AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pKJ1603949820

1RP - 4169

FASKEN OIL & RANCH LTD

3/10/2016

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	AMERICO ENERGY RESOURCES	Contact	STEVE SMITH
Address	10440 OLD KATY RD. HOUSTON, TX 77043	Telephone No.	441-0926
Facility Name	TENTEN SWD #1	Facility Type	SALT WATER DISPOSAL LINE
Surface Owner	JACK PAGELL	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	11	16S	39E	UNK	UNK	UNK	UNK	LEA

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	SALT WATER	Volume of Release 10,000	Volume Recovered 0
Source of Release	WATER LINE	Date and Hour of Occurrence 7/25	Date and Hour of Discovery 7/25 11 AM
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required		If YES, To Whom? JERRY AMOS / GARY WINK	
By Whom?		Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No		If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* 10" RED THREAD FIBERGLASS PIPE, SPLIT ALONG THE SEAM. SHUT DOWN LINE, EXCAVATED BY BACKHOE, REMOVED BAD SECTION OF PIPE AND REPLACED W/ NEW.

Describe Area Affected and Cleanup Action Taken.* APPROXIMATELY 500' X 1000' PASTURE GRASS. CONTACTED LAND OWNER, HE ADVISED HE WANTED ENTIRE AREA EXCAVATED AND NEW DIRT PUT IN THE PLACE.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: STEPHEN B. SMITH	Approved by District Supervisor:
Title: CONSULTANT ENGINEER / AREA REP.	Approval Date: / Expiration Date:
E-mail Address: SMITHSEN@HOTMAIL.COM	Conditions of Approval: / Attached ☐
Date: 8/5/04 Phone: 441-0926	

Attach Additional Sheets If Necessary

Fasken Oil and Ranch, Ltd.
Denton SWD #1 Mainline Monitor Well
Unit J, Section 11, Township 15S, Range 37E
Lea County, New Mexico

Closure Report

July 10, 2012

Prepared for:

Fasken Oil and Ranch, Ltd.
303 West Wall Street, Suite 1800
Midland, Texas 79701-5116

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510

TABLE OF CONTENTS

I. Company Contacts

Representative	Company	Telephone	E-mail
Jimmy Carlile	Fasken	432-818-0210	jimmyc@forl.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety & Environmental Solutions, Inc. was retained by Fasken Oil & Ranch, Ltd. to perform a site assessment at the Denton #1 SWD Mainline. The site is located in Unit Letter J, Section 11, Township; 15 South, Range 37 East.

On July 25, 2004 the Denton # 1 SWD Mainline, which is a 10" red thread fiberglass pipe, breached and released approximately 10,000 barrels of salt water. The line was shut down and excavated with a backhoe. The damaged section of the line was removed and replaced with new.

Contaminant and Size of Area

The suspected contaminant is salt water. Approximately 10,000 barrels of salt water were released. The release covered approximately 136,317 square feet. According to Permian Production Chemical, an analysis of the produced water, which flows through this line, indicated a chloride concentration of 53,053 ppm.

Vertical and Horizontal Extent of Contamination

As reported in the Delineation report dated September 28, 2004, SESI installed a total of six boreholes in the area. With the exception of BH-1, in which auger refusal was encountered at a depth of 30 ft., all other boreholes indicated the vertical extent of contamination to be between 20 and 25 ft. in some areas.

On October 25, 2004, Safety & Environmental Solutions, Inc. (SESI) engaged Eco Drilling of Midland, Texas to install a monitor well. The well was installed in the same vicinity where the highest levels of contamination took place (BH-2).

The monitor well was drilled to a depth of 65 feet. Composite samples were retrieved every 5 feet and a background soil sample was also retrieved. The samples were properly packaged and transported under chain of custody to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 4500-Cl^-B). Installation of the monitor well indicated the contamination has not reached the groundwater (See Figure 3 Log of Boring).

III. Groundwater

On October 29, 2004 SESI developed the monitor well and found the depth of water to be 59.10 feet bgs.

IV. Work Performed

In order to monitor the extent of contamination in monitor well-1, samples have been obtained from late 2004 until 2012. The samples were collected and transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico and analyzed for Chloride (SM4500 Cl^-B), Total Dissolved Solids (TDS 160.1) and Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) (EPA Method 8260B) with the exception of the years 2005-2007 the samples were not tested for BTEX.

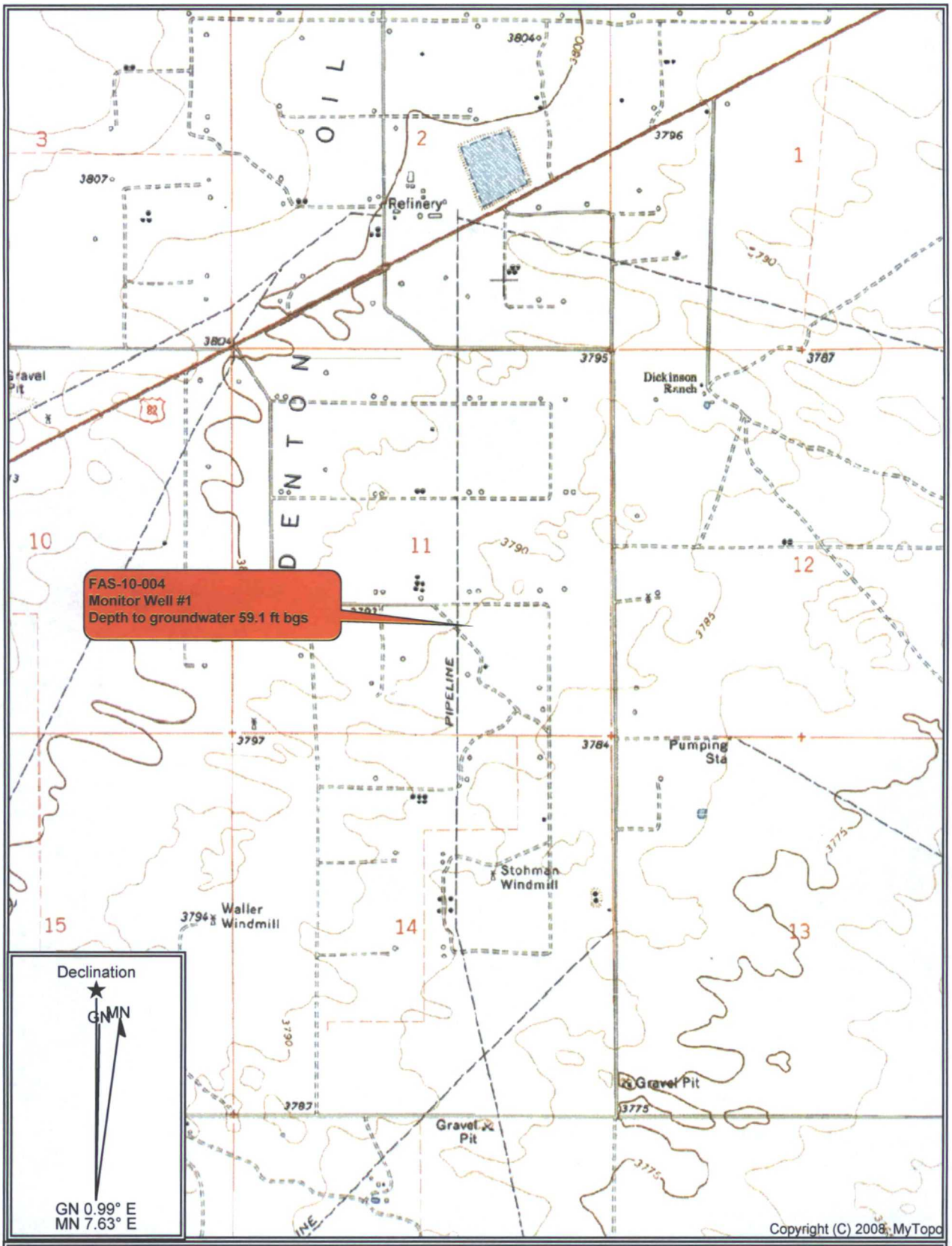
Monitoring Well	Sample Date	Chloride (mg/L)	Total Dissolved Solids (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
MW-1	11/04/04	52	492	<0.002	<0.002	<0.002	<0.006
	06/23/05	40	585	--	--	--	--
	03/14/06	36	480	--	--	--	--
	07/31/07	38	450	--	--	--	--
	02/02/10	44	509	<0.001	<0.001	<0.001	<0.003
	03/29/10	40	509	<0.001	<0.001	<0.001	<0.003
	07/09/10	41	580	<0.0010	<0.0010	<0.0010	<0.0020
	11/08/10	38	820	<0.0010	<0.0010	<0.0010	<0.0020
	01/20/11	41	720	<0.0010	<0.0010	<0.0010	<0.0020
	04/27/11	38	540	<0.0010	<0.0010	<0.0010	<0.0020
	01/16/12	36	522	<0.0010	<0.0010	<0.0010	<0.0020
	03/06/12	36	580	<0.0010	<0.0010	<0.0010	<0.0020
	04/26/12	56	463	<0.0010	<0.0010	<0.0010	<0.0030
NM Groundwater Standard:		**250**	**1,000**	**0.01**	**0.75**	**0.75**	**0.62**

V. Conclusion

The analysis results of all the samples taken from monitor well-1 indicate that chloride contamination has not reached the groundwater. The chloride contamination levels have never exceeded New Mexico groundwater standards. We are requesting no further sampling and respectfully submit permission to plug and abandon monitor well #1.

VI. Figures & Appendices

Figure 1 - Vicinity Map
Figure 2 - Site Plan
Figure 3 – Logs of Boring
Appendix A – Analytical Results
Appendix B – C-141



Map Name: PRAIRIEVIEW,
Scale: 1 inch = 2,000 ft.

Map Center: 033.0288193° N 103.1684535° W
Map Type: Topographic


Monitor Well-1
© 2012 Google
Image USDA Farm Service Agency
571 ft
Google earth
Imagery Date: 7/24/2011
lat 33.028909° lon -103.168514° elev 3795 ft
Eye alt 6269 ft

Safety & Environmental Solutions, Inc.

WELL COMPLETION LOG MW-1

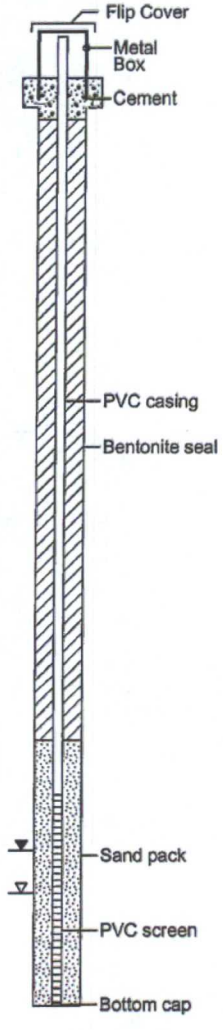
Monitor Well #1
Americo Denton #1 Mainline
NW/4 SE/4 Section 11, T15S, R37E
Lea County, New Mexico
N33° 01' 43.73", W103° 10' 06.72"

Date/Time Started	: 10/25/04, 0830	Drilled By	: Eco Drilling
Date/Time Completed	: 10/25/04, 1500	Sampling Method	: Cuttings
Hole Diameter	: 4-3/4" tricone bit	Logged By	: David Boyer, PG
Drilling Method	: Air Rotary		
Drilling Equipment	: Ingersoll Rand		

Water Levels
▼ During Drilling
▽ After Completion

Sample Method:
SS Split Spoon (18" or 24")
CB Core Barrel (2.5' or 5')
CT Auger Cuttings
NR No recovery

Depth in Feet	Sample Method	USCS	GRAPHIC	DESCRIPTION
0	CT	TS/CA		0-5 ft. Clayey LOAM and CALICHE, loam dark brown, caliche very light brown,
5	CT	CL		5-10 ft. SANDY SILTY CLAY, light brown, slightly damp
10	CT	SP/SS		10-15 ft. SAND and sandstone chips and fragments, light brown, very fine grained sand
15	CT	SP/SS		15-20 ft. SAND, very light brown, very fine grained, some silt, frequent caliche/sandstone chips/fragments to 3/4"
20	CT	SP		20-25 ft. SAND, as above, few chips/fragments
25	CT	SP		25-30 ft. SAND, very light brown, very fine grained, occasional soft sandstone chips/fragments to 1/2 in.
30	CT	SP		30-35 ft. SAND, reddish-brown, very fine to fine grained, slightly damp, occasional sandstone gravel to 1 in.
35	CT	SP		35-40 ft. SAND, reddish-brown, very fine to fine grained, slightly damp
40	CT	SP		40-45 ft. SAND, light brown, very fine grained, occasional sandstone fragments to 1/4 in., slightly damp,
45	CT	SP		45-50 ft. SAND, light brown, very fine grained, uniform, dry, occasional sandstone fragments/chips to 1/4 in.
50	CT	SP		50-55 ft. SAND, reddish-brown, very fine grained, uniform, slightly damp
55	CT	SP		55-60 ft. SAND, brown, very fine grained, wet, occasional small sandstone gravel to 1/4 in.
60	CT	SP		60-67 ft. SAND, as above, H2O saturated
65				
70				



Well Construction Information

COMPLETION DATA

Hole Depth (with bit)	: 67 ft. Below LS
TD Inside casing	: 71.62(?) Below TOC
Top casing	: 2.95 ft. above ground

CASING, SCREEN & CAP

Material, joints	: PVC, threaded
Diameter	: 2 in. ID
Manufacturer	: Monoflex
Screen type	: Slotted
Screen length	: 15 ft.
Screen opening	: 0.010 slot
Scrn. placement	: 54-69 ft. BLS
Bottom Cap	: 0.2 ft PVC
Protector Casing	: Above-ground steel
Lock Key #	: 2001

SEALS & SAND PACK

Cement seal type	: 3 bags Quikcrete
Cem't placement	: 0 - 3 ft. BLS
Annular seal type	: Bentonite 3/8" chips
Annular seal volume	: 15 bags
Seal placement	: 3 - 48 ft. BLS
Sand pack type	: 8/16 Ogleby silica
Sand pack volume	: 12 bags
Sand placement	: 48-69 ft. BLS
Bottom hole backfill	: --

ELEVATIONS.

Ground elevation	: ~3790 ft.
Inner casing, lip	: ~3793
Outer casing, top	: N/A

WELL INSTALLATION:
10/25/04: Drilled to ~67 feet. Saturated about 57 ft. Set pipe/screen to 69 ft. Placed sand (12 bags) to 48 ft. Bentonite (15 bags) to 3 ft. Quikcrete (3 bags) to surface and cement above-grond steel protection box with concrete pad.

WELL DEVELOPMENT:
Well developed 10/29/04 - Total depth before development 71.62(?) ft. BTOC. DTW 62.10 ft., height of riser, 2.95 ft. Purged 20 gallons water, ~ 2 gallons sand. (no final depth measured, total depth 06/21/05 70.58 ft. BTOC)
Water Level Measurements:
10/29/04 - 62.10 ft. BTOC
06/21/05 - 61.28 ft. BTOC
03/20/07 - 62.08 ft. BTOC

Notes:
No hydrocarbon staining or odor noted in drilling the well.

Z:\Company Files\Americo\AME-04-001 Denton #1 Main Line\MW-1.bor

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

February 9, 2010

Bob Allen
Safety & Environmental Solutions, Inc.
703 East Clinton, #102
Hobbs, NM 88240

Re: Denton SWD Mainline (FAS-10-004)

Enclosed are the results of analyses for sample number H19197, received by the laboratory on 02/02/10 at 1:45 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 02/02/10
Reporting Date: 02/05/10
Project Owner: FASKIN (FAS-10-004)
Project Name: DENTON SWD MAINLINE
Project Location: LEA COUNTY, NM

Sampling Date: 02/02/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ 0 °C
Sample Received By: CK
Analyzed By: ZL

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE:		02/04/10	02/04/10	02/04/10	02/04/10
H19197-1	MW #1	<0.001	<0.001	<0.001	<0.003
Quality Control		0.043	0.043	0.043	0.128
True Value QC		0.050	0.050	0.050	0.150
% Recovery		86.0	86.0	86.0	85.3
Relative Percent Difference		10	9	1.8	5.3

METHODS: BTEX - SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Lab Director

02/09/10
Date

H19197 BTEX SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 02/02/10
Reporting Date: 02/05/10
Project Number: FAS-10-004 (FASKIN)
Project Name: DENTON SWD MAINLINE
Project Location: LEA COUNTY, N.M.

Sampling Date: 02/02/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ 0°C
Sample Received By: CK
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/L)	TDS (mg/L)
Analysis Date:		02/02/10	02/03/10
H19197-1	MW #1	44	509
Quality Control		500	NR
True Value QC		500	NR
% Recovery		100	NR
Relative Percent Difference		2.0	1.3

METHOD: Standard Methods, EPA	4500-Cl^-B	160.1

Not accredited for Chloride and TDS.

Chemist

02/09/10
Date

H19197 SESI

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name:	Safety & Environmental Solutions, Inc.	BILL TO	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton	Company:	Same
City:	Hobbs State: NM Zip: 88240	Attn:	
Phone #:	575-397-0510 Fax #: 575-393-4388	Address:	
Project #:	FAS-10-004 Project Owner: Faskin	City:	
Project Name:	Denton SWD Mainline	State: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Brian Cheller	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Cl-	TDS	BTEX
H19197-1 a,b,c,d	MW #1	G	4	X						X	X		2/2/10	1050	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the orginal date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: B. Cheller	Date: 2/2/10 Time: 1345	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By: Celia Keene	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 0 °C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) CK

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#24

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 5, 2010

Bob Allen
Safety & Environmental Solutions, Inc.
703 East Clinton, #102
Hobbs, NM 88240

Re: Denton SWD Mainline (FAS-10-004)

Enclosed are the results of analyses for sample number H19568, received by the laboratory on 03/29/10 at 3:05 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 03/29/10
Reporting Date: 04/05/10
Project Owner: FASKIN
Project Name: DENTON SWD MAINLINE (FAS-10-004)
Project Location: LEA COUNTY

Sampling Date: 03/29/10
Sample Type: WATER
Sample Condition: INTACT @ 15°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/L)	TDS (mg/L)
Analysis Date:		03/29/10	03/30/10
H19568-1	MW #1	40	509
Quality Control		500	NR
True Value QC		500	NR
% Recovery		100	NR
Relative Percent Difference		< 0.1	6.2

METHOD: Standard Methods, EPA	4500-Cl^-B	160.1

Not accredited for Chloride and TDS.

Chemist

04/05/10
Date

H19568 SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, #102
HOBBS, NM 88240
FAX TO: (575) 393-4388

Receiving Date: 03/29/10
Reporting Date: 03/31/10
Project Owner: FASKIN
Project Name: DENTON SWD MAINLINE (FAS-10-004)
Project Location: LEA COUNTY

Sampling Date: 03/29/10
Sample Type: WATER
Sample Condition: INTACT @ 15 °C
Sample Received By: JH
Analyzed By: ZL

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE:		03/30/10	03/30/10	03/30/10	03/30/10
H19568-1	MW #1	<0.001	<0.001	<0.001	<0.003
Quality Control		0.045	0.058	0.050	0.150
True Value QC		0.050	0.050	0.050	0.150
% Recovery		90.0	116.0	100.0	100.0
Relative Percent Difference		1.0	6.1	6.7	3.8

METHODS: BTEX - SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Lab Director

Date 04/05/10

H19568 WB SESI

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	SESI	BILL TO	PO #:
Project Manager:		Company:	SAME
Address:	703 E. CLINTON, #103	Attn:	
City:	HOBBS State: NM Zip: 88240	Address:	
Phone #:	(505) 397-0510	City:	
Fax #:	(505) 393-4388	State:	Zip:
Project #:	FAS-10-004 Project Owner: Faskin	Phone #:	
Project Name:	Denton SWD Mainline	Fax #:	
Project Location:	Lea County		

FOR LAB USE ONLY				MATRIX						PRES.			SAMPLING		ANALYSIS REQUEST											
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:	DATE	TIME	Cl-	TPS	BTEX									
H19568-1	capped MW#1	G	4	X							X		3/29/10	1230	X	X	X								

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 3/29/10 Time: 1505	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
Relinquished By:	Date: 3/29/10 Time: 5:05	Received By: (Lab Staff) Jodi Henson	Fax Result: ☐ Yes ☐ No
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, July 21, 2010

Dave Boyer
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241

TEL: (575) 390-7067
FAX (575) 393-4388

RE: Fasken Denton SWD Mainline

Order No.: 1007294

Dear Dave Boyer:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/9/2010 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

John Caldwell

For Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jul-10*

CLIENT:	Safety & Environmental Solutions	**Client Sample ID:**	MW #1
Lab Order:	1007294	**Collection Date:**	7/8/2010 8:20:00 AM
Project:	Fasken Denton SWD Mainline	**Date Received:**	7/9/2010
Lab ID:	1007294-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **LJB**
Chloride	41	10		mg/L	20	7/9/2010 7:29:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Toluene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Naphthalene	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/15/2010 5:23:00 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/15/2010 5:23:00 AM
Acetone	ND	10		µg/L	1	7/15/2010 5:23:00 AM
Bromobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Bromoform	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Bromomethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
2-Butanone	ND	10		µg/L	1	7/15/2010 5:23:00 AM
Carbon disulfide	ND	10		µg/L	1	7/15/2010 5:23:00 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Chlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Chloroethane	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
Chloroform	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Chloromethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Dibromomethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jul-10*

CLIENT:	Safety & Environmental Solutions	**Client Sample ID:**	MW #1
Lab Order:	1007294	**Collection Date:**	7/8/2010 8:20:00 AM
Project:	Fasken Denton SWD Mainline	**Date Received:**	7/9/2010
Lab ID:	1007294-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
2,2-Dichloropropane	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
2-Hexanone	ND	10		µg/L	1	7/15/2010 5:23:00 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/15/2010 5:23:00 AM
Methylene Chloride	ND	3.0		µg/L	1	7/15/2010 5:23:00 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Styrene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/15/2010 5:23:00 AM
Vinyl chloride	ND	1.0		µg/L	1	7/15/2010 5:23:00 AM
Xylenes, Total	ND	1.5		µg/L	1	7/15/2010 5:23:00 AM
Surr: 1,2-Dichloroethane-d4	77.4	54.6-141		%REC	1	7/15/2010 5:23:00 AM
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	1	7/15/2010 5:23:00 AM
Surr: Dibromofluoromethane	121	78.5-130		%REC	1	7/15/2010 5:23:00 AM
Surr: Toluene-d8	99.8	79.5-126		%REC	1	7/15/2010 5:23:00 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	580	200		mg/L	1	7/15/2010 3:16:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD Mainline **Work Order:** 1007294

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		*MBLK*				Batch ID:	**R39734**	Analysis Date:	7/9/2010 2:15:51 PM		
Chloride	ND	mg/L	0.50								
Sample ID: LCS		*LCS*				Batch ID:	**R39734**	Analysis Date:	7/9/2010 2:33:15 PM		
Chloride	4.989	mg/L	0.50	5	0	99.8	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD Mainline **Work Order:** 1007294

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 1007294-01a msd		*MSD*				Batch ID:	**R39839**	Analysis Date:		7/15/2010 6:19:11 AM	
Benzene	17.30	µg/L	1.0	20	0	86.5	75.7	118	1.31	15	
Toluene	22.49	µg/L	1.0	20	0	112	80.1	114	1.39	15	
Chlorobenzene	21.73	µg/L	1.0	20	0	109	81.5	112	1.80	15	
1,1-Dichloroethene	21.32	µg/L	1.0	20	0	107	77.4	132	7.14	17.8	
Trichloroethene (TCE)	17.30	µg/L	1.0	20	0	86.5	61.1	121	2.26	19.8	
Sample ID: 5ml rb		*MBLK*				Batch ID:	**R39839**	Analysis Date:		7/14/2010 11:02:51 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	1.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD Mainline **Work Order:** 1007294

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		*MBLK*				Batch ID: **R39839**		Analysis Date: 7/14/2010 11:02:51 AM			
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: 100ng lcs		*LCS*				Batch ID: **R39839**		Analysis Date: 7/14/2010 11:59:15 AM			
Benzene	21.14	µg/L	1.0	20	0	106	82.4	116			
Toluene	23.30	µg/L	1.0	20	0	116	89.5	123			
Chlorobenzene	22.32	µg/L	1.0	20	0	112	87.8	120			
1,1-Dichloroethene	25.37	µg/L	1.0	20	0	127	90.3	138			
Trichloroethene (TCE)	20.75	µg/L	1.0	20	0	104	64	129			
Sample ID: 1007294-01a ms		*MS*				Batch ID: **R39839**		Analysis Date: 7/15/2010 5:51:07 AM			
Benzene	17.07	µg/L	1.0	20	0	85.4	75.7	118			
Toluene	22.80	µg/L	1.0	20	0	114	80.1	114			S
Chlorobenzene	22.13	µg/L	1.0	20	0	111	81.5	112			
1,1-Dichloroethene	19.85	µg/L	1.0	20	0	99.3	77.4	132			
Trichloroethene (TCE)	16.91	µg/L	1.0	20	0	84.6	61.1	121			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD Mainline **Work Order:** 1007294

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-22995		*MBLK*				Batch ID: **22995**		Analysis Date: 7/15/2010 3:16:00 PM			
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-22995		*LCS*				Batch ID: **22995**		Analysis Date: 7/15/2010 3:16:00 PM			
Total Dissolved Solids	1009	mg/L	20.0	1000	0	101	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **SAFETY ENV SOLUTIONS** Date Received: **7/9/2010**

Work Order Number **1007294** Received by: **TLS**

Checklist completed by: _____ 7/9/10 Sample ID labels checked by: _____
Signature Date Initials

Matrix: Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**9.0°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: SESI

Mailing Address: 703 E Clinton
Hobbs, NM 88240

Phone #: 575-397-0510

email or Fax#: ikincaid@SESI-NM.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Fasken Denton SWD Mainline

Project #: Fas-10-004

Project Manager: David Boyer

Sampler: Isaac Kincaid

On Ice: ☑ Yes ☐ No

Sample Temperature: 9.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1007394	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides	TDS		Air Bubbles (Y or N)
7/8/10	0820	H2O	MW#1	4	HCl	-1										✓		✓	✓		

Analysis Request

Remarks:

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/8/10	1600				
Date:	Time:	Relinquished by:	Received by:	7/9/10	0905

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, November 15, 2010

Dave Boyer
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241

TEL: (575) 390-7067
FAX (575) 393-4388

RE: Fasken Denton SWD #1 MW Main Line

Order No.: 1011170

Dear Dave Boyer:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/3/2010 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Nov-10*

CLIENT:	Safety & Environmental Solutions	**Client Sample ID:**	MW#1
Lab Order:	1011170	**Collection Date:**	11/1/2010 9:30:00 AM
Project:	Fasken Denton SWD #1 MW Main Line	**Date Received:**	11/3/2010
Lab ID:	1011170-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	38	10		mg/L	20	11/5/2010 8:42:03 AM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
Toluene	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
Ethylbenzene	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/5/2010 2:16:40 AM
Xylenes, Total	ND	2.0		µg/L	1	11/5/2010 2:16:40 AM
Surr: 1,2-Dichloroethane-d4	100	77.7-113		%REC	1	11/5/2010 2:16:40 AM
Surr: 4-Bromofluorobenzene	110	76.4-106	S	%REC	1	11/5/2010 2:16:40 AM
Surr: Dibromofluoromethane	106	91.6-125		%REC	1	11/5/2010 2:16:40 AM
Surr: Toluene-d8	99.6	92.3-107		%REC	1	11/5/2010 2:16:40 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	820	200		mg/L	1	11/5/2010 11:36:00 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD #1 MW Main Line **Work Order:** 1011170

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		*MBLK*				Batch ID:	**R41986**	Analysis Date:		11/4/2010 1:50:19 PM	
Chloride	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R41986**	Analysis Date:		11/5/2010 6:40:08 AM	
Chloride	ND	mg/L	0.50								
Sample ID: LCS		*LCS*				Batch ID:	**R41986**	Analysis Date:		11/4/2010 2:07:43 PM	
Chloride	5.122	mg/L	0.50	5	0	102	90	110			
Sample ID: LCS-B		*LCS*				Batch ID:	**R41986**	Analysis Date:		11/5/2010 10:43:57 AM	
Chloride	5.237	mg/L	0.50	5	0	105	90	110			
Sample ID: LCSD		*LCSD*				Batch ID:	**R41986**	Analysis Date:		11/4/2010 4:44:24 PM	
Chloride	5.111	mg/L	0.50	5	0	102	90	110			
Method: EPA Method 8260: Volatiles Short List											
Sample ID: 1011170-01a msd		*MSD*				Batch ID:	**R41965**	Analysis Date:		11/5/2010 3:09:08 AM	
Benzene	19.18	µg/L	1.0	20	0	95.9	73.1	117	1.87	11.3	
Toluene	18.25	µg/L	1.0	20	0	91.3	82.9	109	3.05	11.6	
Sample ID: 5ml-rb		*MBLK*				Batch ID:	**R41965**	Analysis Date:		11/4/2010 7:52:20 AM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: b3		*MBLK*				Batch ID:	**R41965**	Analysis Date:		11/4/2010 7:15:06 PM	
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R41965**	Analysis Date:		11/4/2010 8:45:06 AM	
Benzene	18.72	µg/L	1.0	20	0	93.6	84.6	109			
Toluene	19.75	µg/L	1.0	20	0	98.8	81	114			
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R41965**	Analysis Date:		11/4/2010 8:07:38 PM	
Benzene	19.54	µg/L	1.0	20	0	97.7	84.6	109			
Toluene	18.66	µg/L	1.0	20	0	93.3	81	114			
Sample ID: 1011170-01a ms		*MS*				Batch ID:	**R41965**	Analysis Date:		11/5/2010 2:42:53 AM	
Benzene	19.54	µg/L	1.0	20	0	97.7	73.1	117			
Toluene	17.70	µg/L	1.0	20	0	88.5	82.9	109			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton SWD #1 MW Main Line **Work Order:** 1011170

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-24376		*MBLK*				Batch ID:	**24376**	Analysis Date:	11/5/2010 11:36:00 AM		
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-24376		*LCS*				Batch ID:	**24376**	Analysis Date:	11/5/2010 11:36:00 AM		
Total Dissolved Solids	1028	mg/L	20.0	1000	0	103	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name SAFETY ENV SOLUTIONS | Date Received: 11/3/2010

Work Order Number 1011170 | Received by: LCD

Checklist completed by: Signature 11/3/10 Date | Sample ID labels checked by: Initials

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	1.4°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: SESE

Mailing Address: 703 E Clinton
Hobbs, NM 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Maintain
Foster Deaton SWD #1 MW

Project #:
Fas-10-004

Project Manager:
David Boyer

Sampler: Isaac Kincaid

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 101170
11/1/10	0530	H2O	MW #1	4	HCl	-1

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides	TDS			Air Bubbles (Y or N)
✓											✓	✓			

Date	Time	Relinquished by:	Received by:	Date	Time
11/1/10	1230		Debbie C. Davis	11/3/10	10:45
Date	Time	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, January 26, 2011

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241

TEL: (575) 397-0510
FAX (575) 393-4388

RE: Fasken Denton Mainline

Order No.: 1101568

Dear Bob Allen:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/19/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-11*

CLIENT:	Safety & Environmental Solutions	**Client Sample ID:**	MW#1
Lab Order:	1101568	**Collection Date:**	1/14/2011 8:55:00 AM
Project:	Fasken Denton Mainline	**Date Received:**	1/19/2011
Lab ID:	1101568-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/20/2011 2:02:18 PM
Benzene	ND	1.0		µg/L	1	1/20/2011 2:02:18 PM
Toluene	ND	1.0		µg/L	1	1/20/2011 2:02:18 PM
Ethylbenzene	ND	1.0		µg/L	1	1/20/2011 2:02:18 PM
Xylenes, Total	ND	2.0		µg/L	1	1/20/2011 2:02:18 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/20/2011 2:02:18 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/20/2011 2:02:18 PM
Surr: 4-Bromofluorobenzene	129	81.3-151		%REC	1	1/20/2011 2:02:18 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	41	10		mg/L	20	1/21/2011 7:09:13 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	720	200		mg/L	1	1/20/2011 5:10:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Fasken Denton Mainline **Work Order:** 1101568

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		*MBLK*				Batch ID:	**R43269**	Analysis Date:	1/20/2011 2:18:12 PM		
Chloride	ND	mg/L	0.50								
Sample ID: MB		*MBLK*				Batch ID:	**R43269**	Analysis Date:	1/21/2011 12:02:21 AM		
Chloride	ND	mg/L	0.50								
Sample ID: LCS		*LCS*				Batch ID:	**R43269**	Analysis Date:	1/20/2011 2:29:27 PM		
Chloride	4.832	mg/L	0.50	5	0	96.6	90	110			
Sample ID: LCS		*LCS*				Batch ID:	**R43269**	Analysis Date:	1/21/2011 12:13:35 AM		
Chloride	4.555	mg/L	0.50	5	0	91.1	90	110			
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R43256**	Analysis Date:	1/20/2011 9:02:55 AM		
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R43256**	Analysis Date:	1/20/2011 1:32:10 PM		
Methyl tert-butyl ether (MTBE)	23.11	µg/L	2.5	20	0	116	75.5	124			
Benzene	21.80	µg/L	1.0	20	0	109	84.7	118			
Toluene	22.47	µg/L	1.0	20	0	112	82	123			
Ethylbenzene	22.18	µg/L	1.0	20	0	111	83	118			
Xylenes, Total	68.20	µg/L	2.0	60	0	114	85.4	119			
1,2,4-Trimethylbenzene	20.62	µg/L	1.0	20	0	103	82.1	113			
1,3,5-Trimethylbenzene	22.40	µg/L	1.0	20	0	112	89.6	119			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-25303		*MBLK*				Batch ID:	**25303**	Analysis Date:	1/20/2011 5:10:00 PM		
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-25303		*LCS*				Batch ID:	**25303**	Analysis Date:	1/20/2011 5:10:00 PM		
Total Dissolved Solids	998.0	mg/L	20.0	1000	0	99.8	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name SAFETY ENV SOLUTIONS | Date Received: 1/19/2011

Work Order Number 1101568 | Received by: AMG

Checklist completed by: Signature 1/19/11 Date | Sample ID labels checked by: dam Initials

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	<2 >12 *unless noted below.*
Container/Temp Blank temperature?	**3.0°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: SESI

Mailing Address: 703 E Clinton Hobbs, NM 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Fasken Denton Mainline

Project #: Fas-10-004

Project Manager: Bob Allen

Sampler: Isaac Kincaid

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201568	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	chlorides	TDS			Air Bubbles (Y or N)
1/14/11	0855	H2O	MW#1	4	Hcl	-1	✓											✓	✓			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/17/11	1540			1/19/11	1010
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, May 03, 2011

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241

TEL: (575) 397-0510
FAX (575) 393-4388

RE: Denton SWD Main Line

Order No.: 1104949

Dear Bob Allen:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/27/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *03-May-11*

CLIENT:	Safety & Environmental Solutions	**Client Sample ID:**	MW-1
Lab Order:	1104949	**Collection Date:**	4/26/2011 9:50:00 AM
Project:	Denton SWD Main Line	**Date Received:**	4/27/2011
Lab ID:	1104949-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/29/2011 4:31:28 PM
Benzene	ND	1.0		µg/L	1	4/29/2011 4:31:28 PM
Toluene	ND	1.0		µg/L	1	4/29/2011 4:31:28 PM
Ethylbenzene	ND	1.0		µg/L	1	4/29/2011 4:31:28 PM
Xylenes, Total	ND	2.0		µg/L	1	4/29/2011 4:31:28 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/29/2011 4:31:28 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/29/2011 4:31:28 PM
Surr: 4-Bromofluorobenzene	102	96.8-145		%REC	1	4/29/2011 4:31:28 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	38	10		mg/L	20	4/27/2011 10:40:43 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	540	100		mg/L	1	5/1/2011 5:27:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Safety & Environmental Solutions
Project: Denton SWD Main Line **Work Order:** 1104949

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: LCS		*LCS*				Batch ID:	**R45012**	Analysis Date:	4/28/2011 4:46:26 AM		
Chloride	4.993	mg/L	0.50	5	0	99.9	90	110			
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R45059**	Analysis Date:	4/29/2011 8:29:49 AM		
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R45059**	Analysis Date:	4/29/2011 12:00:45 PM		
Methyl tert-butyl ether (MTBE)	22.58	µg/L	2.5	20	0	113	97.6	132			
Benzene	22.94	µg/L	1.0	20	0	115	93.4	120			
Toluene	23.13	µg/L	1.0	20	0.14	115	96.2	122			
Ethylbenzene	21.97	µg/L	1.0	20	0.11	109	95	121			
Xylenes, Total	67.37	µg/L	2.0	60	0	112	97.6	122			
1,2,4-Trimethylbenzene	19.22	µg/L	1.0	20	0.144	95.4	86.1	113			
1,3,5-Trimethylbenzene	20.73	µg/L	1.0	20	0	104	94.9	123			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-26598		*MBLK*				Batch ID:	**26598**	Analysis Date:	5/1/2011 5:27:00 PM		
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-26598		*LCS*				Batch ID:	**26598**	Analysis Date:	5/1/2011 5:27:00 PM		
Total Dissolved Solids	1028	mg/L	20.0	1000	0	103	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name SAFETY ENV SOLUTIONS | Date Received: 4/27/2011

Work Order Number 1104949 | Received by: MMG

Checklist completed by: Signature 4/27/11 Date | Sample ID labels checked by: MG Initials

Matrix: | Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	1.0°	<6° C Acceptable If given sufficient time to cool.		

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Safety + Environmental Solutions

Mailing Address: 703 E. Clinton Hobbs, N.M 88240

Phone #: 575-397-0510

email or Fax#: 575-393-4388

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Denton SWD Mainline

Project #: 7AS-10-004

Project Manager: Bob Allen

Sampler: Sosa/Jerry

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1104909	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides + TDS				Air Bubbles (Y or N)
04/26	0950	H20	MW-1	4	HCL	-1	X											X				

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
04/26/11	1330	Sosa Jerry	Michelle Garcia	4/27/11	10:45
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 19, 2012

Dave Boyer
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 390-7067
FAX (575) 393-4388

RE: Denton SWA Main Line

OrderNo.: 1201378

Dear Dave Boyer:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2012 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative. Analytical results designated with a "J" qualifier are estimated and represent a detection above the Method Detection Limit (MDL) and less than the Reporting Limit (PQL). These analytes are not reviewed nor narrated as to whether they are laboratory artifacts.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: MW-1
Project: Denton SWA Main Line
Collection Date: 12/16/2011 10:20:00 AM
Lab ID: 1201378-001
Matrix: AQUEOUS
Received Date: 1/13/2012 9:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Methyl tert-butyl ether (MTBE)	ND	2.5	H	µg/L	1	1/17/2012 4:46:48 AM
Benzene	ND	1.0	H	µg/L	1	1/17/2012 4:46:48 AM
Toluene	ND	1.0	H	µg/L	1	1/17/2012 4:46:48 AM
Ethylbenzene	ND	1.0	H	µg/L	1	1/17/2012 4:46:48 AM
Xylenes, Total	ND	2.0	H	µg/L	1	1/17/2012 4:46:48 AM
1,2,4-Trimethylbenzene	ND	1.0	H	µg/L	1	1/17/2012 4:46:48 AM
1,3,5-Trimethylbenzene	ND	1.0	H	µg/L	1	1/17/2012 4:46:48 AM
Surr: 4-Bromofluorobenzene	98.6	76.5-115	H	%REC	1	1/17/2012 4:46:48 AM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	36	10	H	mg/L	20	1/16/2012 1:44:37 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	522	40.0	H	mg/L	1	1/18/2012 7:03:00 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201378**

19-Jan-12

Client: Safety & Environmental Solutions
Project: Denton SWA Main Line

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R407**	RunNo: **407**							
Prep Date:	Analysis Date: **1/16/2012**	SeqNo: **11949**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R407**	RunNo: **407**							
Prep Date:	Analysis Date: **1/16/2012**	SeqNo: **11950**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.4	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R407**	RunNo: **407**							
Prep Date:	Analysis Date: **1/16/2012**	SeqNo: **12005**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R407**	RunNo: **407**							
Prep Date:	Analysis Date: **1/16/2012**	SeqNo: **12006**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.3	90	110			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201378

19-Jan-12

Client: Safety & Environmental Solutions

Project: Denton SWA Main Line

Sample ID 5ML-RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles
Client ID: PBW	Batch ID: R410	RunNo: 410
Prep Date:	Analysis Date: 1/16/2012	SeqNo: 12097 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	21		20.00		104	76.5	115			

Sample ID 100NG BTEX LCS2	SampType: LCS	TestCode: EPA Method 8021B: Volatiles
Client ID: LCSW	Batch ID: R410	RunNo: 410
Prep Date:	Analysis Date: 1/16/2012	SeqNo: 12101 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	23	2.5	20.00	0	115	44.7	148			
Benzene	20	1.0	20.00	0	99.3	80	120			
Toluene	20	1.0	20.00	0	97.7	80	120			
Ethylbenzene	19	1.0	20.00	0	95.3	80	120			
Xylenes, Total	58	2.0	60.00	0	97.1	78.6	121			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	92.8	75.1	120			
1,3,5-Trimethylbenzene	19	1.0	20.00	0	95.0	76.4	122			
Surr: 4-Bromofluorobenzene	22		20.00		108	76.5	115			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201378**

19-Jan-12

Client: Safety & Environmental Solutions

Project: Denton SWA Main Line

Sample ID **MB-296**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **296**	RunNo: **424**
Prep Date: **1/16/2012**	Analysis Date: **1/18/2012**	SeqNo: **12289** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-296**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **296**	RunNo: **424**
Prep Date: **1/16/2012**	Analysis Date: **1/18/2012**	SeqNo: **12290** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1,030	20.0	1,000	16.00	102	80	120			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Safety Env Solutions** Work Order Number: **1201378**

Logged by: **Lindsay Mangin** **1/13/2012 9:40:00 AM**

Completed By: **Lindsay Mangin** **1/13/2012 10:52:42 AM**

Reviewed By: MG 1/13/12

Chain of Custody

1.	Were seals intact?	Yes		No	Not Present ✔
2.	Is Chain of Custody complete?	Yes	✔	No	Not Present
3.	How was the sample delivered?	Courier			

Log In

4.	Coolers are present? (see 19. for cooler specific information)	Yes	✔	No	NA
5.	Was an attempt made to cool the samples?	Yes	✔	No	NA
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes	✔	No	NA
7.	Sample(s) in proper container(s)?	Yes	✔	No	
8.	Sufficient sample volume for indicated test(s)?	Yes	✔	No	
9.	Are samples (except VOA and ONG) properly preserved?	Yes	✔	No	
10.	Was preservative added to bottles?	Yes		No ✔	NA
11.	Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes	✔	No	No VOA Vials
12.	Were any sample containers received broken?	Yes		No ✔	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	✔	No	# of preserved bottles checked for pH:
14.	Are matrices correctly identified on Chain of Custody?	Yes	✔	No	(<2 or >12 unless noted)
15.	Is it clear what analyses were requested?	Yes	✔	No	Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes		No ✔	Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

CLIENT IS AWARE SAMPLES WERE SENT OUT OF HOLD AND NOTED IN THE "REMARKS" ON COC TO ANALYZE OUT OF HOLD

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record

Client: Safety & Environmental Solution

Mailing Address: 703 E. Clinton Hobbs, NM 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Denton SWD Mainline

Project #: AME-04-001

Project Manager: Boyer, Drew

Sampler: Foy, Jerry

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201378	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDES / TDS	BTEX + MTBE + TMB's (8021)			Air Bubbles (Y or N)
12/16/11	1020	H2O	MW-1	4	HCL	-1												X	X			

Date: 01/02/12 Time: 1500 Relinquished by: Foy, Jerry Received by: _____ Date Time

Date: _____ Time: _____ Relinquished by: _____ Received by: _____ Date: 01/13/12 Time: 0940

Remarks: Analyze out of Hobbs

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 14, 2012

Dave Boyer
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 390-7067
FAX (575) 393-4388

RE: Faskin Denton SWD #1 OrderNo.: 1203154

Dear Dave Boyer:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/6/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1203154**
Date Reported: **3/14/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Project: Faskin Denton SWD #1
Lab ID: 1203154-001 **Matrix:** AQUEOUS

Client Sample ID: MW-1
Collection Date: 3/5/2012 8:38:00 AM
Received Date: 3/6/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/6/2012 11:28:40 PM
Benzene	ND	1.0		µg/L	1	3/6/2012 11:28:40 PM
Toluene	ND	1.0		µg/L	1	3/6/2012 11:28:40 PM
Ethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:28:40 PM
Xylenes, Total	ND	2.0		µg/L	1	3/6/2012 11:28:40 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:28:40 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:28:40 PM
Surr: 4-Bromofluorobenzene	87.6	76.5-115		%REC	1	3/6/2012 11:28:40 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	110	10		mg/L	20	3/6/2012 9:16:33 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	694	40.0		mg/L	1	3/13/2012 9:05:00 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: MW-2
Project: Faskin Denton SWD #1
Collection Date: 3/5/2012 8:55:00 AM
Lab ID: 1203154-002 **Matrix:** AQUEOUS **Received Date:** 3/6/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/6/2012 11:58:54 PM
Benzene	ND	1.0		µg/L	1	3/6/2012 11:58:54 PM
Toluene	ND	1.0		µg/L	1	3/6/2012 11:58:54 PM
Ethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:58:54 PM
Xylenes, Total	ND	2.0		µg/L	1	3/6/2012 11:58:54 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:58:54 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/6/2012 11:58:54 PM
Surr: 4-Bromofluorobenzene	72.9	76.5-115	S	%REC	1	3/6/2012 11:58:54 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	720	25		mg/L	50	3/7/2012 5:04:20 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	1,750	40.0		mg/L	1	3/13/2012 9:05:00 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: MW-3
Project: Faskin Denton SWD #1
Collection Date: 3/5/2012 9:25:00 AM
Lab ID: 1203154-003 **Matrix:** AQUEOUS **Received Date:** 3/6/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/7/2012 12:29:03 AM
Benzene	ND	1.0		µg/L	1	3/7/2012 12:29:03 AM
Toluene	ND	1.0		µg/L	1	3/7/2012 12:29:03 AM
Ethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:29:03 AM
Xylenes, Total	ND	2.0		µg/L	1	3/7/2012 12:29:03 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:29:03 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:29:03 AM
Surr: 4-Bromofluorobenzene	85.0	76.5-115		%REC	1	3/7/2012 12:29:03 AM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	49	10		mg/L	20	3/6/2012 10:06:12 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	428	40.0		mg/L	1	3/13/2012 9:05:00 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: Trip Blank
Project: Faskin Denton SWD #1
Collection Date:
Lab ID: 1203154-004
Matrix: TRIP BLANK
Received Date: 3/6/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/7/2012 12:59:21 AM
Benzene	ND	1.0		µg/L	1	3/7/2012 12:59:21 AM
Toluene	ND	1.0		µg/L	1	3/7/2012 12:59:21 AM
Ethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:59:21 AM
Xylenes, Total	ND	2.0		µg/L	1	3/7/2012 12:59:21 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:59:21 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/7/2012 12:59:21 AM
Surr: 4-Bromofluorobenzene	90.2	76.5-115		%REC	1	3/7/2012 12:59:21 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203154**

14-Mar-12

Client: Safety & Environmental Solutions

Project: Faskin Denton SWD #1

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R1302**	RunNo: **1302**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **36892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R1302**	RunNo: **1302**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **36893** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.3	90	110			

Sample ID **1203142-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R1302**	RunNo: **1302**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **36895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	18	0.50	5.000	13.32	101	78	107			

Sample ID **1203142-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R1302**	RunNo: **1302**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **36896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	18	0.50	5.000	13.32	97.7	78	107	1.03	20	

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R1343**	RunNo: **1343**
Prep Date:	Analysis Date: **3/7/2012**	SeqNo: **37935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R1343**	RunNo: **1343**
Prep Date:	Analysis Date: **3/7/2012**	SeqNo: **37936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.7	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R1343**	RunNo: **1343**
Prep Date:	Analysis Date: **3/7/2012**	SeqNo: **37979** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203154**

14-Mar-12

Client: Safety & Environmental Solutions

Project: Faskin Denton SWD #1

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R1343**	RunNo: **1343**
Prep Date:	Analysis Date: **3/7/2012**	SeqNo: **37980** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.8	90	110			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203154**

14-Mar-12

Client: Safety & Environmental Solutions

Project: Faskin Denton SWD #1

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R1309**	RunNo: **1309**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **37100** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	19		20.00		94.3	76.5	115			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R1309**	RunNo: **1309**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **37148** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	23	2.5	20.00	0	115	50.5	158			
Benzene	21	1.0	20.00	0	103	80	120			
Toluene	22	1.0	20.00	0	112	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	67	2.0	60.00	0	111	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	112	80	120			
1,3,5-Trimethylbenzene	22	1.0	20.00	0	112	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		97.2	76.5	115			

Sample ID **1203147-001A MS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R1309**	RunNo: **1309**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **37149** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	22	2.5	20.00	0	109	58	139			
Benzene	20	1.0	20.00	0	98.0	70.1	118			
Toluene	20	1.0	20.00	0	102	72.3	117			
Ethylbenzene	20	1.0	20.00	0	99.8	73.5	117			
Xylenes, Total	61	2.0	60.00	0	102	73.1	119			
1,2,4-Trimethylbenzene	19	1.0	20.00	0.2140	96.4	65.8	121			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	101	71.1	118			
Surr: 4-Bromofluorobenzene	20		20.00		97.8	76.5	115			

Sample ID **1203147-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R1309**	RunNo: **1309**
Prep Date:	Analysis Date: **3/6/2012**	SeqNo: **37150** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203154**

14-Mar-12

Client: Safety & Environmental Solutions

Project: Faskin Denton SWD #1

Sample ID **1203147-001A MSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **R1309** RunNo: **1309**

Prep Date: Analysis Date: **3/6/2012** SeqNo: **37150** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	23	2.5	20.00	0	114	58	139	3.93	15.2	
Benzene	20	1.0	20.00	0	100	70.1	118	2.47	16.4	
Toluene	21	1.0	20.00	0	105	72.3	117	2.57	13.9	
Ethylbenzene	21	1.0	20.00	0	103	73.5	117	2.84	13.5	
Xylenes, Total	63	2.0	60.00	0	104	73.1	119	2.32	12.9	
1,2,4-Trimethylbenzene	20	1.0	20.00	0.2140	97.9	65.8	121	1.49	13.5	
1,3,5-Trimethylbenzene	21	1.0	20.00	0	104	71.1	118	3.22	13.7	
Surr: 4-Bromofluorobenzene	20		20.00		99.6	76.5	115	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1203154**

14-Mar-12

Client: Safety & Environmental Solutions

Project: Faskin Denton SWD #1

Sample ID **MB-1029**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **1029**	RunNo: **1423**
Prep Date: **3/9/2012**	Analysis Date: **3/13/2012**	SeqNo: **40027** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-1029**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **1029**	RunNo: **1423**
Prep Date: **3/9/2012**	Analysis Date: **3/13/2012**	SeqNo: **40028** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1,010	20.0	1,000	0	101	80	120			

Sample ID **1203275-001BMS**	SampType: **MS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **BatchQC**	Batch ID: **1029**	RunNo: **1423**
Prep Date: **3/9/2012**	Analysis Date: **3/13/2012**	SeqNo: **40041** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1,460	20.0	1,000	434.0	102	80	120			

Sample ID **1203275-001BMSD**	SampType: **MSD**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **BatchQC**	Batch ID: **1029**	RunNo: **1423**
Prep Date: **3/9/2012**	Analysis Date: **3/13/2012**	SeqNo: **40042** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1,450	20.0	1,000	434.0	102	80	120	0.344	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Safety Env Solutions Work Order Number: 1203154

Received by/date: MG 03/06/12

Logged By: Michelle Garcia 3/6/2012 9:45:00 AM Michelle Garcia

Completed By: Michelle Garcia 3/6/2012 10:46:18 AM Michelle Garcia

Reviewed By: 03/06/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

Chain-of-Custody Record

Client: Safety & Environmental Solution

Mailing Address: 703 E. Clinton Hobbs NM 88240

Phone #: 575-397-0510

email or Fax#: dgboyer@secnm.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Jaskin Denton SWD #1

Project #: JAS-10-003

Project Manager: Boyer Dane

Sampler: Sosa Jerry

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.1°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No 1203154	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TDS, Chlorides				Air Bubbles (Y or N)
03/05/12	0838	H2O	MW-1	4	HCl	-1	X											X				
3/05/12	0855	H2O	MW-2	4	HCl	-2	X											X				
3/05/12	0925	H2O	MW-3	4	HCl	-3	X											X				
			Trip Blank MG 03/06			-4	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/05/12	1530	Sosa Jerry	Muriel Garcia	03/06/12	09:45
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

May 03, 2012

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: FAS-10-004

Enclosed are the results of analyses for samples received by the laboratory on 04/26/12 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	04/26/2012	Sampling Date:	04/26/2012
Reported:	05/03/2012	Sampling Type:	Water
Project Name:	FAS-10-004	Sampling Condition:	Cool & Intact
Project Number:	DENTON SWD MAINLINE	Sample Received By:	Jodi Henson
Project Location:	HWY 82		

Sample ID: MW-1 (H200960-01)

BTEX 8260B mg/L **Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	05/01/2012	ND	0.022	112	0.0200	7.82	
Toluene*	<0.001	0.001	05/01/2012	ND	0.020	102	0.0200	3.78	
Ethylbenzene*	<0.001	0.001	05/01/2012	ND	0.020	102	0.0200	4.80	
Total Xylenes*	<0.003	0.003	05/01/2012	ND	0.062	103	0.0600	4.40	

Surrogate: Dibromofluoromethane	*107 %*	*59.8-161*
Surrogate: Toluene-d8	*98.2 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*88.8 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**56.0**	4.00	04/27/2012	ND	100	100	100	3.92	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**463**	5.00	04/30/2012	ND	220	91.7	240	0.428	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name:	Safety & Environmental Solutions, Inc.	**BILL TO**	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton	Company:	Same
City:	Hobbs State: NM Zip: 88240	Attn:	
Phone #:	575-397-0510 Fax #: 575-393-4388	Address:	
Project #:	7th3-10-004 Project Owner: Frisco Oil	City:	
Project Name:	Denton SWD Mainline (Frisco)	State: Zip:	
Project Location:	Hwy 82	Phone #:	
Sampler Name:	Scott Jarvis	Fax #:	

ANALYSIS REQUEST: BTEX; Chlorides; TDS

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME
H200960 -1	mw - 1	G	4	X							X		04/26/12	1220

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: Scott Jarvis	Date: 04/26/12 Time: 1500	Received By: Jodi Henson	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 5°C	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.