	267	17.3 - 160
Surrogate n-Triacontane Sample: 140	Flag e 2 0967 - SB-1 (3-5	Result 400	Units mg/Kg	Dil	ution	Spike Amount 150	Percent Recovery 267	Recov Limi 17.3 - 1
Analysis:	TPH GRO		Analytical	l Method:	S 8015B		Prep M	ethod: S 50

Date Analyzed:

Sample Preparation:

2007-11-07

2007-11-07

Analyzed By:

Prepared By:

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 1 High surrogate recovery due to peak interference. 2 High surrogate recovery due to peak interference.

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QC Batch:

Prep Batch: 36977

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Report Date: November 9, 2007 3135

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Parameter Fla	g		RL Result		Units		Dilution	RL
GRO			414		mg/Kg		10	1.00
0		Dia a	Decili	TT :	Dilution	Spike	Percent	Recovery
Surrogate		riag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			8.01	mg/Kg	10	10.0	80	50.2 - 89.3
4-Bromofluorobenzene (4-BFE	5)	3	17.6	mg/Kg	10	10.0	176	51.2 - 107.4

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

Analysis: QC Batch: Prep Batch:	BTEX 42856 36977			Analytical I Date Analy Sample Pre	Method: zed: paration:	S 8021B 2007-11-07 2007-11-07		Prep Me Analyze Preparee	ethod: d By: d By:	S 5035 DC DC
				RI						
Parameter		Flag		Result	t	Units		Dilution		\mathbf{RL}
Benzene				< 0.0200)	mg/Kg		2		0.0100
Toluene				< 0.0200)	mg/Kg		2		0.0100
Ethylbenzene	9			< 0.0200)	mg/Kg		2		0.0100
Xylene				< 0.020)	mg/Kg		2		0.0100
							Spike	Percent	Re	ecovery
Surrogate			Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	I	imits
Trifluorotclu	ene (TFT)			2.22	mg/Kg	2	2.00	111	39	6 - 116
4-Bromofluor	obenzene (4-BI	FB)		2.88	mg/Kg	2	2.00	144	47.3	3 - 144.2

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

Analysis:	Chloride (Titration)	Analytical Metho	d: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42816	Date Analyzed:	2007-11-06	Analyzed By:	AR
Prep Batch:	36942	Sample Preparati	on:	Prepared By:	\mathbf{AR}
		\mathbf{RL}			
Parameter	Flag	\mathbf{Result}	Units	Dilution	\mathbf{RL}
Chloride		2670	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	TPH DRO 42638 36760	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-01 2007-11-01	Prep Method: Analyzed By: Prepared By:	N/A LD LD
Parameter	Flag	RL Besult	Units	Dilution	τα
	I lag	TCSUIC		Dilduoli	<u></u>
DRO		<50.0	mg/Kg	1	50.0

³High surrogate recovery due to peak interference.

Report Date: November 9, 2007 3135

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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: QC Batch: Prep Batch:	TPH GRO 42865 36977		Analytica Date Ana Sample P	l Method: lyzed: reparation:	S 8015B 2007-11-07 2007-11-07		Prep Me Analyzec Preparec	thod: S 5035 i By: DC i By: DC
			RL					
Parameter	Flag		Result		Units		Dilution	RL
GRO			12.0		mg/Kg		2	1.00
						Spike	Percent	Recovery
Surrogate		Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.60	mg/Kg	2	2.00	80	50.2 - 89.3
4-Bromofluor	obenzene (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:	\mathbf{AR}
Prep Batch:	36942	Sample Preparatio	n:	Prepared By:	\mathbf{AR}
		RL			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Chloride		778	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytical Me	ethod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42816	Date Analyze	d: 2007-11-06	Analyzed By:	AR
Prep Batch:	36942	Sample Prepa	ration:	Prepared By:	AR
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		259	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42816 36942	Analytical M Date Analyze Sample Prep	iethod: SM 4500-Cl B ed: 2007-11-06 aration:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

⁴High surrogate recovery due to peak interference.

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42816 36942	Analytical Metho Date Analyzed: Sample Preparatio	d: SM 4500-Cl B 2007-11-06 on:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
Parameter	Flag	RL Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytical Meth	od: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42816	Date Analyzed:	2007-11-06	Analyzed By:	\mathbf{AR}
Prep Batch:	36942	Sample Preparat	tion:	Prepared By:	\mathbf{AR}
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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

Analysis:	BTEX		Analytical N	Method:	S 8021B		Prep Me	ethod:	S 5035
QC Batch:	42856		Date Analys	zed:	2007-11-07		Analyzed By:		DC
Prep Batch:	36977		Sample Pre	paration:	2007-11-07		Prepare	d By:	DC
			RI	L					
Parameter	Flag		Result	t j	Units		Dilution		\mathbf{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	<u>.</u>	0.0100
						Spike	Percent	${ m R}\epsilon$	ecovery
Surrogate		Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	I	imits
Trifluorotolue	ne (TFT)		1.16	mg/Kg	1	1.00	116	39.	6 - 116
4-Bromofluor	obenzene (4-BFB)		1.42	mg/Kg	1	1.00	142	47.3	3 - 144.2

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

Analysis:	Chloride (Titration)	Analytical Meth	od: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42817	Date Analyzed:	2007-11-07	Analyzed By:	\mathbf{AR}
Prep Batch:	36943	Sample Prepara	tion:	Prepared By:	\mathbf{AR}
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	TPH DRO 42638 36760			Analytical M Date Analyze Sample Prep	ethod: ed: aration:	Mod. 80 2007-11- 2007-11-	15B 01 01	Prep Anal Prep	Method: yzed By: ared By:	N/A LD LD
				\mathbf{RL}						
Parameter		Flag		Result		Units	3	Dilution		\mathbf{RL}
DRO				<50.0	-	mg/Kg	5	1		50.0
Surrogate	Flag		Result	Units	Dilut	ion	Spike Amount	Percent Recovery	Reco	overy nits
n-Triacontan	e		164	mg/Kg	1		150	109	17.3 -	169.6

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

Analysis: QC Batch: Prep Batch:	TPH GRO 42865 36977	H GROAnalytical Method:65Date Analyzed:77Sample Preparation:		S 8015B 2007-11-07 2007-11-07		Prep Method: Analyzed By: Prepared By:		
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	RL
GRO	В		4.46		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)		0.811	mg/Kg	1	1.00	81	50.2 - 89.3
4-Bromofluor	obenzene (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 Preparatic	Prepared By:	AR	
		\mathbf{RL}			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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

Analysis:BTEXQC Batch:42856Prep Batch:36977		Analytical Method: Date Analyzed: Sample Preparation:	S 8021B 2007-11-07 2007-11-07	Prep Method: Analyzed By: Prepared By:	S 5035 DC DC	
			RL			
Parameter		Flag	Result	Units	Dilution	\mathbf{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.

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Parameter F	lag		Resul	t	Units	I	Dilution	\mathbf{RL}
Xylene			< 0.010	0	mg/Kg		1	0.0100
						Spike	Percent	Recovery
Surrogate	\mathbf{F}	lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.16	mg/Kg	1	1.00	116	39.6 - 116
4-Bromofluorobenzene (4-BFE	3)	6	1.45	mg/Kg	1	1.00	145	47.3 - 144.2

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

Analysis:	Chloride (Titration)	Analytical Meth	nod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42817	Date Analyzed:	2007-11-07	Analyzed By:	\mathbf{AR}
Prep Batch:	36943	Sample Prepara	tion:	Prepared By:	\mathbf{AR}
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

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

Analysis:	TPH DRO		Analytical M	fethod: M	od. 8015B	Prep	Method: N	N/A
QC Batch:	42638		Date Analyz	ed: 20	07-11-01	Anal	yzed By: L	D
Prep Batch:	36760		Sample Prep	paration: 20	07-11-01	Prepa	ared By: I	D
			\mathbf{RL}					
Parameter	\mathbf{Flag}		\mathbf{Result}		Units	Dilution	\mathbf{RL}	
DRO			<50.0	r	ng/Kg	1		50.0
					Spike	Percent	Recove	ery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limit	s
n-Triacontan	e	156	mg/Kg	1	150	104	17.3 - 16	69.6

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

Analysis: QC Batch: Prep Batch:	TPH GRO 42865 36977			Analytica Date Ana Sample Pi	l Method: lyzed: reparation:	S 8015B 2007-11-07 2007-11-07		Prep M Analyze Prepare	ethod: ed By: ed By:	S 5035 DC DC
				\mathbf{RL}						
Parameter		Flag		Result		Units		Dilution		\mathbf{RL}
GRO		В		4.24		mg/Kg		1		1.00
Surrogate			Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Re L	covery imits
Trifluorotolu	ene (TFT)			0.802	mg/Kg	1	1.00	80	50.2	2 - 89.3
<u></u>									contin	ued

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

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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: QC Batch:	Chloride (Titration) 42817	Analytical Metho Date Analyzed:	d: SM 4500-Cl B 2007-11-07	Prep Method: Analyzed By:	N/A AR
Prep Batch:	36943	Sample Preparati	Prepared By:	AR	
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{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
		RL			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	$\bar{2.00}$

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

Analysis: QC Batch:	Chloride (Titration) 42817	Analytical Met Date Analyzed:	hod: SM 4500-Cl B 2007-11-07	Prep Method: Analyzed By:	N/A AR
Prep Batch:	36943	Sample Prepara	Prepared By:	AR	
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42817 36943	Analytical Met Date Analyzed Sample Prepar	thod: SM 4500-Cl B l: 2007-11-07 ration:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		\mathbf{RL}			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

⁷High surrogate recovery due to peak interference.

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Sample: 14	10981 - 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	1:	Prepared By:	AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00
Sample: 14	10982 - 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:	ÁŔ
Prep Batch:	36943	Sample Preparation	1:	Prepared By:	AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00
Semple 14	(0000 800 0 (50 80)				
Sample: 14 Analysis: QC Batch: Prop Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 26042	Analytical Method: Date Analyzed:	SM 4500-Cl B 2007-11-07	Prep Method: Analyzed By:	N/A AR
Sample: 14 Analysis: QC Batch: Prep Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943	Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2007-11-07 1:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
Sample: 14 Analysis: QC Batch: Prep Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag	Analytical Method: Date Analyzed: Sample Preparation RL Besult	SM 4500-Cl B 2007-11-07 1:	Prep Method: Analyzed By: Prepared By: Dilution	N/A AR AR BL
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag	Analytical Method: Date Analyzed: Sample Preparation RL Result <100	SM 4500-Cl B 2007-11-07 h: Units mg/Kg	Prep Method: Analyzed By: Prepared By: Dilution 50	N/A AR AR RL 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag	Analytical Method: Date Analyzed: Sample Preparation RL Result <100	SM 4500-Cl B 2007-11-07 h: Units mg/Kg	Prep Method: Analyzed By: Prepared By: Dilution 50	N/A AR AR RL 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70')	Analytical Method: Date Analyzed: Sample Preparation RL Result <100	SM 4500-Cl B 2007-11-07 h: Units mg/Kg	Prep Method: Analyzed By: Prepared By: Dilution 50	N/A AR AR RL 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration)	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method:	SM 4500-Cl B 2007-11-07 h: Units mg/Kg SM 4500-Cl B	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method:	N/A AR AR 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 2004	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed:	SM 4500-Cl B 2007-11-07 h: Units mg/Kg SM 4500-Cl B 2007-11-07	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By:	N/A AR AR 2.00 N/A AR
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2007-11-07 h: <u>Units</u> <u>mg/Kg</u> SM 4500-Cl B 2007-11-07	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By:	N/A AR AR 2.00 N/A AR AR
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL	SM 4500-Cl B 2007-11-07 h: <u>Units</u> <u>mg/Kg</u> SM 4500-Cl B 2007-11-07 h:	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By:	N/A AR AR 2.00 N/A AR AR
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Prep Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944 Flag	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL Result	SM 4500-Cl B 2007-11-07 h: <u>Units</u> <u>mg/Kg</u> SM 4500-Cl B 2007-11-07 h: <u>Units</u>	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution	N/A AR AR 2.00 N/A AR AR AR RL
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Chloride	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944 Flag Flag	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL Result <100	SM 4500-Cl B 2007-11-07 h: Units mg/Kg SM 4500-Cl B 2007-11-07 h: Units mg/Kg	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50	N/A AR AR 2.00 N/A AR AR AR RL 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter Chloride Sample: 14	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944 Flag 10985 - SB-3 (8-10')	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL Result <100	SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50	N/A AR AR 2.00 N/A AR AR AR RL 2.00
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944 Flag 10985 - SB-3 (8-10') BTEX	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: S &	SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg 3021B	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method:	N/A AR AR 2.00 N/A AR AR RL 2.00 S 5035
Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch:	10983 - SB-2 (58-60') Chloride (Titration) 42817 36943 Flag 10984 - SB-2 (68-70') Chloride (Titration) 42818 36944 Flag 10985 - SB-3 (8-10') BTEX 42856	Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: Date Analyzed: Sample Preparation RL Result <100 Analytical Method: S & Date Analyzed: 200	SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg SM 4500-Cl B 2007-11-07 h: <u>Units</u> mg/Kg 8021B 07-11-07	Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By:	N/A AR AR 2.00 N/A AR AR RL 2.00 S 5035 DC

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Parameter Flag	5	Resul	t	Units]	Dilution	RL
		RI	J				
Parameter Flag	z	Resul	t	Units]	Dilution	\mathbf{RL}
Benzene		< 0.0100)	mg/Kg		1	0.0100
Toluene		< 0.0100)	mg/Kg		1	0.0100
Ethylbenzene		0.11	i i	mg/Kg		1	0.0100
Xylene		0.146	3	mg/Kg	·	1	0.0100
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	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	
		\mathbf{RL}			
Parameter	Flag	\mathbf{Result}	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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

Analysis: QC Batch:	TPH DRO 42638			Analytical M Date Analyze	lethod: ed:	Mod. 8013 2007-11-01	5B I	Preg Ana	o Method: lvzed Bv:	N/A LD
Prep Batch:	36760			Sample Prep	aration:	2007-11-01	L	Prep	oared By:	LD
				\mathbf{RL}						
Parameter	Flag			Result		Units		Dilution		\mathbf{RL}
DRO				654		mg/Kg		1		50.0
							Spike	Percent	Reco	overy
Surrogate	Flag		\mathbf{Result}	Units	Diluti	on .	Amount	Recovery	Lin	nits
n-Triacontan	e 9		261	mg/Kg	1		150	174	17.3 -	169.6

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

Analysis: QC Batch: Prep Batch:	TPH GRO 42865 36977	Analytical Method: Date Analyzed: Sample Preparation:	S 8015B 2007-11-07 2007-11-07	Prep Method: Analyzed By: Prepared By:	S 5035 DC DC
5		RL	•• .		
Parameter	Flag	;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.

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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 M	ethod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42818	Date Analyze	d: 2007-11-07	Analyzed By:	AR
Prep Batch:	36944	Sample Prepa	ration:	Prepared By:	\mathbf{AR}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytical Me	hod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42818	Date Analyzed	: 2007-11-07	Analyzed By:	\mathbf{AR}
Prep Batch:	36944	Sample Prepar	ation:	Prepared By:	\mathbf{AR}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42818 36944	Analytical M Date Analyze Sample Prep	iethod: SM 4500-Cl B ed: 2007-11-07 aration: 1	Prep Method Analyzed By: Prepared By:	: N/A AR AR
Parameter	Flag	RL Besult	Units	Dilution	RI.
Chloride		<100	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42818 36944	Analytical Meth Date Analyzed: Sample Prepara	nod: SM 4500-Cl B 2007-11-07 tion:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

¹⁰High surrogate recovery due to peak interference.

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Analysis:	Chloride (Titration)	Analytical Metho	od: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42818	Date Analyzed:	2007-11-07	Analyzed By:	AR
Prep Batch:	36944	Sample Preparati	ion:	Prepared By:	$AR \cdot$
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		449	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42818 36944	Analytical M Date Analyz Sample Prep	fethod: SM 4500-Cl B .ed: 2007-11-07 .earation:	Prep Method: Analyzed By: Prepared By:	N/A AR 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	n:	Prepared By:	\mathbf{AR}
		RL			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Chloride		2050	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42818 36944	Analytical Me Date Analyzed Sample Prepa	thod: SM 4500-Cl B l: 2007-11-07 ration:	Prep Method: Analyzed By: Prepared By:	N/A AR 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:	\mathbf{AR}

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3135		Drickey Queen	Unit #1	<u></u>	
sample 1409	94 continued				
Parameter	Flag	RL Result	Units	Dilution	RL
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		1900	mg/Kg		2.00
Sample: 14	0995 - 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	1:	Prepared By:	AR
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		120	mg/Kg	50	2.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2 0996 - SB-5 (18-20') Chloride (Titration) 42819 36945	Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2007-11-07 1:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
5	~	RL			
Chloride	Flag	Result 104	Units mg/Kg	Dilution	RL 2.00
		104			4.00
Sample: 14	0997 - SB-5 (28-30')				
Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42819 36945	Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2007-11-07 1:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
_		RL			
Parameter	Flag	Result	Units	Dilution	RL
		<100	mg/ Kg		2.00
Sample: 14	0998 - 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
r rep Batch:	30945	Sample Preparation	1:	Prepared By:	AR
_		RL			
Parameter	Flag	Result	Units	Dilution	RL
Unioride		<100	mg/Kg	50	2.00

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3135 Sample: 140999 - SB-5 (48-50') Analytical Method: SM 4500-Cl B Prep Method: N/A Analysis: Chloride (Titration) QC Batch: 42819 Date Analyzed: 2007-11-07 Analyzed By: \mathbf{AR} Prep Batch: 36945 Sample Preparation: Prepared By: AR RLRLUnits Dilution Parameter Flag Result 50 2.00Chloride < 100mg/Kg Sample: 141000 - SB-6 (8-10') Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A Analyzed By: QC Batch: 42819 Date Analyzed: 2007-11-07 \mathbf{AR} Prep Batch: 36945 Sample Preparation: Prepared By: \mathbf{AR} RLParameter Flag Result Units Dilution RLChloride <100 mg/Kg 50 2.00Sample: 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: ARRL Flag Parameter Result Units Dilution \mathbf{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: \mathbf{AR} Prep Batch: 36945Sample Preparation: Prepared By: AR RLParameter Flag Result Units Dilution RLChloride <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 36945 \mathbf{AR} Prep Batch: Sample Preparation: Prepared By: continued ...

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sample 141003 continued ...

		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
	,				
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		967	mg/Kg	50	2.00

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

Analysís: QC Batch:	Chloride (Titration) 42820	Analytical M Date Analyz	fethod: SM 4500-Cl B sed: 2007-11-07	Prep Method: Analyzed By:	N/A AR
Prep Batch:	36946	Sample Prep	paration:	Prepared By:	\mathbf{AR}
		BI.			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		2410	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytical Me	ethod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42820	Date Analyze	d: 2007-11-07	Analyzed By:	AR
Prep Batch:	36946	Sample Prepa	aration:	Prepared By:	\mathbf{AR}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytic	al Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42820	Date An	alyzed:	2007-11-07	Analyzed By:	AR
Prep Batch:	36946	Sample 1	Preparation:		Prepared By:	\mathbf{AR}
		\mathbf{RL}				
Parameter	Flag	\mathbf{Result}		Units	Dilution	\mathbf{RL}
Chloride		<100	n	ng/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42820 36946	Analytical Me Date Analyze Sample Prepa	thod: SM 4500-Cl B d: 2007-11-07 ration:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<100	mg/Kg	50	2.00

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Sample: 14	1008 - SB-7 (38-40')				
Analysis: OC Batch:	Chloride (Titration) 42820	Analytical Method: Date Analyzed:	SM 4500-Cl B 2007-11-07	Prep Method: Analvzed Bv:	N/A AR
Prep Batch:	36946	Sample Preparation	:	Prepared By:	AR
		RL	TT :	Dilution	рſ
Chlorido	Flag	2120	Units mg/Kg	50	<u>17</u>
Sample: 14	1009 - 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
		BL.			
Donomotor	Flog	Regult	Unito	Dilution	
Parameter	Flag	Result 3520	Units mg/Kg	Dilution 50	2 DC
Parameter Chloride	Flag	Result 3520	Units mg/Kg	Dilution 50	RL 2.00
Parameter Chloride Sample: 14	Flag 1010 - SB-8 (8-10')	Result 3520	Units mg/Kg	Dilution 50	RL 2.00
Parameter Chloride Sample: 14 Analysis:	Flag 1010 - SB-8 (8-10') Chloride (Titration)	Analytical Method:	Units mg/Kg SM 4500-Cl B	Dilution 50 Prep Method:	RL 2.00
Parameter Chloride Sample: 14 Analysis: QC Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820	Analytical Method: Date Analyzed:	Units mg/Kg SM 4500-Cl B 2007-11-07	Dilution 50 Prep Method: Analyzed By:	RL 2.00 N/A AR
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946	Analytical Method: Date Analyzed: Sample Preparation	Units mg/Kg SM 4500-Cl B 2007-11-07	Dilution 50 Prep Method: Analyzed By: Prepared By:	RL 2.00 N/A AR AR
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946	Result 3520 Analytical Method: Date Analyzed: Sample Preparation RL Bacult	Units mg/Kg SM 4500-Cl B 2007-11-07 :	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution	RL 2.00 N/A AR AR
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag	Result 3520 Analytical Method: Date Analyzed: Sample Preparation RL Result 2720	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50	RL 2.00 N/A AR AR RI 2.00
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag	Result 3520 Analytical Method: Date Analyzed: Sample Preparation RL Result 2720	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50	RL 2.00 N/A AR AR RL 2.00
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag 1011 - SB-8 (18-20') Chloride (Titration)	Analytical Method: Date Analyzed: Sample Preparation RL Result 2720	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg SM 4500-Cl B	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method:	RL 2.00 N/A AR AR RL 2.00
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag 1011 - SB-8 (18-20') Chloride (Titration) 42820	Analytical Method: Date Analyzed: Sample Preparation RL Result 2720 Analytical Method: Date Analyzed:	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg SM 4500-Cl B 2007-11-07	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By:	RL 2.00 N/A AR RI 2.00 N/A
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag 1011 - SB-8 (18-20') Chloride (Titration) 42820 36946	Analytical Method: Date Analyzed: Sample Preparation RL Result 2720 Analytical Method: Date Analyzed: Sample Preparation	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg SM 4500-Cl B 2007-11-07 :	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By:	RL 2.00 N/A AR RI 2.00 N/A AR AR
Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Parameter Chloride Sample: 14 Analysis: QC Batch: Prep Batch: Prep Batch: Prep Batch:	Flag 1010 - SB-8 (8-10') Chloride (Titration) 42820 36946 Flag 1011 - SB-8 (18-20') Chloride (Titration) 42820 36946 Flag	Result 3520 Analytical Method: Date Analyzed: Sample Preparation RL Result 2720 Analytical Method: Date Analyzed: Sample Preparation RL Result 2720	Units mg/Kg SM 4500-Cl B 2007-11-07 : Units mg/Kg SM 4500-Cl B 2007-11-07 : Units	Dilution 50 Prep Method: Analyzed By: Prepared By: Dilution 50 Prep Method: Analyzed By: Prepared By: Prepared By: Dilution	RL 2.00 N/A AR AR RL 2.00 N/A AR AR AR

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sample 141012 continued ...

		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		5450	mg/Kg	50	2.00

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

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42820 36946	Analytical Method Date Analyzed: Sample Preparation	: SM 4500-Cl B 2007-11-07 a:	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		3800	mg/Kg	50	2.00

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

Analysis:	Chloride (Titration)	Analytical Me	thod: SM 4500-Cl B	Prep Method:	N/A
QC Batch:	42821	Date Analyzed	l: 2007-11-07	Analyzed By:	AR
Prep Batch:	36947	Sample Prepa	ration:	Prepared By:	\mathbf{AR}
		\mathbf{RL}			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{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

				MDL			
Parameter		\mathbf{Flag}		Result		Units	RL
DRO				22.4	1	ng/Kg	50
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	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:	\mathbf{AR}
Prep Batch:	36942	QC Preparation:	2007-11-06	Prepared By:	\mathbf{AR}

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Parameter Chloride	Flag	MDL Result <0.500	Units mg/Kg		$\frac{\mathrm{RL}}{2}$
Method Blank (1)	QC Batch: 42817				
QC Batch: 42817 Prep Batch: 36943		Date Analyzed: 2007-11-07 QC Preparation: 2007-11-07		Analyzed By: Prepared By:	AR 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 Besult	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: 30945		QU Preparation: 2007-11-07		Prepared By:	AR
Parameter	Flag	MDL Result	Units		\mathbf{RL}
Chloride		<0.500	mg/Kg		2
Method Blank (1)	OC Batch: 42820				
OC Batch: 42820	WO Batteri. 12020	Data Applyand 2007 11 07		Analyzed By	٨D
Prep Batch: 36946		QC Preparation: 2007-11-07		Prepared By:	AR
D		MDL			
Chloride	Flag	<0.500	Units mg/Kg		$\frac{RL}{2}$
Method Blank (1)	QC Batch: 42821				
QC Batch: 42821 Prep Batch: 36047		Date Analyzed: 2007-11-07		Analyzed By:	AR
1 icp Daton. 30341		worreparamon. 2007-11-07		r repared by:	лn

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Report Date: November 9, 2007 3135	D	Work Order Drickey Quee	r: 7102940 en Unit #1		Page Nur	nber: 20 of 30
Parameter Flag Chloride		MDL Result <0.500		Units mg/K	g	RL 2
Method Blank (1) QC Batch: 42856						
QC Batch: 42856 Prep Batch: 36977	Date Ana QC Prep	alyzed: 20 aration: 20	007-11-07 007-11-07		Analy: Prepa	zed By: DC [*] red By: DC
Parameter Flag Benzene		MI Rest <0.001	DL 1lt 10	Unita mg/K	s	
Toluene Ethylbenzene Xylene		<0.001 <0.001 <0.004	50 60 10	mg/K mg/K mg/K	E E	0.01 0.01 0.01
Surrogate Flag Trifluorotoluene (TFT)	Result 0.990	Units mg/Kg	Dilution 1	Spike Amount 1.00	Percent Recovery 99	Recovery Limits 58.2 - 121.3
Method Blank (1) QC Batch: 42865 QC Batch: 42865 Pren Batch: 36977	Date An: OC Prep	alyzed: 20 aration: 21	007-11-07		Analy Prepa	zed By: DC
	do a rok	MDL		Ti- ite		DT
GRO Flag		0.933		mg/K	g	<u>RL</u>
Surrogate Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)	0.784	mg/Kg mg/Kg	1	1.00	78 49	67.8 - 103 24.6 - 123
Laboratory Control Spike (LCS-1)						
QC Batch: 42638 Prep Batch: 36760	Date Ana QC Prep	alyzed: 2 aration: 2	007-11-01 007-11-01		Analy Prepa	zed By: LD ared By: LD
Param Re	CS sult U	nits D	Spike	Matrix t Result	Bec	Rec.

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	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.

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Surrogate	LCS Result	LCSD Result) t (Jnits	Dil.	Spike Amount	LCS Rec.	LCSI Rec.	D 	Rec. Limit
n-Triacontane	174	157	m	g/Kg	1	150	116	105	4	9 - 133.2
Laboratory Control S	spike (LCs	5-1)								
QC Batch: 42816 Prep Batch: 36942			Date Ar QC Pre	nalyzed: paration:	2007-11-06 2007-11-06	3 3		An Pre	alyzed B epared B	y: AR y: AR
Param		LC Res	S ult	Units	Dil.	Spike Amount	Ma Res	trix sult F	lec.	Rec. Limit
Chloride		98.	.3	mg/Kg	1	100	<0.	500	98	85 - 115
Percent recovery is based	d on the spi	ike result.	RPD is	based on	the spike an	ld spike dup	olicate r	esult.		
Param		$\begin{array}{c} \mathrm{LCSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		99.4	mg/K	g1	100	< 0.500	99	85 - 115	1	20
Percent recovery is based	d on the spi	ike result.	RPD is	based on	the spike an	ıd spike duş	olicate r	esult.		
Laboratory Control S	spike (LCS	8-1)								
QC Batch: 42817 Prep Batch: 36943			Date A QC Pre	nalyzed: eparation:	2007-11-07 2007-11-07	7 7		Ar Pr	nalyzed B epared B	y: AR y: AR
			CS			Spike	Ma	trix		Rec.
Param Chlorida			ult	Units mg/Kg	Dil	Amount	Re	$\frac{\text{sult}}{500}$	Rec.	Limit
Percent recovery is base	d on the sn	ike result	RPD is	hased on	the spike an	d spike dur	licate r	esult.	100	
	a on the sp	LCCD	101 2 10	Sabed on	a		Sheate I			
Param		LCSD Besult	Units	Dil	Spike Amount	Matrix Result	Rec	Rec. Limit	RPD	RPL Limi
Chloride		101	mg/K	$\frac{2}{g}$ 1	100	<0.500	101	85 - 115	1	20
Percent recovery is based	d on the spi	ike result.	RPD is	based on	the spike an	ıd spike duş	olicate r	esult.		
Laboratory Control S	Spike (LCS	8-1)								
QC Batch: 42818 Prep Batch: 36944			Date A QC Pre	nalyzed: eparation:	2007-11-0' 2007-11-0'	7 7		Ar Pr	nalyzed E repared B	By: AR By: AR
Param		LC Bes	CS ault	Units	Dil	Spike Amount	Ma Be	trix sult F	Rec	Rec. Limit
A		97	.3	mg/Kg	1	100	<0	.500	97	85 - 115
Chloride							aliaata m	1.		
Chloride Percent recovery is based	d on the sp	ike result.	RPD is	based on	the spike an	id spike dur	plicate r	esult.		
Chloride Percent recovery is based Param	d on the sp	ike result. LCSD Result	RPD is	based on Dil	the spike an Spike Amount	id spike dur Matrix Result	Rec	esult. Rec. Limit	RÞD	RPD Limi

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Laboratory Control Spike (LCS-1)

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

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
Chloride	97.2	mg/Kg	1	100	< 0.500	97	85 - 115

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	98.3	mg/Kg	1	100	< 0.500	98	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:	42820	Date Analyzed:	2007-11-07	Analyzed By:	\mathbf{AR}
Prep Batch:	36946	QC Preparation:	2007-11-07	Prepared By:	\mathbf{AR}

Denvilt	TT **	I				
Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
101	mg/Kg	1	100	< 0.500	101	85 - 115
-	101	101 mg/Kg	101 mg/Kg 1	InternationalInternational101mg/Kg1100	Internet Office Diff. Fille Fille	Interaction Diff. Fitheraction Fitteraction Fitteraction 101 mg/Kg 1 100 <0.500

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit	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: Prep Batch:	42821 36947	Da Q(te Analyzed: C Preparation:	2007-11-07 2007-11-07			Analyzed By: Prepared By:	AR AR	
Param		LCS	Unite	Dil	Spike	Matrix	Dog	Rec.	

Param Result Units Dil. Amount Result Rec Limit Chloride 98.9 <u>9</u>9 85 - 115 mg/Kg 1 100 < 0.500

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

	LCSD			Spike	Matrix	Rec.			RPD	
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit	RPD	Limit	
Chloride	99.9	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:	42856	Date Analyzed:	2007-11-07	Analyzed By:	DC
Prep Batch:	36977	QC Preparation:	2007-11-07	Prepared By:	DC

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	LC	S			Spi	ke	Mat	trix		F	lec.
Param	Resu	ult	Units	Dil.	Amo	unt	Res	\mathbf{ult}	Rec.	$\mathbf{L}_{\mathbf{i}}$	imit
Benzene	1.0	3 г	ng/Kg	1	1.0	00	< 0.0	0110	103	71.2	- 119
Toluene	1.0	3 г	ng/Kg	1	1.()0	< 0.0	0150	103	76.3	- 116.5
Ethylbenzene	0.97	79 1	ng/Kg	1	1.(00	< 0.0	0160	98	77.6	- 114
Xylene	2.9	1 O	ng <u>/K</u> g	1	3.0	00	< 0.0	0410	97	78.8	- 113.9
Percent recovery is based on the s	spike result	. RPD i	s based	on the spik	e and	spike du	plicat	e result.			
	LCSD			Spike	M	atrix		R	ec.		RPD
Param	Result	Units	Dil.	Amount	Re	sult	Rec.	Li	mit	RPD	Limit
Benzene	1.04	mg/Kg	ç 1	1.00	<0.	$00\bar{1}10$	104	71.2	- 119	1	20
Toluene	1.02	mg/Kg	ς 1	1.00	<0.	00150	102	76.3 -	116.5	1	20
Ethylbenzene	0.964	mg/Kg	ç 1	1.00	<0.	00160	96	77.6	- 114	2	20
Xylene	2.85	mg/Kg	<u>g 1</u>	3.00	<0.	00410	95	78.8 -	113.9	2	20
Percent recovery is based on the s	Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.										
	LC	S L	CSD			Spil	æ	LCS	LCSD	F	Rec.
Surrogate	Res	ult R	esult	Units	Dil.	Amoi	int	Rec.	Rec.	L	imit
Trifluorotoluene (TFT)	1.0	2	1.00	mg/Kg	1	1.0	0	102	100	56.1	- 107.8
4-Bromofluorobenzene (4-BFB)	0.9	97 0	.973	mg/Kg	1	1.0	0	100	97	56.2	- 118.8
Laboratory Control Spike (Lo QC Batch: 42865 Prep Batch: 36977	CS-1)	Date . QC Pi	Analyze reparati	d: 2007 on: 2007	11-07 11-07				Anal Prep	yzed By ared By	: DC : DC
	\mathbf{L}	CS			:	Spike	Ν	latrix			Rec.
Param	Re	sult	Units	Dil.	A	mount	F	lesult	Rec.]	Limit
GRO	8.	.76	mg/K	g <u>1</u>		10.0	<	0.739	88	56	- 105.2
Percent recovery is based on the s	spike result	. RPD i	s based	on the spik	ke and	spike du	ıplicat	e result			
	LCSD			Spike	e N	Aatrix		R	lec.		RPD
Param	Result	Unit	s Di	l. Amou	nt I	Result	Rec.	. Li	mit	RPD	Limit
GRO	9.28	mg/K	(g 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.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	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: Prep Batch:	42638 36760	D: Q	ate Analyzed: C Preparation:	2007-11-01 2007-11-01			Analy Prepa	yzed By: LD ared By: LD
Param		MS Result	Units	Dil	Spike Amount	Matrix Besult	Bec	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.

Report Date: November 3135	9, 2007			Work Or Drickey (rder: 71029 Jueen Unit	940 ; #1		Page Number: 24 of 30			
Param	I R	MSD lesult	Units	Dil.	Spike Amount	Matrix Result	Rec.	Re Lin	ec. nit	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	e result.	RPD is	based on	the spike a	and spike du	plicate	e result.			
	r r				1	•	•			_	_
	MS	MSE)			Spike		MS	MSI)	Rec.
Surrogate	Result	Resul	lt	Units	Dil.	Amount		Rec.	Rec		Limit
n-Triacontane	161	181		mg/Kg	1	150		107	121		10 - 194
Matrix Spike (MS-1)	Spiked Sa	mple: 14	10973								
OC Bataby 42816			Data A	nalwood	2007-11-	06			Ana	lyzod B	v AR
Prop Batch: 36042			OC Pr	anaryzeu:	2007-11-	00			Pror	iyzeu D	y. AR
riep Datch. 50942			QUII	eparación.	2007-11-	00			r reł	area D	y. An
		MS	3			Spike	Ν	Aatrix			Rec.
Param		Resi	ılt	Units	Dil.	Amount	I	Result	Re	c.	Limit
Chloride		503	10	mg/Kg	50	5000	· · · · · · · · ·	<25.0	10	1	85 - 115
Percent recovery is based	on the spike	e result.	RPD is	based on	the spike a	and spike d	uplicate	e result.			
		MSD			Spike	Matrix		R	lec.		RPD
Param]	Result	Units	5 Dil.	Amount	Result	Rec	. Li	mit	RPD	Limit
Chloride		5090	mg/K	g 50	5000	<25.0	102	85	- 115	1	20
Matrix Spike (MS-1) QC Batch: 42817 Prep Batch: 36943	Spiked Sa	mple: 14	10983 Date A QC Pr	analyzed: eparation:	2007-11- 2007-11-	07 07			Ana Prej	lyzed B pared B	y: AR y: AR
		MS	5			Spike	N	Matrix			Rec.
Param		Resu	ult	Units	Dil.	Amount]	Result	Re	c.	Limit
Chloride		501	.0	mg/Kg	50	5000		$<\!25.0$	10	0	85 - 115
Percent recovery is based	on the spike	e result.	RPD is	based on	the spike a	and spike d	uplicate	e result.			
		MSD			Spike	Matrix		F	lec.		RPD
Param]	Result	Units	5 Dil.	Amount	Result	Rec	. Li	imit	RPD	Limit
Chloride		5060	mg/K	g 50	5000	<25.0	101	. 85	- 115	1	20
Percent recovery is based	on the spike	e result.	RPD is	based on	the spike a	and spike d	uplicat	e result.			
Matrix Spike (MS-1)	Spiked Sa	mple: 14	10993								
OC Batch: 49818	-		Data A	nalvad	2007-11	07			4	luged D	
Prep Batch: 36944			QC Pr	eparation:	2007-11-2007-11-	07			Ana Prej	pared B	y: AR y: AR
		እ <i>ተ</i> ር	2			C :1	х	fat			D
Param		IVI: Doct) 1+	Unita	D:I	Spike	ר ו		D.		Kec.
Chlorido			<u></u>	mg/V/m	<u></u>	KOOO		100 22	R		
omoride		704	:U	mg/Kg	90 06	2000	2	108.22	9	9	00 - 110

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

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3135	007	Work Order: 7102940 Drickey Queen Unit #1						Page Number: 25 of 30				
Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec.	RPD	RPD Limit			
Chloride	7100	mg/Kg	50	5000	2109.33	100	85 - 115	1				
Percent recovery is based on	the spike result.	RPD is b	ased on f	the spike ar	id spike duj	olicate re	esult.					
Matrix Spike (MS-1) S	piked Sample: 14	41003										
QC Batch: 42819 Prep Batch: 36945		Date An QC Prep	alyzed: paration:	2007-11-0 2007-11-0	7 7		An Pre	alyzed B epared B	y: AR y: AR			
Param	M: Res	S ult	Units	Dil.	Spike Amount	Ma Res	trix sult F	lec.	Rec. Limit			
Chloride	642	20 n	ng/Kg	50	5000	967.	067	109	85 - 115			
Percent recovery is based on	the spike result.	RPD is b	ased on (the spike ar	nd spike du	olicate r	esult.					
Param	$egin{array}{c} \mathrm{MSD} \ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit			
Chloride	6480	mg/Kg	50	5000	967.067	110	85 - 115	1	20			
2C Batch: 42820	p	Date An	alyzed:	2007-11-0	17		Ar	alyzed B	y: AR			
QC Batch: 42820 Prep Batch: 36946	p	Date An QC Prep	alyzed: paration:	2007-11-0 2007-11-0	17 17		Ar Pr	alyzed B epared B	y: AR y: AR			
QC Batch: 42820 Prep Batch: 36946	M	Date An QC Prep	alyzed: paration:	2007-11-0 2007-11-0	7 7 Spike	Ма	Ar Pr trix	alyzed B epared B	y: AR y: AR Rec.			
QC Batch: 42820 Prep Batch: 36946 Param	M Res	Date An QC Prep S ult	alyzed: paration: Units	2007-11-0 2007-11-0 Dil.	7 17 Spike Amount	Ma Res	Ar Pr trix Sult H	aalyzed B epared B Rec.	y: AR y: AR Rec. Limit			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on	M Res 898 the spike result.	Date An QC Prep S ult 30 n RPD is b	alyzed: paration: Units ng/Kg pased on	2007-11-0 2007-11-0 Dil. 50 the spike au	7 7 Amount 5000 nd spike du	Ma Res 379 plicate r	Ar Pr sult <u>F</u> 6.11 esult.	alyzed B epared B lec. 104	y: AR y: AR Rec. Limit 85 - 11			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on	M Res 898 the spike result. MSD	Date An QC Prep S ult 30 n RPD is b	alyzed: paration: Units ng/Kg pased on t	2007-11-0 2007-11-0 Dil. 50 the spike an Spike	7 7 Amount 5000 nd spike du Matrix	Ma Res 379 plicate r	Ar Pr trix sult I 6.11 : esult. Rec.	aalyzed B epared B Rec. 104	y: AR y: AR Rec. Limit 85 - 11.			
QC Batch: 42820 Prep Batch: 36946 Param Dhloride Percent recovery is based on Param	M Res 898 the spike result. MSD Result	Date An QC Prep S ult 30 n RPD is b Units	alyzed: paration: Units ng/Kg pased on Dil.	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount	7 Spike Amount 5000 nd spike du Matrix Result	Ma Reg 379 plicate r Rec.	Ar Pr sult F 5.11 esult. Rec. Limit	aalyzed B epared B Rec. 104 RPD	y: AR y: AR Rec. Limit 85 - 11. RPI Limi			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride	M Res 898 the spike result. MSD Result 9040	Date An QC Prep S ult 30 n RPD is b Units mg/Kg	alyzed: paration: Units ng/Kg pased on Dil. 50	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000	7 7 7 Amount 5000 nd spike du Matrix Result 3796.11	Ma Res 379 plicate r <u>Rec.</u> 105	Ar Pr sult F 6.11 esult. Rec. Limit 85 - 115	alyzed B epared B Rec. 104 RPD 1	y: AR y: AR Rec. Limit 85 - 11. RPI Limi 20			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on	M Res 898 the spike result. MSD Result 9040 the spike result.	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an	7 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Ma Res 379 plicate r <u>Rec</u> 105 plicate r	Ar Pr sult I 6.11 esult. Rec. Limit 85 - 115 esult.	aalyzed B epared B Rec. 104 RPD 1	y: AR y: AR Rec. Limit 85 - 11, RPI Limi 20			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S	M Res 898 the spike result. MSD Result 9040 the spike result. piked Sample: 1	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054	alyzed: paration: <u>Units</u> ng/Kg pased on <u>Dil.</u> 50 pased on	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an	7 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Ma Reg 379 plicate r <u>Rec.</u> 105 plicate r	Ar Pr sult F 6.11 esult. Rec. Limit 85 - 115 esult.	alyzed B epared B Rec. 104 RPD 1	y: AR y: AR Rec. Limit 85 - 11 RPE Limi 20			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947	M Res 898 the spike result. MSD Result 9040 the spike result. piked Sample: 1	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on alyzed: paration:	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0	7 Spike Amount 5000 nd spike du Matrix Result 3796.11 nd spike du	Ma Ree 379 plicate r Rec. 105 plicate r	Ar Pr sult F 6.11 esult. Rec. Limit 85 - 115 esult. Ar Pr	alyzed B epared B lec. 104 RPD 1 alyzed B epared B	y: AR y: AR Rec. Limit 85 - 11: RPE Limi 20 Sy: AR y: AR			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947	M Res 899 the spike result. MSD Result 9040 the spike result. piked Sample: 1-	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep S	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on alyzed: paration:	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0	Spike Amount 5000 and spike du Matrix Result 3796.11 and spike du 77 77 Spike	Ma Ree 379 plicate r Rec. 105 plicate r Ma	Ar Pr trix sult F 6.11 esult. Rec. Limit 85 - 115 esult. Ar Pr trix	alyzed B epared B lec. 104 RPD 1 nalyzed B epared B	y: AR y: AR Rec. Limit 85 - 11: RPI Limi 20 Sy: AR y: AR y: AR			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947 Param	M Res 899 the spike result. MSD Result 9040 the spike result. piked Sample: 1 M Res M Res	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep S ult	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on alyzed: paration: Units	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0 Dil. 50	7 7 7 5000 nd spike du Matrix Result 3796.11 nd spike du 7 7 7 7 7 7 7 7	Ma Res 379 plicate r Rec. 105 plicate r Ma Res 644	Ar Pr trix sult F 6.11 esult. Rec. Limit 85 - 115 esult. An Pr trix sult F 9.06	Alyzed B epared B Aec. 104 RPD 1 halyzed B epared B Rec. 101	y: AR y: AR Rec. Limit 85 - 11: RPT Limi 20 Sy: AR y: AR y: AR Rec. Limit 85 - 11			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947 Param Chloride Percent recovery is based on	M Res 899 the spike result. MSD Result 9040 the spike result. piked Sample: 1 m Res 115 the spike result.	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep S ult 00 n RPD is b	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on alyzed: paration: Units ng/Kg pased on	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0 2007-11-0 Dil. 50 the spike an	7 Spike Amount 5000 nd spike du Matrix Result 3796.11 nd spike du 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Ma Ree 379 plicate r 105 plicate r Ma Ree 644 plicate r	Ar Pr trix sult F 6.11 esult. Rec. Limit 85 - 115 esult. Ar Pr trix sult F 9.06 esult.	alyzed B epared B lec. 104 RPD 1 nalyzed B epared B Rec. 101	y: AR y: AR Rec. Limit 85 - 11. RPI Limi 20 Sy: AR y: AR y: AR kec. Limit 85 - 11.			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947 Param Chloride Percent recovery is based on	M Res 898 the spike result. MSD Result 9040 the spike result. piked Sample: 1 MR Res 115 the spike result. MSD	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep S ult 00 n RPD is b	alyzed: paration: Units ng/Kg pased on Dil. 50 pased on alyzed: paration: Units ng/Kg pased on	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0 Dil. 50 the spike an Spike	7 7 Spike Amount 5000 nd spike du Matrix Result 3796.11 nd spike du 7 7 7 Spike Amount 5000 nd spike du Matrix	Ma Ree 379 plicate r Rec. 105 plicate r Ma Res 644 plicate r	Ar Pr trix <u>sult F</u> <u>6.11</u> esult. <u>Rec.</u> Limit <u>85 - 115</u> esult. <u>Ar</u> Pr trix <u>F</u> <u>9.06</u> esult. <u>Rec.</u>	alyzed B epared B lec. 104 RPD 1 nalyzed B epared B lec. 101	y: AR y: AR Rec. Limit 85 - 11 RPI Limi 20 iy: AR y: AR y: AR y: AR y: AR Rec. Limit 85 - 11			
QC Batch: 42820 Prep Batch: 36946 Param Chloride Percent recovery is based on Param Chloride Percent recovery is based on Matrix Spike (MS-1) S QC Batch: 42821 Prep Batch: 36947 Param Chloride Percent recovery is based on Param	M Res 899 the spike result. MSD Result 9040 the spike result. piked Sample: 1 piked Sample: 1 MSD Result	Date An QC Prep S ult 30 n RPD is b Units mg/Kg RPD is b 41054 Date An QC Prep S ult 00 n RPD is b Units	alyzed: paration: <u>Units</u> pased on <u>Dil.</u> 50 pased on alyzed: paration: <u>Units</u> ng/Kg pased on <u>Dil.</u>	2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount 5000 the spike an 2007-11-0 2007-11-0 Dil. 50 the spike an Spike Amount	27 Spike Amount 5000 ad spike du Matrix Result 3796.11 ad spike du 27 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Ma Ree 379 plicate r Rec. 105 plicate r Ma Ree 644 plicate r Rec.	Ar Pr trix <u>sult F</u> <u>6.11</u> esult. <u>Rec.</u> <u>Limit</u> <u>85 - 115</u> esult. <u>Ar</u> Pr trix <u>sult F</u> <u>9.06</u> esult. <u>Rec.</u> Limit	alyzed B epared B lec. 104 RPD 1 nalyzed B epared B Rec. 101 RPD	y: AF y: AF Rec. Limit 85 - 11 Lim 20 Sy: AF y: AF y: AF y: AF Rec. Limit 85 - 11 RPI Lim			

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

3135	9, 2007			Work (Drickey	Order: 710 Queen Un	2940 it #1]	Page Number: 26 of 30		
Matrix Spike (MS-1)	Spiked S	Sample: 14	40985								
QC Batch: 42856 Prep Batch: 36977			Date A QC Pre	nalyzed: eparatior	2007-12 n: 2007-12	1-07 1-07			Analy Prepa	zed By: ared By:	DC DC
		MS	3			Spike	Mat	rix		R	lec.
Param		Resu	ılt	Units	Dil.	Amount	Rest	ult	Rec.	Li	mit
Benzene	ГÍ	1.2	8 · n	ng/Kg	1	1.00	< 0.00)110	128	65.7	- 119.1
Toluene		1.3	5 n	ng/Kg	1	1.00	< 0.00	0150	135	47.7	- 153.8
Ethylbenzene	12	1.5	0 n	ng/Kg	1	1.00	0.11	52	138	73.5	- 126.3
Xylene	13	4.5	4 n	ng/Kg	1	3.00	0.14	46	146	73.6	- 125.9
Percent recovery is based	on the spi	ke result.	RPD is	based or	n the spike	e and spike o	luplicate	e result.			
		MSD			Spike	Matrix		Re	ec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Lin	mit	RPD	Limi
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
Xvlene	17	3.08	mg/Kg	- 1	3.00	0.146	98	73.6 -	125.9	38	20^{-5}
Percent recovery is based	on the spi	ke result.	RPD is	based or	n the spike	e and spike o	luplicate	e result.			
			MS	MSD		c	Spike	MS	MSD	g	loc
Surrogate		R	esult	Result	Units	Dil Ai	nount	Rec	Rec	Li	imit
Trifluorotoluene (TFT)			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.
Standard (CCV-1)											
Standard (CCV-1) QC Batch: 42638			Date A	.nalyzed:	2007-11	-01			Anal	yzed By	: LD
Standard (CCV-1) QC Batch: 42638			Date A CCVs	.nalyzed: C	2007-11 CVs	-01 CCVs		Perce	Anal	yzed By	: LD
Standard (CCV-1) QC Batch: 42638			Date A CCVs True	.nalyzed: C Fi	2007-11 CVs ound	-01 CCVs Percent		Perce Recov	Anal ent ery	yzed By I	: LD Date
Standard (CCV-1) QC Batch: 42638 Param Flag	Units		Date A CCVs True Conc.	.nalyzed: C Fo C	2007-11 CVs ound conc.	-01 CCVs Percent Recovery	,	Perce Recov Limi	Anal ent ery ts	yzed By I An	: LD Date alyzed
Standard (CCV-1) QC Batch: 42638 Param Flag DRO	Units mg/Kį	ţ	Date A CCVs True Conc. 250	nalyzed: C FG C	2007-11 CVs ound onc. 244	-01 CCVs Percent Recovery 98	,	Perce Recov Limi 85 - 1	Anal ent ery ts 15	yzed By I An 200'	: LD Date alyzed 7-11-0
Standard (CCV-1) QC Batch: 42638 Param Flag DRO	Units mg/K{	ŗ 2	Date A CCVs True Conc. 250	nalyzed: C Fo	2007-11 CVs ound onc. 244	-01 CCVs Percent Recovery 98	,	Perce Recov Limi 85 - 1	Anal ent ery ts 15	yzed By I An 200'	: LD Date alyzed 7-11-0
Standard (CCV-1) QC Batch: 42638 Param Flag DRO Standard (CCV-2)	Units mg/Kį	5	Date A CCVs True Conc. 250	nalyzed: C F	2007-11 CVs ound onc. 244	-01 CCVs Percent Recovery 98	,	Perce Recov Limi 85 - 1	Anal ent ery ts 15	yzed By I An 200'	: LD Date alyzed 7-11-0
Standard (CCV-1) QC Batch: 42638 Param Flag DRO Standard (CCV-2) QC Batch: 42638	Units mg/Kį	5	Date A CCVs True Conc. 250 Date A	.nalyzed: C F C	2007-11 CVs ound onc. 244 2007-11	-01 CCVs Percent Recovery 98	/	Perce Recov Limi 85 - 1	Anal ent ery ts .15 Anal	yzed By I An 200' yzed By	: LD Date alyzed 7-11-0 : LD
Standard (CCV-1) QC Batch: 42638 Param Flag DRO Standard (CCV-2) QC Batch: 42638	Units mg/Ka	Ţ	Date A CCVs True Conc. 250 Date A CCVs	nalyzed: F C	2007-11 CVs ound conc. 244 2007-11	-01 CCVs Percent Recovery 98 -01 CCVs	,	Perce Recov Limi 85 - 1 Perce	Anal ent ery ts .15 Anal	yzed By I An 200' yzed By	: LD Date alyzed 7-11-0 : LD
Standard (CCV-1) QC Batch: 42638 Param Flag DRO Standard (CCV-2) QC Batch: 42638	Units mg/Ka	r 2	Date A CCVs True Conc. 250 Date A CCVs True	nalyzed: F C .nalyzed: F	2007-11 CVs ound fonc. 244 2007-11 CVs ound	-01 CCVs Percent Recovery 98 -01 CCVs Percent	,	Perce Recov Limi 85 - 1 Perce Recov	Anal ent ery ts .15 Anal ent ery	yzed By I <u>An</u> 200' yzed By I	: LD Date alyzed 7-11-0 : LD Date
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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.

Report Date: November 9, 2007 3135

Standard ((CCV-3)
Standard	

	(0010)						
QC Batch:	42638		Date Ana	lyzed: 2007-1	1-01	Anal	yzed By: LD
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	267	107	85 - 115	2007-11-01
Standard	(ICV-1)						
QC Batch:	42816		Date Ana	lyzed: 2007-12	1-06	Anal	yzed By: AR
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2007-11-06
Standar d QC Batch:	(CCV-1) 42816		Date Ana	lyzed: 2007-1	1-06	Anal	yzed By: AR
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Becovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride	0	mg/Kg	100	100	100	85 - 115	2007-11-06
	•						·······
Standard	(ICV-1)						
QC Batch:	42817		Date Ana	lyzed: 2007-1	1-07	Anal	yzed By: AR
			ICVs	ICVs	ICVs	Percent	

			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	97.6	98	85 - 115	2007-11-07
		then each "the second					

Standard (CCV-1)

QC Batch:	42817		Date Anal	yzed: 2007-11	-07	Anal	yzed By: AR
			CCVs True	CCVs Found	CCVs Percent	Percent	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2007-11-07

Standard (ICV-1)

QC Batch: 42818

Date Analyzed: 2007-11-07

Analyzed By: AR

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Report Dat 3135	Report Date: November 9, 2007 135			Vork Order: 71 rickey Queen U	02940 nit #1	Page Nu	umber: 28 of 30
Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analvzed
Chloride	1 100	mg/Kg	100	101	101	85 - 115	2007-11-07
Standard	(CCV-1)						
QC Batch:	42818		Date Ana	lyzed: 2007-11	L-07	Anal	yzed By: AR
			CCVs True	CCVs Found	$\begin{array}{c} \mathrm{CCVs} \\ \mathrm{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2007-11-07
Standard	(ICV-1)						
QC Batch:	42819		Date Ana	lyzed: 2007-11	1-07	Anal	yzed By: AR
			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
							2001,11,01
Standard	(CCV-1)		Data Arra	l	1.07	A	
QU Batch:	42819		Date Ana	Iyzea: 2007-1.	1-07	Anai	yzed By: AR
			CCVs	CCVs	CCVs	Percent	D I
Daram	Flor	Unita	True	Found	Percent	Limita	Date
Chloride	r lag	mg/Kg	100	99.3	QQ	<u> </u>	2007-11-07
							2001 11 01
Standard	(ICV-1)						
QC Batch:	42820		Date Ana	lyzed: 2007-1	1-07	Anal	yzed By: AR
			ICVs	ICVs	ICVs	Percent	
Dorom	Flor	Unite	Cone	Found	Percent	Kecovery	Date
Chloride	I'lag	mg/Kg	100	97.3	<u>97</u>	85 - 115	2007-11-07
							2001 11 01
Standard	(CCV-1)						
QC Batch:	42820		Date Ana	lyzed: 2007-11	1-07	Anal	yzed By: AR
			CCVs	CCVs	CCVs	Percent	
Doram	Floo	IInita	Cone	Found	Percent	Kecovery	Date
Chloride	r lag	mg/Kg	100	103	103	85 - 115	2007-11-07
		0/ **0	100		100		2001-11-01

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Report Date: November 9, 2007 3135

Page Number: 29 of 30

Standard ((ICV-1)
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Standard (ICV-1)						
QC Batch:	42821		Date Analy	zed: 2007-11-	-07	Anal	yzed By: AR
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride	0	mg/Kg	100	99.1	99	85 - 115	2007-11-07
					La rante.	· ·····	
Standard (CCV-1)						
QC Batch:	42821		Date Analy	zed: 2007-11-	-07	Anal	yzed By: AR
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2007-11-07
Standard (QC Batch:	ICV-1) 42856		Date Analy	vzed: 2007-11-	-07	Anal	yzed By: DC
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0995	100	85 - 115	2007-11-07
Toluene		mg/Kg	0.100	0.103	103	85 - 115	2007-11-07
Ethylbenzen	e	mg/Kg	0.100	0.102	102	85 - 115	2007-11-07
Xylene		mg/Kg	0.300	0.307	102	85 - 115	2007-11-07
Standard (CCV-1)						
QC Batch:	42856		Date Analy	vzed: 2007-11	-07	Anal	yzed By: DC
			CCVs	CCVs	\mathbf{CCVs}	Percent	
			True	Found	Percent	Recovery	Date

			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2007-11-07
Toluene		mg/Kg	0.100	0.103	103	85 - 115	2007-11-07
Ethylbenzene		mg/Kg	0.100	0.0986	99	85 - 115	2007 - 11 - 07
Xylene		mg/Kg	0.300	0.299	100	85 - 115	2007-11-07

Standard (ICV-1)

QC Batch:	42865		Date Ana	alyzed: 2007-1	1-07	Anal	yzed By: DC
			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.941	94	85 - 115	2007-11-07

Report D 3135	ate: November 9,	2007	I	Work Order: 71 Drickey Queen U	.02940 Jnit #1	Page N	umber: 30 of 30
Standard	d (CCV-1)						
QC Batch	a: 42865		Date Ana	alyzed: 2007-1	1-07	Anal	lyzed By: DC
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.01	101	85 - 115	2007-11-07

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APPENDIX B PERMEABILITY/SIEVE ANALYSIS

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Hines, Joleen

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From	Hines, Joken
Sant:	Monday, September 28, 2005 3:46 PM
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To: John P Pellicer

Subject: Cover Bucket Density & Clay K-Sat

John,

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I have attached the results for the density of the cover meterial '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,

Joicen

Joleon Hirles Daniel B. Stophens & Associates Laboratory 5840 Osuna Rd., NE Albuquerque, NM 87109

505.889.7752 505.889.0258(fax) jhines@dbstephens.com www.dbstephens.com 11/02/2007 07:42 5053470435 Sec. 26. 2005 3:55PM GANDY MARLEY INC



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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 Dete: 23-Sep-05

Field weight' of sample (g): 21536.00 Tare weight, ring (g): 0.00 Tare weight, cep/plete/epoxy (g): 0.00

> Dry weight of sample (g): 20511.00 Sample volume (c:n³): 14884.53 Assumed perticle density: 2.85

initial Volumetric Moisture Content (% vol): 6.9 Initial Grevimetric Molsture 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



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Daniel B. Stephens & Associates, Inc.

Summary of Saturated Hydraulic Conductivity Tests

	Kaal	Method p	f Analysis
Sample Number	(cm/sec)	Constant Head Flexible Wali	Falling Head Flexible Wall
Clay	1.5E-08		x

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SAMPLE RECEIPT FORM	
CLIENT: Gandy Marley, Inc. DATE R	ECEIVED: 9/16/05
PROJECT #:	
DBS&A	
PROJECT #:	
1) Are the custody seels on the cooler intert?	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 Note
5) Is the COC in agreement with the samples received?	See Note
-, -, -, -, -, -, -, -, -, -, -, -, -, -	000 11018
6) Did all the samples arrive intact?	Yes
 6) Did all the samples arrive intact? 7) Comments Three samples arrived, each in full 5-gallon buckets, in good clay sample is being prepared today and testing will begin so 	Yes condition. The oon. Will await
 6) Did all the samples arrive intact? 7) Comments 7) Three samples arrived, each in full 5-gallon buckets, in good clay sample is being prepared today and testing will begin so further instuction on the Cover and Caliche samples. Also a clay core sample. 	Yes condition. The oon. Will await waiting in-situ
 6) Did all the samples arrive intact? 7) Comments 7) Three samples arrived, each in full 5-gallon buckets, in good clay sample is being prepared today and testing will begin so further instuction on the Cover and Caliche samples. Also a clay core sample. If you have any questions or concerns please contact Joleer 889-7752. 	Yes condition. The pon. Will await waiting in-situ Hines at (505)
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APPENDIX C BORING LOGS/MONITOR WELL CONSTRUCTION DIAGRAM

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Boring/Well:SB-1Project Number:3135Client:Celero EnergySite Location:Drickey Queen Unit SWD Plant #1Location:Chavez County, New MexicoTotal Depth70Date 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

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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
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Total Depth is 70 feet No Groundwater encountered during drilling

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Boring/Well:SB-3Project Number:3135Client:Celero EnergySite Location:Drickey Queen Unit SWD Plant #1Location:Chavez County, New MexicoTotal Depth50Date Installed:10/25/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-10	95.0	Tan/black hydrocarbon stainded 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

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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

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No Groundwater encountered during drilling

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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

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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

Boring/Well:SB-7Project Number:3135Client:Celero EnergySite Location:Drickey Queen Unit SWD Plant #1Location:Chavez County, New MexicoTotal Depth50Date 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

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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

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

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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



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

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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

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

Release Notificatio	on and Corrective A	ction				
			(AME	NDED)		
	OPERATOR		🛛 Initia	l Report		Final Repor
Name of Company: Celero Energy II, LP	Contact: Bruce Woodard					
Address: 400 W. Illinois, Suite 1601, Midland, TX 79701	Telephone No. 432-686-1	883				
Facility Name: Drickey Queen Unit Salt Water Plant #1	Facility Type: Pit at Facilit	у				
Surface Owner State Mineral Owner			Lease N	lo.		
LOCATIC	N OF RELEASE					
Unit LetterSection\TownshipRangeFeet from theNortI314S31E	h/South Line Feet from the	East/W	/est Line	County Chaves		
Latitude _33.13043°	Longitude <u>103.80</u>	167°	jining you t	L		
NATURI	E OF RELEASE					
Type of Release Produced Water	Volume of Release Unknow	wn	Volume F	lecovered 1	Vone	
Source of Kelease	Unknown	ce	Date and N/A	nour of Dis	covery	i i i i i i i i i i i i i i i i i i i
Was Immediate Notice Given?	If YES, To Whom?					
🛛 Yes 🗌 No 🗌 Not Required	Larry Johnson, NMOCD					
By Whom? Bruce Woodard	Date and Hour					
Was a Watercourse Reached?	If YES Volume Impacting the Watercourse					
🗋 Yes 🛛 No		ti 125, forane impaoring no materoouto.				
If a Watercourse was Impacted, Describe Fully.*	····					
Describe Course of Broblem and Remodial 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 Invest pit.	tigation and Characterization Pl	an. Soil	borings ha	ve been plac	ed in a	and around
I hereby certify that the information given above is true and complete to	the best of my knowledge and	understar	nd that pur	suant to NM	OCD r	rules and
regulations all operators are required to report and/or file certain release	notifications and perform corre	ctive acti	ions for rel	eases which	may e	ndanger
public nealth or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remedi	ate contamination that pose a the	Report" d	oes not rel	eve the ope	rator o ater bi	t hability Iman health
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of	f responsi	bility for c	ompliance	with an	y other
federal, state, or local aws and/or regulations.	-	-				
	OIL CONSERVATION DIVISION					
Signature: MMNUN						
	Approved by District Supervi	sor:				
Printed Name: Bruce Woodard	<u>}</u>					
Title: Engineer	Approval Date:		Expiration	Date:		
E-mail Address: bwoodard@celeroenergy.com	Conditions of Approval:			Attached	ttached	
Date: Phone: (432) 686-1883						
Attach Additional Sheets If Necessary	<u></u>			- -		

N. Long B District 1 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

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State of New Mexico Energy Minerals and Natural Resources

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

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

Release Notification and Corrective Action

and a							OPERAT	FOR		Initia	l Report	\boxtimes	Final Re	eport
	Name of Company: Celero Energy II, LP					Contact: Bruce Woodard								
	Address: 400 W. Illinois, Suite 1601, Midland, TX 79701				Telephone N	No. 432-686-18	83							
	Facility Name: Drickey Queen Unit Salt Water Plant #1 Facility Type: Pit at Facility													
	Surface Ow	ner State			Mineral C	Owner				Lease N	lo.			
-					LOCA	ATIO	N OF REI	LEASE						
and Car	Unit Letter 1	Section\ 3	Township 14S	Range 31E	Feet from the	North	/South Line	Feet from the	East/V	West Line	County Chaves			
			Lat	itude _	<u>33.13043°</u> NAT	TURE	Longitud COF REL	de <u>103.801</u> E ASE	<u>67°</u>					
	Type of Rele	ase Produc	ed Water		· · · · · · · · ·		Volume of	Release Unknow	n	Volume F	Recovered N	one		
1997 - 1915 1917 - 1917	Source of Re	lease					Date and H	lour of Occurrenc	e	Date and	Hour of Disc	covery		
	Was Immedia	ate Notice (Given?	Yes 🗌	No 🗌 Not Re	equired	If YES, To Larry John	Whom? son, NMOCD		1.071				
100 m	By Whom? Bruce Wood						Date and H	lour						
Bruce woodard Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.														
	If a Watercou	urse was Im	pacted, Descr	the Fully.	• • T-l *		·····					_		
A. S.	This is an his	storic pit loc	ation. Celero	acquired	from Palisades ar	nd is in t	the process of	closing.						
	Describe Are Pit has been o pit. Site was backfilled wi	a Affected dewatered a excavated th over exc	and Cleanup A and visually in to a depth of 4 avated soils fr	Action Tal npacted so feet belo com surrou	ken.* oil removed as per w ground surface unding the pit and	Investi and a o brough	igation and Ch one foot clay li it up to surface	aracterization Pla ner installed to di grade.	n. Soil mensio	borings hav ns of 175 fe	ve been place et by 110 fee	ed in an et. Site	nd around was	
	I hereby certi regulations al public health should their c	fy that the Il operators or the envi operations h	information g are required t ronment. The ave failed to	iven above o report a acceptan adequately	e is true and comp nd/or file certain t ce of a C-141 repo / investigate and t	olete to release i ort by th remedia	the best of my notifications an he NMOCD m te contaminati	knowledge and u nd perform correc arked as "Final Re on that pose a three	ndersta tive acl eport" o eat to g	nd that purs tions for rel does not rel round wate	suant to NMC eases which ieve the oper r, surface wa	DCD ru may er ator of ter, hu	iles and idanger liability man healt	h
	or the enviror federal, state	nment. In a or logal lay	ddition, NMC	CD acceptions	otance of a C-141	report of	does not reliev	e the operator of r	respons	sibility for c	ompliance w	rith any	other	
	OIL CONSERVATION DIVISION													
200	Printed Name		bodard	<u> </u>	 		Approved by	District Supervise	or:					
	Title: Engine	er					Approval Dat	te:		Expiration	Date:			_
	E-mail Addre	ess: bwooda	urd@celeroen	ergy.com			Conditions of	f Approval:			Åttached			_
interests in	Date: Attach Addi	Phor tional She	ne: (432) 686- ets If Necess	1883 ary										

Literical 1625 N. Franch D., Helders, NUB 18220 <u>District H</u> 1901 W. Gernal Az enne, Antosia, FIM 18210 <u>District HI</u> HD0 free Brazas Read, Actor, NUB 17730 <u>District FV</u> 1220 S. St. Francis Dr., Santa Fr. NUB 17505

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1. A.

State of New Mexico Facility Ministers and Natural Resources

Form C+144 June 1, 2004

Coll Conservation Division 1220 South St. Francis Dr. Santa F.a. NM \$7505 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

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lis jak at inclose grade ban Type of actions degestration of a pai	It conversed by a "selicial plan"? Yes [] in below- or below-grade tank BI Closure of a pit or below-	no ⊠ grade tank □
Appearun Geluna Energy II, LP Telephone: Attauss: #00 West Blancks, Suite J604, Madimal, Vestas 1970) Relibity of well-manae: Dukskey+Doren Unit Sufficience Plant #1, 2014. Guarty: Chaves Latitudes Sentace Owner: Federal [] State [2] Private [] Parelian []	(#32) 685-6683 c-mai 	l address: bwoodard@eeleroenergy.com Sec 3 T-14-S R-34-t * NAD: 1927 ⊠ 1983 []
<u>500</u>	fletion gradi: tank.	
Indiang I Production I Disposal I Wolfsman II Banaryoney II Ince X United II K Incer Type: Name Dirickness Unitemation with Olay I Incer Type: Name Dirickness Unitemation with Olay I	Verlande:bbt Type of fluid: Constructions material: Buefole-walked, with leat detection? Yes [] f	f not, explain why not.
Depth 12 grammad wester (และสร้ายส) เป็รโลกระยาสังหา ส่งประเทศ ตรีสุมัน 10 ระสรณสต์ ช่วยปราสายา Eleventium แป้ grammit waten. ค	Less than 50 boot 30 tool of more, but fess than 100 tool 140 tool of music	(20 points) (10 points) (-0 points) 0
Northbased providentian rates: (Leoss Maria 2009 Ricci Cintria reguliantic Councistic worker statistic, on loss Maria (10199 Ricci Cintaianalli, atlace matter statistics.)	Yes No	(20 points) (=0 points) ==0
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an for an a for the state of th	1000 feet or more	(0 points)
Christin: a fait character: (1) Attack a clargenear of the the data showing the ph	1000 feet or more Benshing Scale (Detai Periods) "s refretonskip to where equipment and tanks. (2) 1	(0 points) 10 Identicate disposal location: (check the onsite box)
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at the state of the	<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u>	State of New Mexico Energy Minerals and Natural Resource	s
ALL PROPERTY	1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	For drilling and production facilities appropriate NMOCD District Office. For downstream facilities, submit to office
1	Pit o Is pit or Type of action:	r Below-Grade Tank Registration (below-grade tank covered by a "general plan"? Registration of a pit or below-grade tank ⊠ Closure of a pi	$\begin{array}{c c} \mathbf{Dr} & \mathbf{Closure} \\ \mathbf{Yes} & \Box & \mathbf{No} & \mathbf{X} \\ \text{it or below-grade tank } & \Box \end{array}$
1. T. S.	Operator:Celero Energy II. LP Address:400 West Illinios, Suite 1601, Midland,	Telephone:(432) 686-1883e-mail a Texas 79701	nddress:bwoodward@celeroenergy.com
	Facility or well name: _Drickey Queen Unit Saltwate	r Plant #1 API #: U/L or Qtr/Qtr I	Sec3T14-SR31-E

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 ancluding remediation start date and end date. (4) Groundwater encountered: No 🛛 Yes 🗔 If yes, show depth below ground surface ft. and attach sample results. (45) Attach soil sample results and a diagram of sample locations and excavations.

Below-grade tank

Less than 50 feet

100 feet or more

Less than 200 feet

1000 feet or more

Yes

No

Construction material:

50 feet or more, but less than 100 feet

200 feet or more, but less than 1000 feet

Ranking Score (Total Points)

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 Isigns 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 🗔.

Printed Name/Title Bruce Woodward, Engineer

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.

Signature / /

Approval:

Date:

Printed Name/Title

County: ____Chaves_

Lined 🛛 Unlined 🗌

Pit Volume 25,000

Pit

Surface Owner: Federal [] State Private [] Indian []

Liner type: Unknown Thickness Unknown Clay

bbl

Depth to ground water (vertical distance from bottom of pit to seasonal

Wellhead protection area: (Less than 200 feet from a private domestic

Distance to surface water: (horizontal distance to all wetlands, playas,

irrigation canals, ditches, and perennial and ephemeral watercourses.)

high water elevation of ground water.) approximately 110 feet

water source, or less than 1000 feet from all other water sources.)

Type: Drilling 🗌 Production 🗌 Disposal 🗌 Workover 🗌 Emergency 🛛

_ Signature _

n facilities, submit to t Office. submit to Santa Fe

(20 points)

(10 points)

(0 points)

(20 points)

(0 points)

(20 points)

(10 points)

(0 points)

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Latitude __33.13043 N _____ Longitude __103.80167 W ____ NAD: 1927 🛛 1983 🗌

Volume: ____bbl Type of fluid: _____

Double-walled, with leak detection? Yes 🗌 If not, explain why not.