



TETRA TECH

September 24, 2010

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

RE: Assessment and Closure Request for the Stephens and Johnson Operating Co., East Millman Unit #150, located in Unit Letter P, Section 15, Township 19 South, Range 28 East, Eddy County, New Mexico. (LOV #02-09-132)

Dear Mr. Bratcher:

Tetra Tech Inc. was contacted by Stephens and Johnson Operating Co. to assess and remediate a vent area located Unit Letter P, Section 15, Township 19 South, Range 28 East, Eddy County, New Mexico. The vent area is located west of the Millman Tank Battery. Periodically, the gas and oil from the tank battery was vented into an earthen pit measuring approximately 25' x 25'. Stephens and Johnson received a Letter of Violation (LOV), dated February 23, 2010, from the New Mexico Oil Conservation Division (NMOCD) addressing the vent area and impacted soils. The LOV and the initial C-141 are enclosed in Appendix A.

Tetra Tech submitted a work plan to assess impacted soils associated with the earthen pit, dated March 15, 2010. The work plan proposed the following:

1. Discontinue venting into the earthen pit.
2. Remove free fluids from the earthen pit.
3. The venting line will be connected to an above ground tank to contain any liquids during periodic venting.
4. Once the equipment and vent line are removed, the earthen pit will be scraped (1.0' to 2.0') to remove saturated soils, which would be hauled to proper disposal.
5. Once removed, Tetra Tech will supervise the installation of boreholes to assess the impacted soil.

RECEIVED

OCT 22 2010

NMOCD ARTESIA

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946

www.tetratech.com



Groundwater and Regulatory

A review of the New Mexico office of the State Engineer and the USGS database did show wells in Section 9, Township 19 South, Range 25 East with reported depths to water of 265' and 246', respectively. The groundwater depth map is enclosed in Appendix B.

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. Based upon the risk based evaluation, the Site will be remediated to the proposed RRAL of 5,000 mg/kg.

Soil Assessment/Boreholes Installation

Stephens and Johnson have discontinued the used of the earthen pit. The vent line has been plumbed into an above ground tank to contain any liquids from periodic venting. In addition, the free liquids were removed and earthen pit the was excavated to remove the saturated soil, approximately 2.0 to 4.0' below surface. The excavated soil was transported to proper disposal. Once completed, Stephens and Johnson contacted Tetra Tech to evaluate the soils.

On May 6, 2010, Tetra Tech personnel were onsite to supervise the installation of boreholes using an air rotary rig. Soil samples were collected to evaluate the extent of subsurface impact at this site to total depth of 20.0' to 40.0' below surface. In addition, a background borehole was installed to evaluate the soil surrounding the area. Borehole (BH-1) was installed in the center of the vent pit to define the vertical extents and the remaining boreholes (BH-2, BH-3, BH-4 and BH-5) were installed around the perimeter of the pit to define the horizontal extents. The soil samples were placed into laboratory supplied containers and delivered to a laboratory under chain-of-custody control for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B and chloride by EPA method 300.0. The laboratory reports and chain of custody documentation are included in Appendix C. The borehole data is summarized in Table 1.

Referring to Table 1, none of the samples exceed the RRAL for TPH or BTEX. The chloride concentrations did show a slight impact the subsurface soils. Borehole (BH-1), installed in the center of the pit, showed chloride concentrations <1,000 mg/kg, with a bottom hole concentration of 368 mg/kg at 20.0' below excavation bottom. The samples



from BH-2 were all below 1,000 mg/kg, with bottom hole concentration of 507 mg/kg. Boreholes (BH-3, BH-4 and BH-5) did show chloride concentrations slightly above 1,000 mg/kg (1,260 mg/kg, 1,270 mg/kg and 1,130 mg/kg) at varying depths. The samples declined with depth, with bottom hole concentrations of <200 mg/kg at 20', 575 mg/kg at 20' and 460 mg/kg at 40', respectively.

The background borehole was installed to a depth of 60' below surface and showed chloride concentrations <200 in the majority of the samples, with a chloride high of 289 mg/kg at 30' below surface.

Recommendations

Based on the results, the soil impact appears to be limited around the pit area and the investigation did not show a significant impact the subsurface soil. The visually oily soil surrounding the pit will be excavated and hauled to proper disposal. Prior to backfilling, a 40 mil liner will be installed at 4.0' below surface to cap the pit area. The area will be backfilled with clean soil to grade. Once the remedial activities are performed, Stephens and Johnson will submit a final C-141 and request closure of the site.

If you have any questions or comments concerning the assessment, please call me at (432) 682-4559.

TETRA TECH


Ike Tavaréz, P.G.
Project Manager/Senior Geologist

cc: Mike Kincaid - Stephens and Johnson

TABLE

T
STEPHENS & JOHNSON
EAST MILLMAN TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
BH-1	5/5/2010	0-1'	X		1140	404	1544	0.816	1.35	1.16	3.49	<200
		3-4'	X		-	-	-	-	-	-	-	246
		7-8'	X		-	-	-	-	-	-	-	398
		10-11'	X		-	-	-	-	-	-	-	355
		15-16'	X		-	-	-	-	-	-	-	617
		20-21'	X		-	-	-	-	-	-	-	368
BH-2	5/5/2010	0-1'	X		<1.00	177	177	<0.0100	<0.0100	<0.0100	<0.0100	779
		3-4'	X		-	-	-	-	-	-	-	913
		7-8'	X		-	-	-	-	-	-	-	435
		10-11'	X		-	-	-	-	-	-	-	<200
		15-16'	X		-	-	-	-	-	-	-	621
		20-21'	X		-	-	-	-	-	-	-	507
BH-3	5/6/2010	0-1'	X		<1.00	<50.00	<50.00	<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-4'	X		-	-	-	-	-	-	-	1,260
		7-8'	X		-	-	-	-	-	-	-	971
		10-11'	X		-	-	-	-	-	-	-	667
		15-16'	X		-	-	-	-	-	-	-	<200
		20-21'	X		-	-	-	-	-	-	-	<200
BH-4	5/6/2010	0-1'	X		<1.00	<50.00	<50.00	<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-4'	X		-	-	-	-	-	-	-	247
		7-8'	X		-	-	-	-	-	-	-	918
		10-11'	X		-	-	-	-	-	-	-	1,270
		15-16'	X		-	-	-	-	-	-	-	628
		20-21'	X		-	-	-	-	-	-	-	575

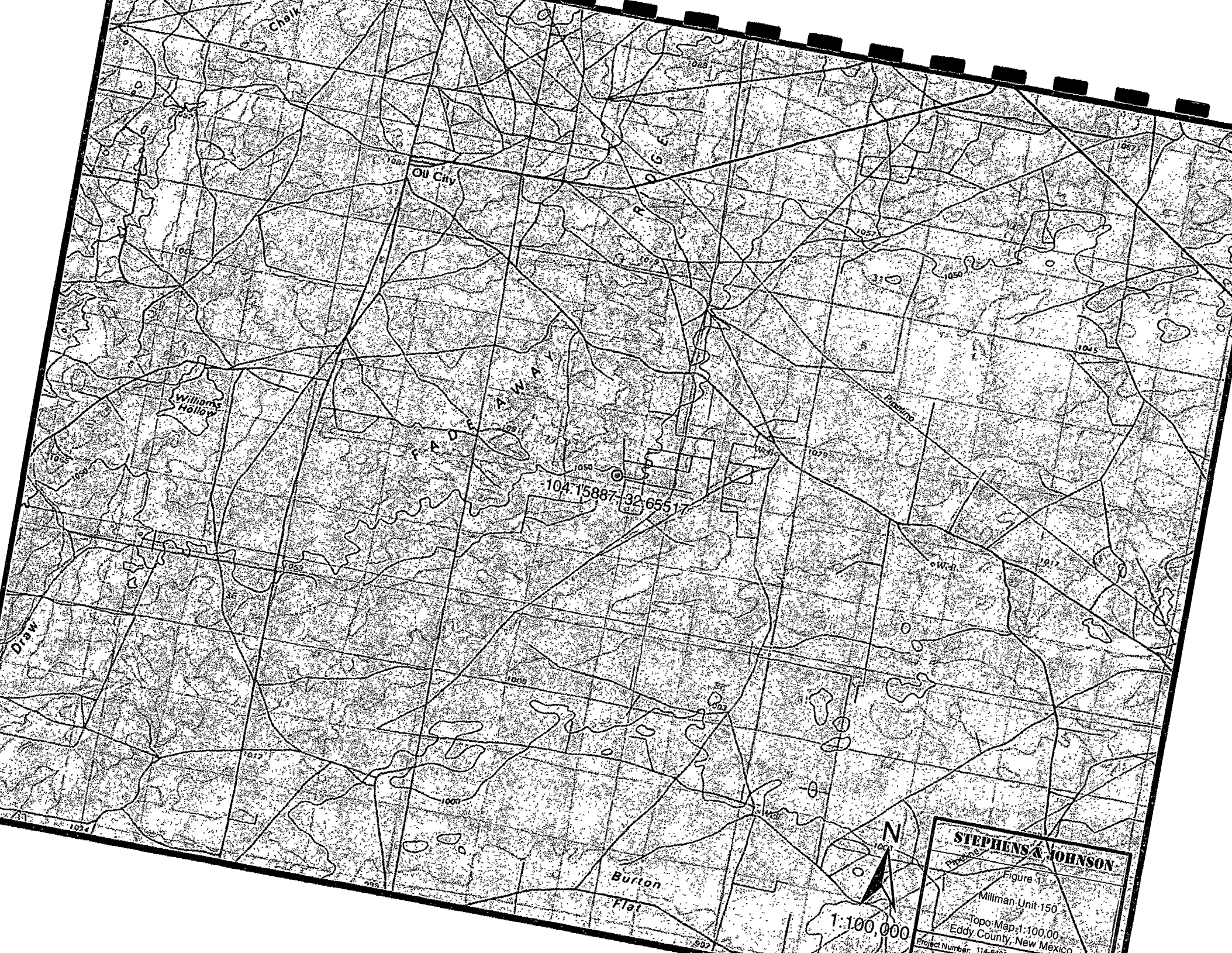
(-) Not Analyzed

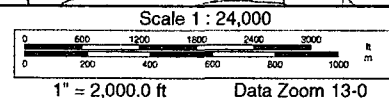
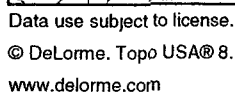
Table 1
STEPHENS & JOHNSON
EAST MILLMAN TANK BATTERY
EDDY COUNTY, NEW MEXICO

Sample ID	Date Sampled	Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total					
BH-5	5/6/2010	0-1'	X		<1.00	<50.00	<50.00	<0.0100	<0.0100	<0.0100	<0.0100	<200
		3-4'	X		-	-	-	-	-	-	-	620
		7-8'	X		-	-	-	-	-	-	-	421
		10-11'	X		-	-	-	-	-	-	-	809
		15-16'	X		-	-	-	-	-	-	-	644
		20-21'	X		-	-	-	-	-	-	-	983
		30-31	X		-	-	-	-	-	-	-	1,130
		40-41	X		-	-	-	-	-	-	-	460
Background	5/5/2010	10'	X		-	-	-	-	-	-	-	<200
		20'	X		-	-	-	-	-	-	-	<200
		30'	X		-	-	-	-	-	-	-	289
		40'	X		-	-	-	-	-	-	-	<200
		50'	X		-	-	-	-	-	-	-	<200
		60'	X		-	-	-	-	-	-	-	<200

(-) Not Analyzed

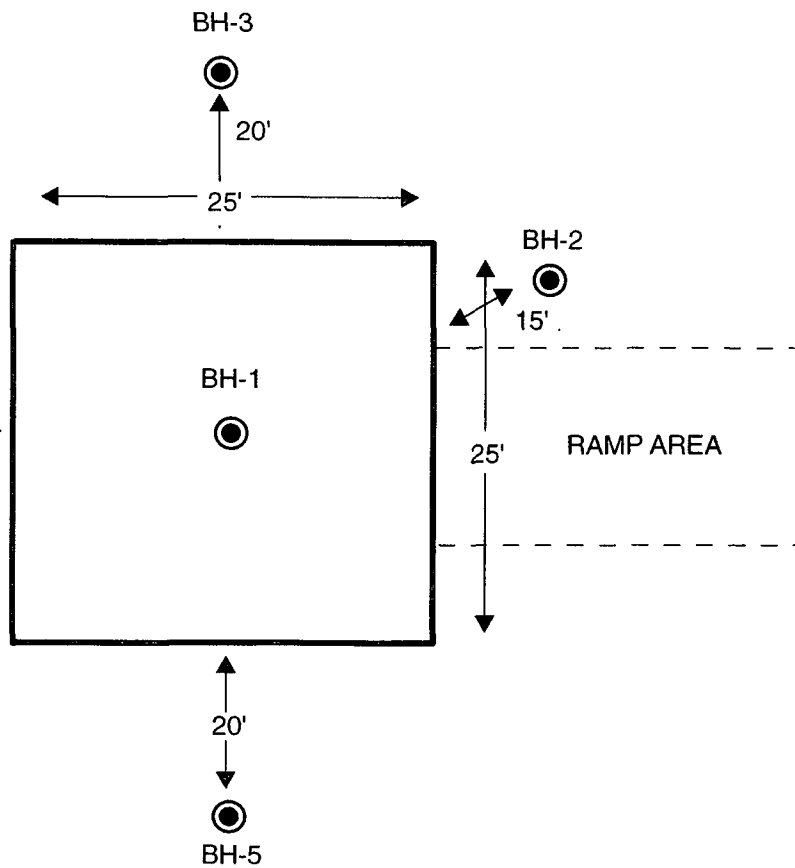
FIGURES





DCP UNDERGROUND LINE

DCP UNDERGROUND LINE



East Millman Tank Battery



NOT TO SCALE

STEPHENS & JOHNSON

Figure 3

Millman Unit 150

Site Assessment Map
Eddy County, New Mexico

Project Number: 114-6400476

Date: 9-24-2010

File: H/GIS/114-6400476

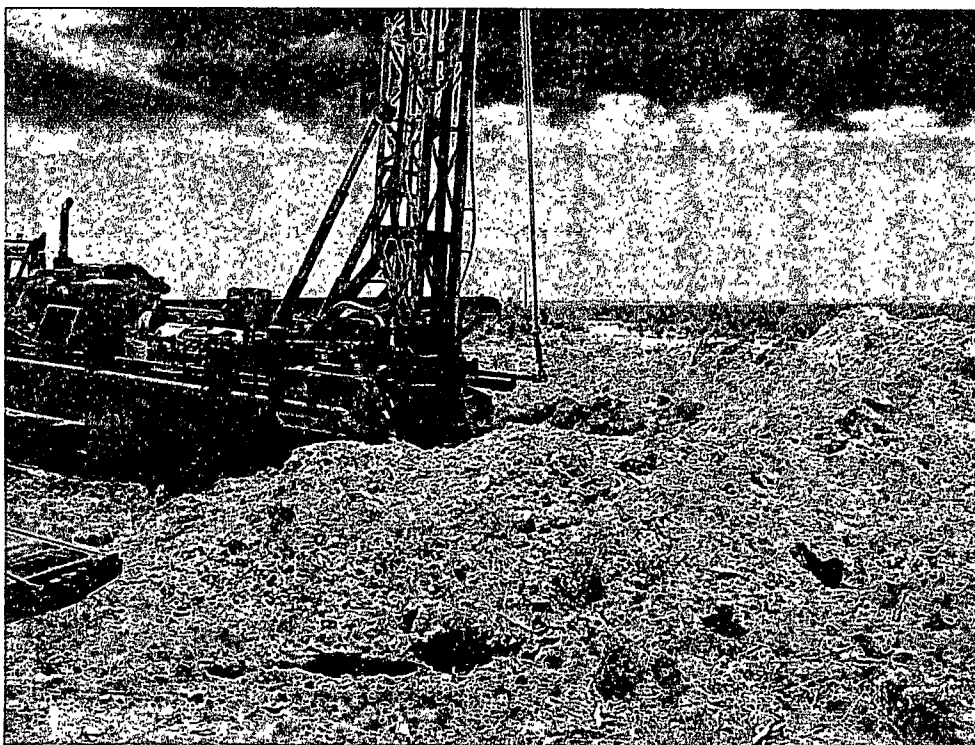


PHOTOGRAPHS

Stephens and Johnson - East Millman Unit
Eddy County, New Mexico

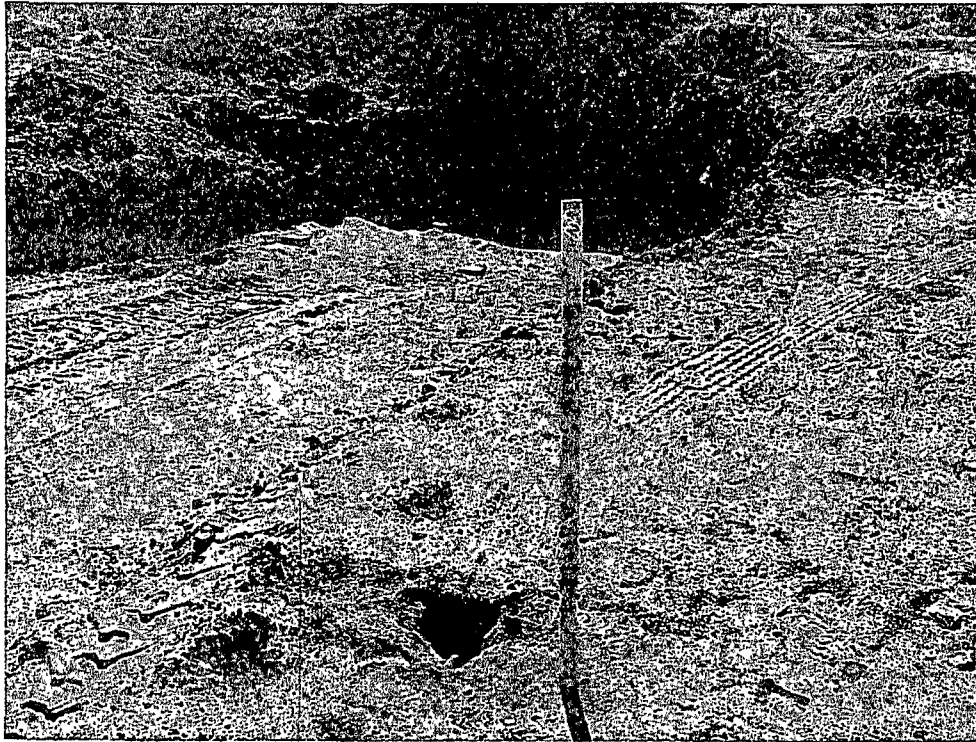


View of earthen pit area, after excavation

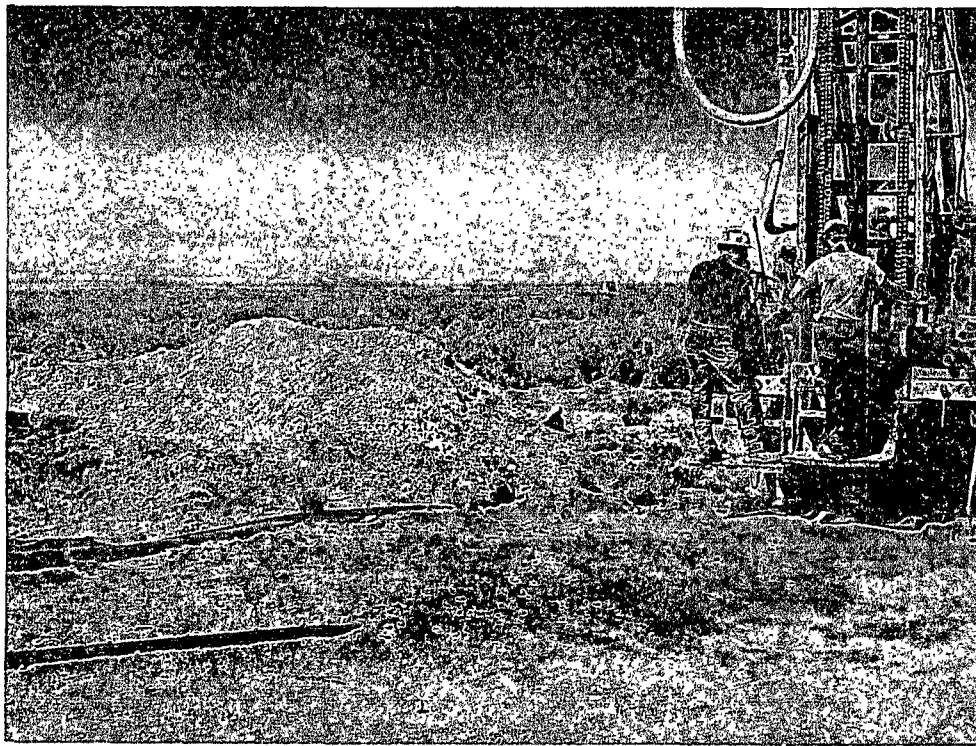


View of earthen pit area and BH-1

Stephens and Johnson - East Millman Unit
Eddy County, New Mexico

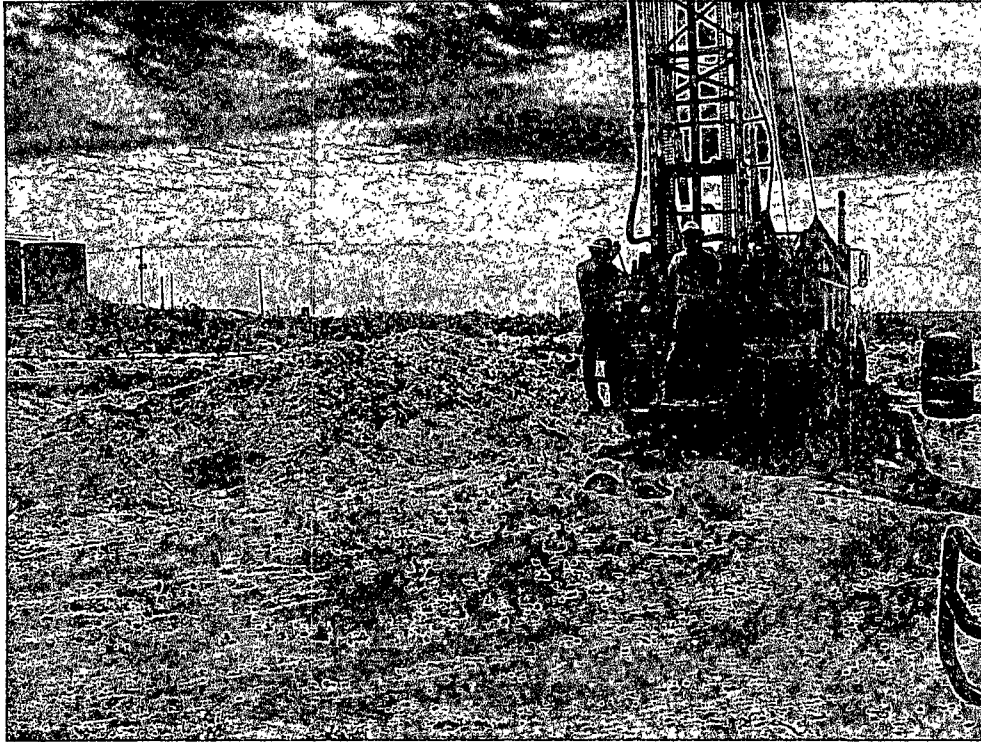


View of BH-2 Location

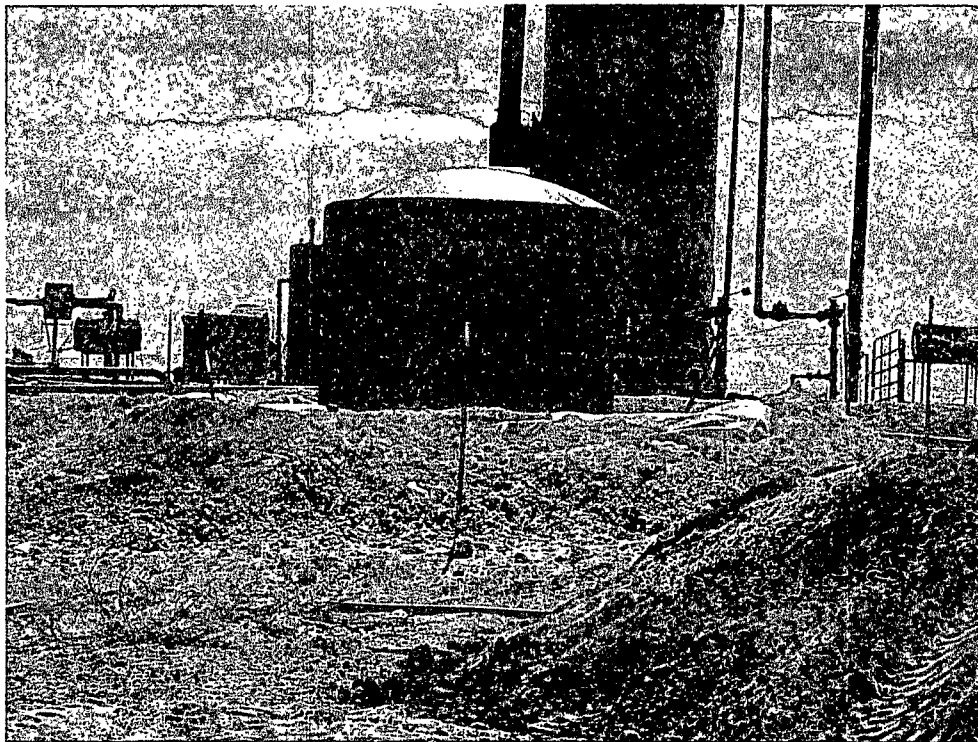


View of BH-3 Installation

Stephens and Johnson - East Millman Unit
Eddy County, New Mexico



View of BH-4 Installation



View of new above tank installed for venting

APPENDIX A

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Stephens & Johnson Operating Co.	Contact	Mike Kincaid
Address	P.O. Box 2249, Wichita Falls, Tx. 76307	Telephone No.	(940) 723-2166
Facility Name	East Millman Unit No. 150	Facility Type	Tank Battery
Surface Owner	State Land	Mineral Owner	
		Lease No.	30-015-02257

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	15	19S	28E					Eddy

Latitude 32.65456 Longitude 104.15868

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	Unknown	Volume Recovered	NA
Source of Release	Vent line	Date and Hour of Occurrence	NA	Date and Hour of Discovery	NA
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	N/A		
By Whom?		Date and Hour	N/A		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		

If a Watercourse was Impacted, Describe Fully.*

N/A

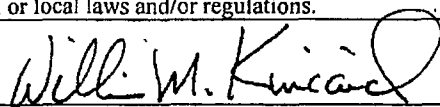
Describe Cause of Problem and Remedial Action Taken.*

A vent line was located west of the East Millman Tank Battery, which periodically vented gas and small amounts oil into an earthen pit. Venting would occur due to vessel malfunction or emergencies. The pit contained free oil on top of rain water. The vent line has been connected to a holding tank to capture any fluids during periodic venting in the future.

Describe Area Affected and Cleanup Action Taken.*

The earthen pit measured approximately 25' x 25'. As per LOV No. 02-09-132 the rain water and free oil have been removed from the pit. A work plan will be completed to address the impacted soil.

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: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: William M. Kincaid	Approved by District Supervisor:		
Title: Petroleum Engineer	Approval Date:	Expiration Date:	
E-mail Address: mkincaid@sjoc.net	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 03/15/2010	Phone: 940-723-2166		

* Attach Additional Sheets If Necessary

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Jon Goldstein
Cabinet Secretary

Jim Noel
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Response Required – Deadline Enclosed

Field Inspection Program

"Preserving the Integrity of Our Environment"

23-Feb-10

STEPHENS & JOHNSON OP CO
PO BOX 2249
WICHITA FALLS TX 76307

LOV NO. 02-09-132

LETTER OF VIOLATION -

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division.

Please notify the proper district office, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and /or facility.

INSPECTION DETAIL SECTION

EAST MILLMAN UNIT No.150

P-15-19S-28E 30-015-02257-00-00

Inspection					*Significant	Corrective
Date	Type Inspection	Inspector	Violation?	Non-Compliance?	Action Due By:	Inspection No.
02/23/2010	Routine/Periodic	Tim Gum	Yes	No	3/23/2010	ITWG10054465

Comments on
Inspection:

NOTE: large amount of free oil standing in earthen pit located west of battery.

Numerous violations of OCD rules as follows: 1.) Rule 19.15.2; General Operations/Waste prohibited, 2.) 19.15.18 ; Tanks, 3.) 19.15.29 ; Release Notification, 4.) 19.15.17 ; Pits, and 4.) 19.15.36; Netting requirements.

Corrective action to be taken 1.) All free oil to be removed from pit, 2.) Submit a form C-141 along with a remediation and closure plan to address the contaminated area and the closure of the pit

Corrective action to be taken; oil removed immediately, form and plan by 3/23/10.

Oil Conservation Division * 1220 South St. Francis Drive

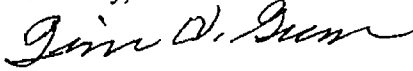
* Santa Fe, New Mexico 87505

* Phone: (505) 476-3440 * Fax (505) 476-3462* <http://www.emnrd.state.nm.us>



In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,



Artesia OCD District Office

Note: Information in Detail Section comes directly from field inspector data entries - not all blanks will contain data.

*Significant Non-Compliance events are reported directly to the EPA, Region VI, Dallas, Texas.

APPENDIX B

Water Well Data
Average Depth to Groundwater (ft)
Stephens and Johnson - Millman Tank Battery
Eddy County, New Mexico

18 South			27 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			28 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

19 South			27 East		
6	5	20	4	3	2
7	8	50	9	10	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

19 South			28 East		
6	5	4	3	2	1
7	8	9	246	10	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

19 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

20 South			27 East		
6	5	50	4	3	2
7	66	8	9	10	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

20 South			28 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

20 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Field water level

143 NMOCD Groundwater map well location

APPENDIX C

Summary Report

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

Report Date: May 19, 2010

Work Order: 10051019



Project Location: Eddy County, NM
Project Name: Stephens & Johnson/East Millman TB
Project Number: 114-6400476

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
231048	BG-10'	soil	2010-05-05	00:00	2010-05-07
231049	BG-20'	soil	2010-05-05	00:00	2010-05-07
231050	BG-30'	soil	2010-05-05	00:00	2010-05-07
231051	BG-40'	soil	2010-05-05	00:00	2010-05-07
231052	BG-50'	soil	2010-05-05	00:00	2010-05-07
231053	BG-60'	soil	2010-05-05	00:00	2010-05-07
231054	BH-1 0-1'	soil	2010-05-05	00:00	2010-05-07
231055	BH-1 3-4'	soil	2010-05-05	00:00	2010-05-07
231056	BH-1 7-8'	soil	2010-05-05	00:00	2010-05-07
231057	BH-1 10-11'	soil	2010-05-05	00:00	2010-05-07
231058	BH-1 15-16'	soil	2010-05-05	00:00	2010-05-07
231059	BH-1 20-21'	soil	2010-05-05	00:00	2010-05-07
231067	BH-2 0-1'	soil	2010-05-05	00:00	2010-05-07
231068	BH-2 3-4'	soil	2010-05-05	00:00	2010-05-07
231069	BH-2 7-8'	soil	2010-05-05	00:00	2010-05-07
231070	BH-2 10-11'	soil	2010-05-05	00:00	2010-05-07
231071	BH-2 15-16'	soil	2010-05-05	00:00	2010-05-07
231072	BH-2 20-21'	soil	2010-05-05	00:00	2010-05-07
231076	BH-3 0-1'	soil	2010-05-06	00:00	2010-05-07
231077	BH-3 3-4'	soil	2010-05-06	00:00	2010-05-07
231078	BH-3 7-8'	soil	2010-05-06	00:00	2010-05-07
231079	BH-3 10-11'	soil	2010-05-06	00:00	2010-05-07
231080	BH-3 15-16'	soil	2010-05-06	00:00	2010-05-07
231081	BH-3 20-21'	soil	2010-05-06	00:00	2010-05-07
231084	BH-4 0-1'	soil	2010-05-06	00:00	2010-05-07
231085	BH-4 3-4'	soil	2010-05-06	00:00	2010-05-07
231086	BH-4 7-8'	soil	2010-05-06	00:00	2010-05-07
231087	BH-4 10-11'	soil	2010-05-06	00:00	2010-05-07
231088	BH-4 15-16'	soil	2010-05-06	00:00	2010-05-07
231089	BH-4 20-21'	soil	2010-05-06	00:00	2010-05-07

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
231095	BH-5 0-1'	soil	2010-05-06	00:00	2010-05-07
231096	BH-5 3-4'	soil	2010-05-06	00:00	2010-05-07
231097	BH-5 7-8'	soil	2010-05-06	00:00	2010-05-07
231098	BH-5 10-11'	soil	2010-05-06	00:00	2010-05-07
231099	BH-5 15-16'	soil	2010-05-06	00:00	2010-05-07
231100	BH-5 20-21'	soil	2010-05-06	00:00	2010-05-07

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
231054 - BH-1 0-1'	0.816	1.35	1.16	3.49	404	1140
231067 - BH-2 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	177	<1.00
231076 - BH-3 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
231084 - BH-4 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
231095 - BH-5 0-1'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00

Sample: 231048 - BG-10'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231049 - BG-20'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231050 - BG-30'

Param	Flag	Result	Units	RL
Chloride		289	mg/Kg	4.00

Sample: 231051 - BG-40'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231052 - BG-50'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231053 - BG-60'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231054 - BH-1 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231055 - BH-1 3-4'

Param	Flag	Result	Units	RL
Chloride		246	mg/Kg	4.00

Sample: 231056 - BH-1 7-8'

Param	Flag	Result	Units	RL
Chloride		398	mg/Kg	4.00

Sample: 231057 - BH-1 10-11'

Param	Flag	Result	Units	RL
Chloride		355	mg/Kg	4.00

Sample: 231058 - BH-1 15-16'

Param	Flag	Result	Units	RL
Chloride		617	mg/Kg	4.00

Sample: 231059 - BH-1 20-21'

Param	Flag	Result	Units	RL
Chloride		368	mg/Kg	4.00

Sample: 231067 - BH-2 0-1'

Param	Flag	Result	Units	RL
Chloride		779	mg/Kg	4.00

Sample: 231068 - BH-2 3-4'

Param	Flag	Result	Units	RL
Chloride		913	mg/Kg	4.00

Sample: 231069 - BH-2 7-8'

Param	Flag	Result	Units	RL
Chloride		435	mg/Kg	4.00

Sample: 231070 - BH-2 10-11'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231071 - BH-2 15-16'

Param	Flag	Result	Units	RL
Chloride		621	mg/Kg	4.00

Sample: 231072 - BH-2 20-21'

Param	Flag	Result	Units	RL
Chloride		507	mg/Kg	4.00

Sample: 231076 - BH-3 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231077 - BH-3 3-4'

Param	Flag	Result	Units	RL
Chloride		1260	mg/Kg	4.00

Sample: 231078 - BH-3 7-8'

Param	Flag	Result	Units	RL
Chloride		971	mg/Kg	4.00

Sample: 231079 - BH-3 10-11'

Param	Flag	Result	Units	RL
Chloride		667	mg/Kg	4.00

Sample: 231080 - BH-3 15-16'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231081 - BH-3 20-21'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231084 - BH-4 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231085 - BH-4 3-4'

Param	Flag	Result	Units	RL
Chloride		247	mg/Kg	4.00

Sample: 231086 - BH-4 7-8'

Param	Flag	Result	Units	RL
Chloride		918	mg/Kg	4.00

Sample: 231087 - BH-4 10-11'

Param	Flag	Result	Units	RL
Chloride		1270	mg/Kg	4.00

Sample: 231088 - BH-4 15-16'

Param	Flag	Result	Units	RL
Chloride		628	mg/Kg	4.00

Sample: 231089 - BH-4 20-21'

Param	Flag	Result	Units	RL
Chloride		575	mg/Kg	4.00

Sample: 231095 - BH-5 0-1'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 231096 - BH-5 3-4'

Param	Flag	Result	Units	RL
Chloride		620	mg/Kg	4.00

Sample: 231097 - BH-5 7-8'

Param	Flag	Result	Units	RL
Chloride		421	mg/Kg	4.00

Sample: 231098 - BH-5 10-11'

Param	Flag	Result	Units	RL
Chloride		809	mg/Kg	4.00

Sample: 231099 - BH-5 15-16'

Param	Flag	Result	Units	RL
Chloride		644	mg/Kg	4.00

Sample: 231100 - BH-5 20-21'

Param	Flag	Result	Units	RL
Chloride		983	mg/Kg	4.00



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

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: May 19, 2010

Work Order: 10051019



Project Location: Eddy County, NM
Project Name: Stephens & Johnson/East Millman TB
Project Number: 114-6400476

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
231048	BG-10'	soil	2010-05-05	00:00	2010-05-07
231049	BG-20'	soil	2010-05-05	00:00	2010-05-07
231050	BG-30'	soil	2010-05-05	00:00	2010-05-07
231051	BG-40'	soil	2010-05-05	00:00	2010-05-07
231052	BG-50'	soil	2010-05-05	00:00	2010-05-07
231053	BG-60'	soil	2010-05-05	00:00	2010-05-07
231054	BH-1 0-1'	soil	2010-05-05	00:00	2010-05-07
231055	BH-1 3-4'	soil	2010-05-05	00:00	2010-05-07
231056	BH-1 7-8'	soil	2010-05-05	00:00	2010-05-07
231057	BH-1 10-11'	soil	2010-05-05	00:00	2010-05-07

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
231058	BH-1 15-16'	soil	2010-05-05	00:00	2010-05-07
231059	BH-1 20-21'	soil	2010-05-05	00:00	2010-05-07
231067	BH-2 0-1'	soil	2010-05-05	00:00	2010-05-07
231068	BH-2 3-4'	soil	2010-05-05	00:00	2010-05-07
231069	BH-2 7-8'	soil	2010-05-05	00:00	2010-05-07
231070	BH-2 10-11'	soil	2010-05-05	00:00	2010-05-07
231071	BH-2 15-16'	soil	2010-05-05	00:00	2010-05-07
231072	BH-2 20-21'	soil	2010-05-05	00:00	2010-05-07
231076	BH-3 0-1'	soil	2010-05-06	00:00	2010-05-07
231077	BH-3 3-4'	soil	2010-05-06	00:00	2010-05-07
231078	BH-3 7-8'	soil	2010-05-06	00:00	2010-05-07
231079	BH-3 10-11'	soil	2010-05-06	00:00	2010-05-07
231080	BH-3 15-16'	soil	2010-05-06	00:00	2010-05-07
231081	BH-3 20-21'	soil	2010-05-06	00:00	2010-05-07
231084	BH-4 0-1'	soil	2010-05-06	00:00	2010-05-07
231085	BH-4 3-4'	soil	2010-05-06	00:00	2010-05-07
231086	BH-4 7-8'	soil	2010-05-06	00:00	2010-05-07
231087	BH-4 10-11'	soil	2010-05-06	00:00	2010-05-07
231088	BH-4 15-16'	soil	2010-05-06	00:00	2010-05-07
231089	BH-4 20-21'	soil	2010-05-06	00:00	2010-05-07
231095	BH-5 0-1'	soil	2010-05-06	00:00	2010-05-07
231096	BH-5 3-4'	soil	2010-05-06	00:00	2010-05-07
231097	BH-5 7-8'	soil	2010-05-06	00:00	2010-05-07
231098	BH-5 10-11'	soil	2010-05-06	00:00	2010-05-07
231099	BH-5 15-16'	soil	2010-05-06	00:00	2010-05-07
231100	BH-5 20-21'	soil	2010-05-06	00:00	2010-05-07

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

This report consists of a total of 30 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

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

Case Narrative

Samples for project Stephens & Johnson/East Millman TB were received by TraceAnalysis, Inc. on 2010-05-07 and assigned to work order 10051019. Samples for work order 10051019 were received intact at a temperature of 4.0 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	59862	2010-05-11 at 09:20	69934	2010-05-11 at 12:08
Chloride (Titration)	SM 4500-Cl B	60018	2010-05-17 at 08:48	70112	2010-05-17 at 16:58
Chloride (Titration)	SM 4500-Cl B	60019	2010-05-17 at 08:49	70113	2010-05-17 at 16:58
Chloride (Titration)	SM 4500-Cl B	60020	2010-05-17 at 08:49	70152	2010-05-18 at 15:54
Chloride (Titration)	SM 4500-Cl B	60022	2010-05-17 at 12:50	70153	2010-05-18 at 16:01
TPH DRO - NEW	S 8015 D	59834	2010-05-11 at 10:00	69902	2010-05-11 at 10:00
TPH GRO	S 8015 D	59862	2010-05-11 at 09:20	69936	2010-05-11 at 12:36

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 10051019 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.

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 4 of 30
Eddy County, NM

Analytical Report

Sample: 231048 - BG-10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70112	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60018				

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

Sample: 231049 - BG-20'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70112	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60018				

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

Sample: 231050 - BG-30'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70112	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60018				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		289	mg/Kg	50	4.00

Sample: 231051 - BG-40'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70112	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60018				

continued ...

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 5 of 30
Eddy County, NM

sample 231051 continued ...

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

Sample: 231052 - BG-50'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

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

Sample: 231053 - BG-60'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

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

Sample: 231054 - BH-1 0-1'

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 Sample Preparation: 2010-05-11 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.816	mg/Kg	20	0.0100
Toluene		1.35	mg/Kg	20	0.0100
Ethylbenzene		1.16	mg/Kg	20	0.0100
Xylene		3.49	mg/Kg	20	0.0100

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 6 of 30
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		19.6	mg/Kg	20	20.0	98	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		21.6	mg/Kg	20	20.0	108	43.1 - 158.4

Sample: 231054 - BH-1 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

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

Sample: 231054 - BH-1 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 69902 Date Analyzed: 2010-05-11 Analyzed By: kg
Prep Batch: 59834 Sample Preparation: 2010-05-11 Prepared By: kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		404	mg/Kg	1	50.0

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

Sample: 231054 - BH-1 0-1'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 69936 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 Sample Preparation: 2010-05-11 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1140	mg/Kg	20	1.00

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 7 of 30
Eddy County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		19.8	mg/Kg	20	20.0	99	50.3 - 155
4-Bromofluorobenzene (4-BFB)		24.6	mg/Kg	20	20.0	123	51.7 - 131.1

Sample: 231055 - BH-1 3-4'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		246	mg/Kg	50	4.00

Sample: 231056 - BH-1 7-8'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		398	mg/Kg	50	4.00

Sample: 231057 - BH-1 10-11'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		355	mg/Kg	50	4.00

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 8 of 30
Eddy County, NM

Sample: 231058 - BH-1 15-16'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		617	mg/Kg	50	4.00

Sample: 231059 - BH-1 20-21'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		368	mg/Kg	50	4.00

Sample: 231067 - BH-2 0-1'

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 Sample Preparation: 2010-05-11 Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.66	mg/Kg	1	2.00	83	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.52	mg/Kg	1	2.00	76	43.1 - 158.4

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 9 of 30
Eddy County, NM

Sample: 231067 - BH-2 0-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70113	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60019				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		779	mg/Kg	50	4.00

Sample: 231067 - BH-2 0-1'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2010-05-11	Analyzed By:	kg
QC Batch:	69902	Sample Preparation:	2010-05-11	Prepared By:	kg
Prep Batch:	59834				

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		177	mg/Kg	1	50.0

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

Sample: 231067 - BH-2 0-1'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2010-05-11	Analyzed By:	AG
QC Batch:	69936	Sample Preparation:	2010-05-11	Prepared By:	AG
Prep Batch:	59862				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.74	mg/Kg	1	2.00	87	50.3 - 155
4-Bromofluorobenzene (4-BFB)		1.72	mg/Kg	1	2.00	86	51.7 - 131.1

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 10 of 30
Eddy County, NM

Sample: 231068 - BH-2 3-4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70113	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60019				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		913	mg/Kg	50	4.00

Sample: 231069 - BH-2 7-8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70113	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60019				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		435	mg/Kg	50	4.00

Sample: 231070 - BH-2 10-11'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70113	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60019				

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

Sample: 231071 - BH-2 15-16'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-17	Analyzed By:	AR
QC Batch:	70113	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60019				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		621	mg/Kg	50	4.00

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 11 of 30
Eddy County, NM

Sample: 231072 - BH-2 20-21'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		507	mg/Kg	50	4.00

Sample: 231076 - BH-3 0-1'

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 Sample Preparation: 2010-05-11 Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.23	mg/Kg	1	2.00	62	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	2.00	54	43.1 - 158.4

Sample: 231076 - BH-3 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 Sample Preparation: 2010-05-17 Prepared By: AR

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

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 12 of 30
Eddy County, NM

Sample: 231076 - BH-3 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 69902
Prep Batch: 59834

Analytical Method: S 8015 D
Date Analyzed: 2010-05-11
Sample Preparation: 2010-05-11

Prep Method: N/A
Analyzed By: kg
Prepared By: kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		88.9	mg/Kg	1	100	89	70 - 130

Sample: 231076 - BH-3 0-1'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 69936
Prep Batch: 59862

Analytical Method: S 8015 D
Date Analyzed: 2010-05-11
Sample Preparation: 2010-05-11

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.23	mg/Kg	1	2.00	62	50.3 - 155
4-Bromofluorobenzene (4-BFB)		1.22	mg/Kg	1	2.00	61	51.7 - 131.1

Sample: 231077 - BH-3 3-4'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 70113
Prep Batch: 60019

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-05-17
Sample Preparation: 2010-05-17

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1260	mg/Kg	50	4.00

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 13 of 30
Eddy County, NM

Sample: 231078 - BH-3 7-8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70152	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60020				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		971	mg/Kg	50	4.00

Sample: 231079 - BH-3 10-11'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70152	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60020				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		667	mg/Kg	50	4.00

Sample: 231080 - BH-3 15-16'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70152	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60020				

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

Sample: 231081 - BH-3 20-21'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70152	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60020				

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

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 14 of 30
Eddy County, NM

Sample: 231084 - BH-4 0-1'

Laboratory: Midland
Analysis: BTEX
QC Batch: 69934
Prep Batch: 59862

Analytical Method: S 8021B
Date Analyzed: 2010-05-11
Sample Preparation: 2010-05-11

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.31	mg/Kg	1	2.00	66	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	1	2.00	46	43.1 - 158.4

Sample: 231084 - BH-4 0-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 70152
Prep Batch: 60020

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-05-18
Sample Preparation: 2010-05-17

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

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

Sample: 231084 - BH-4 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 69902
Prep Batch: 59834

Analytical Method: S 8015 D
Date Analyzed: 2010-05-11
Sample Preparation: 2010-05-11

Prep Method: N/A
Analyzed By: kg
Prepared By: kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		89.7	mg/Kg	1	100	90	70 - 130

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 15 of 30
Eddy County, NM

Sample: 231084 - BH-4 0-1'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 69936
Prep Batch: 59862

Analytical Method: S 8015 D
Date Analyzed: 2010-05-11
Sample Preparation: 2010-05-11

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.37	mg/Kg	1	2.00	68	50.3 - 155
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	2.00	54	51.7 - 131.1

Sample: 231085 - BH-4 3-4'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 70152
Prep Batch: 60020

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-05-18
Sample Preparation: 2010-05-17

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		247	mg/Kg	50	4.00

Sample: 231086 - BH-4 7-8'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 70152
Prep Batch: 60020

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-05-18
Sample Preparation: 2010-05-17

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		918	mg/Kg	50	4.00

Sample: 231087 - BH-4 10-11'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 70152
Prep Batch: 60020

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-05-18
Sample Preparation: 2010-05-17

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 16 of 30
Eddy County, NM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1270	mg/Kg	50	4.00

Sample: 231088 - BH-4 15-16'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60020 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		628	mg/Kg	50	4.00

Sample: 231089 - BH-4 20-21'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60020 Sample Preparation: 2010-05-17 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		575	mg/Kg	50	4.00

Sample: 231095 - BH-5 0-1'

Laboratory: Midland
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 Sample Preparation: 2010-05-11 Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.02	mg/Kg	1	2.00	101	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.84	mg/Kg	1	2.00	92	43.1 - 158.4

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 17 of 30
Eddy County, NM

Sample: 231095 - BH-5 0-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

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

Sample: 231095 - BH-5 0-1'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2010-05-11	Analyzed By:	kg
QC Batch:	69902	Sample Preparation:	2010-05-11	Prepared By:	kg
Prep Batch:	59834				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		88.1	mg/Kg	1	100	88	70 - 130

Sample: 231095 - BH-5 0-1'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2010-05-11	Analyzed By:	AG
QC Batch:	69936	Sample Preparation:	2010-05-11	Prepared By:	AG
Prep Batch:	59862				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.08	mg/Kg	1	2.00	104	50.3 - 155
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	1	2.00	103	51.7 - 131.1

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 18 of 30
Eddy County, NM

Sample: 231096 - BH-5 3-4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		620	mg/Kg	50	4.00

Sample: 231097 - BH-5 7-8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		421	mg/Kg	50	4.00

Sample: 231098 - BH-5 10-11'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		809	mg/Kg	50	4.00

Sample: 231099 - BH-5 15-16'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		644	mg/Kg	50	4.00

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 19 of 30
Eddy County, NM

Sample: 231100 - BH-5 20-21'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-18	Analyzed By:	AR
QC Batch:	70153	Sample Preparation:	2010-05-17	Prepared By:	AR
Prep Batch:	60022				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		983	mg/Kg	50	4.00

Method Blank (1) QC Batch: 69902

QC Batch:	69902	Date Analyzed:	2010-05-11	Analyzed By:	kg
Prep Batch:	59834	QC Preparation:	2010-05-11	Prepared By:	kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		78.8	mg/Kg	1	100	79	70 - 130

Method Blank (1) QC Batch: 69934

QC Batch:	69934	Date Analyzed:	2010-05-11	Analyzed By:	AG
Prep Batch:	59862	QC Preparation:	2010-05-11	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.01	mg/Kg	1	2.00	100	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.56	mg/Kg	1	2.00	78	43.9 - 141.9

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 20 of 30
Eddy County, NM

Method Blank (1) QC Batch: 69936

QC Batch: 69936 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 QC Preparation: 2010-05-11 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.00	mg/Kg	1	2.00	100	66.2 - 145
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	1	2.00	87	62 - 120.5

Method Blank (1) QC Batch: 70112

QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60018 QC Preparation: 2010-05-17 Prepared By: AR

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

Method Blank (1) QC Batch: 70113

QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 QC Preparation: 2010-05-17 Prepared By: AR

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

Method Blank (1) QC Batch: 70152

QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60020 QC Preparation: 2010-05-17 Prepared By: AR

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

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 21 of 30
Eddy County, NM

Method Blank (1) QC Batch: 70153

QC Batch: 70153
Prep Batch: 60022

Date Analyzed: 2010-05-18
QC Preparation: 2010-05-17

Analyzed By: AR
Prepared By: AR

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

Laboratory Control Spike (LCS-1)

QC Batch: 69902
Prep Batch: 59834

Date Analyzed: 2010-05-11
QC Preparation: 2010-05-11

Analyzed By: kg
Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	255	mg/Kg	1	250	<5.86	102	57.4 - 133.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	266	mg/Kg	1	250	<5.86	106	57.4 - 133.4	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
n-Tricosane	85.4	88.7	mg/Kg	1	100	85	89	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 69934
Prep Batch: 59862

Date Analyzed: 2010-05-11
QC Preparation: 2010-05-11

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.98	mg/Kg	1	2.00	<0.00410	99	75.4 - 115.7
Toluene	1.97	mg/Kg	1	2.00	<0.00310	98	78.4 - 113.6
Ethylbenzene	1.90	mg/Kg	1	2.00	<0.00240	95	76 - 114.2
Xylene	5.70	mg/Kg	1	6.00	<0.00650	95	76.9 - 113.6

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.94	mg/Kg	1	2.00	<0.00410	97	75.4 - 115.7	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Toluene	1.93	mg/Kg	1	2.00	<0.00310	96	78.4 - 113.6	2	20
Ethylbenzene	1.88	mg/Kg	1	2.00	<0.00240	94	76 - 114.2	1	20
Xylene	5.63	mg/Kg	1	6.00	<0.00650	94	76.9 - 113.6	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.00	1.86	mg/Kg	1	2.00	100	93	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.88	1.75	mg/Kg	1	2.00	94	88	43.8 - 144.9

Laboratory Control Spike (LCS-1)

QC Batch: 69936
Prep Batch: 59862

Date Analyzed: 2010-05-11
QC Preparation: 2010-05-11

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.2	mg/Kg	1	20.0	<0.396	76	52.5 - 114.3

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.8	mg/Kg	1	20.0	<0.396	79	52.5 - 114.3	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)	2.03	1.80	mg/Kg	1	2.00	102	90	66.2 - 148.7
4-Bromofluorobenzene (4-BFB)	2.00	1.78	mg/Kg	1	2.00	100	89	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 70112
Prep Batch: 60018

Date Analyzed: 2010-05-17
QC Preparation: 2010-05-17

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.1	mg/Kg	1	100	<2.18	98	85 - 115

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

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 23 of 30
Eddy County, NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.7	mg/Kg	1	100	<2.18	100	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 QC Preparation: 2010-05-17 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.4	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	3	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: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60020 QC Preparation: 2010-05-17 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.2	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	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: 70153 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60022 QC Preparation: 2010-05-17 Prepared By: AR

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.3	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115	3	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: 231095

QC Batch: 69902 Date Analyzed: 2010-05-11 Analyzed By: kg
Prep Batch: 59834 QC Preparation: 2010-05-11 Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	203	mg/Kg	1	250	7.29	78	35.2 - 167.1

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	210	mg/Kg	1	250	7.29	81	35.2 - 167.1	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	82.8	83.2	mg/Kg	1	100	83	83	70 - 130

Matrix Spike (MS-1) Spiked Sample: 231095

QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG
Prep Batch: 59862 QC Preparation: 2010-05-11 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.01	mg/Kg	1	2.00	<0.00410	100	57.7 - 140.7
Toluene	2.04	mg/Kg	1	2.00	<0.00310	102	53.4 - 146.6
Ethylbenzene	2.01	mg/Kg	1	2.00	<0.00240	100	62.1 - 141.6
Xylene	6.07	mg/Kg	1	6.00	<0.00650	101	61.2 - 142.7

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.27	mg/Kg	1	2.00	<0.00410	114	57.7 - 140.7	12	20
Toluene	2.30	mg/Kg	1	2.00	<0.00310	115	53.4 - 146.6	12	20
Ethylbenzene	2.27	mg/Kg	1	2.00	<0.00240	114	62.1 - 141.6	12	20
Xylene	6.82	mg/Kg	1	6.00	<0.00650	114	61.2 - 142.7	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)	1.53	1.44	mg/Kg	1	2	76	72	61.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.44	1.34	mg/Kg	1	2	72	67	49.6 - 146.7

Matrix Spike (MS-1) Spiked Sample: 230972

QC Batch: 69936
Prep Batch: 59862

Date Analyzed: 2010-05-11
QC Preparation: 2010-05-11

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	28.6	mg/Kg	1	20.0	8.37	101	10 - 198.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	22.9	mg/Kg	1	20.0	8.37	114	10 - 198.3	22	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)	1.87	1.56	mg/Kg	1	2	94	78	65.5 - 143
4-Bromofluorobenzene (4-BFB)	2.18	1.68	mg/Kg	1	2	109	84	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 231057

QC Batch: 70112
Prep Batch: 60018

Date Analyzed: 2010-05-17
QC Preparation: 2010-05-17

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10200	mg/Kg	100	10000	355	98	85 - 115

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

¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 26 of 30
Eddy County, NM

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10400	mg/Kg	100	10000	355	100	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 231077

QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR
Prep Batch: 60019 QC Preparation: 2010-05-17 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11300	mg/Kg	100	10000	1260	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11400	mg/Kg	100	10000	1260	101	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 231089

QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60020 QC Preparation: 2010-05-17 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10800	mg/Kg	100	10000	575	102	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11000	mg/Kg	100	10000	575	104	85 - 115	2	20

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

Matrix Spike (MS-1) Spiked Sample: 231283

QC Batch: 70153 Date Analyzed: 2010-05-18 Analyzed By: AR
Prep Batch: 60022 QC Preparation: 2010-05-17 Prepared By: AR

continued ...

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 27 of 30
Eddy County, NM

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12800	mg/Kg	100	10000	2750	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12900	mg/Kg	100	10000	2750	102	85 - 115	1	20

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

Standard (CCV-1)

QC Batch: 69902 Date Analyzed: 2010-05-11 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	104	80 - 120	2010-05-11

Standard (CCV-2)

QC Batch: 69902 Date Analyzed: 2010-05-11 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	80 - 120	2010-05-11

Standard (CCV-3)

QC Batch: 69902 Date Analyzed: 2010-05-11 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	219	88	80 - 120	2010-05-11

Standard (CCV-1)

QC Batch: 69934 Date Analyzed: 2010-05-11 Analyzed By: AG

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 28 of 30
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0941	94	80 - 120	2010-05-11
Toluene		mg/Kg	0.100	0.0913	91	80 - 120	2010-05-11
Ethylbenzene		mg/Kg	0.100	0.0833	83	80 - 120	2010-05-11
Xylene		mg/Kg	0.300	0.251	84	80 - 120	2010-05-11

Standard (CCV-2)

QC Batch: 69934

Date Analyzed: 2010-05-11

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0983	98	80 - 120	2010-05-11
Toluene		mg/Kg	0.100	0.0967	97	80 - 120	2010-05-11
Ethylbenzene		mg/Kg	0.100	0.0915	92	80 - 120	2010-05-11
Xylene		mg/Kg	0.300	0.276	92	80 - 120	2010-05-11

Standard (CCV-1)

QC Batch: 69936

Date Analyzed: 2010-05-11

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.03	103	80 - 120	2010-05-11

Standard (CCV-2)

QC Batch: 69936

Date Analyzed: 2010-05-11

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.922	92	80 - 120	2010-05-11

Standard (ICV-1)

QC Batch: 70112

Date Analyzed: 2010-05-17

Analyzed By: AR

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 29 of 30
Eddy County, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.4	99	85 - 115	2010-05-17

Standard (CCV-1)

QC Batch: 70112 Date Analyzed: 2010-05-17 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-17

Standard (ICV-1)

QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-17

Standard (CCV-1)

QC Batch: 70113 Date Analyzed: 2010-05-17 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-05-17

Standard (ICV-1)

QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.6	99	85 - 115	2010-05-18

Standard (CCV-1)

QC Batch: 70152 Date Analyzed: 2010-05-18 Analyzed By: AR

Report Date: May 19, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 30 of 30
Eddy County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-18

Standard (ICV-1)

QC Batch: 70153

Date Analyzed: 2010-05-18

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-05-18

Standard (CCV-1)

QC Batch: 70153

Date Analyzed: 2010-05-18

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.4	98	85 - 115	2010-05-18

Order #: 10051019

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-1400476

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy G. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTEX 8021B
TPH 8015 MOD TX1005 (Ext. to C36)

PAH 8270

ROHA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

31048

5/5

S

X

BG 10'

1

X

X

049

BG 20'

050

BG 30'

051

BG 40'

052

BG 50'

053

BG 60'

054

BH-1 0'-1'

XX

X

055

BH-1 3'-4'

056

BH-1 7'-8'

057

BH-1 10'-11'

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

FEDEX

BUS

OTHER:

HAND DELIVERED

UPS

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

4.0°C intact

If total TPH exceed 5,000 mg/kg run deeper samples

If Benzen exceeds 10 mg/kg run deeper samples

If BTEX exceeds 50 mg/kg run deeper samples

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

Order # 10057014

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-6400476

PROJECT NAME:

Stephens & Johnson / East Millman TIS

Eddy G. NM

LAB I.D.
NUMBERDATE
2010

TIME

MATRIX

COMP.

GRAB

231058

7/5

S

X

BH-1

15'-16'

059

BH-1

20'-21'

060

BH-1

25'-26'

061

BH-1

30'-31'

062

BH-1

40'-41'

063

BH-1

50'-51'

064

BH-1

60'-61'

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE: 3

OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-1410-176

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy Co. NM

SAMPLE IDENTIFICATION

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB		NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	PRESERVATIVE METHOD	TX1005 (Ext. to C35)	PH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	HCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
231008	5/5		S		X	BH-2 3'-4'	1				X															X				
069						BH-2 7'-8'																								
070						BH-2 10'-11'																								
071						BH-2 15'-16'																								
072						BH-2 20'-21'																								
073						BH-2 25'-26'																								
074						BH-2 30'-31'																								
075						BH-2 40'-41'																								
076	5/6					BH-3 0'-1'								XX												X				
077						BH-3 3'-4'																								

RELINQUISHED BY: (Signature)

Date: 5/11/10

Time: 12:00

RECEIVED BY: (Signature)

Date: 5/11/10

Time: 12:00

SAMPLED BY: (Print & Initial)

Date: 5/11/10

Time: 12:00

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

AIRBILL #: _____

FEDEX

BUS

HAND DELIVERED

UPS

OTHER: _____

RECEIVING LABORATORY:

Tetra

RECEIVED BY: (Signature)

ADDRESS:

CITY: Midland

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: _____

TIME: _____

SAMPLE CONDITION WHEN RECEIVED:

4.0°C intact

REMARKS:

If total TPH exceed 5,000 mg/kg run deeper samples

If BTEX exceeds 10 mg/kg run deeper samples

If BTEX exceeds 55 mg/kg run deeper samples

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

Order # 10051019

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 8



TETRA TECH

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:
Stephens & Johnson Consulting

SITE MANAGER:
Ike Tavaraz

PROJECT NO.:
114-6400476

PROJECT NAME:
*Stephens & Johnson / East Millman TB
Eddy Co. NM*

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	Eddy, G. NM SAMPLE IDENTIFICATION		NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	ATEX 8021B	CPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 1	GC/MS Semi	PCB's 8080/0	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (PLM (Asbes)	Major Anion	
23178	5/6		S	X		BH-3	7'-8'	1			X														X					
079						BH-3	10'-11'																							
080						BH-3	15'-16'																							
081						BH-3	20'-21'																							
082						BH-3	25'-26'																							
083						BH-3	30'-31'																							
084						BH-4	0'-1'						XX												X					
085						BH-4	3'-4'																							
086						BH-4	7'-8'																							
087						BH-4	10'-11'																							

RELINQUISHED BY: (Signature) <i>[Signature]</i>	Date: <i>5/7/10</i> Time: <i>1700</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	Date: <i>5/7/10</i> Time: <i>1700</i>	SAMPLED BY: (Print & Initial) <i>IT</i>	Date: <i>5/4/10</i> Time: _____
RELINQUISHED BY: (Signature) _____	Date: _____ Time: _____	RECEIVED BY: (Signature) _____	Date: _____ Time: _____	SAMPLE SHIPPED BY: (Circle) FEDEX <input checked="" type="checkbox"/> BUS <input type="checkbox"/> HAND DELIVERED <input type="checkbox"/> UPS <input type="checkbox"/>	AIRBILL #: _____ OTHER: _____
RELINQUISHED BY: (Signature) _____	Date: _____ Time: _____	RECEIVED BY: (Signature) _____	Date: _____ Time: _____	TETRA TECH CONTACT PERSON: <i>Ike Tavaraz</i>	
RECEIVING LABORATORY: <i>Tetra</i>				Results by: _____	
ADDRESS: <i>Midland</i> STATE: <i>TX</i> ZIP: _____				RUSH Charges Authorized: _____	
CONTACT: _____ PHONE: _____ DATE: _____ TIME: _____				Yes _____ No _____	

SAMPLE CONDITION WHEN RECEIVED: *4.0°C intact*

REMARKS: *If total TP+ exceed 5,000 mg/kg run deeper samples If Biber exceeds 10 mg/kg run deeper samples If BTEX exceeds 15 mg/kg run deeper samples*

Order # 10051019

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 8



TETRA TECH

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

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:
Stephens & Johnson Operating

SITE MANAGER:
IKT Tovar

PROJECT NO.:
114-4400476

PROJECT NAME:
*Stephens & Johnson / East Millman TB
Eddy Co. NM*

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	Eddy C. NM SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	PRESERVATIVE METHOD										C35 TX1005 (Ext. to C35)	C36 TX1005 MOD. TX1005	C37 PAH 8270	C38 ACRA Metals Ag As Ba Cd Cr Pb Hg Se	C39 TCLP Metals Ag As Ba Cd Vr Pd Hg Se	C40 TCLP Volatiles	C41 TCLP Semi Volatiles	C42 RCI	C43 GC/MS Vol. 8240/8260/624	C44 GC/MS Semi. Vol. 8270/625	C45 PCB's 8080/608	C46 Pest. 808/608	C47 Chloride	C48 Gamma Spec.	C49 Alpha Beta (Air)	C50 PLM (Asbestos)	C51 Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																							
231088	5/6		S		X	BH-4 15'-16'	1					X																						
089						BH-4 20'-21'																												
090						BH-4 25'-26'																												
091						BH-4 30'-31'																												
092						BH-4 40'-41'																												
093						BH-4 50'-51'																												
094						BH-4 60'-61'																												
095						BH-5 0'-1'											X	X								X								
096						BH-5 3'-4'																												
097						BH-5 7'-8'																												

RELINQUISHED BY: (Signature) *[Signature]* Date: *5/1/10*
Time: *17:00*

RECEIVED BY: (Signature) *[Signature]* Date: *5/1/10*
Time: *17:10*

SAMPLED BY: (Print & Initial) *IKT* Date: *5/1/10*
Time: *17:10*

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

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

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

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

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

TETRA TECH CONTACT PERSON: *IKT Tovar* Results by: _____

RECEIVING LABORATORY: *Trace*
ADDRESS: _____
CITY: *Midland* STATE: *TX* ZIP: _____
CONTACT: _____ PHONE: _____ DATE: _____ TIME: _____

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

RUSH Charges Authorized: _____
Yes No

SAMPLE CONDITION WHEN RECEIVED:
2.0°C intact

REMARKS:
*If total TPH exceed 5,000 mg/kg run deeper samples If Bensen exceeds 10mg/kg run deeper samples
If BTEX exceeds 50mg/kg run deeper samples*

Order #: 10057019

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Taverre

PROJECT NO.:

114-640070

PROJECT NAME:

Stephens & Johnson / East Millman TB

LAB I.D. NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE METHOD

HCL

HNO3

ICE

NONE

EPA 8021B

EPA 8015 MOD. (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

231098

S

X

BH-5

10'-11'

1

X

X

099

BH-5

15'-16'

X

231100

BH-5

20'-21'

X

101

BH-5

30'-31'

102

BH-5

40'-41'

103

BH-5

50'-51'

104

BH-5

60'-61'

105

BH-6

20'-21'

106

BH-6

30'-31'

107

BH-7

20'-21'

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

HAND DELIVERED

UPS

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

4.0°C intact

If total TPH exceed 5,000 mg/kg run deeper samples

If BTEX exceeds 10 mg/kg run deeper samples
If BTEX exceeds 25 mg/kg run deeper samplesRUSH Charges
Authorized.
Yes No

Order: 10057014

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 8

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

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-4400476

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy G NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBERDATE
2010

TIME

MATRIX

COMP

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE
METHOD
 STEX 8021B
 PH- 8015 MOD TX1005 (Ext. to C36)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

231108

S

X

BH-7 30'-31'

1

X

109

BH-8 20'-21'

110

BH-8 30'-31'

111

BH-8 40'-41'

112

BH-8 50'-51'

113

BH-8 60'-61'

114

BH-8 70'-71'

115

BH-8 80'-81'

116

BH-9 20'-21'

117

BH-9 30'-31'

RELINQUISHED BY: (Signature)

Date: 5/12/10

Time: 1700

RECEIVED BY: (Signature)

Date: 5/12/10

Time: 1700

SAMPLED BY: (Print & Initial)

IT

Date: 5/12/10

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

RECEIVING LABORATORY:

Tetra

RECEIVED BY: (Signature)

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

TETRA TECH CONTACT PERSON:

Ike Tavaraz

Results by:

RUSH Charges
Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

4.0°C intact

REMARKS:

If total TPH exceed 5,000 mg/kg run deeper samples

If BTEX exceeds 10 mg/kg run deeper samples

If BTEX exceeds 55 mg/kg run deeper samples

11/5

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



TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Attachments Describe Any Attachments: (ex. Title V Application, Waste Transporter Application, etc.)		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
3. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
6. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check only one of the following:			
<input type="checkbox"/> Owner	<input type="checkbox"/> Operator	<input type="checkbox"/> Owner & Operator	
<input type="checkbox"/> Occupational Licensee	<input type="checkbox"/> Responsible Party	<input type="checkbox"/> Voluntary Cleanup Applicant	<input type="checkbox"/> Other: _____
7. General Customer Information			
<input type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information	<input type="checkbox"/> Change in Regulated Entity Ownership
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State)		<input type="checkbox"/> No Change**	
**If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.			
8. Type of Customer:			
<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	<input type="checkbox"/> Sole Proprietorship- D.B.A	
<input type="checkbox"/> City Government	<input type="checkbox"/> County Government	<input type="checkbox"/> Federal Government	<input type="checkbox"/> State Government
<input type="checkbox"/> Other Government	<input type="checkbox"/> General Partnership	<input type="checkbox"/> Limited Partnership	<input type="checkbox"/> Other: _____
9. Customer Legal Name (If an individual, print last name first: ex: Doe, John) If new Customer, enter previous Customer below End Date: _____			
10. Mailing Address:			
City	State	ZIP	ZIP + 4
11. Country Mailing Information (if outside USA)		12. E-Mail Address (if applicable)	
13. Telephone Number		14. Extension or Code	15. Fax Number (if applicable)
() -			() -
16. Federal Tax ID (9 digits)	17. TX State Franchise Tax ID (11 digits)	18. DUNS Number (if applicable)	19. TX SOS Filing Number (if applicable)
20. Number of Employees			21. Independently Owned and Operated?
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher			<input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information: (If "New Regulated Entity" is selected below this form should be accompanied by a permit application)			
<input type="checkbox"/> New Regulated Entity	<input type="checkbox"/> Update to Regulated Entity Name	<input type="checkbox"/> Update to Regulated Entity Information	<input type="checkbox"/> No Change** (See below)
**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.			
23. Regulated Entity Name (name of the site where the regulated action is taking place)			

24. Street Address of the Regulated Entity: (No P.O. Boxes)							
	City		State		ZIP		ZIP + 4
25. Mailing Address:							
	City		State		ZIP		ZIP + 4
26. E-Mail Address:							
27. Telephone Number	28. Extension or Code		29. Fax Number (if applicable)				
() -			() -				
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)		33. Secondary NAICS Code (5 or 6 digits)			
34. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.)							

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:					
36. Nearest City	County	State	Nearest ZIP Code		
37. Latitude (N) In Decimal:	38. Longitude (W) In Decimal:				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Industrial Hazardous Waste	<input type="checkbox"/> Municipal Solid Waste
<input type="checkbox"/> New Source Review – Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS	<input type="checkbox"/> Sludge
<input type="checkbox"/> Stormwater	<input type="checkbox"/> Title V – Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil	<input type="checkbox"/> Utilities
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	41. Title:	
42. Telephone Number	43. Ext./Code	44. Fax Number
() -		() -
45. E-Mail Address		

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Job Title:
Name (In Print):	Phone: () -
Signature:	Date:

Summary Report

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

Report Date: May 25, 2010

Work Order: 10051019



Project Location: Eddy County, NM
Project Name: Stephens & Johnson/East Millman TB
Project Number: 114-6400476

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
231101	BH-5 30-31'	soil	2010-05-06	00:00	2010-05-07
231102	BH-5 40-41'	soil	2010-05-06	00:00	2010-05-07

Sample: 231101 - BH-5 30-31'

Param	Flag	Result	Units	RL
Chloride		1130	mg/Kg	4.00

Sample: 231102 - BH-5 40-41'

Param	Flag	Result	Units	RL
Chloride		460	mg/Kg	4.00



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

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: May 25, 2010

Work Order: 10051019



Project Location: Eddy County, NM
Project Name: Stephens & Johnson/East Millman TB
Project Number: 114-6400476

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
231101	BH-5 30-31'	soil	2010-05-06	00:00	2010-05-07
231102	BH-5 40-41'	soil	2010-05-06	00:00	2010-05-07

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

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

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

Case Narrative

Samples for project Stephens & Johnson/East Millman TB were received by TraceAnalysis, Inc. on 2010-05-07 and assigned to work order 10051019. Samples for work order 10051019 were received intact at a temperature of 4.0 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	60199	2010-05-24 at 09:13	70333	2010-05-25 at 09:55

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 10051019 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.

Report Date: May 25, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 4 of 5
Eddy County, NM

Analytical Report

Sample: 231101 - BH-5 30-31'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-25	Analyzed By:	AR
QC Batch:	70333	Sample Preparation:	2010-05-25	Prepared By:	AR
Prep Batch:	60199				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1130	mg/Kg	50	4.00

Sample: 231102 - BH-5 40-41'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-05-25	Analyzed By:	AR
QC Batch:	70333	Sample Preparation:	2010-05-25	Prepared By:	AR
Prep Batch:	60199				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		460	mg/Kg	50	4.00

Method Blank (1) QC Batch: 70333

QC Batch:	70333	Date Analyzed:	2010-05-25	Analyzed By:	AR
Prep Batch:	60199	QC Preparation:	2010-05-24	Prepared By:	AR

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

Laboratory Control Spike (LCS-1)

QC Batch:	70333	Date Analyzed:	2010-05-25	Analyzed By:	AR
Prep Batch:	60199	QC Preparation:	2010-05-24	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.4	mg/Kg	1	100	<2.18	98	85 - 115

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

Report Date: May 25, 2010
114-6400476

Work Order: 10051019
Stephens & Johnson/East Millman TB

Page Number: 5 of 5
Eddy County, NM

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

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

Matrix Spike (MS-1) Spiked Sample: 231598

QC Batch: 70333
Prep Batch: 60199

Date Analyzed: 2010-05-25
QC Preparation: 2010-05-24

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10700	mg/Kg	100	10000	470	102	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10900	mg/Kg	100	10000	470	104	85 - 115	2	20

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

Standard (ICV-1)

QC Batch: 70333

Date Analyzed: 2010-05-25

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2010-05-25

Standard (CCV-1)

QC Batch: 70333

Date Analyzed: 2010-05-25

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-25

Order #: 10051019

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-6400476

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy Co. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE
METHODGTEX 8021B
PH 8015 MOD, TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

B1048

5/5

S

X

BG

10'

1

X

049

BG

20'

050

BG

30'

051

BG

40'

052

BG

50'

053

BG

60'

054

BH-1

0-1'

055

BH-1

3-4'

056

BH-1

7-8'

057

BH-1

10-11'

Order # 10057019

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaroz

PROJECT NO.:

114-4400476

PROJECT NAME:

Stephens & Johnson / East Millman TIS

Eddy G. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

☒ TEX 8021B
☒ PH 8015 MOD TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

231058

5/5

S

X

BH-1

15'-16'

1

X

059

BH-1

20'-21'

060

BH-1

25'-26'

061

BH-1

30'-31'

062

BH-1

40'-41'

063

BH-1

50'-51'

064

BH-1

60'-61'

065

BH-1

70'-71'

066

BH-1

80'-81'

067

BH-2

0'-1'

1

X

X

X

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

☒ FEDEX
☒ HAND DELIVERED

☐ BUS
☐ UPS

OTHER:

RECEIVING LABORATORY:

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

TETRA TECH CONTACT PERSON:

Results by:

Ike Tavaroz

RUSH Charges
Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

4.0°C in ice

REMARKS:

If total TPH exceed 5,000 mg/kg run deeper samples

If BTEX exceeds 10 mg/kg run deeper samples

If BTEX exceeds 50 mg/kg run deeper samples

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

Order # 10057019

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaré

PROJECT NO.:

114-6400476

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy C. NM

SAMPLE IDENTIFICATION

LAB I.D. NUMBER	DATE TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION		NUMBER	FILTERED	HCL	HNO3	ICE	NONE	BTEX 8021	PH 8015	PAH 8270	RCRA Me	TCLP Me	TCLP Vol	TCLP Ser	RCI	GC/MS V	GC/MS S	PCB's 808	Pest. 808	Chloride	Gamma S	Alpha Be	PLM (As)	Major An
23K78	5/6	S	X		BH-3	7'-8'	1				X														X				
079					BH-3	10'-11'																							
080					BH-3	15'-16'																							
081					BH-3	20'-21'																							
082					BH-3	25'-26'																							
083					BH-3	30'-31'																							
084					BH-4	0'-1'									XX										X				
085					BH-4	3'-4'																							
086					BH-4	7'-8'																							
087					BH-4	10'-11'																							

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Date:

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

FEDEX

BUS

HAND DELIVERED

UPS

OTHER:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

RECEIVED BY: (Signature)

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

4.0°C intact

If total TPH exceed 5,000 mg/kg run deeper samples If BTEX exceeds 10 mg/kg run deeper samples If BTEX exceeds 50 mg/kg run deeper samples

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

WFOC # 10057014

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 8



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:
Stephens & Johnson Operating

SITE MANAGER:
Ike Tovar

PROJECT NO.:
114-6400476

PROJECT NAME:
Stephens & Johnson / East Millman TB
Feldy, G. NM
SAMPLE IDENTIFICATION

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB		NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	PRESERVATIVE METHOD	TEX 8021B	TPH 8015 MOD, TX1005 (Ext. to C35)	PAH 8270	HCR Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
231088	5/6		S	X		BH-4 15'-16'	1				X																			
089						BH-4 20'-21'																								
090						BH-4 25'-26'																								
091						BH-4 30'-31'																								
092						BH-4 40'-41'																								
093						BH-4 50'-51'																								
094						BH-4 60'-61'																								
095						BH-5 0'-1'								X	X											X				
096						BH-5 3'-4'																								
097						BH-5 7'-8'																								

RELINQUISHED BY: (Signature) Date: 5/22/10 Time: 1:00

RECEIVED BY: (Signature) Date: 5/22/10 Time: 1:10

SAMPLED BY: (Print & Initial) Date: 5/21/10 Time: 1:10

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

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

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

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

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

TETRA TECH CONTACT PERSON: _____ Results by: _____

RECEIVING LABORATORY: Tetra
ADDRESS: _____
CITY: Midland STATE: TX ZIP: _____
CONTACT: _____ PHONE: _____ DATE: _____ TIME: _____

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

TETRA TECH CONTACT PERSON: Ike Tovar
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:
21.0°C intact

REMARKS:
If total TPH exceed 5,000 mg/kg run deeper samples If BTEX exceeds 10 mg/kg run deeper samples
If BTEX exceeds 50 mg/kg run deeper samples

Order #: 10057019

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 8

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-6400176

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy C. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBERDATE
2010

TIME

MATRIX

COMP

GRAB

231098

S

X

BH-5

10'-11'

099

BH-5

15'-16'

231100

BH-5

20'-21'

101

BH-5

30'-31'

102

BH-5

40'-41'

103

BH-5

50'-51'

104

BH-5

60'-61'

Order: 10051017

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE: 7 OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Taveraz

PROJECT NO.:

114-4400476

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eddy C. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBER

DATE
2010

TIME

MATRIX

COMP.

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTX 80215

PH 8015 MOD

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

231108

S

X

BH-7

30'-31'

1

X

109

BH-8

20'-21'

110

BH-8

30'-31'

111

BH-8

40'-41'

112

BH-8

50'-51'

113

BH-8

60'-61'

114

BH-8

20'-71'

115

BH-8

80'-81'

116

BH-9

20'-21'

117

BH-9

30'-31'

RELINQUISHED BY: (Signature)

Date: 5/17/10

Time: 1700

RECEIVED BY: (Signature)

Date: 5/17/10

Time: 1700

SAMPLED BY: (Print & Initial)

IT

Date: 5/17/10

Time:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

HAND DELIVERED

TETRA TECH CONTACT PERSON:

Ike Taveraz

AIRBILL #:

OTHER:

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS:

CITY: Midland

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

TIME:

SAMPLE CONDITION WHEN RECEIVED:

4.0°C intact

REMARKS:

If total TPH exceed 5,000 mg/kg run deeper samples

If Benzen exceeds 10 mg/kg run deeper samples

If BTEX exceeds 50 mg/kg run deeper samples

11/6

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

Order # 10051019

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

PAGE: 8 OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Stephens & Johnson Operating

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-1400-176

PROJECT NAME:

Stephens & Johnson / East Millman TB

Eldy C. NM

SAMPLE IDENTIFICATION

LAB I.D.
NUMBER

DATE
2010

TIME

MATRIX

COMP

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

PH 8015 MODS TX1005 (Ext. to C35)

PAH 8270

PCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC-MS Vol. 8240/8260/824

GC-MS Semi. Vol. 8270/825

PCB's 8080/608

Pest. 809/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

23118

5/6

S

X

BH-10

20'-21'

1

X

119

5/6

S

S

BH-10

30'-31'

1

Hold all additional samples

for further instructions

RELINQUISHED BY: (Signature)

Date: 5/11/10

Time: 1200

RECEIVED BY: (Signature)

Date: 5/11/10

Time: 1200

SAMPLED BY: (Print & Initial)

IT

Date: 5/11/10

Time: 1200

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX HAND DELIVERED BUS UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Ike Tavaraz

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

Address:

City: Midland

STATE: TX

ZIP: _____

CONTACT: _____

PHONE: _____

RECEIVED BY: (Signature)

DATE: _____

TIME: _____

SAMPLE CONDITION WHEN RECEIVED:

4.0°C intact

REMARKS:

If total TPH exceed 5,000 mg/kg run deeper samples If BTEX exceeds 10mg/kg run deeper samples If BTEX exceeds 150mg/kg run deeper samples (6)

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