District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED OCT 0 1 2009

Form C-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

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

Operator St Mary Land & Exploration Company Telephone: (432) 688-1773 e-mail address: tmorrow@stmaryland com
Address 3300 N A Street, Bldg # 7 Suite 200 Midland, Texasc79705
Facility or well name: Osceola State # 1 Well and Tank Battery API #: 30-015-27844 U/L or Qtr/Qtr L Sec 1 T-25-S R-28-E
County: Eddy Latitude 32 16077 N Longitude 104.03529 W NAD. 1927 ☒ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**
Type: Drilling ☐ Production ☒ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type Thickness mil Clay ☐ Pit Volume 500 bbl (estimated)	Volume: ____bbl Type of fluid: _____ Construction material. _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water) **40'**	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	**20** **0**
Wellhead protection area (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)	 **0**
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)	 **0**
	Ranking Score (Total Points)		**20**

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

Additional Comments. Please see attached closure plan. ←

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

Date: **5-28-2008**

Printed Name/Title **Gary Miller, Agent, Highlander Environmental Corp** Signature _____

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

Approval:
Printed Name/Title Accepted for record NMOCD _____ Signature _____ Date: OCT 0 1 2009

Closure ops commenced prior to 6/16/08

TETRA TECH

RECEIVED OCT 0 1 2009

August 17, 2009

Mr. Mike Bratcher
Environmental Bureau
Oil Conservation Division- District 2
1301 W. Grand Avenue
Artesia, New Mexico 88210

RE: Closure Report for the Pit Located at the Osceola State #1 Well and Tank Battery, Unit Letter L, Section 1, Township 25 South, Range 28 East, Eddy County, New Mexico, Operated by St. Mary Land & Exploration Company

Mr. Bratcher:

St. Mary Land & Exploration Company retained Tetra Tech, Inc. to assist in the closure of the above mentioned pit. The site location coordinates are 32° 09' 38.49" N, 104° 02' 07.35" W. The site location is shown on Figures 1 and 2.

Background

At the time, St. Mary Land & Exploration Co had recently acquired the property from Nance Petroleum Corporation. The Osceola State #1 and Tank Battery pit was located immediately south of the tank battery approximately 5.0' from the tank battery firewall. The unlined pit was dry and grassed over. The pit was visually inspected and no obvious signs of impact were noted in the pit. The pit measured approximately 20' x 50' at a depth of 2.0' below surface. In order to close the pit, a C-144 was submitted to the NMOCD for approval. According to published data, the depth to groundwater was reportedly less than 50' below surface. The C-144 is included in Appendix A.

Regulatory

A review of the New Mexico State Engineer's Office database and the USGS database did not show any wells in Section 1, Township 25 South, Range 28 East. The closest well listed in the New Mexico State Engineer's database is located in Section 6, T-25-S, R-29-E, with a reported depth to water of 40'.

Tetra Tech
1910 North Big Spring Midland,TX 79705
Tel 432 682 4559 Fax 432 682 3946 www.tetratech.com

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 on the regional groundwater data, the proposed RRAL for TPH was 100 mg/kg.

Pit Assessment

The pit was visually inspected and found no obvious signs of impact in the bottom of the pit. The pit measured approximately 20' x 50' at a depth of 2.0' below surface. Due to the size of the pit, a total of two test trenches (T-1 and T-2) were installed in the bottom of the pit using a backhoe on June 11, 2008. Soil samples were collected placed into a laboratory prepared sample container and properly preserved. Selected samples were analyzed for TPH by method 8015 modified, and chloride by EPA method SM4500-Cl B. Selected samples were analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) by method 8021B, depending on TPH results. The samples were transported to Trace Analysis, Inc. laboratory under chain-of-custody control. Table 1 presents a summary of the analyses. The analytical reports and chain-of-custodies are presented in Appendix B.

Soil Sample Results

Referring to Table 1, no TPH and BTEX exceeded the RRAL. Elevated chloride concentrations were detected in both trenches and declined with depth. T-1 showed a chloride high of 15,500 mg/kg at 5.0' and declined to 338 mg/kg at 12.0' below pit bottom. T-2 chlorides were not as high as T-1, with chloride concentrations ranging from <100 mg/kg at 0-1' to 4,170 mg/kg at 3.0' below pit bottom. The bottom hole sample at 12.0' showed a chloride of 278 mg/kg.

Pit Closure Activities

From April 16 – 17, 2009 and May 4, 2009, the pit was excavated to the final approximate dimensions of 32' x 73' to a depth of 12.0' below pit bottom. On May 5, 2009, final confirmation samples were collected from the sidewalls. In addition, background samples were collected for evaluation. Based on the field chloride data, a test trench was installed on the east wall to define the extents horizontally. The excavated soils were hauled to proper disposal at the Lea Land, Inc. facility. Confirmation sidewall samples collected were consistent with background samples taken in the area.

TETRA TECH

Analytical data is summarized in Table 2. The site closure was approved by the NMOCD during a meeting with the NMOCD in Artesia, New Mexico on July 27, 2009. Once approved, the excavated pit area was backfilled with clean fill material and closed. Based upon the closure activities performed at this facility, St. Mary Land & Exploration requests closure of this pit. A copy of the C-144 (Closure) form is included in Appendix A.

Should you have any questions, or require any additional information, please contact me at (432) 682-4559. Thank you for your attention to this matter.

Tetra Tech, Inc.

Tim Reed, P.G.
Senior Project Manager

cc: Tom Morrow – St. Mary Land
Don Riggs- St. Mary

FIGURES

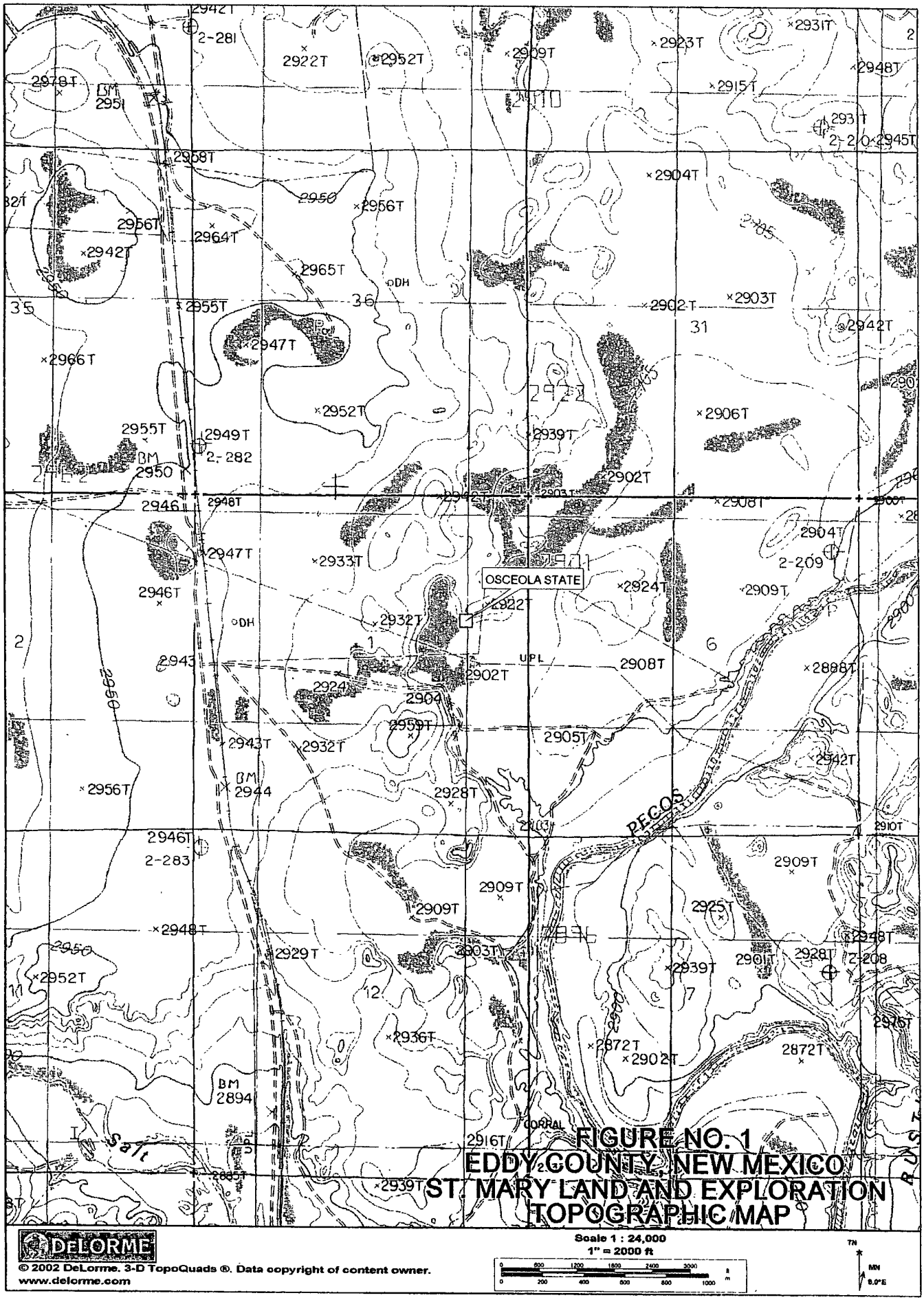

FIGURE NO. 1
EDDY COUNTY, NEW MEXICO
ST. MARY LAND AND EXPLORATION
TOPOGRAPHIC MAP

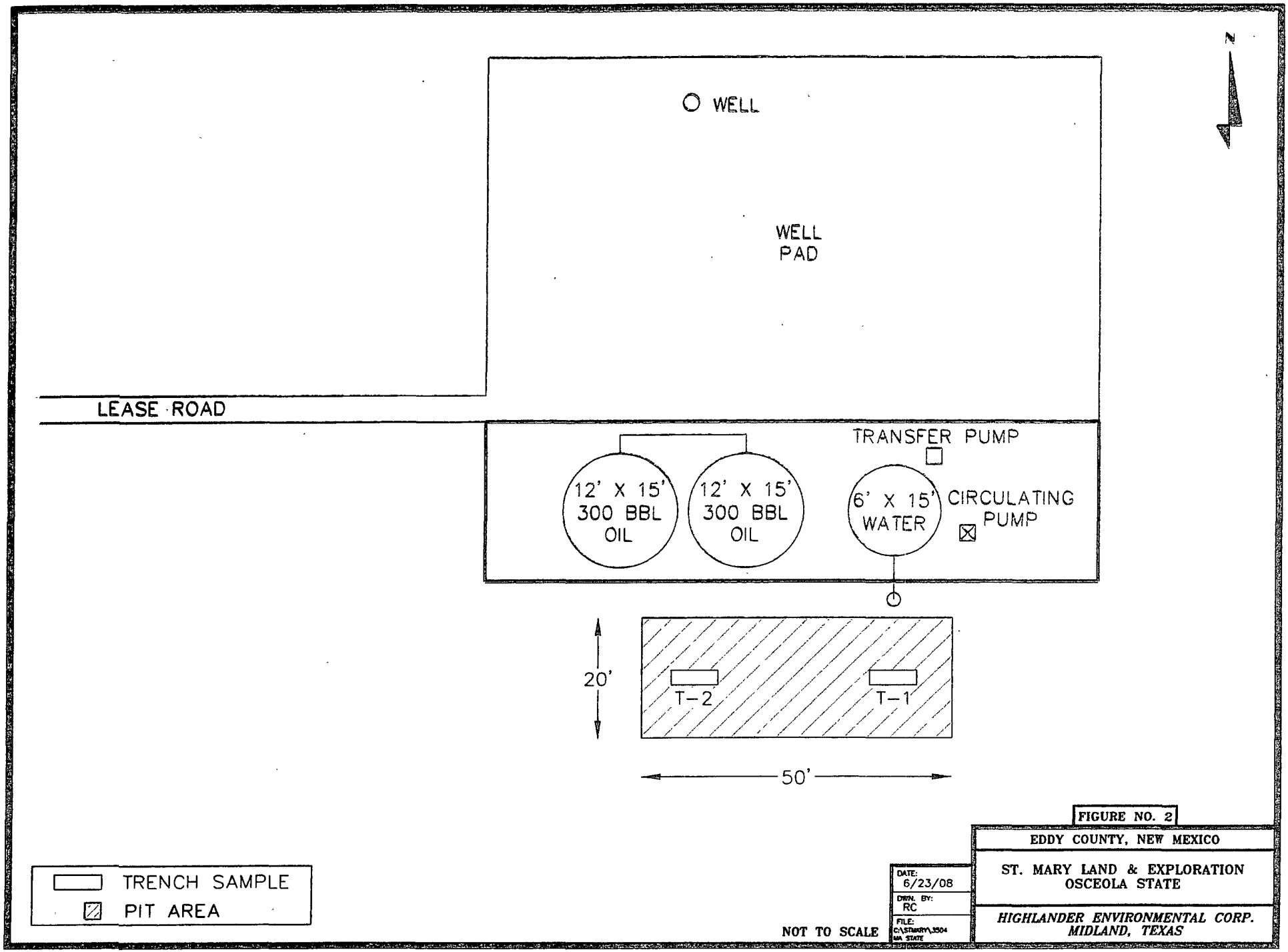

FIGURE NO. 2

EDDY COUNTY, NEW MEXICO

ST. MARY LAND & EXPLORATION
OSCEOLA STATE

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLES

Table 1
St. Mary Land & Exploration
Osceola State #1 Tank Battery

Sample ID	Soil Status		Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
	Insitu	Removed			C6-C12	C12-C35	Total					
T-1	X		6/11/2008	0-1	<50.0	3.83	3.83	<0.001	<0.001	0.0150	0.0199	3,220
	X		6/11/2008	2.0	-	-	-	-	-	-	-	2,160
	X		6/11/2008	3.0	-	-	-	-	-	-	-	5,890
	X		6/11/2008	5.0	-	-	-	-	-	-	-	15,500
	X		6/11/2008	7.0	-	-	-	-	-	-	-	12,800
	X		6/11/2008	10.0	-	-	-	-	-	-	-	604
	X		6/11/2008	12.0	-	-	-	-	-	-	-	338
T-2	X		6/11/2008	0-1	<50.0	<1.0	<50.0	<0.001	<0.001	<0.001	0.0225	<100
	X		6/11/2008	2.0	-	-	-	-	-	-	-	2,320
	X		6/11/2008	3.0	-	-	-	-	-	-	-	4,170
	X		6/11/2008	5.0	-	-	-	-	-	-	-	2,420
	X		6/11/2008	7.0	-	-	-	-	-	-	-	2,500
	X		6/11/2008	10.0	-	-	-	-	-	-	-	2,200
	X		6/11/2008	12.0	-	-	-	-	-	-	-	278

(-) not analyzed

Table 2
St. Mary Land & Exploration
Osceola State #1 Tank Battery

Sample ID	Soil Status		Date Sampled	Sample Type	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
	Insitu	Removed			DRO	GRO	Total					
Northwall	X		4/17/2009	composite	<50.0	1.84	1.84	<0.100	<0.100	<0.100	<0.100	2,790
Southwall		X	4/17/2009	composite	<50.0	<1.00	<50.0	<0.100	<0.100	<0.100	<0.100	2,470
Southeast		X	4/23/2009	composite	-	-	-	-	-	-	-	3,010
Southeast	X		5/5/2009	composite								2,970
Southwest		X	4/23/2009	composite	-	-	-	-	-	-	-	3,360
Southwest	X		5/5/2009	composite	-	-	-	-	-	-	-	1,650
Eastwall		X	4/17/2009	composite	<50.0	<1.00	<50.0	<0.100	<0.100	<0.100	<0.100	2,670
Eastwall		X	4/23/2009	composite	-	-	-	-	-	-	-	3,240
Eastwall	X		5/5/2009	composite								3,750
T-1 (2.0')	X		5/5/2009	grab	-	-	-	-	-	-	-	1,170
T-1 (4.0')	X		5/5/2009	grab	-	-	-	-	-	-	-	1,300
T-1 (6.0')	X		5/5/2009	grab	-	-	-	-	-	-	-	229
Westwall		X	4/17/2009	composite	<50.0	<1.00	<50.0	<0.100	<0.100	<0.100	0.0968	1,800
Westwall		X	4/23/2009	composite	-	-	-	-	-	-	-	1,530
Westwall	X		5/5/2009	composite								<200
Background 3'	X		5/5/2009	grab	-	-	-	-	-	-	-	1,950
Background 6'	X		5/5/2009	grab	-	-	-	-	-	-	-	2,130
Background 8'	X		5/5/2009	grab	-	-	-	-	-	-	-	2,810

(-) not analyzed

Insitu sample results

APPENDIX A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
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Form C-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

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

Operator St Mary Land & Exploration Company Telephone: (432) 688-1773 e-mail address: tmorrow@stmaryland.com
Address: 3300 N. A Street, Bldg # 7 Suite 200 Midland, Texasc79705
Facility or well name: Osceola State # 1 Well and Tank Battery API #: 30-015-27844 U/L or Qtr/Qtr L Sec 1 T-25-S R-28-E
County: Eddy Latitude 32.16077 N Longitude 104.03529 W NAD: 1927 ☒ 1983 ☐
Surface Owner. Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☐ Production ☒ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type Thickness mil Clay ☐ Pit Volume 500 bbl (estimated)	Volume: ____bbl Type of fluid. _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) **40'**	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) **20** (10 points) (0 points) **0**
Wellhead protection area. (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) **0**
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) **0**
	Ranking Score (Total Points)	**20**

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

Additional Comments: Registration.

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

Date: **5-28-2008**
Printed Name/Title **Gary Miller, Agent, Highlander Environmental Corp** Signature _____

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

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

APPENDIX B

Summary Report

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

Report Date: June 17, 2008

Work Order: 8061331

Project Location: Eddy County, NM
Project Name: St. Mary/Asceola State #1 Tank Battery
Project Number: 3504

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163242	T-1 0-1'	soil	2008-06-11	00:00	2008-06-13
163243	T-1 2.0'	soil	2008-06-11	00:00	2008-06-13
163244	T-1 3.0'	soil	2008-06-11	00:00	2008-06-13
163245	T-1 5.0'	soil	2008-06-11	00:00	2008-06-13
163246	T-1 7.0'	soil	2008-06-11	00:00	2008-06-13
163247	T-1 10.0'	soil	2008-06-11	00:00	2008-06-13
163248	T-1 12.0'	soil	2008-06-11	00:00	2008-06-13
163249	T-2 0-1'	soil	2008-06-11	00:00	2008-06-13
163250	T-2 2.0'	soil	2008-06-11	00:00	2008-06-13
163251	T-2 3.0'	soil	2008-06-11	00:00	2008-06-13
163252	T-2 5.0'	soil	2008-06-11	00:00	2008-06-13
163253	T-2 7.0'	soil	2008-06-11	00:00	2008-06-13
163254	T-2 10.0'	soil	2008-06-11	00:00	2008-06-13
163255	T-2 12.0'	soil	2008-06-11	00:00	2008-06-13

	BTEX				TPH DRO	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
163242 - T-1 0-1'	<0.0100	<0.0100	**0.0150**	**0.0199**	<50.0	**3.83**
163249 - T-2 0-1'	<0.0100	<0.0100	<0.0100	**0.0225**	<50.0	<1.00

Sample: 163242 - T-1 0-1'

Param	Flag	Result	Units	RL
Chloride		**3220**	mg/Kg	2.00

Sample: 163243 - T-1 2.0'

Param	Flag	Result	Units	RL
Chloride		**2160**	mg/Kg	2.00

Sample: 163244 - T-1 3.0'

Param	Flag	Result	Units	RL
Chloride		**5890**	mg/Kg	2.00

Sample: 163245 - T-1 5.0'

Param	Flag	Result	Units	RL
Chloride		**15500**	mg/Kg	2.00

Sample: 163246 - T-1 7.0'

Param	Flag	Result	Units	RL
Chloride		**12800**	mg/Kg	2.00

Sample: 163247 - T-1 10.0'

Param	Flag	Result	Units	RL
Chloride		**604**	mg/Kg	2.00

Sample: 163248 - T-1 12.0'

Param	Flag	Result	Units	RL
Chloride		**338**	mg/Kg	2.00

Sample: 163249 - T-2 0-1'

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 163250 - T-2 2.0'

Param	Flag	Result	Units	RL
Chloride		**2320**	mg/Kg	2.00

Sample: 163251 - T-2 3.0'

Param	Flag	Result	Units	RL
Chloride		**4170**	mg/Kg	2.00

Sample: 163252 - T-2 5.0'

Param	Flag	Result	Units	RL
Chloride		**2420**	mg/Kg	2.00

Sample: 163253 - T-2 7.0'

Param	Flag	Result	Units	RL
Chloride		**2500**	mg/Kg	2.00

Sample: 163254 - T-2 10.0'

Param	Flag	Result	Units	RL
Chloride		**2200**	mg/Kg	2.00

Sample: 163255 - T-2 12.0'

Param	Flag	Result	Units	RL
Chloride		**278**	mg/Kg	2.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Analytical and Quality Control Report

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

Report Date: June 17, 2008

Work Order: 8061331

Project Location: Eddy County, NM
Project Name: St. Mary/Asceola State #1 Tank Battery
Project Number: 3504

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163242	T-1 0-1'	soil	2008-06-11	00:00	2008-06-13
163243	T-1 2.0'	soil	2008-06-11	00:00	2008-06-13
163244	T-1 3.0'	soil	2008-06-11	00:00	2008-06-13
163245	T-1 5.0'	soil	2008-06-11	00:00	2008-06-13
163246	T-1 7.0'	soil	2008-06-11	00:00	2008-06-13
163247	T-1 10.0'	soil	2008-06-11	00:00	2008-06-13
163248	T-1 12.0'	soil	2008-06-11	00:00	2008-06-13
163249	T-2 0-1'	soil	2008-06-11	00:00	2008-06-13
163250	T-2 2.0'	soil	2008-06-11	00:00	2008-06-13
163251	T-2 3.0'	soil	2008-06-11	00:00	2008-06-13
163252	T-2 5.0'	soil	2008-06-11	00:00	2008-06-13
163253	T-2 7.0'	soil	2008-06-11	00:00	2008-06-13
163254	T-2 10.0'	soil	2008-06-11	00:00	2008-06-13
163255	T-2 12.0'	soil	2008-06-11	00:00	2008-06-13

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 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Certifications
Lubbock - NELAP T104704219-08-TX
El Paso - NELAP T104704221-08-TX

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

Case Narrative

Samples for project St. Mary/Asceola State #1 Tank Battery were received by TraceAnalysis, Inc. on 2008-06-13 and assigned to work order 8061331. Samples for work order 8061331 were received intact at a temperature of 3.2 deg C.

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

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8061331 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 163242 - T-1 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	49404	Date Analyzed:	2008-06-16	Analyzed By:	DC
Prep Batch:	42405	Sample Preparation:	2008-06-16	Prepared By:	DC

Parameter	Flag	Result	RL Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		**0.0150**	mg/Kg	1	0.0100
Xylene		**0.0199**	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.986	mg/Kg	1	1.00	99	68 - 136.9
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	1	1.00	101	48.2 - 155

Sample: 163242 - T-1 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		**3220**	mg/Kg	50	2.00

Sample: 163242 - T-1 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	49369	Date Analyzed:	2008-06-16	Analyzed By:	LD
Prep Batch:	42392	Sample Preparation:	2008-06-16	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	100	135	10 - 250.4

Sample: 163242 - T-1 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	49405	Date Analyzed:	2008-06-16	Analyzed By:	DC
Prep Batch:	42405	Sample Preparation:	2008-06-16	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**3.83**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	63.8 - 141

Sample: 163243 - T-1 2.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2160**	mg/Kg	50	2.00

Sample: 163244 - T-1 3.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**5890**	mg/Kg	50	2.00

Sample: 163245 - T-1 5.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**15500**		mg/Kg	50	2.00

Sample: 163246 - T-1 7.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**12800**		mg/Kg	50	2.00

Sample: 163247 - T-1 10.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**604**		mg/Kg	50	2.00

Sample: 163248 - T-1 12.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**338**		mg/Kg	50	2.00

Sample: 163249 - T-2 0-1'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	49404	Date Analyzed:	2008-06-16	Analyzed By:	DC
Prep Batch:	42405	Sample Preparation:	2008-06-16	Prepared By:	DC

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	1	0.0100
Toluene		<0.0100		mg/Kg	1	0.0100
Ethylbenzene		<0.0100		mg/Kg	1	0.0100
Xylene		**0.0225**		mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.995	mg/Kg	1	1.00	100	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.995	mg/Kg	1	1.00	100	48.2 - 155

Sample: 163249 - T-2 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

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

Sample: 163249 - T-2 0-1'

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	49369	Date Analyzed:	2008-06-16	Analyzed By:	LD
Prep Batch:	42392	Sample Preparation:	2008-06-16	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		138	mg/Kg	1	100	138	10 - 250.4

Sample: 163249 - T-2 0-1'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	49405	Date Analyzed:	2008-06-16	Analyzed By:	DC
Prep Batch:	42405	Sample Preparation:	2008-06-16	Prepared By:	DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	63.8 - 141

Sample: 163250 - T-2 2.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2320**	mg/Kg	50	2.00

Sample: 163251 - T-2 3.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49380	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42412	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**4170**	mg/Kg	50	2.00

Sample: 163252 - T-2 5.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49381	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42413	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2420**	mg/Kg	50	2.00

Sample: 163253 - T-2 7.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49381	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42413	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2500**	mg/Kg	50	2.00

Sample: 163254 - T-2 10.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49381	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42413	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2200**	mg/Kg	50	2.00

Sample: 163255 - T-2 12.0'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	49381	Date Analyzed:	2008-06-16	Analyzed By:	AR
Prep Batch:	42413	Sample Preparation:	2008-06-16	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**278**	mg/Kg	50	2.00

Method Blank (1) QC Batch: 49369

QC Batch:	49369	Date Analyzed:	2008-06-16	Analyzed By:	LD
Prep Batch:	42392	QC Preparation:	2008-06-16	Prepared By:	LD

Parameter	Flag	MDL Result	Units	RL
DRO		16.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	100	132	30.9 - 146.4

Method Blank (1) QC Batch: 49380

QC Batch: 49380 Date Analyzed: 2008-06-16 Analyzed By: AR
Prep Batch: 42412 QC Preparation: 2008-06-16 Prepared By: AR

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

Method Blank (1) QC Batch: 49381

QC Batch: 49381 Date Analyzed: 2008-06-16 Analyzed By: AR
Prep Batch: 42413 QC Preparation: 2008-06-16 Prepared By: AR

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

Method Blank (1) QC Batch: 49404

QC Batch: 49404 Date Analyzed: 2008-06-16 Analyzed By: DC
Prep Batch: 42405 QC Preparation: 2008-06-16 Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.955	mg/Kg	1	1.00	96	48.3 - 132.5
4-Bromofluorobenzene (4-BFB)		0.967	mg/Kg	1	1.00	97	37.7 - 128.9

Method Blank (1) QC Batch: 49405

QC Batch: 49405 | Date Analyzed: 2008-06-16 | Analyzed By: DC
Prep Batch: 42405 | QC Preparation: 2008-06-16 | Prepared By: DC

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	1	1.00	100	39.2 - 135.2
4-Bromofluorobenzene (4-BFB)		0.988	mg/Kg	1	1.00	99	16.8 - 138.1

Laboratory Control Spike (LCS-1)

QC Batch: 49369 | Date Analyzed: 2008-06-16 | Analyzed By: LD
Prep Batch: 42392 | QC Preparation: 2008-06-16 | Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	271	mg/Kg	1	250	16	102	27.8 - 152.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	320	mg/Kg	1	250	16	122	27.8 - 152.1	17	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	108	97.0	mg/Kg	1	100	108	97	38 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 49380 | Date Analyzed: 2008-06-16 | Analyzed By: AR
Prep Batch: 42412 | QC Preparation: 2008-06-16 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.1	mg/Kg	1	100	<0.500	99	85 - 115

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

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

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

Laboratory Control Spike (LCS-1)

QC Batch: 49381 | Date Analyzed: 2008-06-16 | Analyzed By: AR
Prep Batch: 42413 | QC Preparation: 2008-06-16 | Prepared By: AR

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

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	104	mg/Kg	1	100	<0.500	104	85 - 115	2	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: 49404 | Date Analyzed: 2008-06-16 | Analyzed By: DC
Prep Batch: 42405 | QC Preparation: 2008-06-16 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.00	mg/Kg	1	1.00	<0.00110	100	73.3 - 116.6
Toluene	0.996	mg/Kg	1	1.00	<0.00150	100	78.6 - 115.1
Ethylbenzene	0.924	mg/Kg	1	1.00	<0.00160	92	77.4 - 114.9
Xylene	2.93	mg/Kg	1	3.00	<0.00410	98	78.2 - 114.7

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.991	mg/Kg	1	1.00	<0.00110	99	73.3 - 116.6	1	20
Toluene	0.987	mg/Kg	1	1.00	<0.00150	99	78.6 - 115.1	1	20
Ethylbenzene	0.948	mg/Kg	1	1.00	<0.00160	95	77.4 - 114.9	3	20
Xylene	2.94	mg/Kg	1	3.00	<0.00410	98	78.2 - 114.7	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.958	0.946	mg/Kg	1	1.00	96	95	45 - 124.2

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.975	0.959	mg/Kg	1	1.00	98	96	47.2 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 49405 | Date Analyzed: 2008-06-16 | Analyzed By: DC
Prep Batch: 42405 | QC Preparation: 2008-06-16 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.87	mg/Kg	1	10.0	<0.739	79	57.5 - 106.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.14	mg/Kg	1	10.0	<0.739	81	57.5 - 106.4	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.979	0.995	mg/Kg	1	1.00	98	100	63.8 - 134.3
4-Bromofluorobenzene (4-BFB)	0.998	1.02	mg/Kg	1	1.00	100	102	53.3 - 123.6

Matrix Spike (MS-1) Spiked Sample: 163242

QC Batch: 49369 | Date Analyzed: 2008-06-16 | Analyzed By: LD
Prep Batch: 42392 | QC Preparation: 2008-06-16 | Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	265	mg/Kg	1	250	21.75	97	18 - 179.5

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	280	mg/Kg	1	250	21.75	112	18 - 179.5	6	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	93.6	107	mg/Kg	1	100	94	107	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 163251

QC Batch: 49380 | Date Analyzed: 2008-06-16 | Analyzed By: AR
Prep Batch: 42412 | QC Preparation: 2008-06-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	8610	mg/Kg	50	5000	4168	89	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	8770	mg/Kg	50	5000	4168	92	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 163261

QC Batch: 49381 | Date Analyzed: 2008-06-16 | Analyzed By: AR
Prep Batch: 42413 | QC Preparation: 2008-06-16 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	18400	mg/Kg	50	5000	12860	111	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	18500	mg/Kg	50	5000	12860	113	85 - 115	0	20

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

Matrix Spike (MS-1) Spiked Sample: 163242

QC Batch: 49404 | Date Analyzed: 2008-06-16 | Analyzed By: DC
Prep Batch: 42405 | QC Preparation: 2008-06-16 | Prepared By: DC

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[1]	2.45	mg/Kg	1	1.00	<0.00110	245	62.2 - 134.3
Toluene	[2]	2.48	mg/Kg	1	1.00	<0.00150	248	62.6 - 145.4
Ethylbenzene	[3]	2.51	mg/Kg	1	1.00	0.015	250	64.6 - 146.4

continued ...

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

matrix spikes continued ...

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Xylene	[4]	7.55	mg/Kg	1	3.00	0.0199	251	64.3 - 148.8

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

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[5]	2.53	mg/Kg	1	1.00	<0.00110	253	62.2 - 134.3	3	20
Toluene	[6]	2.60	mg/Kg	1	1.00	<0.00150	260	62.6 - 145.4	5	20
Ethylbenzene	[7]	2.66	mg/Kg	1	1.00	0.015	264	64.6 - 146.4	6	20
Xylene	[8]	7.98	mg/Kg	1	3.00	0.0199	265	64.3 - 148.8	6	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.05	0.973	mg/Kg	1	1	105	97	38.8 - 127.5
4-Bromofluorobenzene (4-BFB)	1.08	1.02	mg/Kg	1	1	108	102	49.3 - 142.4

Matrix Spike (MS-1) Spiked Sample: 163242

QC Batch: 49405 | Date Analyzed: 2008-06-16 | Analyzed By: DC
Prep Batch: 42405 | QC Preparation: 2008-06-16 | Prepared By: DC

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	[9]	23.7	mg/Kg	1	10.0	3.8341	199	10 - 139.3

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

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	[10]	22.4	mg/Kg	1	10.0	3.8341	186	10 - 139.3	6	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.03	mg/Kg	1	1	102	103	21.3 - 119
4-Bromofluorobenzene (4-BFB)	1.04	1.04	mg/Kg	1	1	104	104	52.5 - 154

[4]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[9]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[10]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (ICV-1)

QC Batch: 49369 | Date Analyzed: 2008-06-16 | Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	262	105	85 - 115	2008-06-16

Standard (CCV-1)

QC Batch: 49369 | Date Analyzed: 2008-06-16 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	287	115	85 - 115	2008-06-16

Standard (ICV-1)

QC Batch: 49380 | Date Analyzed: 2008-06-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2008-06-16

Standard (CCV-1)

QC Batch: 49380 | Date Analyzed: 2008-06-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.6	98	85 - 115	2008-06-16

Standard (ICV-1)

QC Batch: 49381 | Date Analyzed: 2008-06-16 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.0	98	85 - 115	2008-06-16

Standard (CCV-1)

QC Batch: 49381 | Date Analyzed: 2008-06-16 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2008-06-16

Standard (ICV-1)

QC Batch: 49404 | Date Analyzed: 2008-06-16 | Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0991	99	85 - 115	2008-06-16
Toluene		mg/Kg	0.100	0.0984	98	85 - 115	2008-06-16
Ethylbenzene		mg/Kg	0.100	0.0885	88	85 - 115	2008-06-16
Xylene		mg/Kg	0.300	0.282	94	85 - 115	2008-06-16

Standard (CCV-1)

QC Batch: 49404 | Date Analyzed: 2008-06-16 | Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0881	88	85 - 115	2008-06-16
Toluene		mg/Kg	0.100	0.0878	88	85 - 115	2008-06-16
Ethylbenzene	[11]	mg/Kg	0.100	0.0818	82	85 - 115	2008-06-16
Xylene		mg/Kg	0.300	0.261	87	85 - 115	2008-06-16

Standard (ICV-1)

QC Batch: 49405 | Date Analyzed: 2008-06-16 | Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.939	94	85 - 115	2008-06-16

[11] Ethylbenzene outside of control limits on CCV. CCV component average is .0863 which is within acceptable range. This is acceptable by Method 8000.

Standard (CCV-1)

QC Batch: 49405 | Date Analyzed: 2008-06-16 | Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.862	86	85 - 115	2008-06-16

WO # 806133

Analysis Request of Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: ST Mary

SITE MANAGER: Ike Tavarez

PROJECT NO.: 3504

PROJECT NAME: ST Mary / Asceola State #1 Tank Battery, Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
163242	6/11/08		S		✓	T-1 0-1	1				✓		X	X											X				
243			S		✓	T-1 2.0'	1				✓														X				
244			S		✓	T-1 3.0'	1				✓														X				
245			S		✓	T-1 5.0'	1				✓														X				
246			S		✓	T-1 7.0'	1				✓														X				
247			S		✓	T-1 10.0'	1				✓														X				
248			S		✓	T-1 12.0'	1				✓														X				
249			S		✓	T-2 0-1	1				✓		X	X											X				
250			S		✓	T-2 2.0	1				✓														X				
251	↓		S		✓	T-2 3.0'	1				✓														X				

RELIQUISHED BY: (Signature) [signature] Date: 6-13-08 Time: 14:40 RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Initial) [signature] Date: Time:

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

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

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

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) [signature]
DATE: 6-13-08 TIME: 14:40

RUSH Charges Authorized: Yes No — Rush

SAMPLE CONDITION WHEN RECEIVED: 3.2° C intact

REMARKS: Run deeper Samples if TPH exceeds 100 mg/kg.

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

all tests Midland

WO# 806133 1

Analysis Request of Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 2 OF: 2

CLIENT NAME: St. Mary

SITE MANAGER: Ike Tavarez

PROJECT NO.: 3504

PROJECT NAME: St Mary / Asceola State #1 / Tank Battery / Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
163252	6-11-08		S		-	T-2 (5.0')	1				/														X				
253	6-11-08		S		-	T-2 (7.0')	1				/														X				
254	6-11-08		S		-	T-2 (10.0')	1				/														X				
255	6-11-08		S		-	T-2 (12.0')	1				/														X				

RELINQUISHED BY: (Signature) Date: 6-13-08 Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Initial) Ike Tavarez / Gene Date: Time:

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

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
HIGHLANDER CONTACT PERSON: Ike Tavarez Results by:

RECEIVING LABORATORY: Trace
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 6.13.08 TIME: 14:40
RUSH Charges Authorized: (Yes) No

SAMPLE CONDITION WHEN RECEIVED: 3.2°C intact

REMARKS: all tests - midland

RUSH!

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

Summary Report

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

Report Date: April 22, 2009

Work Order: 9042012

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 3504

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
193572	North Wall	soil	2009-04-17	00:00	2009-04-20
193573	South Wall	soil	2009-04-17	00:00	2009-04-20
193574	East Wall	soil	2009-04-17	00:00	2009-04-20
193575	West Wall	soil	2009-04-17	00:00	2009-04-20

	BTEX				TPH DRO	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
193572 - North Wall	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	**1.84**
193573 - South Wall	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
193574 - East Wall	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
193575 - West Wall	<0.0100	<0.0100	<0.0100	**0.0968**	<50.0	<1.00

Sample: 193572 - North Wall

Param	Flag	Result	Units	RL
Chloride		**2790**	mg/Kg	4.00

Sample: 193573 - South Wall

Param	Flag	Result	Units	RL
Chloride		**2470**	mg/Kg	4.00

Sample: 193574 - East Wall

Param	Flag	Result	Units	RL
Chloride		**2670**	mg/Kg	4.00

Sample: 193575 - West Wall

Param	Flag	Result	Units	RL
Chloride		**1800**	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: April 22, 2009

Work Order: 9042012

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 3504

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
193572	North Wall	soil	2009-04-17	00:00	2009-04-20
193573	South Wall	soil	2009-04-17	00:00	2009-04-20
193574	East Wall	soil	2009-04-17	00:00	2009-04-20
193575	West Wall	soil	2009-04-17	00:00	2009-04-20

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project St. Mary/Osceola State #1 were received by TraceAnalysis, Inc. on 2009-04-20 and assigned to work order 9042012. Samples for work order 9042012 were received intact at a temperature of 3.6 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	50179	2009-04-21 at 10:07	58790	2009-04-21 at 10:07
Chloride (Titration)	SM 4500-Cl B	50197	2009-04-22 at 09:00	58813	2009-04-22 at 11:35
TPH DRO	Mod. 8015B	50145	2009-04-20 at 09:00	58771	2009-04-20 at 14:20
TPH GRO	S 8015B	50179	2009-04-21 at 10:07	58791	2009-04-21 at 10:07

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9042012 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 193572 - North Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	58790	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.02	mg/Kg	1	2.00	101	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.80	mg/Kg	1	2.00	90	45.2 - 144.3

Sample: 193572 - North Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58813	Date Analyzed:	2009-04-22	Analyzed By:	AR
Prep Batch:	50197	Sample Preparation:	2009-04-22	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2790**	mg/Kg	50	4.00

Sample: 193572 - North Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	Sample Preparation:	2009-04-20	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		154	mg/Kg	1	100	154	13.2 - 219.3

Sample: 193572 - North Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	58791	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**1.84**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.99	mg/Kg	1	2.00	100	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.75	mg/Kg	1	2.00	88	52 - 117

Sample: 193573 - South Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	58790	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.00	mg/Kg	1	2.00	100	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.81	mg/Kg	1	2.00	90	45.2 - 144.3

Sample: 193573 - South Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58813	Date Analyzed:	2009-04-22	Analyzed By:	AR
Prep Batch:	50197	Sample Preparation:	2009-04-22	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2470**	mg/Kg	50	4.00

Sample: 193573 - South Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	Sample Preparation:	2009-04-20	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		140	mg/Kg	1	100	140	13.2 - 219.3

Sample: 193573 - South Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	58791	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.09	mg/Kg	1	2.00	104	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.70	mg/Kg	1	2.00	85	52 - 117

Sample: 193574 - East Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	58790	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.06	mg/Kg	1	2.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.75	mg/Kg	1	2.00	88	45.2 - 144.3

Sample: 193574 - East Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58813	Date Analyzed:	2009-04-22	Analyzed By:	AR
Prep Batch:	50197	Sample Preparation:	2009-04-22	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2670**	mg/Kg	50	4.00

Sample: 193574 - East Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	Sample Preparation:	2009-04-20	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	.	162	mg/Kg	1	100	162	13.2 - 219.3

Sample: 193574 - East Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	58791	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.66	mg/Kg	1	2.00	83	52 - 117

Sample: 193575 - West Wall

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	58790	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		**0.0968**	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.72	mg/Kg	1	2.00	86	45.2 - 144.3

Sample: 193575 - West Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58813	Date Analyzed:	2009-04-22	Analyzed By:	AR
Prep Batch:	50197	Sample Preparation:	2009-04-22	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1800**	mg/Kg	50	4.00

Sample: 193575 - West Wall

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	Sample Preparation:	2009-04-20	Prepared By:	LD

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		153	mg/Kg	1	100	153	13.2 - 219.3

Sample: 193575 - West Wall

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	58791	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	Sample Preparation:	2009-04-21	Prepared By:	ME

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.01	mg/Kg	1	2.00	100	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.65	mg/Kg	1	2.00	82	52 - 117

Method Blank (1) QC Batch: 58771

QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	QC Preparation:	2009-04-20	Prepared By:	LD

Parameter	Flag	MDL Result	Units	RL
DRO		8.40	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		105	mg/Kg	1	100	105	13 - 178.5

Method Blank (1) QC Batch: 58790

QC Batch:	58790	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	QC Preparation:	2009-04-21	Prepared By:	ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00100	mg/Kg	0.01
Toluene		<0.00100	mg/Kg	0.01
Ethylbenzene		<0.00110	mg/Kg	0.01
Xylene		<0.00360	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.11	mg/Kg	1	2.00	106	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	1	2.00	103	51.9 - 128.1

Method Blank (1) QC Batch: 58791

QC Batch:	58791	Date Analyzed:	2009-04-21	Analyzed By:	ME
Prep Batch:	50179	QC Preparation:	2009-04-21	Prepared By:	ME

Parameter	Flag	MDL Result	Units	RL
GRO		<0.482	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	1	2.00	99	71.9 - 115
4-Bromofluorobenzene (4-BFB)		2.00	mg/Kg	1	2.00	100	45.7 - 118.9

Method Blank (1) QC Batch: 58813

QC Batch:	58813	Date Analyzed:	2009-04-22	Analyzed By:	AR
Prep Batch:	50197	QC Preparation:	2009-04-22	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch:	58771	Date Analyzed:	2009-04-20	Analyzed By:	LD
Prep Batch:	50145	QC Preparation:	2009-04-20	Prepared By:	LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	254	mg/Kg	1	250	8.4	98	57.4 - 133.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	260	mg/Kg	1	250	8.4	101	57.4 - 133.4	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	89.0	94.7	mg/Kg	1	100	89	95	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 58790 | Date Analyzed: 2009-04-21 | Analyzed By: ME
Prep Batch: 50179 | QC Preparation: 2009-04-21 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.03	mg/Kg	1	2.00	<0.00100	102	72.7 - 129.8
Toluene	2.08	mg/Kg	1	2.00	<0.00100	104	71.6 - 129.6
Ethylbenzene	2.05	mg/Kg	1	2.00	<0.00110	102	70.8 - 129.7
Xylene	6.19	mg/Kg	1	6.00	<0.00360	103	70.9 - 129.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.14	mg/Kg	1	2.00	<0.00100	107	72.7 - 129.8	5	20
Toluene	2.16	mg/Kg	1	2.00	<0.00100	108	71.6 - 129.6	4	20
Ethylbenzene	2.19	mg/Kg	1	2.00	<0.00110	110	70.8 - 129.7	7	20
Xylene	6.66	mg/Kg	1	6.00	<0.00360	111	70.9 - 129.4	7	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.07	2.01	mg/Kg	1	2.00	104	100	65.9 - 132
4-Bromofluorobenzene (4-BFB)	2.15	2.16	mg/Kg	1	2.00	108	108	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 58791 | Date Analyzed: 2009-04-21 | Analyzed By: ME
Prep Batch: 50179 | QC Preparation: 2009-04-21 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	18.5	mg/Kg	1	20.0	<0.482	92	60.5 - 100.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	19.9	mg/Kg	1	20.0	<0.482	100	60.5 - 100.1	7	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.03	2.06	mg/Kg	1	2.00	102	103	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	2.10	2.10	mg/Kg	1	2.00	105	105	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch: 58813 | Date Analyzed: 2009-04-22 | Analyzed By: AR
Prep Batch: 50197 | QC Preparation: 2009-04-22 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.3	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.8	mg/Kg	1	100	<2.18	100	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 193518

QC Batch: 58771 | Date Analyzed: 2009-04-20 | Analyzed By: LD
Prep Batch: 50145 | QC Preparation: 2009-04-20 | Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	174	mg/Kg	1	250	14.28	64	35.2 - 167.1

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	190	mg/Kg	1	250	14.28	70	35.2 - 167.1	9	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	62.8	119	mg/Kg	1	100	63	119	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 193575

QC Batch: 58790 | Date Analyzed: 2009-04-21 | Analyzed By: ME
Prep Batch: 50179 | QC Preparation: 2009-04-21 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.98	mg/Kg	1	2.00	<0.00100	99	58.6 - 165.2
Toluene	1.98	mg/Kg	1	2.00	<0.00100	99	64.2 - 153.8
Ethylbenzene	2.04	mg/Kg	1	2.00	<0.00110	102	61.6 - 159.4
Xylene	6.00	mg/Kg	1	6.00	0.0968	98	64.4 - 155.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.92	mg/Kg	1	2.00	<0.00100	96	58.6 - 165.2	3	20
Toluene	2.02	mg/Kg	1	2.00	<0.00100	101	64.2 - 153.8	2	20
Ethylbenzene	2.11	mg/Kg	1	2.00	<0.00110	106	61.6 - 159.4	3	20
Xylene	6.19	mg/Kg	1	6.00	0.0968	102	64.4 - 155.3	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.04	2.03	mg/Kg	1	2	102	102	76 - 127.9
4-Bromofluorobenzene (4-BFB)	1.72	1.80	mg/Kg	1	2	86	90	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 193574

QC Batch: 58791 | Date Analyzed: 2009-04-21 | Analyzed By: ME
Prep Batch: 50179 | QC Preparation: 2009-04-21 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	25.0	mg/Kg	1	20.0	<0.482	125	12.8 - 175.2

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	24.7	mg/Kg	1	20.0	<0.482	124	12.8 - 175.2	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.26	2.23	mg/Kg	1	2	113	112	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	1.74	1.73	mg/Kg	1	2	87	86	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 193572

QC Batch: 58813 | Date Analyzed: 2009-04-22 | Analyzed By: AR
Prep Batch: 50197 | QC Preparation: 2009-04-22 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	7770	mg/Kg	50	5000	2790	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	7940	mg/Kg	50	5000	2790	103	85 - 115	2	20

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

Standard (CCV-2)

QC Batch: 58771 | Date Analyzed: 2009-04-20 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	229	92	80 - 120	2009-04-20

Standard (CCV-3)

QC Batch: 58771 | Date Analyzed: 2009-04-20 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	235	94	80 - 120	2009-04-20

Standard (CCV-4)

QC Batch: 58771 | Date Analyzed: 2009-04-20 | Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	268	107	80 - 120	2009-04-20

Standard (CCV-1)

QC Batch: 58790 Date Analyzed: 2009-04-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.106	106	80 - 120	2009-04-21
Toluene		mg/Kg	0.100	0.111	111	80 - 120	2009-04-21
Ethylbenzene		mg/Kg	0.100	0.109	109	80 - 120	2009-04-21
Xylene		mg/Kg	0.300	0.324	108	80 - 120	2009-04-21

Standard (CCV-2)

QC Batch: 58790 Date Analyzed: 2009-04-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.106	106	80 - 120	2009-04-21
Toluene		mg/Kg	0.100	0.106	106	80 - 120	2009-04-21
Ethylbenzene		mg/Kg	0.100	0.104	104	80 - 120	2009-04-21
Xylene		mg/Kg	0.300	0.306	102	80 - 120	2009-04-21

Standard (CCV-1)

QC Batch: 58791 Date Analyzed: 2009-04-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.10	110	80 - 120	2009-04-21

Standard (CCV-2)

QC Batch: 58791 Date Analyzed: 2009-04-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.18	118	80 - 120	2009-04-21

Standard (ICV-1)

QC Batch: 58813 Date Analyzed: 2009-04-22 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.4	99	85 - 115	2009-04-22

Standard (CCV-1)

QC Batch: 58813 Date Analyzed: 2009-04-22 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-04-22

107201C

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 1

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: ST. MARY'S

SITE MANAGER: IKE TAVAREZ

PROJECT NO.: 3504

PROJECT NAME: ST. MARY'S / OSCEOLA STATE #1 EDDY CO, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TX1005 (Ext. to C35)	TPH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
193572	04/17/09			X		NORTH WALL	1				X		X	X												X				
573	"			X		SOUTH WALL	1				X		X	X												X				
574	"			X		EAST WALL	1				X		X	X												X				
575	"			X		WEST WALL	1				X		X	X												X				

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) — Date: 04/20/09 Time: 11:00
RECEIVED BY: (Signature) Lindsey Walls — Date: 4/20/09 Time: 11:00
SAMPLED BY: (Print & Initial) ROBERT GRUBBS — Date: 04/17/09 Time:

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

RELINQUISHED BY: (Signature) — Date: Time:
RECEIVED BY: (Signature) — Date: Time:
TETRA TECH CONTACT PERSON: IKE TAVAREZ — Results by:

RECEIVING LABORATORY: TICAGE
ADDRESS:
CITY: MIDLAND STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 3.6°

REMARKS: All tests Midland

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

Summary Report

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

Report Date: April 27, 2009

Work Order: 9042421

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 3504

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
193995	Southwest Wall	soil	2009-04-23	00:00	2009-04-24
193996	Southeast Wall	soil	2009-04-23	00:00	2009-04-24
193997	East Wall	soil	2009-04-23	00:00	2009-04-24
193998	West Wall	soil	2009-04-23	00:00	2009-04-24

Sample: 193995 - Southwest Wall

Param	Flag	Result	Units	RL
Chloride		**3360**	mg/Kg	4.00

Sample: 193996 - Southeast Wall

Param	Flag	Result	Units	RL
Chloride		**3010**	mg/Kg	4.00

Sample: 193997 - East Wall

Param	Flag	Result	Units	RL
Chloride		**3240**	mg/Kg	4.00

Sample: 193998 - West Wall

Param	Flag	Result	Units	RL
Chloride		**1530**	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: April 27, 2009

Work Order: 9042421

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 3504

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
193995	Southwest Wall	soil	2009-04-23	00:00	2009-04-24
193996	Southeast Wall	soil	2009-04-23	00:00	2009-04-24
193997	East Wall	soil	2009-04-23	00:00	2009-04-24
193998	West Wall	soil	2009-04-23	00:00	2009-04-24

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project St. Mary/Osceola State #1 were received by TraceAnalysis, Inc. on 2009-04-24 and assigned to work order 9042421. Samples for work order 9042421 were received intact at a temperature of 5.3 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	50267	2009-04-24 at 09:03	58891	2009-04-24 at 15:06

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9042421 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 193995 - Southwest Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58891	Date Analyzed:	2009-04-24	Analyzed By:	AR
Prep Batch:	50267	Sample Preparation:	2009-04-24	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3360**	mg/Kg	50	4.00

Sample: 193996 - Southeast Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58891	Date Analyzed:	2009-04-24	Analyzed By:	AR
Prep Batch:	50267	Sample Preparation:	2009-04-24	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3010**	mg/Kg	50	4.00

Sample: 193997 - East Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58891	Date Analyzed:	2009-04-24	Analyzed By:	AR
Prep Batch:	50267	Sample Preparation:	2009-04-24	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3240**	mg/Kg	50	4.00

Sample: 193998 - West Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	58891	Date Analyzed:	2009-04-24	Analyzed By:	AR
Prep Batch:	50267	Sample Preparation:	2009-04-24	Prepared By:	AR

continued ...

sample 193998 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1530**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 58891

QC Batch: 58891 Date Analyzed: 2009-04-24 Analyzed By: AR
Prep Batch: 50267 QC Preparation: 2009-04-24 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 58891 Date Analyzed: 2009-04-24 Analyzed By: AR
Prep Batch: 50267 QC Preparation: 2009-04-24 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.9	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 193925

QC Batch: 58891 Date Analyzed: 2009-04-24 Analyzed By: AR
Prep Batch: 50267 QC Preparation: 2009-04-24 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11800	mg/Kg	50	5000	7070	95	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11900	mg/Kg	50	5000	7070	97	85 - 115	1	20

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

Standard (ICV-1)

QC Batch: 58891 Date Analyzed: 2009-04-24 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-04-24

Standard (CCV-1)

QC Batch: 58891 Date Analyzed: 2009-04-24 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.1	99	85 - 115	2009-04-24

Analysis Request of Chain of Custody Record

PAGE: 1 OF:

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: St Marys
SITE MANAGER: Ike Tavarez
PROJECT NO.: 3504
PROJECT NAME: St. Marys / OSCEOLA State #1 Eddy Co, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
193995	12-23-09					Southwest wall																		X				
996	"					South East wall																		X				
997	"					East wall																		X				
998	"					West wall.																		X				

RELINQUISHED BY: (Signature) Date: 12/24/09 Time: 1340
RECEIVED BY: (Signature) Date: 12-24-09 Time: 13:40
SAMPLED BY: (Print & Initial) IT Date: 12/23/09 Time:

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

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:

RECEIVING LABORATORY: Xenco
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 5.3°C, intact.
REMARKS: Rush All tests Midland.

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

Summary Report

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

Report Date: June 9, 2009

Work Order: 9050534

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 115-6403504

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
195008	East Trench 2'	soil	2009-05-04	00:00	2009-05-05
195009	East Trench 4'	soil	2009-05-04	00:00	2009-05-05
195010	East Trench 6'	soil	2009-05-04	00:00	2009-05-05

Sample: 195008 - East Trench 2'

Param	Flag	Result	Units	RL
Chloride		**1170**	mg/Kg	4.00

Sample: 195009 - East Trench 4'

Param	Flag	Result	Units	RL
Chloride		**1300**	mg/Kg	4.00

Sample: 195010 - East Trench 6'

Param	Flag	Result	Units	RL
Chloride		**229**	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: June 9, 2009

Work Order: 9050534

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 115-6403504

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
195008	East Trench 2'	soil	2009-05-04	00:00	2009-05-05
195009	East Trench 4'	soil	2009-05-04	00:00	2009-05-05
195010	East Trench 6'	soil	2009-05-04	00:00	2009-05-05

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

Michael Ward

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project St. Mary/Osceola State #1 were received by TraceAnalysis, Inc. on 2009-05-05 and assigned to work order 9050534. Samples for work order 9050534 were received intact at a temperature of 4.1 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	51363	2009-06-08 at 09:31	60187	2009-06-08 at 15:11

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9050534 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 195008 - East Trench 2'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	60187	Date Analyzed:	2009-06-08	Analyzed By:	AR
Prep Batch:	51363	Sample Preparation:	2009-06-08	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1170**	mg/Kg	50	4.00

Sample: 195009 - East Trench 4'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	60187	Date Analyzed:	2009-06-08	Analyzed By:	AR
Prep Batch:	51363	Sample Preparation:	2009-06-08	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1300**	mg/Kg	50	4.00

Sample: 195010 - East Trench 6'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	60187	Date Analyzed:	2009-06-08	Analyzed By:	AR
Prep Batch:	51363	Sample Preparation:	2009-06-08	Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**229**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 60187

QC Batch:	60187	Date Analyzed:	2009-06-08	Analyzed By:	AR
Prep Batch:	51363	QC Preparation:	2009-06-08	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 60187 | Date Analyzed: 2009-06-08 | Analyzed By: AR
Prep Batch: 51363 | QC Preparation: 2009-06-08 | Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 198009

QC Batch: 60187 | Date Analyzed: 2009-06-08 | Analyzed By: AR
Prep Batch: 51363 | QC Preparation: 2009-06-08 | Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	5000	mg/Kg	50	5000	<109	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	5040	mg/Kg	50	5000	<109	101	85 - 115	1	20

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

Standard (ICV-1)

QC Batch: 60187 | Date Analyzed: 2009-06-08 | Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-06-08

Standard (CCV-1)

QC Batch: 60187 | Date Analyzed: 2009-06-08 | Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.4	99	85 - 115	2009-06-08

Work Order #

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 2

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: St. Marys

SITE MANAGER: Ike Tavarez

PROJECT NO.: 115-G4035504

PROJECT NAME: St. Marys / Osceola State #1 Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
194995	5/4/09		S		X	Background 3'	1				X														X				
996						Background 6'																			X				
997						Background 8'																			X				
998						Southwest Trench 2'																							
999						Southwest Trench 4'																							
195000						Southwest Trench 6'																							
001						Southeast Trench 2'																							
002						Southeast Trench 4'																							
003						Southeast Trench 6'																							
004						West Wall				HNO3															X				

RELINQUISHED BY: (Signature) — Date: 5/5/09 Time: 1538 — RECEIVED BY: (Signature) — Date: 5-5-09 Time: 15:38

SAMPLED BY: (Print & Initial) Robert Crabb Jr — Date: 5/5/09 Time: 5:25

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

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

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

TETRA TECH CONTACT PERSON: Ike Tavarez — Results by:

RECEIVING LABORATORY: Trace — RECEIVED BY: (Signature)

ADDRESS: — CITY: Midland — STATE: TX — ZIP: — CONTACT: — PHONE: — DATE: — TIME:

RUSH Charges Authorized: (Yes) No

SAMPLE CONDITION WHEN RECEIVED: 4.1°C, intact

REMARKS: All tests Midland.

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

Work Order #: _____

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: St. Marys

SITE MANAGER: Ike Tavarez

PROJECT NO.: 115-6410350A

PROJECT NAME: St. Marys / Osceola State #1 Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
195005	5/1/09		S		X	East wall	1				X	
006						Southwest Wall						
007						Southeast Wall						
008						East Trench 2'						
009						East Trench 4'						
010						East Trench 6'						

ANALYSIS REQUEST (Circle or Specify Method No.)

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

RELINQUISHED BY: (Signature) Robert Gaddis — Date: 5-5-09 Time: 915 1538

RECEIVED BY: (Signature) — Date: 5-5-09 Time: 1538

SAMPLED BY: (Print & Initial) Robert Gaddis RG — Date: 5-5-09 Time: 915

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

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

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

AIRBILL #: _____

OTHER: _____

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

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

RECEIVING LABORATORY: Test

ADDRESS: _____

CITY: Midland STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____

RECEIVED BY: (Signature) _____

DATE: _____ TIME: _____

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: (Yes) No

SAMPLE CONDITION WHEN RECEIVED: 4.1°C intact.

REMARKS: All tests Midland.

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

Summary Report

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

Report Date: May 6, 2009

Work Order: 9050534

Project Location: Eddy Co., NM
Project Name: St. Marys/Osceola State #1
Project Number: 115-6403504

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
194995	Background 3'	soil	2009-05-04	00:00	2009-05-05
194996	Background 6'	soil	2009-05-04	00:00	2009-05-05
194997	Background 8'	soil	2009-05-04	00:00	2009-05-05
195004	West Wall	soil	2009-05-04	00:00	2009-05-05
195005	East Wall	soil	2009-05-04	00:00	2009-05-05
195006	Southwest Wall	soil	2009-05-04	00:00	2009-05-05
195007	Southeast Wall	soil	2009-05-04	00:00	2009-05-05

Sample: 194995 - Background 3'

Param	Flag	Result	Units	RL
Chloride		**1950**	mg/Kg	4.00

Sample: 194996 - Background 6'

Param	Flag	Result	Units	RL
Chloride		**2130**	mg/Kg	4.00

Sample: 194997 - Background 8'

Param	Flag	Result	Units	RL
Chloride		**2810**	mg/Kg	4.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: May 6, 2009

Work Order: 9050534

Project Location: Eddy Co., NM
Project Name: St. Mary/Osceola State #1
Project Number: 115-6403504

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
194995	Background 3'	soil	2009-05-04	00:00	2009-05-05
194996	Background 6'	soil	2009-05-04	00:00	2009-05-05
194997	Background 8'	soil	2009-05-04	00:00	2009-05-05
195004	West Wall	soil	2009-05-04	00:00	2009-05-05
195005	East Wall	soil	2009-05-04	00:00	2009-05-05
195006	Southwest Wall	soil	2009-05-04	00:00	2009-05-05
195007	Southeast Wall	soil	2009-05-04	00:00	2009-05-05

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 7 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project St. Mary/Osceola State #1 were received by TraceAnalysis, Inc. on 2009-05-05 and assigned to work order 9050534. Samples for work order 9050534 were received intact at a temperature of 4.1 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	50516	2009-05-05 at 16:15	59194	2009-05-05 at 17:00

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9050534 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 194995 - Background 3'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**1950**		mg/Kg	50	4.00

Sample: 194996 - Background 6'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2130**		mg/Kg	50	4.00

Sample: 194997 - Background 8'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**2810**		mg/Kg	50	4.00

Sample: 195004 - West Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

continued ...

sample 195004 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 195005 - East Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3750**	mg/Kg	50	4.00

Sample: 195006 - Southwest Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**1650**	mg/Kg	50	4.00

Sample: 195007 - Southeast Wall

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	59194	Date Analyzed:	2009-05-05	Analyzed By:	AG
Prep Batch:	50516	Sample Preparation:	2009-05-05	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2970**	mg/Kg	50	4.00

Method Blank (1) QC Batch: 59194

QC Batch: 59194 | Date Analyzed: 2009-05-05 | Analyzed By: AG
Prep Batch: 50516 | QC Preparation: 2009-05-05 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 59194 | Date Analyzed: 2009-05-05 | Analyzed By: AG
Prep Batch: 50516 | QC Preparation: 2009-05-05 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	96.4	mg/Kg	1	100	<2.18	96	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	97.2	mg/Kg	1	100	<2.18	97	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 195007

QC Batch: 59194 | Date Analyzed: 2009-05-05 | Analyzed By: AG
Prep Batch: 50516 | QC Preparation: 2009-05-05 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	8650	mg/Kg	50	5000	2970	114	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	8710	mg/Kg	50	5000	2970	115	85 - 115	1	20

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

Standard (ICV-1)

QC Batch: 59194 | Date Analyzed: 2009-05-05 | Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.7	98	85 - 115	2009-05-05

Standard (CCV-1)

QC Batch: 59194 Date Analyzed: 2009-05-05 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.2	98	85 - 115	2009-05-05

Work Order #

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 2

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: St. Marys

SITE MANAGER: Ike Tavarez

PROJECT NO.: 115-G4035504

PROJECT NAME: St. Marys / Osceola State #1 Eddy Co. NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
194995	5/4/09		S		X	Background 3'	1				X	
996						Background 6'						
997						Background 8'						
998						Southwest Trench 2'						
999						Southwest Trench 4'						
195000						Southwest Trench 6'						
001						Southeast Trench 2'						
002						Southeast Trench 4'						
003						Southeast Trench 6'						
004						West Wall						

ANALYSIS REQUEST (Circle or Specify Method No.)

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

RELINQUISHED BY: (Signature) — Date: 5/5/09 Time: 1538 — RECEIVED BY: (Signature) — Date: 5-5-09 Time: 15:38

SAMPLED BY: (Print & Initial) Robert Cobbs Jr — Date: 5/5/09 Time: 523

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

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

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

RECEIVING LABORATORY: Trace — RECEIVED BY: (Signature)

ADDRESS: — CITY: Midland STATE: TX ZIP: — CONTACT: — PHONE: — DATE: — TIME:

TETRA TECH CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: (Yes) No

SAMPLE CONDITION WHEN RECEIVED: 4.1°C intact

REMARKS: All tests Midland.

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

Work Order # ______

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

TETRA TECH
1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: St. Marys
SITE MANAGER: Ike Tavarez
PROJECT NO.: 115-6403504
PROJECT NAME: St. Marys / Osceola State #1 Eddy Co. NM

ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8021B; TPH 8015 MOD. TX1005 (Ext. to C35); PAH 8270; RCRA Metals Ag As Ba Cd Cr Pb Hg Se; TCLP Metals Ag As Ba Cd Vr Pd Hg Se; TCLP Volatiles; TCLP Semi Volatiles; RCI; GC.MS Vol. 8240/8260/624; GC.MS Semi. Vol. 8270/625; PCB's 8080/608; Pest. 808/608; Chloride (circled); Gamma Spec.; Alpha Beta (Air); PLM (Asbestos); Major Anions/Cations, pH, TDS

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	Chloride
195005	5/4/09		S		X	East wall	1				X		X
006	↓		↓		↓	Southwest Wall	↓				↓		X
007	↓		↓		↓	Southeast Wall	↓				↓		X
008	↓		↓		↓	East Trench 2'	↓				↓		
009	↓		↓		↓	East Trench 4'	↓				↓		
010	↓		↓		↓	East Trench 6'	↓				↓		

RELINQUISHED BY: (Signature) Robert Grubbs Date: 5-5-09 Time: 915 1538
RECEIVED BY: (Signature) [signature] Date: 5-5-09 Time: 15:38
SAMPLED BY: (Print & Initial) Robert Grubbs Jr. Date: 5-5-09 Time: 915

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

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
TETRA TECH CONTACT PERSON: Ike Tavarez
Results by:

RECEIVING LABORATORY: Trace
RECEIVED BY: (Signature)
ADDRESS:
CITY: Midland STATE: TX ZIP:
CONTACT: PHONE: DATE: TIME:
RUSH Charges Authorized: Yes (circled) No

SAMPLE CONDITION WHEN RECEIVED: 4.1°C intact.
REMARKS: All tests Midland.

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