July 1, 2015

Ms. Dina Ferguson
Enterprise Field Services, LLC
PO Box 4324
Houston, TX 77252

Re: ECIRTS 24187
Event Date: November 8, 2014
Potash 1002 Release
Eddy County, New Mexico
Apex Project No. 7030714G096.001

Dear Ms. Ferguson:

Per your request, this letter provides a summary of the scope, activities and results for the project referred to as Potash 1002 release, referred to hereinafter as the "Site".

Scope

Enterprise Field Services, LLC (Enterprise) requested Apex TITAN, Inc. (Apex) to conduct investigation and remediation activities related to a natural gas liquids release at the above referenced Site. The investigation included assessment, removal of potentially impacted material, confirmation sampling and backfilling of the excavation, and production of a written narrative of findings.

Setting

The Site is located at latitude 32.192564, longitude -104.052654 which is located southeast of Malaga in Eddy County, New Mexico. The Site is located along a pipeline segment of the Enterprise 1002 natural gas pipeline. A Site Location Map (Figure 1) is provided as an attachment to this letter report.

The Site is in a relatively level area along the Enterprise 1002 natural gas line, traversing the site from the north to the south. The Site is located in an area with a soil content characterized by potash, which is a term that describes the naturally occurring potassium salts in the subsurface of southeastern New Mexico.

The pipeline leak vented a small amount of gas, with less than approximately one barrel (bbl) of pipeline liquids released on the surface. The release was immediately abated by Enterprise personnel. The subsurface consists of alluvium and carbonate deposits with a soil cover.

Site Geology

The lithology encountered during the completion of site activities consisted of silty sand and gypsum overlain by windblown sand.

The *Surface Geology of the Nash Draw Quadrangle Eddy County, New Mexico* published by the United States Department of the Interior indicates that the Site is underlain by the Rustler formation, which averages approximately 230 feet in thickness. The Rustler formation is subdivided into four distinct members. The oldest member at the base of the Rustler formation is the Culebra, which consists of microcrystalline dolomite and dolomitic limestone. The Culebra is overlain by the Tamarisk, which consists of a massive gypsum deposit at the surface changing to anhydrite and siltstone at the base. This is overlain by the Magenta and Forty-Niner members, which consist of broken gypsum, siltstone and anhydrite. The upper portion of the Rustler formation represents the insoluble residue of salt beds reported from the subsurface to the east.

Release Description and Abatement Activities

On November 8, 2014, Enterprise personnel were notified of a leak on the 1002 pipeline. The leaking segment of the pipeline was isolated and a blowdown was performed. Enterprise personnel noted that there was less than one barrel (bbl) of pipeline liquid released from the leak. The cause of the release was reported to be internal corrosion.

Site Activities

Wilbros Construction began excavation of the pipeline and impacted material below the release point. An initial site visit was conducted on November 20, 2014, by an Apex professional, Mr. William Ferguson. Additional excavation was necessary due to high chloride field screening levels in the sidewalls. Following over-excavation activities, additional confirmation soil samples were collected on December 10, 2014 from each wall of the excavation and directly under the point of release (N-Wall, S-Wall, E-Wall, W-Wall, and RP). Based on analytical results, additional excavation was required due to high concentrations of total benzene, toluene, ethylbenzene and xylenes (BTEX) and chlorides.

On January 19, 2015, additional confirmation soil samples were collected (N-Wall RE, S-Wall RE, E-Wall RE, W-Wall RE and RP RE) following final over-excavation activities. A composite soil sample was taken of the stockpiled material (STP). On March 9, 2015, background confirmation soil samples (BKG-1 and BKG-2) were taken approximately 50 to 250 feet from the site to determine the background concentration of chlorides already present in the soil at approximately six (6) feet below ground surface (bgs).

On April 22, 2015, final confirmation soil samples (N-Wall RE-2, S-Wall RE-2, E-Wall RE-2 and RP RE-2) were collected following final over-excavation activities. Figure 2 provides details on background confirmation sample locations. Figure 3 provides details on confirmation sample locations.

Based on laboratory results, the confirmation soil samples (N-Wall RE, S-Wall RE, E-Wall RE, W-Wall RE and RP RE) exhibited TPH and BTEX concentrations below the New Mexico Oil Conservation Division (NMOCD) Recommended Remediation Action Levels (RRALs).

The confirmation soil samples (E-Wall RE-2, W-Wall RE and RP RE-2) exhibited chloride concentrations ranging from 1,330 milligrams per Kilogram (mg/Kg) to 4,290 mg/Kg, which are above the NMOCD RRALs. However, the laboratory results of the background confirmation soil samples (BKG-1 and BKG-2) exhibited chloride concentrations ranging from 2,310 mg/Kg to 2,790 mg/Kg. It should also be noted that the site is located in an area of southeastern New

Mexico that is characterized by potash, or naturally occurring potassium salts in the soil, as detailed in the geology section of this report. Therefore, based on the sample results from the background samples and the proximity of the site to potash, it can be assumed that the chloride concentrations found in the final confirmation soil samples from the excavation naturally occur in the soil in the immediate vicinity of the pipeline. The increase of chloride concentrations shown at the Site may indicate hydration and solution of chloride that was near the surface.

Final excavation dimensions were approximately 35 feet long by 15 feet wide with an approximate depth of 10 feet at the release point. Impacted soil was removed and collected into a stockpile on Site. A Site Details Plan (Figure 3) is provided as an attachment to this letter report.

All soil samples were collected in laboratory supplied glass containers, immediately cooled to approximately 4° C, transported under proper chain-of-custody procedures and documentation and submitted to Trace Analysis laboratory in Midland, Texas. Samples were analyzed for total petroleum hydrocarbons, gasoline range organics and diesel range organics, (TPH GRO/DRO) by method EPA Method 8015 extended to C-35, benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021B and chlorides utilizing EPA Method 300.0.
All final confirmation soil sample analytical results for BTEX and TPH were below the NMOCD RRALS. The final confirmation soil sample results for chloride were above the NMOCD RRALs, however, two (2) background samples were taken approximately 50 to 250 feet from the vicinity of the site, which demonstrate elevated chloride results indicative of a potash area. A summary of concentrations in Table 1- Soil Sample Analytical Results and laboratory reports are provided as attachments to this letter report.

Backfill of the excavated area was completed on May 18, 2015. The stockpiled soils were disposed of at a state approved landfill, and clean soil was used as fill material in the excavation. The area was returned to original surface grade.

If you have any questions about this letter or require anything further, please feel free to call either of the undersigned at (214) 350-5469.

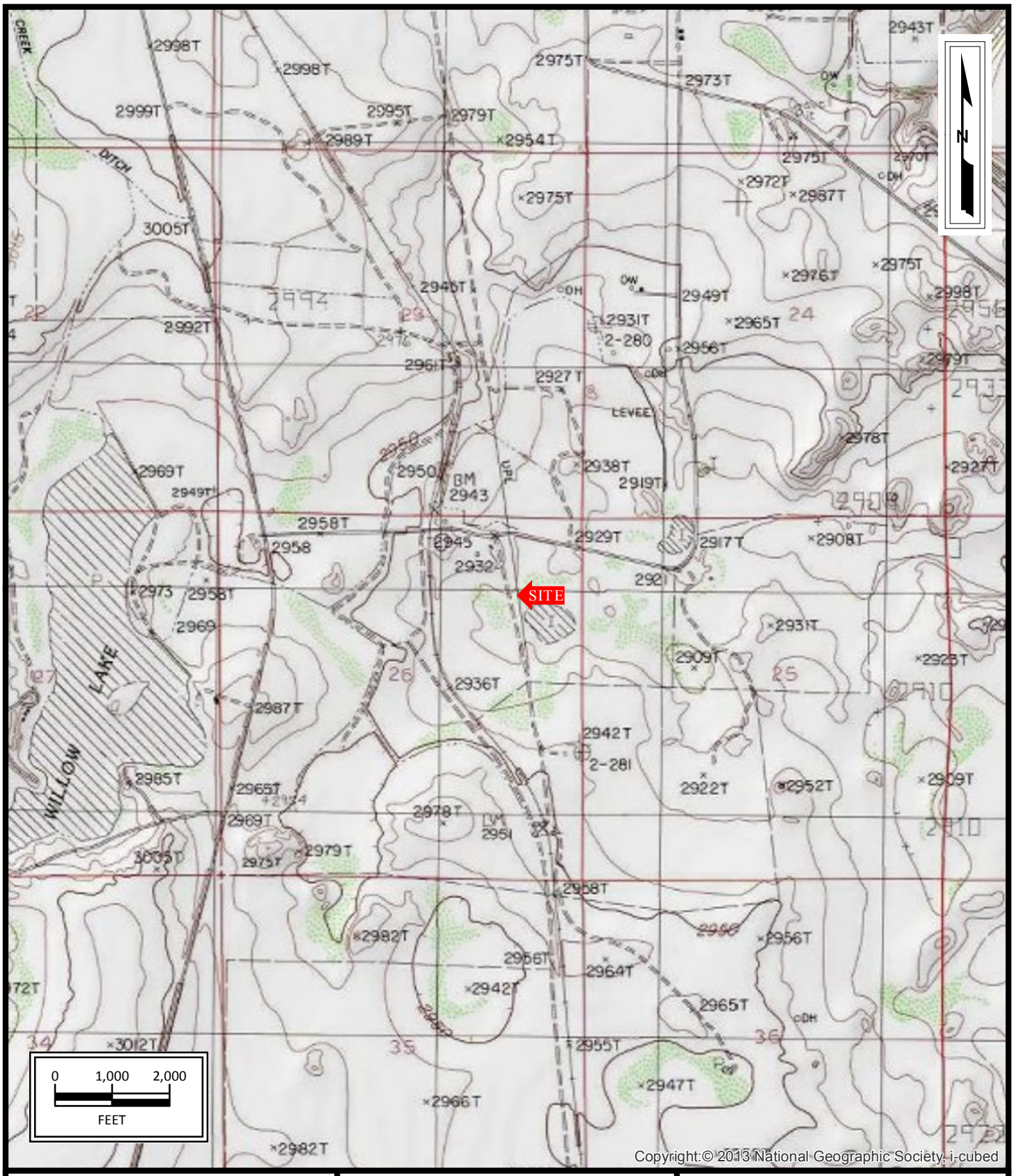
Sincerely,
Apex Titan, Inc.

Karolanne Toby
Project Geologist

Liz Scaggs, P.G.
Division Manager

Attachments:

Figure 1- Site Location Map
Figure 2- Site Vicinity Map
Figure 3 - Site Details Map
Table 1- Soil Sample Analytical Results
Laboratory Reports
NMOCD C-141
Disposal Documentation



1002 Potash Pipeline Release
Enterprise Products Operating LLC
Eddy County, New Mexico
32.192564N, 104.052654W

Project No. 7030714G096.001

Apex TITAN, Inc.
505 N. Big Spring Street, Suite 301A
Midland, Texas 79701
Phone: (432) 695-6016
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 1
Topographic Map
Malaga, NM Quadrangle
1985

1002 Potash Pipeline Release
Enterprise Products Operating LLC
Eddy County, New Mexico
32.192564N, 104.052654W

Project No. 7030714G096.001

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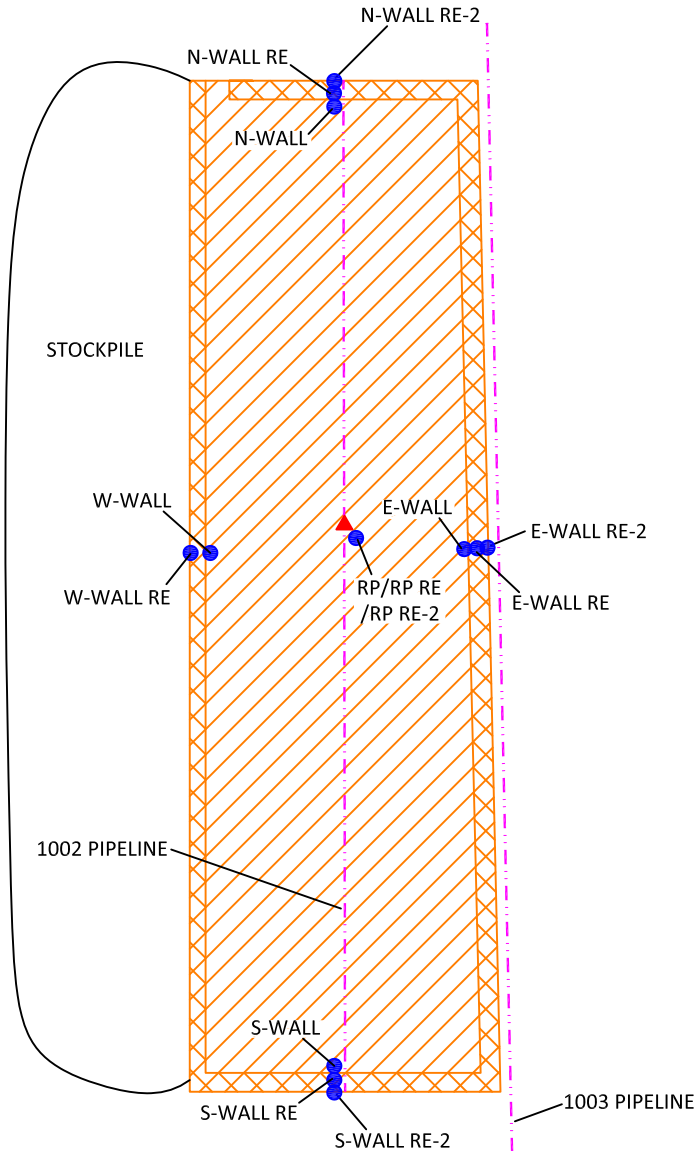
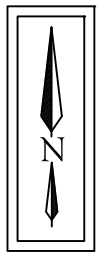
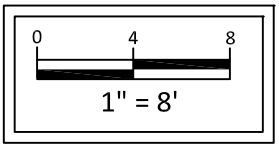
FIGURE 2
Site Vicinity Map





LEGEND:

- SAMPLE LOCATION
- RELEASE POINT
- PIPELINE
- EXTENT OF ORIGINAL EXCAVATION
- EXTENT OF OVER EXCAVATION



1002 Potash Pipeline Release
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FIGURE 3
Site Map

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

POTASH 1002 RELEASE

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Soil Status	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH GRO/DRO (mg/Kg)	Chlorides (mg/Kg)
New Mexico Oil Conservation Division (NMOCD) Recomended Remediation Action Levels (RRALs) (Total Ranking Score: 0)												
New Mexico Oil Conservation Division (NMOCD) Recomended Remediation Action Level				10	NE	NE	NE	50	NE	NE	5,000	1,000
BACKGROUND SAMPLE ANALYTICAL RESULTS												
BKG-1	3/9/2015	6	NA	NS	NS	NS	NS	NS	NS	NS	NS	**2,790**
BKG-2	3/9/2015	6	NA	NS	NS	NS	NS	NS	NS	NS	NS	**2,310**
EXCAVATION CONFRIMATION SAMPLE ANALYTICAL RESULTS												
N-Wall	12/10/2014	4'	Excavated	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	5.20	<50.0	<50.0	<20.0
N-Wall RE	1/19/2015	6'	Excavated	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	**5,740**
N-Wall RE-2	4/22/2015	4'-6'	In-Situ	NS	NS	NS	NS	NS	NS	NS	NS	197
S-Wall	12/10/2014	4'	Excavated	0.338	9.44	4.75	37.6	**52.1**	3,800	2,110	**5,910**	594
S-Wall RE	1/19/2015	6'	Excavated	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	**4,310**
S-Wall RE-2	4/22/2015	4'-6'	In-Situ	NS	NS	NS	NS	NS	NS	NS	NS	381
E-Wall	12/10/2014	4'	Excavated	5.02	79.40	23.20	142	**250**	12,300	1,480	**13,780**	50.0
E-Wall RE	1/19/2015	6'	Excavated	0.573	6.73	5.65	21.4	34.4	954	209	1,163	**3,780**
E-Wall RE-2	4/22/2015	4'-6'	In-Situ	NS	NS	NS	NS	NS	NS	NS	NS	**1,330**
W-Wall	12/10/2014	4'	Excavated	1.09	11.60	5.63	34.6	**52.9**	5,130	591	**5,721**	**2,180**
W-Wall RE	1/19/2015	6'	In-Situ	<0.0200	<0.0200	<0.0200	0.0483	0.0483	<4.00	<50.0	<50.0	**2,230**
RP	12/10/2014	7'	Excavated	0.17	3.57	0.790	14.4	18.9	1,040	1,960	3,000	**2,720**
RP RE	1/19/2015	9'	Excavated	0.0881	1.18	1.08	6.08	8.43	521	623	1,144	**3,510**
RP RE-2	4/22/2015	10'	In-Situ	NS	NS	NS	NS	NS	NS	NS	NS	**4,290**
STOCKPILE SAMPLE ANALYTICAL RESULTS												
STP	1/19/2015	NA	NA	0.032	0.281	0.490	2.05	2.85	236	212	448	**1,600**

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

mg/Kg- milligrams per Kilograms

NE - Not Established

NS - Not Sampled

NA - Not Applicable

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 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Karolanne Toby
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: December 16, 2014

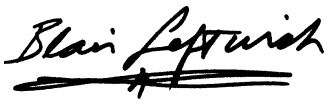
Work Order: 14121110

Project Name: Potash 1002 Leak
Project Number: 7030714G096

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
381907	N-WAll	soil	2014-12-10	14:41	2014-12-11
381908	S-WAll	soil	2014-12-10	14:42	2014-12-11
381909	E-WAll	soil	2014-12-10	14:43	2014-12-11
381910	W-WAll	soil	2014-12-10	14:44	2014-12-11
381911	RP	soil	2014-12-10	14:45	2014-12-11

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
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Potash 1002 Leak were received by TraceAnalysis, Inc. on 2014-12-11 and assigned to work order 14121110. Samples for work order 14121110 were received intact at a temperature of 4.3 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	99722	2014-12-12 at 12:41	117964	2014-12-13 at 08:45
Chloride (Titration)	SM 4500-Cl B	99730	2014-12-12 at 09:35	117957	2014-12-12 at 14:53
TPH DRO - NEW	S 8015 D	99716	2014-12-12 at 11:00	117968	2014-12-15 at 08:15
TPH GRO	S 8015 D	99722	2014-12-12 at 12:41	117965	2014-12-16 at 08:50

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 14121110 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: 381907 - N-WAll

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	5	<0.0200	mg/Kg	1	0.0200
Toluene	U	5	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	5	<0.0200	mg/Kg	1	0.0200
Xylene	U	5	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.67	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)			2.46	mg/Kg	1	2.00	123	70 - 130

Sample: 381907 - N-WAll

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	U		<20.0	mg/Kg	5	4.00

Sample: 381907 - N-WAll

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	Qr,Qs,U	5	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			124	mg/Kg	1	100	124	70 - 130

Sample: 381907 - N-WAll

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	B	5	**5.20**	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.67	mg/Kg	1	2.00	84	70 - 130

Sample: 381908 - S-WAll

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		5	**0.338**	mg/Kg	1	0.0200
Toluene		5	**9.44**	mg/Kg	1	0.0200
Ethylbenzene		5	**4.75**	mg/Kg	1	0.0200
Xylene		5	**37.6**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.71	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	10.4	mg/Kg	1	2.00	520	70 - 130

Sample: 381908 - S-WAll

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**594**	mg/Kg	5	4.00

Sample: 381908 - S-WAll

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr,Qs	5	**2110**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		148	mg/Kg	1	100	148	70 - 130

Sample: 381908 - S-WAll

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		5	**3800**	mg/Kg	50	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			98.0	mg/Kg	50	100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			94.9	mg/Kg	50	100	95	70 - 130

Sample: 381909 - E-WAll

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		5	**5.02**	mg/Kg	5	0.0200
Toluene	Je	5	**79.4**	mg/Kg	5	0.0200
Ethylbenzene		5	**23.2**	mg/Kg	5	0.0200
Xylene	Je	5	**142**	mg/Kg	5	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			9.08	mg/Kg	5	10.0	91	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	41.6	mg/Kg	5	10.0	416	70 - 130

Sample: 381909 - E-WAll

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**50.0**	mg/Kg	5	4.00

Sample: 381909 - E-WAll

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	5	**1480**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	144	mg/Kg	1	100	144	70 - 130

Sample: 381909 - E-WAll

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		5	**12300**	mg/Kg	100	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			180	mg/Kg	100	200	90	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	435	mg/Kg	100	200	218	70 - 130

Sample: 381910 - W-WAll

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		5	**1.09**	mg/Kg	1	0.0200
Toluene	Je	5	**11.6**	mg/Kg	1	0.0200
Ethylbenzene		5	**5.63**	mg/Kg	1	0.0200
Xylene	Je	5	**34.6**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.78	mg/Kg	1	2.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	11.2	mg/Kg	1	2.00	560	70 - 130

Sample: 381910 - W-WAll

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	Sample Preparation:	2014-12-12	Prepared By:	SC

continued ...

sample 381910 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**2180**	mg/Kg	5	4.00

Sample: 381910 - W-WAll

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	5	**591**	mg/Kg	1	50.0

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr		139	mg/Kg	1	100	139	70 - 130

Sample: 381910 - W-WAll

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		5	**5130**	mg/Kg	100	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			182	mg/Kg	100	200	91	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	283	mg/Kg	100	200	142	70 - 130

Sample: 381911 - RP

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		5	**0.166**	mg/Kg	1	0.0200
Toluene		5	**3.57**	mg/Kg	1	0.0200
Ethylbenzene		5	**0.790**	mg/Kg	1	0.0200
Xylene		5	**14.4**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.74	mg/Kg	1	2.00	87	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	6.52	mg/Kg	1	2.00	326	70 - 130

Sample: 381911 - RP

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**2720**	mg/Kg	5	4.00

Sample: 381911 - RP

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	Sample Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	5	**1960**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	153	mg/Kg	1	100	153	70 - 130

Sample: 381911 - RP

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	Sample Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	B	5	**1040**	mg/Kg	50	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			95.5	mg/Kg	50	100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			78.1	mg/Kg	50	100	78	70 - 130

Method Blanks

Method Blank (1) QC Batch: 117957

QC Batch:	117957	Date Analyzed:	2014-12-12	Analyzed By:	SC
Prep Batch:	99730	QC Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 117964

QC Batch:	117964	Date Analyzed:	2014-12-13	Analyzed By:	AK
Prep Batch:	99722	QC Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		5	<0.00533	mg/Kg	0.02
Toluene		5	<0.00645	mg/Kg	0.02
Ethylbenzene		5	<0.0116	mg/Kg	0.02
Xylene		5	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.65	mg/Kg	1	2.00	82	70 - 130
4-Bromofluorobenzene (4-BFB)			2.32	mg/Kg	1	2.00	116	70 - 130

Method Blank (1) QC Batch: 117965

QC Batch:	117965	Date Analyzed:	2014-12-16	Analyzed By:	AK
Prep Batch:	99722	QC Preparation:	2014-12-12	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		5	3.97	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	2.81	mg/Kg	1	2.00	140	70 - 130

Method Blank (1) QC Batch: 117968

QC Batch:	117968	Date Analyzed:	2014-12-15	Analyzed By:	SC
Prep Batch:	99716	QC Preparation:	2014-12-12	Prepared By:	SC

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		5	<7.41	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			113	mg/Kg	1	100	113	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 117957 | Date Analyzed: 2014-12-12 | Analyzed By: SC
Prep Batch: 99730 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2570	mg/Kg	5	0.00	<19.2	103	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2620	mg/Kg	5	0.00	<19.2	105	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: 117964 | Date Analyzed: 2014-12-13 | Analyzed By: AK
Prep Batch: 99722 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		[5]	1.67	mg/Kg	1	2.00	<0.00533	84	70 - 130
Toluene		[5]	1.75	mg/Kg	1	2.00	<0.00645	88	70 - 130
Ethylbenzene		[5]	1.93	mg/Kg	1	2.00	<0.0116	96	70 - 130
Xylene		[5]	5.80	mg/Kg	1	6.00	<0.00874	97	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		[5]	1.66	mg/Kg	1	2.00	<0.00533	83	70 - 130	1	20
Toluene		[5]	1.76	mg/Kg	1	2.00	<0.00645	88	70 - 130	1	20
Ethylbenzene		[5]	1.95	mg/Kg	1	2.00	<0.0116	98	70 - 130	1	20
Xylene		[5]	5.89	mg/Kg	1	6.00	<0.00874	98	70 - 130	2	20

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

continued ...

control spikes continued ...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.60	1.69	mg/Kg	1	2.00	80	84	70 - 130
4-Bromofluorobenzene (4-BFB)	2.43	2.45	mg/Kg	1	2.00	122	122	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 117965 | Date Analyzed: 2014-12-16 | Analyzed By: AK
Prep Batch: 99722 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	31.9	mg/Kg	1	30.0	3.97	93	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	31.2	mg/Kg	1	30.0	3.97	91	70 - 130	2	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.79	1.83	mg/Kg	1	2.00	90	92	70 - 130
4-Bromofluorobenzene (4-BFB)	2.60	2.54	mg/Kg	1	2.00	130	127	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 117968 | Date Analyzed: 2014-12-15 | Analyzed By: SC
Prep Batch: 99716 | QC Preparation: 2014-12-12 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		5	282	mg/Kg	1	250	<7.41	113	70 - 130

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

continued ...

control spikes continued ...

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		[5]	267	mg/Kg	1	250	<7.41	107	70 - 130	6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	126	116	mg/Kg	1	100	126	116	70 - 130

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 381911

QC Batch: 117957 | Date Analyzed: 2014-12-12 | Analyzed By: SC
Prep Batch: 99730 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			5100	mg/Kg	5	0.00	2720	95	78.9 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			4900	mg/Kg	5	0.00	2720	87	78.9 - 121	4	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: 381907

QC Batch: 117964 | Date Analyzed: 2014-12-13 | Analyzed By: AK
Prep Batch: 99722 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		[5]	1.66	mg/Kg	1	2.00	<0.00533	83	70 - 130
Toluene		[5]	1.76	mg/Kg	1	2.00	<0.00645	88	70 - 130
Ethylbenzene		[5]	1.92	mg/Kg	1	2.00	<0.0116	96	70 - 130
Xylene		[5]	5.86	mg/Kg	1	6.00	<0.00874	98	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		[5]	1.51	mg/Kg	1	2.00	<0.00533	76	70 - 130	10	20
Toluene		[5]	1.64	mg/Kg	1	2.00	<0.00645	82	70 - 130	7	20
Ethylbenzene		[5]	1.81	mg/Kg	1	2.00	<0.0116	90	70 - 130	6	20
Xylene		[5]	5.51	mg/Kg	1	6.00	<0.00874	92	70 - 130	6	20

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

continued ...

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.59	1.59	mg/Kg	1	2	80	80	70 - 130
4-Bromofluorobenzene (4-BFB)	2.56	2.52	mg/Kg	1	2	128	126	70 - 130

Matrix Spike (MS-1) Spiked Sample: 381907

QC Batch: 117965 | Date Analyzed: 2014-12-16 | Analyzed By: AK
Prep Batch: 99722 | QC Preparation: 2014-12-12 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		5	31.6	mg/Kg	1	30.0	5.2	88	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		5	29.7	mg/Kg	1	30.0	5.2	82	70 - 130	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)	1.88	1.88	mg/Kg	1	2	94	94	70 - 130
4-Bromofluorobenzene (4-BFB)	2.16	2.58	mg/Kg	1	2	108	129	70 - 130

Matrix Spike (MS-1) Spiked Sample: 381907

QC Batch: 117968 | Date Analyzed: 2014-12-15 | Analyzed By: SC
Prep Batch: 99716 | QC Preparation: 2014-12-12 | Prepared By: SC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO Qs	Qs	5	148	mg/Kg	1	250	<7.41	59	70 - 130

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

continued ...

matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr	Qr	5 199	mg/Kg	1	250	<7.41	80	70 - 130	29	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-Tricosane	121	122	mg/Kg	1	100	121	122	70 - 130

Calibration Standards

Standard (ICV-1)

QC Batch: 117957 | Date Analyzed: 2014-12-12 | Analyzed By: SC

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	0.00	101	101	85 - 115	2014-12-12

Standard (CCV-1)

QC Batch: 117957 | Date Analyzed: 2014-12-12 | Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	0.00	99.0	99	85 - 115	2014-12-12

Standard (CCV-1)

QC Batch: 117964 | Date Analyzed: 2014-12-13 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0936	94	80 - 120	2014-12-13
Toluene		5	mg/kg	0.100	0.0960	96	80 - 120	2014-12-13
Ethylbenzene		5	mg/kg	0.100	0.0957	96	80 - 120	2014-12-13
Xylene		5	mg/kg	0.300	0.292	97	80 - 120	2014-12-13

Standard (CCV-2)

QC Batch: 117964 | Date Analyzed: 2014-12-13 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		5	mg/kg	0.100	0.0947	95	80 - 120	2014-12-13
Toluene		5	mg/kg	0.100	0.0953	95	80 - 120	2014-12-13
Ethylbenzene		5	mg/kg	0.100	0.103	103	80 - 120	2014-12-13
Xylene		5	mg/kg	0.300	0.301	100	80 - 120	2014-12-13

Standard (CCV-1)

QC Batch: 117965 Date Analyzed: 2014-12-16 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.50	1.60	107	80 - 120	2014-12-16

Standard (CCV-2)

QC Batch: 117965 Date Analyzed: 2014-12-16 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		5	mg/Kg	1.50	1.36	91	80 - 120	2014-12-16

Standard (CCV-1)

QC Batch: 117968 Date Analyzed: 2014-12-15 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		5	mg/Kg	250	289	116	80 - 120	2014-12-15

Standard (CCV-2)

QC Batch: 117968 Date Analyzed: 2014-12-15 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		5	mg/Kg	250	284	114	80 - 120	2014-12-15

Standard (CCV-3)

QC Batch: 117968 Date Analyzed: 2014-12-15 Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		5	mg/Kg	250	285	114	80 - 120	2014-12-15

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	PJLA	L14-93	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-14-10	Lubbock
5	NELAP	T104704392-14-8	Midland
6		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.

F	Description
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

14121110

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland, TX

Project Manager Kandanne Toby

Laboratory: Trace Analysis

Address: 5002 Basin St.
Midland, TX

Contact:

Phone:

PO/SO #:

Sampler's Name: Kandanne Toby

Sampler's Signature:

Proj. No.: 70307146096

Project Name: Potash 1002 Leak

No/Type of Containers: 5/40Z

ANALYSIS REQUESTED

Lab use only
Due Date:

Temp. of coolers when received (C°): 4.3°C

1	2	3	4	5

Page ____ of ____

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	BTEX 8021B	TPH GRO/DRO	Chlorides	Lab Sample ID (Lab Use Only)
S	12/10/14	14:41		X	N-Wall	4'					X		X	X	X	381907
		14:42			S-Wall	4'										908
		14:43			E-Wall	4'										909
		14:44			W-Wall	4'										910
S	12/10/14	14:45		X	RP	7'					X		X	X	X	911

NFE KT
12/11/14

Turn around time ❑ Normal ❑ 25% Rush ☒ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/11/14	9:18		12/11/14	9:18
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES: ★ 48 hr. TAT ★

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other ____

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 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Karolanne Toby
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: February 2, 2015

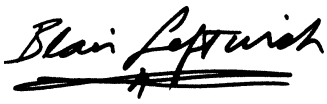
Work Order: 15012014

Project Name: Potash 1002 Leak
Project Number: 7030714G096

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
384579	N-Wall RE	soil	2015-01-19	12:00	2015-01-20
384580	S-Wall RE	soil	2015-01-19	12:05	2015-01-20
384581	E-Wall RE	soil	2015-01-19	12:10	2015-01-20
384582	W-Wall RE	soil	2015-01-19	12:12	2015-01-20
384583	RP RE	soil	2015-01-19	12:15	2015-01-20
384584	STP	soil	2015-01-19	13:40	2015-01-20

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
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Potash 1002 Leak were received by TraceAnalysis, Inc. on 2015-01-20 and assigned to work order 15012014. Samples for work order 15012014 were received intact at a temperature of 4.4 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	100410	2015-01-20 at 14:17	118828	2015-01-23 at 11:48
Chloride (Titration)	SM 4500-Cl B	100646	2015-02-02 at 11:30	119011	2015-02-02 at 11:45
TPH DRO - NEW	S 8015 D	100444	2015-01-21 at 18:05	118788	2015-01-22 at 09:47
TPH GRO	S 8015 D	100523	2015-01-27 at 09:51	118896	2015-01-28 at 07:31
TX1005 Extended - NEW	TX1005	100415	2015-01-20 at 15:18	118750	2015-01-21 at 08:29

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 15012014 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: 384579 - N-Wall RE

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	2	<0.0200	mg/Kg	1	0.0200
Toluene	U	2	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	2	<0.0200	mg/Kg	1	0.0200
Xylene	U	2	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			2.03	mg/Kg	1	2.00	102	70 - 130

Sample: 384579 - N-Wall RE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1	**5740**	mg/Kg	5	5.00

Sample: 384579 - N-Wall RE

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	Qr,U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			105	mg/Kg	1	100	105	70 - 130

Sample: 384579 - N-Wall RE

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO	U	2	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.76	mg/Kg	1	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

Sample: 384579 - N-Wall RE

Laboratory:	Midland				
Analysis:	TX1005 Extended - NEW	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	118750	Date Analyzed:	2015-01-21	Analyzed By:	SC
Prep Batch:	100415	Sample Preparation:	2015-01-20	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
C6-C12	Jb	2	<50.0	mg/Kg	1	50.0
>C12-C35	U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane			95.2	mg/Kg	1	100	95	70 - 130
n-Octane			108	mg/Kg	1	100	108	70 - 130
n-Tricosane			104	mg/Kg	1	100	104	70 - 130

Sample: 384580 - S-Wall RE

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	2	<0.0200	mg/Kg	1	0.0200
Toluene	U	2	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	2	<0.0200	mg/Kg	1	0.0200
Xylene	U	2	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.81	mg/Kg	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	1	2.00	99	70 - 130

Sample: 384580 - S-Wall RE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		1	**4310**	mg/Kg	5	5.00

Sample: 384580 - S-Wall RE

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr,U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane Qsr	Qsr		62.6	mg/Kg	1	100	63	70 - 130

Sample: 384580 - S-Wall RE

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	2	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.68	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)			1.66	mg/Kg	1	2.00	83	70 - 130

Sample: 384581 - E-Wall RE

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	**0.573**	mg/Kg	1	0.0200
Toluene		2	**6.73**	mg/Kg	1	0.0200
Ethylbenzene		2	**5.65**	mg/Kg	1	0.0200
Xylene		2	**21.4**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.73	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	6.08	mg/Kg	1	2.00	304	70 - 130

Sample: 384581 - E-Wall RE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

continued ...

sample 384581 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride		1	**3780**	mg/Kg	5	5.00

Sample: 384581 - E-Wall RE

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr	2	**209**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			86.6	mg/Kg	1	100	87	70 - 130

Sample: 384581 - E-Wall RE

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		2	**954**	mg/Kg	50	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			87.7	mg/Kg	50	100	88	70 - 130
4-Bromofluorobenzene (4-BFB)			90.5	mg/Kg	50	100	90	70 - 130

Sample: 384582 - W-Wall RE

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene	U	2	<0.0200	mg/Kg	1	0.0200
Toluene	U	2	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	U	2	<0.0200	mg/Kg	1	0.0200
Xylene		2	**0.0483**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

Sample: 384582 - W-Wall RE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		1	**2230**	mg/Kg	1	5.00

Sample: 384582 - W-Wall RE

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr,U	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			90.6	mg/Kg	1	100	91	70 - 130

Sample: 384582 - W-Wall RE

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	2	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.83	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	70 - 130

Sample: 384583 - RP RE

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	**0.0881**	mg/Kg	2	0.0200
Toluene		2	**1.18**	mg/Kg	2	0.0200
Ethylbenzene		2	**1.08**	mg/Kg	2	0.0200
Xylene		2	**6.08**	mg/Kg	2	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			3.49	mg/Kg	2	4.00	87	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	6.69	mg/Kg	2	4.00	167	70 - 130

Sample: 384583 - RP RE

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

continued ...

sample 384583 continued . . .

Parameter	Flag	Cert	RL Result	Units	Dilution	RL

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride		1	**3510**	mg/Kg	5	5.00

Sample: 384583 - RP RE

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr	2	**623**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			89.4	mg/Kg	1	100	89	70 - 130

Sample: 384583 - RP RE

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		2	**521**	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			9.28	mg/Kg	5	10.0	93	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	18.4	mg/Kg	5	10.0	184	70 - 130

Sample: 384584 - STP

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	Sample Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Benzene		2	**0.0320**	mg/Kg	1	0.0200
Toluene		2	**0.281**	mg/Kg	1	0.0200
Ethylbenzene		2	**0.490**	mg/Kg	1	0.0200
Xylene		2	**2.05**	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.74	mg/Kg	1	2.00	87	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	3.28	mg/Kg	1	2.00	164	70 - 130

Sample: 384584 - STP

Laboratory:	Lubbock				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119011	Date Analyzed:	2015-02-02	Analyzed By:	AT
Prep Batch:	100646	Sample Preparation:	2015-02-02	Prepared By:	AT

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride		1	**1600**	mg/Kg	5	5.00

Sample: 384584 - STP

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	Sample Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
DRO	Qr	2	**212**	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			83.9	mg/Kg	1	100	84	70 - 130

Sample: 384584 - STP

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	118896	Date Analyzed:	2015-01-28	Analyzed By:	AK
Prep Batch:	100523	Sample Preparation:	2015-01-27	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
GRO		2	**236**	mg/Kg	5	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			8.82	mg/Kg	5	10.0	88	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	14.4	mg/Kg	5	10.0	144	70 - 130

Method Blanks

Method Blank (1) QC Batch: 118750

QC Batch:	118750	Date Analyzed:	2015-01-21	Analyzed By:	SC
Prep Batch:	100415	QC Preparation:	2015-01-20	Prepared By:	SC

Parameter	Flag	Cert	MDL Result	Units	RL
C6-C12		2	12.7	mg/Kg	50
>C12-C35		2	<7.50	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane			93.8	mg/Kg	1	100	94	70 - 130
n-Octane			113	mg/Kg	1	100	113	70 - 130
n-Tricosane			109	mg/Kg	1	100	109	70 - 130

Method Blank (1) QC Batch: 118788

QC Batch:	118788	Date Analyzed:	2015-01-22	Analyzed By:	SC
Prep Batch:	100444	QC Preparation:	2015-01-21	Prepared By:	SC

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		2	<7.41	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			89.2	mg/Kg	1	100	89	70 - 130

Method Blank (1) QC Batch: 118828

QC Batch:	118828	Date Analyzed:	2015-01-23	Analyzed By:	AK
Prep Batch:	100410	QC Preparation:	2015-01-20	Prepared By:	AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.00533	mg/Kg	0.02

continued . . .

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Toluene		2	<0.00645	mg/Kg	0.02
Ethylbenzene		2	<0.0116	mg/Kg	0.02
Xylene		2	<0.00874	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

Method Blank (1) QC Batch: 118896

QC Batch: 118896 Date Analyzed: 2015-01-28 Analyzed By: AK
Prep Batch: 100523 QC Preparation: 2015-01-27 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		2	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Method Blank (1) QC Batch: 119011

QC Batch: 119011 Date Analyzed: 2015-02-02 Analyzed By: AT
Prep Batch: 100646 QC Preparation: 2015-02-02 Prepared By: AT

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride		1	<3.05	mg/Kg	5

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 118750 | Date Analyzed: 2015-01-21 | Analyzed By: SC
Prep Batch: 100415 | QC Preparation: 2015-01-20 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12		2	210	mg/Kg	1	250	12.7	79	75 - 125
>C12-C35		2	244	mg/Kg	1	250	<7.50	98	75 - 125

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12		2	238	mg/Kg	1	250	12.7	90	75 - 125	12	20
>C12-C35		2	267	mg/Kg	1	250	<7.50	107	75 - 125	9	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	91.5	92.7	mg/Kg	1	100	92	93	70 - 130
n-Octane	110	112	mg/Kg	1	100	110	112	70 - 130
n-Tricosane	104	105	mg/Kg	1	100	104	105	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 118788 | Date Analyzed: 2015-01-22 | Analyzed By: SC
Prep Batch: 100444 | QC Preparation: 2015-01-21 | Prepared By: SC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	282	mg/Kg	1	250	<7.41	113	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		2	262	mg/Kg	1	250	<7.41	105	70 - 130	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
n-Tricosane	114	99.7	mg/Kg	1	100	114	100	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 118828 | Date Analyzed: 2015-01-23 | Analyzed By: AK
Prep Batch: 100410 | QC Preparation: 2015-01-20 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	1.69	mg/Kg	1	2.00	<0.00533	84	70 - 130
Toluene		2	1.73	mg/Kg	1	2.00	<0.00645	86	70 - 130
Ethylbenzene		2	1.83	mg/Kg	1	2.00	<0.0116	92	70 - 130
Xylene		2	5.56	mg/Kg	1	6.00	<0.00874	93	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	1.78	mg/Kg	1	2.00	<0.00533	89	70 - 130	5	20
Toluene		2	1.82	mg/Kg	1	2.00	<0.00645	91	70 - 130	5	20
Ethylbenzene		2	1.94	mg/Kg	1	2.00	<0.0116	97	70 - 130	6	20
Xylene		2	5.89	mg/Kg	1	6.00	<0.00874	98	70 - 130	6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.88	mg/Kg	1	2.00	94	94	70 - 130
4-Bromofluorobenzene (4-BFB)	2.05	2.05	mg/Kg	1	2.00	102	102	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 118896 | Date Analyzed: 2015-01-28 | Analyzed By: AK
Prep Batch: 100523 | QC Preparation: 2015-01-27 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		2	20.9	mg/Kg	1	20.0	<2.32	104	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		2	21.8	mg/Kg	1	20.0	<2.32	109	70 - 130	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.96	mg/Kg	1	2.00	94	98	70 - 130
4-Bromofluorobenzene (4-BFB)	1.72	1.76	mg/Kg	1	2.00	86	88	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 119011 | Date Analyzed: 2015-02-02 | Analyzed By: AT
Prep Batch: 100646 | QC Preparation: 2015-02-02 | Prepared By: AT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1	2290	mg/Kg	5	2500	<15.2	92	76.7 - 126

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1	2390	mg/Kg	5	2500	<15.2	96	76.7 - 126	4	20

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

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 384438

QC Batch: 118750 | Date Analyzed: 2015-01-21 | Analyzed By: SC
Prep Batch: 100415 | QC Preparation: 2015-01-20 | Prepared By: SC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
C6-C12		2	226	mg/Kg	1	250	12.1	86	75 - 125
>C12-C35		2	255	mg/Kg	1	250	<7.50	102	75 - 125

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12		2	229	mg/Kg	1	250	12.1	87	75 - 125	1	20
>C12-C35		2	233	mg/Kg	1	250	<7.50	93	75 - 125	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	92.8	89.7	mg/Kg	1	100	93	90	70 - 130
n-Octane	112	110	mg/Kg	1	100	112	110	70 - 130
n-Tricosane	104	102	mg/Kg	1	100	104	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 384579

QC Batch: 118788 | Date Analyzed: 2015-01-22 | Analyzed By: SC
Prep Batch: 100444 | QC Preparation: 2015-01-21 | Prepared By: SC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	271	mg/Kg	1	250	<7.41	108	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr Qr	2	177	mg/Kg	1	250	<7.41	71	70 - 130	42	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-Tricosane	104	69.5	mg/Kg	1	100	104	70	70 - 130

Matrix Spike (MS-1) Spiked Sample: 384579

QC Batch: 118828 | Date Analyzed: 2015-01-23 | Analyzed By: AK
Prep Batch: 100410 | QC Preparation: 2015-01-20 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	1.68	mg/Kg	1	2.00	<0.00533	84	70 - 130
Toluene		2	1.73	mg/Kg	1	2.00	<0.00645	86	70 - 130
Ethylbenzene		2	1.85	mg/Kg	1	2.00	<0.0116	92	70 - 130
Xylene		2	5.59	mg/Kg	1	6.00	<0.00874	93	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	1.70	mg/Kg	1	2.00	<0.00533	85	70 - 130	1	20
Toluene		2	1.77	mg/Kg	1	2.00	<0.00645	88	70 - 130	2	20
Ethylbenzene		2	1.86	mg/Kg	1	2.00	<0.0116	93	70 - 130	0	20
Xylene		2	5.70	mg/Kg	1	6.00	<0.00874	95	70 - 130	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.88	1.83	mg/Kg	1	2	94	92	70 - 130
4-Bromofluorobenzene (4-BFB)	2.07	2.00	mg/Kg	1	2	104	100	70 - 130

Matrix Spike (MS-1) Spiked Sample: 384938

QC Batch: 118896 | Date Analyzed: 2015-01-28 | Analyzed By: AK
Prep Batch: 100523 | QC Preparation: 2015-01-27 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		2	22.8	mg/Kg	2	20.0	<4.64	114	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		2	25.7	mg/Kg	2	20.0	<4.64	128	70 - 130	12	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	3.61	3.67	mg/Kg	2	4	90	92	70 - 130
4-Bromofluorobenzene (4-BFB)	3.93	3.72	mg/Kg	2	4	98	93	70 - 130

Matrix Spike (MS-1) Spiked Sample: 384584

QC Batch: 119011 | Date Analyzed: 2015-02-02 | Analyzed By: AT
Prep Batch: 100646 | QC Preparation: 2015-02-02 | Prepared By: AT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		1	2770	mg/Kg	5	2500	1600	47	58.7 - 137

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		1	2870	mg/Kg	5	2500	1600	51	58.7 - 137	4	20

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

Calibration Standards

Standard (CCV-2)

QC Batch: 118750 | Date Analyzed: 2015-01-21 | Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		2	mg/Kg	250	212	85	75 - 125	2015-01-21
>C12-C35		2	mg/Kg	250	253	101	75 - 125	2015-01-21

Standard (CCV-3)

QC Batch: 118750 | Date Analyzed: 2015-01-21 | Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		2	mg/Kg	250	238	95	75 - 125	2015-01-21
>C12-C35		2	mg/Kg	250	277	111	75 - 125	2015-01-21

Standard (CCV-1)

QC Batch: 118788 | Date Analyzed: 2015-01-22 | Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	259	104	80 - 120	2015-01-22

Standard (CCV-2)

QC Batch: 118788 | Date Analyzed: 2015-01-22 | Analyzed By: SC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	218	87	80 - 120	2015-01-22

Standard (CCV-1)

QC Batch: 118828 Date Analyzed: 2015-01-23 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/kg	0.100	0.0985	98	80 - 120	2015-01-23
Toluene		2	mg/kg	0.100	0.0985	98	80 - 120	2015-01-23
Ethylbenzene		2	mg/kg	0.100	0.0981	98	80 - 120	2015-01-23
Xylene		2	mg/kg	0.300	0.294	98	80 - 120	2015-01-23

Standard (CCV-2)

QC Batch: 118828 Date Analyzed: 2015-01-23 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/kg	0.100	0.0985	98	80 - 120	2015-01-23
Toluene		2	mg/kg	0.100	0.0979	98	80 - 120	2015-01-23
Ethylbenzene		2	mg/kg	0.100	0.0993	99	80 - 120	2015-01-23
Xylene		2	mg/kg	0.300	0.296	99	80 - 120	2015-01-23

Standard (CCV-1)

QC Batch: 118896 Date Analyzed: 2015-01-28 Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		2	mg/Kg	1.00	0.871	87	80 - 120	2015-01-28

Standard (CCV-2)

QC Batch: 118896 | Date Analyzed: 2015-01-28 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		2	mg/Kg	1.00	0.970	97	80 - 120	2015-01-28

Standard (ICV-1)

QC Batch: 119011 | Date Analyzed: 2015-02-02 | Analyzed By: AT

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1	mg/Kg	100	103	103	85 - 115	2015-02-02

Standard (CCV-1)

QC Batch: 119011 | Date Analyzed: 2015-02-02 | Analyzed By: AT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		1	mg/Kg	100	97.0	97	85 - 115	2015-02-02

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	PJLA	L14-93	Lubbock
2	NELAP	T104704392-14-8	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

15012014

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland, TX

Project Manager Farolanne Tobin

Laboratory: Trace Analysis

Address: 5002 Basin St.

Contact: Angie Merlene

Phone:

PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 4.4

1	2	3	4	5

Page ____ of ____

Sampler's Name: Travis Turner

Sampler's Signature:

Proj. No.: 703071460946

Project Name: Potash 1002 leak

No/Type of Containers: 6

ANALYSIS REQUESTED: BTEX 8021B; TPH 8015M(DRO); Chlorides

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	1/19/15	1200		X	N-Wall		6ft				X		384579
		1205			S-Wall								580
		1210			E-Wall								581
		1212			W-Wall								582
		1215			RP		9ft						583
		1340	X		Stockpile								584

1/19/15

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	1/20/15	0931	AM TA	1-20-15	09:31
Relinquished by (Signature) AM TA	Date: 1-20-15	Time: 11:16	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				1-21-15	8am

NOTES: IR3 3.4/3.4

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

AJ

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 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Karolanne Toby
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: March 12, 2015

Work Order: 15030935

Project Name: Potash 1002
Project Number: 7030714G096.001

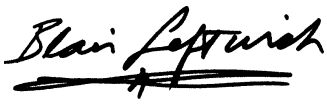
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
388419	BKG 1	soil	2015-03-09	12:50	2015-03-09
388420	BKG 2	soil	2015-03-09	13:40	2015-03-09

Notes

- **Work Order 15030935:** Straight from field

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
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Potash 1002 were received by TraceAnalysis, Inc. on 2015-03-09 and assigned to work order 15030935. Samples for work order 15030935 were received intact at a temperature of 13.9 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	101464	2015-03-12 at 09:37	119938	2015-03-12 at 09:39

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 15030935 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: 388419 - BKG 1

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119938	Date Analyzed:	2015-03-12	Analyzed By:	EM
Prep Batch:	101464	Sample Preparation:	2015-03-12	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**2790**	mg/Kg	5	4.00

Sample: 388420 - BKG 2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	119938	Date Analyzed:	2015-03-12	Analyzed By:	EM
Prep Batch:	101464	Sample Preparation:	2015-03-12	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**2310**	mg/Kg	5	4.00

Method Blanks

Method Blank (1) QC Batch: 119938

QC Batch:	119938	Date Analyzed:	2015-03-12	Analyzed By:	EM
Prep Batch:	101464	QC Preparation:	2015-03-12	Prepared By:	EM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 119938 | Date Analyzed: 2015-03-12 | Analyzed By: EM
Prep Batch: 101464 | QC Preparation: 2015-03-12 | Prepared By: EM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2310	mg/Kg	5	2500	<19.2	92	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2500	mg/Kg	5	2500	<19.2	100	85 - 115	8	20

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

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 388420

QC Batch: 119938 | Date Analyzed: 2015-03-12 | Analyzed By: EM
Prep Batch: 101464 | QC Preparation: 2015-03-12 | Prepared By: EM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			4810	mg/Kg	5	2500	2310	100	78.9 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			4710	mg/Kg	5	2500	2310	96	78.9 - 121	2	20

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

Calibration Standards

Standard (ICV-1)

QC Batch: 119938 Date Analyzed: 2015-03-12 Analyzed By: EM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-03-12

Standard (CCV-1)

QC Batch: 119938 Date Analyzed: 2015-03-12 Analyzed By: EM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-03-12

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	PJLA	L14-103	El Paso
2	LELAP	LELAP-02002	El Paso
3	NELAP	T104704221-15-6	El Paso

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

15030935

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland

Project Manager Karolann Tutt

Laboratory: Trace Analysis

Address:

Contact:

Phone:

PO/SO #:

Lab use only
Due Date:

Temp. of coolers when received (C°): 13.9

1	2	3	4	5

Page ____ of ____

Sampler's Name: Travis Turner

Sampler's Signature:

Proj. No.: 703071460096.001

Project Name: Potash Loop

No/Type of Containers: 2

ANALYSIS REQUESTED: Chlorides

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	3/9/15	1250		X	Bkg-1		6'				X		388419
S	3/9/15	1340		X	Bkg-2		6'				X		420

Turn around time: [X] Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	3/9/15	1619		3/9/15	16:20
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES: Straight from field
called Karol Anne who gave project # of 703071460096.001 - 3.9.15 AT

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other ____

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 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972•242•7750
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Karolanne Toby
APEX/Titan
2351 W. Northwest Hwy.
Suite 3321
Dallas, Tx, 75220

Report Date: April 28, 2015

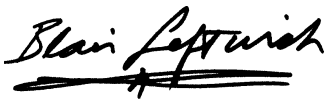
Work Order: 15042301

Project Name: Potash 1002
Project Number: 7030714G096.001

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
391499	N WALL RE-2	soil	2015-04-22	13:25	2015-04-23
391500	RP RE-2	soil	2015-04-22	13:45	2015-04-23
391501	S WALL RE-2	soil	2015-04-22	14:30	2015-04-23
391502	E WALL RE-2	soil	2015-04-22	15:10	2015-04-23

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
James Taylor, Assistant Director
Brian Pellam, Operations Manager

Report Contents

Case Narrative

Samples for project Potash 1002 were received by TraceAnalysis, Inc. on 2015-04-23 and assigned to work order 15042301. Samples for work order 15042301 were received intact at a temperature of 5.7 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	102410	2015-04-24 at 12:46	121027	2015-04-24 at 12:46
Chloride (Titration)	SM 4500-Cl B	102468	2015-04-28 at 09:57	121097	2015-04-28 at 10:01

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 15042301 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: 391499 - N WALL RE-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121097	Date Analyzed:	2015-04-28	Analyzed By:	EM
Prep Batch:	102468	Sample Preparation:	2015-04-28	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**197**	mg/Kg	5	4.00

Sample: 391500 - RP RE-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121027	Date Analyzed:	2015-04-24	Analyzed By:	EM
Prep Batch:	102410	Sample Preparation:	2015-04-24	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**4290**	mg/Kg	5	4.00

Sample: 391501 - S WALL RE-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121027	Date Analyzed:	2015-04-24	Analyzed By:	EM
Prep Batch:	102410	Sample Preparation:	2015-04-24	Prepared By:	EM

Parameter	Flag	Cert	Result	RL Units	Dilution	RL
Chloride			**381**	mg/Kg	5	4.00

Sample: 391502 - E WALL RE-2

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	121027	Date Analyzed:	2015-04-24	Analyzed By:	EM
Prep Batch:	102410	Sample Preparation:	2015-04-24	Prepared By:	EM

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			**1330**	mg/Kg	5	4.00

Method Blanks

Method Blank (1) QC Batch: 121027

QC Batch:	121027	Date Analyzed:	2015-04-24	Analyzed By:	EM
Prep Batch:	102410	QC Preparation:	2015-04-24	Prepared By:	EM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 121097

QC Batch:	121097	Date Analyzed:	2015-04-28	Analyzed By:	EM
Prep Batch:	102468	QC Preparation:	2015-04-28	Prepared By:	EM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 121027 | Date Analyzed: 2015-04-24 | Analyzed By: EM
Prep Batch: 102410 | QC Preparation: 2015-04-24 | Prepared By: EM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2290	mg/Kg	5	2500	<19.2	91	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2190	mg/Kg	5	2500	<19.2	88	85 - 115	4	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: 121097 | Date Analyzed: 2015-04-28 | Analyzed By: EM
Prep Batch: 102468 | QC Preparation: 2015-04-28 | Prepared By: EM

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2360	mg/Kg	5	2500	<19.2	95	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2270	mg/Kg	5	2500	<19.2	91	85 - 115	4	20

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

Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 391629

QC Batch: 121027 | Date Analyzed: 2015-04-24 | Analyzed By: EM
Prep Batch: 102410 | QC Preparation: 2015-04-24 | Prepared By: EM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2670	mg/Kg	5	2500	476	88	78.9 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2480	mg/Kg	5	2500	476	99	78.9 - 121	7	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: 391640

QC Batch: 121097 | Date Analyzed: 2015-04-28 | Analyzed By: EM
Prep Batch: 102468 | QC Preparation: 2015-04-28 | Prepared By: EM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			2560	mg/Kg	5	2500	<19.2	102	78.9 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			2460	mg/Kg	5	2500	<19.2	98	78.9 - 121	4	20

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

Calibration Standards

Standard (ICV-1)

QC Batch: 121027 | Date Analyzed: 2015-04-24 | Analyzed By: EM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-04-24

Standard (CCV-1)

QC Batch: 121027 | Date Analyzed: 2015-04-24 | Analyzed By: EM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-04-24

Standard (ICV-1)

QC Batch: 121097 | Date Analyzed: 2015-04-28 | Analyzed By: EM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-04-28

Standard (CCV-1)

QC Batch: 121097 | Date Analyzed: 2015-04-28 | Analyzed By: EM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2015-04-28

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-15-11	Lubbock
5		2014-018	Lubbock

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.

F	Description
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

15042301

CHAIN OF CUSTODY RECORD

APEX

Office Location Midland TX

Project Manager Karolanne Toby

Laboratory: Trace

Address: Midland TX

Contact:

Phone:

PO/SO #:

ANALYSIS REQUESTED

Lab use only
Due Date:

Temp. of coolers when received (C°): 5.8

1	2	3	4	5

Page 1 of 1

Sampler's Name: Thomas Franklin

Sampler's Signature:

Proj. No.: 703071460960.001

Project Name: Eddy Co NM Enterprise - 1002 Potash Pipeline

No/Type of Containers: 4-Glass

Matrix	Date 2015	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O 1 Lt	Chloride	Lab Sample ID (Lab Use Only)
S	4/22	1325		X	N Wall RE-2	4'	6'				X	X	X	391499
		1345			RP RE-2		10'							500
		1430			S Wall RE-2	4'	6'							501
		1510			E Wall RE-2	4'	6'							502

NFE TKF 4-23-15

Turn around time ❑ Normal ❑ 25% Rush ❑ 50% Rush ❑ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4-23-15	831		4-23-15	8:31
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other _____

Enterprise Products

ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

November 14, 2014

7014 1820 0001 6317 7675
Return Receipt Requested

Mr. Mike Bratcher
New Mexico Oil Conservation Division
District 2 Office
811 South First Street
Artesia, New Mexico 88210

RE: Form C-141 Report for Enterprise Field Services LLC
Release on Carlsbad Area Gathering Lines

Dear Mr. Bratcher,

Enclosed, please find the required initial C-141 Form report for the unplanned release on our 1002 Line in Eddy County on November 8, 2014.

This report is sent pursuant to NMAC 19.15.29 for minor releases. Cleanup activities are currently underway, and a final C-141 form will be submitted when soil sampling results demonstrate that cleanup of the affected area is complete.

If you have any questions or need additional information, please contact Dina Babinski, our area Environmental Supervisor at 210-528-3824, or me at 713-381-6684.

Yours truly,

Jon E. Fields
Director, Field Environmental

/bjm
Enclosure

P. O. BOX 4324
HOUSTON, TX 77210-4324
713.381.6500

1100 LOUISIANA STREET
HOUSTON, TX 77002-5227
www.enterpriseproducts.com

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company *Enterprise Field Services LLC*	Contact *Dina Babinski*
PO Box 4324, Houston, TX 77252	Telephone No. *210-528-3824*
Facility Name *Pipeline ROW, 1002 Gathering Lateral*	Facility Type: *Gas Gathering Pipeline*

Surface Owner *Private Owner*	Mineral Owner *NA - Pipeline*	Lease No. *NA*

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
NENE	*26*	*24S*	*28E*	*125*	*South*	*325*	*West*	*Eddy*

Latitude: *N 32.192564* **Longitude:** *W -104.052654*

NATURE OF RELEASE

Type of Release *Natural Gas, Pipeline Liquids*	Volume of Release: *224 MCF, 1 BBL Liquids*	Volume Recovered: *N/A*
Source of Release *Pipeline Leak.*	Date and Hour of Occurrence *11/08/2014 @ 12:23 MST*	Date and Hour of Discovery *11/08/2014 @ 12:23 MST*
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Pipeline leak was detected by a pumper passing by. Pipeline segment was isolated and blown down, and leaking portion was repaired.

Describe Area Affected and Cleanup Action Taken.*

Liquid spill occurred within pipeline ROW. Cleanup activities are currently being performed and additional sampling has been requested to confirm cleanup is satisfactory.

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

Signature: *Jon E. Fields*	OIL CONSERVATION DIVISION	
Printed Name: *Jon E. Fields*	Approved by District Supervisor:	
Title: *Director, Field Environmental*	Approval Date:	Expiration Date:
E-mail Address: *jefields@eprod.com*	Conditions of Approval:	Attached ☐
Date: *11/14/2014* Phone: *713-381-6684*		

* Attach Additional Sheets If Necessary

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Sotelo's

NON-HAZARDOUS WASTE MANIFEST NO 108679 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #10

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Products	2182 Commerce	5/18/2015
PHONE NO.	CITY / STATE / ZIP	6. TNRCC I.D. NO.
432 230-1414	Midland / TX 79703	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 39,920. @35,920. 38,940					

12. COMMENTS OR SPECIAL INSTRUCTIONS: 1002 HOLY ROAD TOTAL 114780

13. WASTE PROFILE NO. 708582

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: SOTELO'S TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE SOTELO	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 706-3842	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME & Jose Sotelo Sr	PRINTED/TYPED NAME
SIGNATURE & Jose Sotelo DATE 5/18/2015	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Donna Ingino	—	5/18/2015	10:15

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Sotelo's

NON-HAZARDOUS WASTE MANIFEST NO 108684 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #28.

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Enterprise Products	2162 Commerce			5/18/2015
PHONE NO.	CITY	STATE	ZIP	6. TNRCC I.D. NO.
(432) 230-1414	Midland	TX	79703	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non-Regulated, Non Hazardous Waste	1	CM			
b.					
c.					
d. WT: 41340 @ 40820					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
1002 HOLY ROAD TOTAL 82160	708582

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO	24-HOUR EMERGENCY NO.
Kin Slaughter	575-887-4048	

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: SOTELO'S TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE SOTELO	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 706-3842	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Micheal Nailin	PRINTED/TYPED NAME
SIGNATURE Micheal Nailin DATE 5/18/2015	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Donna Mano		5/18/2015	11:15

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Sotelo 10.5.

NON-HAZARDOUS WASTE MANIFEST NO 108694 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #28.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Products	2182 Commerce	5/19/2015
PHONE NO. (432) 230-1414	CITY Midland STATE TX ZIP 79703	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
~~Non-Regulated, Non Hazardous Waste~~					
a.					
b. ③ 45,120					
c.					
d. AT 40,720. ② 42040					

12. COMMENTS OR SPECIAL INSTRUCTIONS: 1002 HOLY ROAD T-82,760 F-127,880 BT

13. WASTE PROFILE NO. 108582

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME: KM Slaughter PHONE NO. 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. **TRANSPORTER (1)** SOTELO'S TRUCKING	17. **TRANSPORTER (2)**
NAME:	NAME:
TEXAS I.D. NO. JOSE SOTELO	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: (575 706-3842	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Micheal Nasik	PRINTED/TYPED NAME
SIGNATURE Micheal Nasik DATE 5/19/2015	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE Donna Lewino	CELL NO.	DATE 5/19/2015	TIME 9.05

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257 Sotelo's.

NON-HAZARDOUS WASTE MANIFEST NO 108695 | 1. PAGE ___ OF ___ | 2. TRAILER NO. #10.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Enterprise Products	2162 Commerce	5/19/2015
PHONE NO. (432) 230-1414	CITY Midland STATE TX ZIP 79703	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	CM			
b.					
c. WT:					
d. 41,820. @ 43,940.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: 1002 HOLLY ROAD T-85760

13. WASTE PROFILE NO. 708582

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME Kin Slaughter | PHONE NO 575-887-4048 | 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME: SOTELO'S TRUCKING	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE SOTELO	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (575) 706-3842	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME X Jose Sotelo	PRINTED/TYPED NAME
SIGNATURE DATE 5/19/2015	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE 5/19/2015	TIME 9:20
Donna Young			

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & TRANSPORTERS: COPIES 4 & 5

COPY 1