



Electronic Correspondence

August 17, 2017

Ms. Olivia Yu  
Environmental Specialist, District I  
Oil Conservation Division, EMNRD  
Olivia.yu@state.nm.us

Re: Closure Report- 4437  
SOGO III, SFPRR A  
Legal: Unit K, Sec 27, T9S R37E, Lea County, NM  
Latitude/Longitude: 33.501784/ -103.145577  
Etech Proj. Number: 584-7504-000  
Depth to Groundwater: 150-165 feet - Chevron/Texaco Lea County Depth to Groundwater Map  
Release Type: Produced Water  
Contaminants of Concern (COC's)                      Threshold Levels  
Chlorides    1000 mg/kg

Dear Olivia:

Etech Environmental & Safety Solutions, Inc. (Etech) is submitting the following corrective action plan on the aforementioned site for your review and approval.

### **Background**

On September 7, 2016, lightning struck tanks located at the SFPRR lease causing a release of fluids inside the location's soil containment. Approximately 630 barrels (bbl.) of produced water and oil were released into the containment. Approximately 460 bbl. of fluid were recovered and disposed. Tank bottoms and solids were jetted using a hot oiler and taken to disposal.

An initial sampling was conducted of the impacted area on September 13, 2016 by SOGO employees. Samples were collected from five (5) locations of the impacted area utilizing a backhoe. The samples were analyzed for TPH, BTEX and Chlorides. The results of analyses determined that TPH and BTEX values were below reporting limits. Chloride levels ranged from 48 mg/kg to 5,680 mg/kg.

An assessment of the site was conducted on September 22, 2016 by Etech. It was determined that the release was contained inside the soil containment and impacted an area of approximately 8,000 square feet with the exception of less than one bbl. of fluid that was released onto the location. SOGO had excavated approximately 400 cubic yards of impacted material and staged the material on plastic for disposal.

Due to the site not being delineated to below 250 mg/kg on initial assessment, the site was further delineated on September 22, 2016. A backhoe was utilized to dig test trenches in three separate locations inside the containment. Chloride levels ranged from 900 ppm to 11,160 ppm. Additional delineation was performed on December 15, 2016. An air rotary drilling rig was utilized to perform soil

borings at five separate locations. Chloride levels ranged from 41 to 3,890 ppm. Please find copies of the assessment sheets, well records and logs, and the analytical results attached.

### **Work Performed**

Delineation data from sample points on the south side of the containment showed soils were below threshold levels; therefore further excavation was not conducted on the southern half of the containment. Excavation was conducted on the northern half where the trench was located and elevated levels of chlorides remained (See Figure 1). Impacted soils inside the containment were excavated to a depth of four (4) to five (5) feet below ground surface (bgs). Oil tanks are still in production inside the battery, therefore excavation of soils inside the containment was conducted only in areas where it was practicably possible to do so without disturbing the soil integrity around the tanks. SOGO initially excavated impacted areas inside the containment to a depth of two (2) to three (3) feet bgs. Therefore, Etech excavated approximately two (2) additional feet bgs. A trench was present inside of the containment on the north side that ran from east to west prior to the lightning strike.

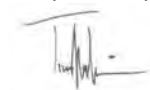
Upon completion of excavation activities, samples were collected from the excavated area, labeled Bottom Hole 1 through Bottom Hole 5 and delivered to Permian Basin Environmental Lab for chloride analysis. Chloride levels ranged from 877 mg/kg to 1,990 mg/kg. Please find copies of the analytical results attached. Following sampling activities, a 20 mil plastic liner was placed inside the excavated area to prevent further vertical migration of chlorides. The excavated area was backfilled with clean caliche purchased from the landowner.

Following restoration activities, approximately five hundred thirteen (513) cubic yards of impacted soil was transported for disposal at Gandy Marley, Inc., Roswell, New Mexico.

Soils not delineated and/or remediated during the field activities which are the subject of this report will be addressed at the time of tank battery abandonment.

Thank you for your assistance on this matter. Should you have any questions, require additional information, or have any additional stipulations for this site, please me at (432) 563-2200 (office) or via email at [tim@etechenv.com](mailto:tim@etechenv.com).

Respectfully:



Tim McMinn  
Project Manager  
Etech Environmental & Safety Solutions, Inc.

**Attachment A**  
**Initial C-141**

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company	SOGO III LLC	Contact	Billy M. Priebe
Address	P.O. Box 210, Midland, TX 79702	Telephone No.	432-640-0040
Facility Name	SFPRR	Facility Type	Tank Battery/Injection Station
Surface Owner	Michael Harton	Mineral Owner	Santa Fe, et al
		API No.	NA

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	27	09S	37E	1310	South	1330	West	Lea

Latitude 33.501784 Longitude -103.145577

**NATURE OF RELEASE**

Type of Release	Oil & Water	Volume of Release	630	Volume Recovered	460
Source of Release	Tank Battery	Date and Hour of Occurrence	9/7/16, hour unknown	Date and Hour of Discovery	9/07/16, 8 AM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required				
By Whom?	Jackie Washburn, SOGO Production Foreman	If YES, To Whom?	Mark Whitaker @ 9:46 AM		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Date and Hour	9/07/16 9:45 AM	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Tank battery/injection station on the SFPRR lease (est. 20 miles NE of Tatum, NM) burned. The fire is believed to have been caused by lightening since thunderstorms were in the area.

Describe Area Affected and Cleanup Action Taken.\*

The majority of fluid from the tanks was contained by a firewall with the exception of a small amount that ran onto the location. The free liquid was picked up by a vacuum truck and taken to disposal. Tank bottoms and solids were jetted using a hot oiler and taken to disposal. Contaminated soil will be removed.

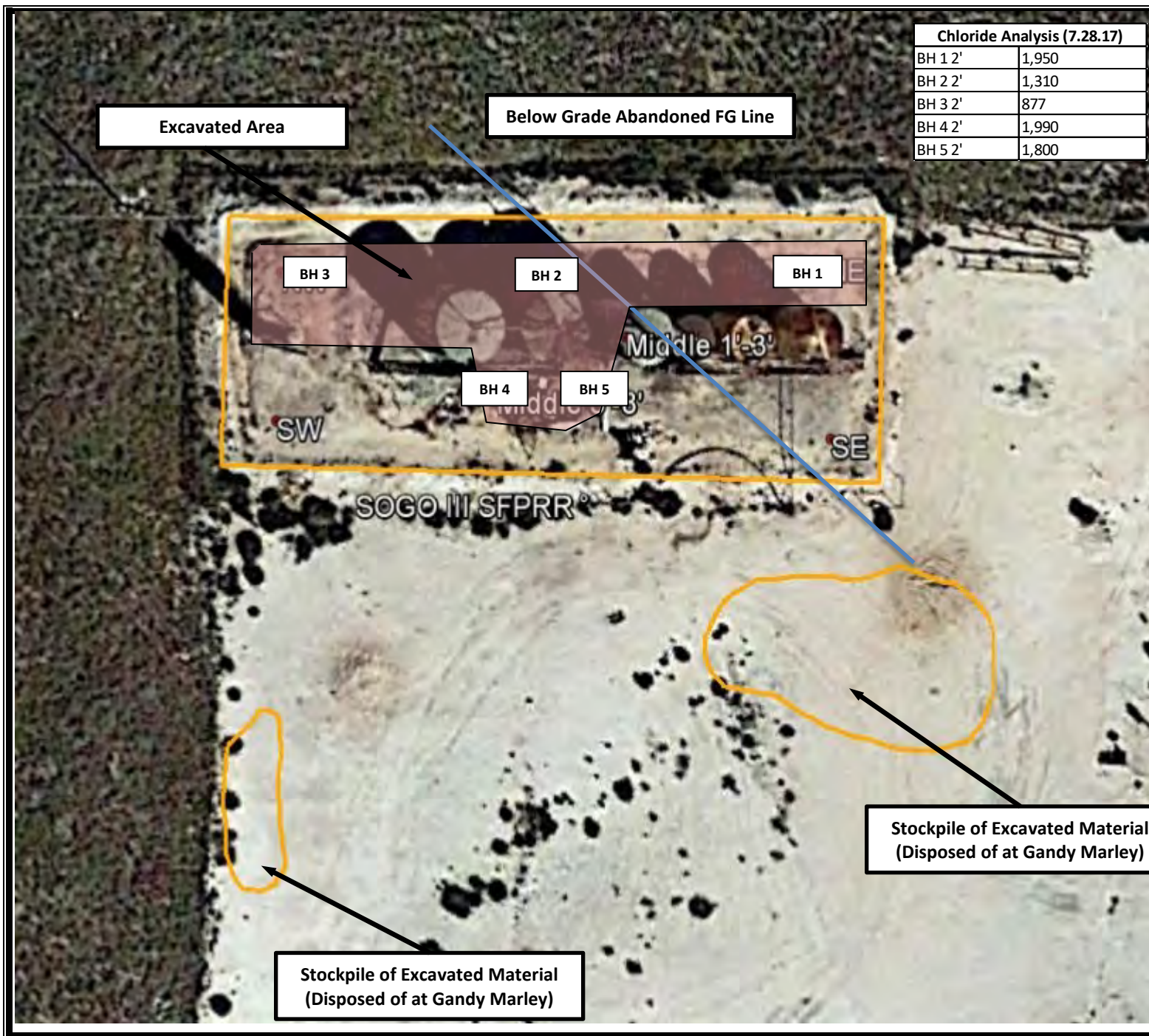
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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.

**OIL CONSERVATION DIVISION**

Signature: <i>Billy M. Priebe</i>	Approved by Environmental Specialist:		
Printed Name: Billy M. Priebe			
Title: Executive VP - Operations	Approval Date:	Expiration Date:	
E-mail Address: bpriebe@stanolind.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 9/09/2016	Phone: 432-640-0040		

\* Attach Additional Sheets If Necessary

**Attachment B**  
**Annotated Aerial Imagery**



**Figure 1**  
**General Site Location**  
**Excavation Diagram**  
**Sample Location Map**

Stanolind Oil & Gas III, LLC  
SFPRR Lease

Project Number  
584-7504-000

**Note:**

Red shaded area denotes  
area that was further  
excavated and lined with a  
poly liner.

**Prepared For:**

Stanolind Oil & Gas  
PO Box 210  
Midland, Texas 79702

**Prepared By:**

Etech Environmental and  
Safety Solutions, Inc.  
P.O. Box 62228  
Midland, TX 79711





**Assessment Results**

Sample I.D.	Depth (ft.)	Chlorides (mg/kg)
NE*	1	1,760
NE*	2	3,120
NE*	3	5,680
NE**	6	900
NE**	7	3,100
SE*	1	112
SE*	2	48
SE*	3	128
Middle*	1	624
Middle*	2	640
Middle*	3	736
Middle**	5	990
Middle**	8	11,160
SW*	1	240
SW*	2	240
SW*	3	352
NW*	1	2,040
NW*	2	2,360
NW*	3	2,880
NW**	4	1,090
NW**	5	1,800
NW**	7	1,620
NW**	8	990

\* Denotes soil sample collected on 9/13/2016. Chloride concentration based on laboratory analysis. Chloride,TPH, and BTEX analytical attached.

\*\* Denotes soil sample collected on 9/22/2016. Chloride concentration based on field test.

SOGO III SFPRR



**Assessment Results**

Sample I.D.	Depth (ft.)	Chlorides (mg/kg)
NE a*	9	490
NE a*	11	350
NE a*	13	350
NE a**	15	83.7
NE a**	17	41
N1*	2	910
N1*	4	510
N1*	6	380
N1**	8	223
N2*	2	900
N2*	4	1,690
N2*	6	560
N2**	8	521
N2**	10	969
N2**	12	249
NW a**	10	83.3
NW a**	12	228
Middle a*	10	3,360
Middle a*	12	3,620
Middle a*	14	3,620
Middle a*	16	2,510
Middle a*	18	820
Middle a*	20	3,360
Middle a*	22	3,890
Middle a*	24	2,510
Middle a*	26	320
Middle a**	28	296
Middle a**	30	198

\* Denotes chloride concentration based on field test.

\*\* Denotes chloride concentration based on laboratory analysis. Chloride, TPH, and BTEX analytical attached.

**Attachment C**  
**Well Records and Logs**



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

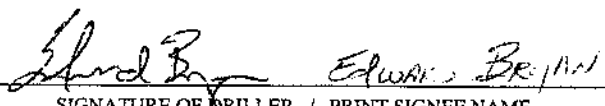
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD 1) SFPRR #26 UNIT K SB-1				OSE FILE NUMBER(S) L-14231			
	WELL OWNER NAME(S) ETECH ENVIRONMENTAL & SAFETY SOULUTIONS, INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 62228				CITY Midland		STATE Tx	ZIP 79711
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 33		MINUTES 30	SECONDS 7	N		
	LONGITUDE 103		8	43	W			* DATUM REQUIRED: WGS 84
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE TURN WEST ONTO WHITE RANCH ROAD. GO WEST FOR 1.2 MI TO UNNAMED LEASE ROAD. TURN N & GO 0.6 MI TO SITE.								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 12-15-16		DRILLING ENDED 12-15-16		DEPTH OF COMPLETED WELL (FT) 18'	BORE HOLE DEPTH (FT) 18'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	18'	6"	N/A	N/A	N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	2	6"	5' CEMENT		TOPLOAD		
	2	18	6"	6 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 1 OF 2	

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	2'	2'	TAN FINE SAND - CALICHE - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	2'	5'	3'	BROWN FINE SAND WITH CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	5'	11'	6'	TAN FINE SAND WITH CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	11'	14'	3'	TAN FINE SAND SILICEOUS SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	14'	18'	4'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD	18'			<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION:						
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM UNIT L, SECTION 27, TOWNSHIP 9 SOUTH, RANGE 37 EAST						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME					12-19-16 DATE	

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER

POD NUMBER

TRN NUMBER

LOCATION

PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NUMBER (WELL NUMBER) (POD 2) SFPRR #26 UNIT K SB-2				OSE FILE NUMBER(S) L-14231			
	WELL OWNER NAME(S) ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 62228				CITY Midland		STATE Tx	ZIP 79711
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 30	SECONDS 7	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
	LONGITUDE	103	8	44	W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE TURN WEST ONTO WHITE RANCH ROAD. GO WEST FOR 1.2 MI TO UNNAMED LEASE ROAD. TURN N & GO 0.6 MI TO SITE.								

<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN		NAME OF WELL DRILLING COMPANY STRAUB CORPORATION				
	DRILLING STARTED 12-15-16		DRILLING ENDED 12-15-16		DEPTH OF COMPLETED WELL (FT) 26'		BORE HOLE DEPTH (FT) 26'		
							DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)							STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY								
	DRILLING METHOD <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY								
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)	
	FROM	TO							
	0	26'	6"	N/A	N/A	N/A	N/A	N/A	

<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	2'	6"	.5 CEMENT		TOPLOAD
	2'	26'	6"	7 BAGS OF 3/8 HOLEPLUG		TOPLOAD

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER	
LOCATION			PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	5'	5'	BROWN FINE SAND WITH CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	5'	14'	9'	TAN FINE SAND - CEMENT SANDSTONE CALICHE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	14'	17'	3'	TAN FINE SAND - SILICEOUS SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	17'	22'	5'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	22'	26'	4'	TAN FINE SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	TD	26'			<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM UNIT 1, SECTION 27, TOWNSHIP 9 SOUTH, RANGE 37 EAST					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING					
	 SIGNATURE OF DRILLER / PRINT SIGNED NAME					12-19-16 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NUMBER (WELL NUMBER) (POD 3) SFPRR #26 UNIT K SB-3				OSE FILE NUMBER(S) L-14231			
	WELL OWNER NAME(S) ETECH ENVIRONMENTAL & SAFETY SOULUTIONS, INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 62228				CITY Midland		STATE Tx	ZIP 79711
	WELL LOCATION (FROM GPS)	DEGREES      MINUTES      SECONDS			* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LATITUDE	33	30				
	LONGITUDE	103	8	44	W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE TURN WEST ONTO WHITE RANCH ROAD. GO WEST FOR 1.2 MI TO UNNAMED LEASE ROAD. TURN N & GO 0.6 MI TO SITE.								

<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 12-15-16	DRILLING ENDED 12-15-16	DEPTH OF COMPLETED WELL (FT) 30'	BORE HOLE DEPTH (FT) 30'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A			
	COMPLETED WELL IS <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID <input checked="" type="radio"/> AIR <input type="radio"/> MUD    ADDITIVES - SPECIFY							
	DRILLING METHOD <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	30'	6"	N/A	N/A	N/A	N/A	N/A

<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	2'	6"	.5 CEMENT		TOPLOAD
	2'	30'	6"	8 BAGS OF 3/8 HOLEPLUG		TOPLOAD

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


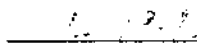
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD 4) SFPRR #26 UNIT K SB-4				OSE FILE NUMBER(S) L-14231			
	WELL OWNER NAME(S) ETECH ENVIRONMENTAL & SAFETY SOULUTIONS, INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 62228				CITY Midland	STATE Tx	ZIP 79711	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 33	MINUTES 30	SECONDS 7	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	8	43	W	* DATUM REQUIRED WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE TURN WEST ONTO WHITE RANCH ROAD. GO WEST FOR 1.2 MI TO UNNAMED LEASE ROAD. TURN N & GO 0.6 MI TO SITE.								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 12-15-16		DRILLING ENDED 12-15-16		DEPTH OF COMPLETED WELL (FT) 18'	BORE HOLE DEPTH (FT) 18'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY							
	DRILLING METHOD <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 18'		6"	N/A	N/A	N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	0 2'		6"	.5 CEMENT		TOPLOAD		
	2' 18'		6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER	PAGE 1 OF 2
LOCATION			

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	4'	4'	BROWN FINE SAND WITH CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	4'	10'	6'	TAN FINE SAND - CALICHE - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	10'	18'	8'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD	18'			<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION:						
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM UNIT L, SECTION 27, TOWNSHIP 9 SOUTH, RANGE 37 EAST						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING.						
	 SIGNATURE OF DRILLER / PRINT SIGNED NAME					 DATE	

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER

POD NUMBER

TRN NUMBER

LOCATION

PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

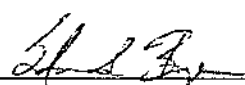
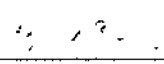
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD 5) SFPRR #26 UNIT K SB-5				OSE FILE NUMBER(S) L-14231			
	WELL OWNER NAME(S) ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 62228				CITY Midland		STATE Tx	ZIP 79711
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 33		MINUTES 30	SECONDS 7	N	* ACCURACY REQUIRED- ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE 103		8	44			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE TURN WEST ONTO WHITE RANCH ROAD. GO WEST FOR 1.2 MI TO UNNAMED LEASE ROAD. TURN N & GO 0.6 MI TO SITE.								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 12-15-16		DRILLING ENDED 12-15-16		DEPTH OF COMPLETED WELL (FT) 30'	BORE HOLE DEPTH (FT) 30'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY							
	DRILLING METHOD <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 30'							
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	0 2'					TOPLOAD		
	2' 30'		6"	5 CEMENT 9 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	3'	3'	BROWN FINE SAND WITH CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	3'	14'	11'	TAN FINE SAND - CALICHE - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	14'	18'	4'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	18'	26'	8'	TAN FINE SAND - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	26'	30'	4'	TAN FINE SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD	30'			<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD					
	MISCELLANEOUS INFORMATION:						
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM UNIT 1, SECTION 27, TOWNSHIP 9 SOUTH, RANGE 37 EAST						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE.							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING						
							
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME:					DATE	

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 2 OF 2	

**Attachment D**  
**Photograph Log**



View of tank battery looking to the northwest.



View of front of tank battery looking to the east.



View of the northwest corner of the tank battery.



View of tank pad where previous tanks were located looking east; stockpile of excavated material in background.



View of Middle test trench.



View of NW test trench.



View of NE test trench.



View of stockpile of excavated impacted material.



View of stockpile of excavated impacted material.



View of boring NE a after plugging and abandonment.



View of of boring N1 after plugging and abandonment.



View of drilling operations at the boring N2 location.



View of boring N2 after plugging and abandonment.



View of boring NW a after plugging and abandonment.



View of emplacement of bentonite plug in boring Middle a during plugging and abandonment.



View of boring Middle a after plugging and abandonment.



Close up view of boring Middle a after plugging and abandonment.



View of excavation looking to the west.



View of excavation looking to the west.



View of plastic liner installation looking to the west.



View of excavation after backfilling looking to the west.



View of excavation after backfilling looking to the west.

**Attachment E**  
**Analytical Results**

September 14, 2016

JACKIE WASHBURN

STANOLIND OIL & GAS LLC

310 W. WALL STREET, STE. 1000

MIDLAND, TX 79701

RE: S F P R R #26

Enclosed are the results of analyses for samples received by the laboratory on 09/13/16 11:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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

Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH EAST @ 1' (H602043-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05	
Total BTEX	<0.300	0.300	09/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 86.0 % 35-147

Surrogate: 1-Chlorooctadecane 94.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH EAST @ 2' (H602043-02)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53		
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31		
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25		
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05		
Total BTX	<0.300	0.300	09/13/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3120	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 83.5 % 35-147

Surrogate: 1-Chlorooctadecane 92.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH EAST @ 3' (H602043-03)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 81.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH WEST @ 1' (H602043-04)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2040	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 88.0 % 35-147

Surrogate: 1-Chlorooctadecane 84.8 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH WEST @ 2' (H602043-05)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53		
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31		
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25		
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05		
Total BTX	<0.300	0.300	09/13/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 87.6 % 35-147

Surrogate: 1-Chlorooctadecane 77.8 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: NORTH WEST @ 3' (H602043-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2880	16.0	09/14/2016	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 85.0 % 35-147

Surrogate: 1-Chlorooctadecane 93.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH EAST @ 1' (H602043-07)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/13/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/13/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/13/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/13/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 86.4 % 35-147

Surrogate: 1-Chlorooctadecane 88.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH EAST @ 2' (H602043-08)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 76.5 % 35-147

Surrogate: 1-Chlorooctadecane 89.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH EAST @ 3' (H602043-09)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 73.8 % 35-147

Surrogate: 1-Chlorooctadecane 84.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH WEST @ 1' (H602043-10)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 76.5 % 35-147

Surrogate: 1-Chlorooctadecane 90.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH WEST @ 2' (H602043-11)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTEx	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	09/14/2016	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 62.9 % 35-147

Surrogate: 1-Chlorooctadecane 75.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOUTH WEST @ 3' (H602043-12)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 72.2 % 35-147

Surrogate: 1-Chlorooctadecane 84.1 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: MIDDLE @ 1' (H602043-13)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 82.6 % 35-147

Surrogate: 1-Chlorooctadecane 94.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: MIDDLE @ 2' (H602043-14)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTEx	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 84.6 % 35-147

Surrogate: 1-Chlorooctadecane 96.4 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

STANOLIND OIL & GAS LLC  
JACKIE WASHBURN  
310 W. WALL STREET, STE. 1000  
MIDLAND TX, 79701  
Fax To: (432) 640-0099

Received: 09/13/2016  
Reported: 09/14/2016  
Project Name: S F P R R #26  
Project Number: NONE GIVEN  
Project Location: LEA COUNTY, NM

Sampling Date: 09/13/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: MIDDLE @ 3' (H602043-15)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/14/2016	ND	2.06	103	2.00	4.53	
Toluene*	<0.050	0.050	09/14/2016	ND	2.02	101	2.00	3.31	
Ethylbenzene*	<0.050	0.050	09/14/2016	ND	1.96	98.2	2.00	3.25	
Total Xylenes*	<0.150	0.150	09/14/2016	ND	5.97	99.5	6.00	3.05	
Total BTX	<0.300	0.300	09/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	09/14/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2016	ND	193	96.7	200	0.0781	
DRO >C10-C28	<10.0	10.0	09/13/2016	ND	196	97.8	200	1.72	

Surrogate: 1-Chlorooctane 83.6 % 35-147

Surrogate: 1-Chlorooctadecane 89.9 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <b>Standing Oil &amp; Gas</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <b>Jackie Washburn</b>		P.O. #:													
Address: <b>310 W. Wall St Suite 1000</b>		Company:													
City: <b>Midland</b>		Attn:													
State: <b>TX</b>		Address:													
Zip: <b>79702</b>		City:													
Phone #:		State:													
Fax #:		Zip:													
Project #:		Phone #:													
Project Location: <b>Lee County, NM</b>		Fax #:													
Sample Name: <b>Jackie Washburn</b>		PRESERV:													
FOR LAB USE ONLY		SAMPLING													
Lab I.D.		Sample I.D.													
1 NE 1'		DATE													
2 NE 2'		TIME													
3 NE 3'		9:05													
4 NW 1'		9:15													
5 NW 2'		9:15													
6 NW 3'		9:05													
7 SE 1'		9:10													
8 SE 2'		9:10													
9 SE 3'		9:20													
10 SW 1'		9:20													
11 NE 1'		9:20													
12 NE 2'		9:20													
13 NE 3'		9:20													
14 NW 1'		9:20													
15 NW 2'		9:20													
16 NW 3'		9:20													
17 SE 1'		9:20													
18 SE 2'		9:20													
19 SE 3'		9:20													
20 SW 1'		9:20													
21 SW 2'		9:20													
22 SW 3'		9:20													
23 SW 4'		9:20													
24 SW 5'		9:20													
25 SW 6'		9:20													
26 SW 7'		9:20													
27 SW 8'		9:20													
28 SW 9'		9:20													
29 SW 10'		9:20													
30 SW 11'		9:20													
31 SW 12'		9:20													
32 SW 13'		9:20													
33 SW 14'		9:20													
34 SW 15'		9:20													
35 SW 16'		9:20													
36 SW 17'		9:20													
37 SW 18'		9:20													
38 SW 19'		9:20													
39 SW 20'		9:20													
40 SW 21'		9:20													
41 SW 22'		9:20													
42 SW 23'		9:20													
43 SW 24'		9:20													
44 SW 25'		9:20													
45 SW 26'		9:20													
46 SW 27'		9:20													
47 SW 28'		9:20													
48 SW 29'		9:20													
49 SW 30'		9:20													
50 SW 31'		9:20													
51 SW 32'		9:20													
52 SW 33'		9:20													
53 SW 34'		9:20													
54 SW 35'		9:20													
55 SW 36'		9:20													
56 SW 37'		9:20													
57 SW 38'		9:20													
58 SW 39'		9:20													
59 SW 40'		9:20													
60 SW 41'		9:20													
61 SW 42'		9:20													
62 SW 43'		9:20													
63 SW 44'		9:20													
64 SW 45'		9:20													
65 SW 46'		9:20													
66 SW 47'		9:20													
67 SW 48'		9:20													
68 SW 49'		9:20													
69 SW 50'		9:20													
70 SW 51'		9:20													
71 SW 52'		9:20													
72 SW 53'		9:20													
73 SW 54'		9:20													
74 SW 55'		9:20													
75 SW 56'		9:20													
76 SW 57'		9:20													
77 SW 58'		9:20													
78 SW 59'		9:20													
79 SW 60'		9:20													
80 SW 61'		9:20													
81 SW 62'		9:20													
82 SW 63'		9:20													
83 SW 64'		9:20													
84 SW 65'		9:20													
85 SW 66'		9:20													
86 SW 67'		9:20													
87 SW 68'		9:20													
88 SW 69'		9:20													
89 SW 70'		9:20													
90 SW 71'		9:20													
91 SW 72'		9:20													
92 SW 73'		9:20													
93 SW 74'		9:20													
94 SW 75'		9:20													
95 SW 76'		9:20													
96 SW															



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

[illegible]

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Tim McMinn  
E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa, TX 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Location: Tatum , NM  
Lab Order Number: 6L19002



**NELAP/TCEQ # T104704156-13-3**

Report Date: 12/22/16

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NE a 15'	6L19002-01	Soil	12/15/16 09:35	12-19-2016 10:00
NE a 17'	6L19002-02	Soil	12/15/16 09:40	12-19-2016 10:00
NW a 10'	6L19002-03	Soil	12/15/16 10:30	12-19-2016 10:00
NW a 12'	6L19002-04	Soil	12/15/16 10:35	12-19-2016 10:00
N2 8'	6L19002-05	Soil	12/15/16 12:25	12-19-2016 10:00
N2 10'	6L19002-06	Soil	12/15/16 12:30	12-19-2016 10:00
N2 12'	6L19002-07	Soil	12/15/16 12:35	12-19-2016 10:00
Middle a 28'	6L19002-08	Soil	12/15/16 14:35	12-19-2016 10:00
Middle a 30'	6L19002-09	Soil	12/15/16 14:40	12-19-2016 10:00

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**NE a 15'**  
**6L19002-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	83.7	1.04	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0
% Moisture	4.0	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**NE a 17'**  
**6L19002-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>41.0</b>	1.14	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>12.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**NW a 10'**  
**6L19002-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>83.3</b>	1.16	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0
<b>% Moisture</b>	<b>14.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**NW a 12'**  
**6L19002-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>228</b>	1.16	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0
<b>% Moisture</b>	<b>14.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**N2 8'**  
**6L19002-05 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>521</b>	1.06	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>6.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**N2 10'**  
**6L19002-06 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>969</b>	1.09	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>8.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**N2 12'**  
**6L19002-07 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>249</b>	1.15	mg/kg dry	1	P6L1903	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>13.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Middle a 28'**  
**6L19002-08 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>296</b>	1.06	mg/kg dry	1	P6L1904	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>6.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Middle a 30'**  
**6L19002-09 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>198</b>	1.09	mg/kg dry	1	P6L1904	12/19/16	12/20/16	EPA 300.0	
<b>% Moisture</b>	<b>8.0</b>	0.1	%	1	P6L2001	12/20/16	12/20/16	% calculation	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch P6L1903 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P6L1903-BLK1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride ND 1.00 mg/kg wet

**LCS (P6L1903-BS1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 379 1.00 mg/kg wet 400 94.9 80-120

**LCS Dup (P6L1903-BSD1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 382 1.00 mg/kg wet 400 95.5 80-120 0.620 20

**Duplicate (P6L1903-DUP1)**

Source: 6L16006-23

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 282 5.88 mg/kg dry 261 7.78 20

**Duplicate (P6L1903-DUP2)**

Source: 6L16006-35

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 412 1.16 mg/kg dry 418 1.52 20

**Matrix Spike (P6L1903-MS1)**

Source: 6L16006-23

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 1800 5.88 mg/kg dry 1410 261 109 80-120

**Batch P6L1904 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P6L1904-BLK1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride ND 1.00 mg/kg wet

**LCS (P6L1904-BS1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 384 1.00 mg/kg wet 400 96.1 80-120

**LCS Dup (P6L1904-BSD1)**

Prepared: 12/19/16 Analyzed: 12/20/16

Chloride 390 1.00 mg/kg wet 400 97.5 80-120 1.45 20

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch P6L1904 - \*\*\* DEFAULT PREP \*\*\***

<b>Duplicate (P6L1904-DUP1)</b>		<b>Source: 6L19002-08</b>		Prepared: 12/19/16 Analyzed: 12/20/16						
Chloride	280	1.06	mg/kg dry		296			5.52	20	
<b>Duplicate (P6L1904-DUP2)</b>		<b>Source: 6L19010-03</b>		Prepared: 12/19/16 Analyzed: 12/20/16						
Chloride	533	1.05	mg/kg dry		527			1.15	20	
<b>Matrix Spike (P6L1904-MS1)</b>		<b>Source: 6L19002-08</b>		Prepared: 12/19/16 Analyzed: 12/20/16						
Chloride	1250	1.06	mg/kg dry	1060	296	89.6	80-120			

**Batch P6L2001 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6L2001-BLK1)</b>				Prepared & Analyzed: 12/20/16						
% Moisture	ND	0.1	%							
<b>Duplicate (P6L2001-DUP1)</b>		<b>Source: 6L19005-02</b>		Prepared & Analyzed: 12/20/16						
% Moisture	4.0	0.1	%		4.0			0.00	20	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### Notes and Definitions

BULK Samples received in Bulk soil containers  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

12/22/2016

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

# Etech Environmental & Safety Solutions, Inc.

12800 W. Hwy 80 E  
Odessa, Texas 79765

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-2200  
Fax: 432-563-2213

Project Manager: Tim McMillin

Company Name: Etech Environmental & Safety Solutions, Inc.

Company Address: PO Box 8469

City/State/Zip: Midland, Texas 79708

Telephone No: 432-563-2200

Fax No: 432-563-2213

Sampler Signature: [Signature]

e-mail: Tim@etechenv.com

Project Name: SEPRR LEASE FIRE

Project #: 584-7504-000

Project Loc: Tatum, NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

ORDER #: 10119002

LAB # (lab use only)		FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers							Matrix	Analyze For:														
						Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418,1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
1	NE a	15'	12.15.16	0935		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	NE a	17'		0940		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	NW a	10'		1030		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	NW a	12'		1035		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	N2	8'		1225		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	N2	10'		1230		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	N2	12'		1235		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	MIDDLE a	28'		1435		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	MIDDLE a	30'		1440		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Special Instructions: RUN N2 12' ONLY IF N2 8' IS > 250 mg/kg  
AND N2 10' IS < 250 mg/kg

Laboratory Comments:  
Sample Containers Intact?  
VOCs Free of Headspace?  
Custody seals on container(s)  
Custody seals on cooler(s)  
Sample Hand Delivered  
by Sampler/Client Rep?  
by Courier? UPS DHL FedEx Lone Star

Relinquished by: [Signature] Date: 12/19/16 Time: 9:40  
Received by: [Signature] Date: 12/19/16 Time: 9:40

Relinquished by: [Signature] Date: 12/19/16 Time: 9:40  
Received by: [Signature] Date: 12/19/16 Time: 9:40

Temperature Upon Receipt: 20 N/C

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Tim McMinn  
E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa, TX 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Location: Tatum NM  
Lab Order Number: 7A06003



**NELAP/TCEQ # T104704156-13-3**

Report Date: 01/10/17

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N1 8'	7A06003-01	Soil	12/15/16 13:10	01-06-2017 11:45

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**N1 8'**  
**7A06003-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>223</b>	1.06	mg/kg dry	1	P7A0601	01/06/17	01/09/17	EPA 300.0
<b>% Moisture</b>	<b>6.0</b>	0.1	%	1	P7A0904	01/09/17	01/09/17	% calculation

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch P7A0601 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P7A0601-BLK1)</b>				Prepared: 01/06/17 Analyzed: 01/09/17						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P7A0601-BS1)</b>				Prepared: 01/06/17 Analyzed: 01/09/17						
Chloride	442	1.00	mg/kg wet	400		111	80-120			
<b>LCS Dup (P7A0601-BSD1)</b>				Prepared: 01/06/17 Analyzed: 01/09/17						
Chloride	415	1.00	mg/kg wet	400		104	80-120	6.43	20	
<b>Duplicate (P7A0601-DUP1)</b>				<b>Source: 7A06001-01</b>		Prepared: 01/06/17 Analyzed: 01/09/17				
Chloride	53.1	1.18	mg/kg dry		53.6			0.971	20	
<b>Duplicate (P7A0601-DUP2)</b>				<b>Source: 7A06002-06</b>		Prepared: 01/06/17 Analyzed: 01/09/17				
Chloride	10900	55.6	mg/kg dry		10500			3.83	20	
<b>Matrix Spike (P7A0601-MS1)</b>				<b>Source: 7A06001-01</b>		Prepared: 01/06/17 Analyzed: 01/09/17				
Chloride	1200	1.18	mg/kg dry	1180	53.6	97.1	80-120			

**Batch P7A0904 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P7A0904-BLK1)</b>				Prepared & Analyzed: 01/09/17						
% Moisture	ND	0.1	%							
<b>Duplicate (P7A0904-DUP1)</b>				<b>Source: 7A06002-06</b>		Prepared & Analyzed: 01/09/17				
% Moisture	11.0	0.1	%		10.0			9.52	20	
<b>Duplicate (P7A0904-DUP2)</b>				<b>Source: 7A09001-01</b>		Prepared & Analyzed: 01/09/17				
% Moisture	2.0	0.1	%		1.0			66.7	20	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### Notes and Definitions

BULK Samples received in Bulk soil containers  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

1/10/2017

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

# Etech Environmental & Safety Solutions, Inc.

12800 W. Hwy 80 E  
Odessa, Texas 79765

CHAIN OF CUSTODY / RECORD AND ANALYSIS REQUEST

Project Manager: Tim McMillin

Company Name: Etech Environmental & Safety Solutions, Inc.

Company Address: PO Box 8469

City/State/Zip: Midland, Texas 79708

Telephone No: 432-563-2200

Fax No: 432-563-2213

Sampler Signature: Jeff Elvin e-mail: Tim@etechenv.com

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Project Name: SPPR LEASE FIRE

Project #: 584-7504-000

Project Loc: Tatum, NM

PO #:

(lab use only)		ORDER #: <u>1A06003</u>	
LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled
<u>1</u>	<u>N1 8'</u>	<u>12.15.16</u>	<u>1310</u>
No. of Containers		1	
Preservation & # of Containers		Matrix	
<input checked="" type="checkbox"/> Ice <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> HCl <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> <input type="checkbox"/> None <input type="checkbox"/> Other (Specify)		DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	
TPH: 418.1 8015M 1005 1006		Cations (Ca, Mg, Na, K)	
Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )		SAR / ESP / CEC	
Metals: As Ag Ba Cd Cr Pb Hg Se		Volatiles	
Semivolatiles		BTEX 8021B/5030 or BTEX 8260	
RCI		N.O.R.M.	
Chlorides		<input checked="" type="checkbox"/>	
RUSH TAT (Pre-Schedule) 24, 48, 72 hrs		<input checked="" type="checkbox"/>	
Standard TAT		<input checked="" type="checkbox"/>	

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Jeff Elvin</u>	<u>12/6/17</u>				
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Special Instructions:

Laboratory Comments:

Sample Containers Intact? Y

VOCs Free of Headspace? Y

Custody seals on container(s)? Y

Custody seals on cooler(s)? Y

Sample Hand Delivered by Sampler/Client Rep.? Y

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.0 MCE

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
1400 Rankin Hwy  
Midland, TX 79701**



# Analytical Report

**Prepared for:**

Tim McMinn  
E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa, TX 79765

Project: SFPRR LEASE FIRE

Project Number: 584-7504-000

Location: SOGO

Lab Order Number: 7H01006



**NELAP/TCEQ # T104704516-16-7**

Report Date: 08/07/17

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole 1 2'	7H01006-01	Soil	07/28/17 08:00	08-01-2017 08:46
Bottom Hole 2 2'	7H01006-02	Soil	07/28/17 08:15	08-01-2017 08:46
Bottom Hole 3 2'	7H01006-03	Soil	07/28/17 08:30	08-01-2017 08:46
Bottom Hole 4 2'	7H01006-04	Soil	07/28/17 08:45	08-01-2017 08:46
Bottom Hole 5 2'	7H01006-05	Soil	07/28/17 09:00	08-01-2017 08:46

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Bottom Hole 1 2'**  
**7H01006-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	1950	10.1	mg/kg dry	10	P7H0209	08/02/17	08/05/17	EPA 300.0	
% Moisture	1.0	0.1	%	1	P7H0203	08/02/17	08/02/17	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Bottom Hole 2 2'**  
**7H01006-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1310</b>	10.1	mg/kg dry	10	P7H0209	08/02/17	08/05/17	EPA 300.0	
<b>% Moisture</b>	<b>1.0</b>	0.1	%	1	P7H0203	08/02/17	08/02/17	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Bottom Hole 3 2'**  
**7H01006-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>877</b>	5.75	mg/kg dry	5	P7H0209	08/02/17	08/05/17	EPA 300.0	
<b>% Moisture</b>	<b>13.0</b>	0.1	%	1	P7H0203	08/02/17	08/02/17	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Bottom Hole 4 2'**  
**7H01006-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1990</b>	25.3	mg/kg dry	25	P7H0209	08/02/17	08/05/17	EPA 300.0	
<b>% Moisture</b>	<b>1.0</b>	0.1	%	1	P7H0203	08/02/17	08/02/17	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**Bottom Hole 5 2'**  
**7H01006-05 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>1800</b>	10.1	mg/kg dry	10	P7H0209	08/02/17	08/05/17	EPA 300.0
<b>% Moisture</b>	<b>1.0</b>	0.1	%	1	P7H0203	08/02/17	08/02/17	ASTM D2216

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch P7H0203 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P7H0203-BLK1)</b>				Prepared & Analyzed: 08/02/17						
% Moisture	ND	0.1	%							
<b>Duplicate (P7H0203-DUP1)</b>				<b>Source: 7H01005-01</b>		Prepared & Analyzed: 08/02/17				
% Moisture	ND	0.1	%		ND				20	
<b>Duplicate (P7H0203-DUP2)</b>				<b>Source: 7H01008-02</b>		Prepared & Analyzed: 08/02/17				
% Moisture	6.0	0.1	%		6.0			0.00	20	

**Batch P7H0209 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P7H0209-BLK1)</b>				Prepared: 08/02/17 Analyzed: 08/05/17						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P7H0209-BS1)</b>				Prepared: 08/02/17 Analyzed: 08/05/17						
Chloride	405	1.00	mg/kg wet	400		101	80-120			
<b>LCS Dup (P7H0209-BSD1)</b>				Prepared: 08/02/17 Analyzed: 08/05/17						
Chloride	366	1.00	mg/kg wet	400		91.4	80-120	10.1	20	
<b>Duplicate (P7H0209-DUP1)</b>				<b>Source: 7G31002-01</b>		Prepared: 08/02/17 Analyzed: 08/05/17				
Chloride	7.32	1.10	mg/kg dry		8.07			9.71	20	
<b>Duplicate (P7H0209-DUP2)</b>				<b>Source: 7H01003-01</b>		Prepared: 08/02/17 Analyzed: 08/05/17				
Chloride	799	1.22	mg/kg dry		823			3.00	20	
<b>Matrix Spike (P7H0209-MS1)</b>				<b>Source: 7G31002-01</b>		Prepared: 08/02/17 Analyzed: 08/05/17				
Chloride	1070	1.10	mg/kg dry	1100	8.07	96.4	80-120			

E Tech Environmental & Safety Solutions, Inc.  
13000 West County Road 100  
Odessa TX, 79765

Project: SFPRR LEASE FIRE  
Project Number: 584-7504-000  
Project Manager: Tim McMinn

Fax: (432) 563-2213

### Notes and Definitions

BULK Samples received in Bulk soil containers  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

8/7/2017

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

**Fax: 432-563-2213**

**Project #:**

**584-7504-000**

**PO #:**

**SOGO**

Page 10 of 10

Sampler Signature: CM

email: [Tim@etechenv.com](mailto:Tim@etechenv.com)

Report Format: STANDARD: ☒ TRRP: ☐ NPDES: ☐

STANDARD: ☒

TRRP: ☐NPDES: ☐[illegible]