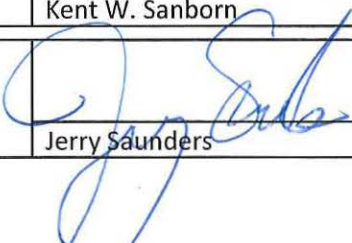


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	November 17, 2017		
Media:	Water (CWA)		
Regulatory Program(s)	NPDES – Oil and Gas BRINE		
Company Name:	Trinity Operating, LLC		
Facility Name:	Roxy No. 4-20/29H		
Facility Physical Location:	35.075407N, -96.167297W		
(city, state, zip code)	Lamar, Oklahoma 74850		
Mailing address:	601 Travis Street, 19 th floor		
(city, state, zip code)	Houston, Texas 77002		
County/Parish:	Hughes		
Facility Contact:	Blayne Gunderman	713-374-1526; cell: 281-725-8267	
	Blayne.gunderman@trinityoperating.com		
FRS Number:	N/A		
Identification/Permit Number:	OKU000864		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Personnel participating in inspection:			
Kent W. Sanborn	EPA Region 6, 6EN-WR	Environmental Engineer	918-557-1615
EPA Lead Inspector Signature/Date	Sanborn, Kent Digitally signed by Sanborn, Kent DN: cn=Sanborn, Kent, email=Sanborn.Kent@epa.gov Date: 2018.01.11 09:43:32 -06'00'		Date
	Kent W. Sanborn		Date
Supervisor Signature/Date	 Jerry Saunders		1/16/2018 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn arrived at the Trinity Operating, LLC, Roxy Lease at 1:00 PM on November 17, 2017 for an inspection. The inspection was initiated by a reported discharge of fluids into a nearby creek by Trinity Operating, LLC to the NRC/EPA. It was initially reported that the discharge did not reach an established tributary. I met with Blayne Gunderman of Trinity Operating, LLC toward the end of the inspection. Crews were at work cleaning the pad site where the discharge had originated. The inspection was conducted under the authority of Section 308 of the CWA. The scope of the inspection was to determine if the facility was in compliance with Clean Water Act, including Section 301, and to identify and document discharges of produced wastewater (brine) to waters of the United States. Several contractors were already present and assisting with cleanup. An Oklahoma Corporation Commission inspector was not present, but was at the discharge site a day earlier.

FACILITY DESCRIPTION

The discharge site was a tank battery enclosed by a steel secondary containment system. There are several wells on the site. There was no power run to the facility, so all power was generated at the facility. That generator failed causing the brine tanks to overflow. The secondary containment then overflowed to a nearby ravine or tributary of Coal Creek.

Section II – OBSERVATIONS

I initially arrived at the Trinity Operating, LLC, Roxy lease and pad site at about 1:00 pm on November 17, 2017. Photo 1 shows the tank battery location where a power failure caused at least 1,200 barrels of produced water, or brine to enter a small drainage ravine and a tributary of Coal Creek. Photos 2 and 3 show the Roxy pad site. The facility had 3 wells and brine storage tanks. The tanks were enclosed by a steel berm or firewall secondary containment system. Brine and some oil ran over the steel containment and traveled over the pad (Photo 4) to the northwest edge (Photo 5). The discharge then ran down the hill northwest (Photos 6 and 7) towards a drainage ravine. The ravine runs on the west side of the Roxy pad site. Oil staining was evident on the rocks as shown in Photo 8. The discharge entered the ravine at the point shown in Photo 9. There was both oil and brine in pools and around the rocks. The ravine was a dry downslope from the Roxy pad. With a calibrated YSI 30 Pro Conductivity Meter, I took a Total Dissolved Solids (TDS) reading of 78,700 mg/L of the brine in the ravine, which was along the flow path from the pad site (Photo 10). Photo 11 shows the proximity of the pad to the ravine. The ravine flows south toward the tributary of Coal Creek. Oil was present in the ravine portion of the drainage (Photo 12). The ravine enters the tributary of Coal Creek (Photo 13) that originates west of this location. TDS of the entry point was 89,977 mg/L (Photo 14). The tributary continues south and east (Photo 15), but I observed no oil present in this location. TDS at the location shown in Photo 15 was 74,428 mg/L (Photo 16). The tributary was shown again downstream (Photo 17) near where a temporary dam will be constructed for flushing operations of the drainage path. Currently the TDS at this point was 91,360 mg/L (Photo 18). The tributary of Coal Creek enters the main branch of Coal Creek near the point shown in Photo 19. This point was downstream of the proposed temporary dam. I did not

observe that this portion of Coal Creek was effected by the spill. I observed that all of the TDS field measurements ranged from 150 to 250 mg/L in the area near the confluence of the tributary of Coal Creek and Coal Creek downstream from the discharge. Photo 20 shows Coal Creek about a half a mile downstream of the point shown in Photo 19. Coal Creek as this location had TDS readings that ranged from 150-250 mg/L.

Section III – AREAS OF CONCERN

The tributary of Coal Creek had brine and oil in tributary and along the flow path from the Roxy pad site. The overflowing tank battery and secondary containment area did not stop brine fluids from discharging to the tributary of Coal Creek.

Section IV – FOLLOW UP

A follow up inspection will be conducted as needed.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 20 photos take on 11/17/2017

Appendix 1

Photographic Log (20 photos)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 1 (DSC_0060)

Orientation: East

Date of Photo: 11/17/2017

Time of Photo: 4:56 pm

Latitude: 35.086784N

Longitude: -96.172373W

Photographer: K.W. Sanborn

Description: This image shows the sign on at the Trinity Operating, LLC - Roxy No. 4-20/29H pad site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 2 (DSC_0059)

Orientation: Northwest

Date of Photo: 11/17/2017

Time of Photo: 3:55 pm

Latitude: 35.07520N

Longitude: -96.16690W

Photographer: K.W. Sanborn

Description: The Roxy pad site is shown here. I observed that contaminated gravel and dirt were piled up.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 3 (DSC_0027)

Orientation: Southeast

Date of Photo: 11/17/2017

Time of Photo: 1:11 pm

Latitude: 35.075407N

Longitude: -96.167297W

Photographer: K.W. Sanborn

Description: The tank battery was the source of the brine and oil discharge. Power failure led to the tanks overflowing into the secondary containment area. The containment then overflowed to a nearby drainage ravine.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 4 (DSC_0004)

Orientation: West

Date of Photo: 11/17/2017

Time of Photo: 1:11 pm

Latitude: 35.075407N

Longitude: -96.167297W

Photographer: K.W. Sanborn

Description: The oil and brine ran northwest across the pad site location to a drainage ravine that passes on the west side of the site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 5 (DSC_0030)

Orientation: West

Date of Photo: 11/17/2017

Time of Photo: 1:14 pm

Latitude: 35.075407N

Longitude: -96.167297W

Photographer: K.W. Sanborn

Description: The discharge ran over the edge of the pad here. The area was saturated with brine and some oil. A berm and hole were dug in this area to prevent further runoff.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 6 (DSC_0031)

Orientation: West

Date of Photo: 11/17/2017

Time of Photo: 1:15 pm

Latitude: 35.075407N

Longitude: -96.167297W

Photographer: K.W. Sanborn

Description: The discharge traveled down the hill here toward the drainage ravine.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 7 (DSC_0035)

Orientation: Northwest

Date of Photo: 11/17/2017

Time of Photo: 3:09 pm

Latitude: 35.0760N

Longitude: -96.1673W

Photographer: K.W. Sanborn

Description: The discharge ran down the hill here toward the drainage ravine.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 8 (DSC_0036)

Orientation: Northwest

Date of Photo: 11/17/2017

Time of Photo: 3:10 pm

Latitude: 35.0760N

Longitude: -96.1673W

Photographer: K.W. Sanborn

Description: I observed oil staining on the rocks along the discharge path at this location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 9 (DSC_0044)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:13 pm

Latitude: 35.0762N

Longitude: -96.1681W

Photographer: K.W. Sanborn

Description: This is near the point of entry to the drainage ravine. I observed that brine and oil were pooled up at this location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 10 (DSC_0045)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:14 pm

Latitude: 35.0762N

Longitude: -96.1681W

Photographer: K.W. Sanborn

Description: With a calibrated YSI 30 Pro Conductivity meter, I took a Total Dissolved Solids (TDS) reading of 78,700 mg/L along the flow path in the drainage ravine.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 11 (DSC_0042)

Orientation: Southeast

Date of Photo: 11/17/2017

Time of Photo: 3:12 pm

Latitude: 35.0762N

Longitude: -96.1681W

Photographer: K.W. Sanborn

Description: This is a view of the west side of the pad from the drainage ravine. Flow was south toward the tributary of Coal Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 12 (DSC_0043)

Orientation: East

Date of Photo: 11/17/2017

Time of Photo: 3:13 pm

Latitude: 35.0762N

Longitude: -96.1681W

Photographer: K.W. Sanborn

Description: I observed that oil and brine fluids were pooled in the ravine below the pad site.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 13 (DSC_0049)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:20 pm

Latitude: 35.0742N

Longitude: -96.1692W

Photographer: K.W. Sanborn

Description: This was the point where the drainage ravine meets the tributary of Coal Creek. That tributary joins the ravine from the northwest and then flows south and east toward the main branch of Coal Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 14 (DSC_0051)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:23 pm

Latitude: 35.0742N

Longitude: -96.1692W

Photographer: K.W. Sanborn

Description: The TDS at the point of entry to the tributary of Coal Creek was 89,977 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 15 (DSC_0053)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:27 pm

Latitude: 35.0722N

Longitude: -96.1680W

Photographer: K.W. Sanborn

Description: The brine traveled south in the tributary. I did not observe oil or oil sheen at this location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 16 (DSC_0054)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:27 pm

Latitude: 35.0722N

Longitude: -96.1680W

Photographer: K.W. Sanborn

Description: TDS was 74,428 mg/L at the location shown in photo 15.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma

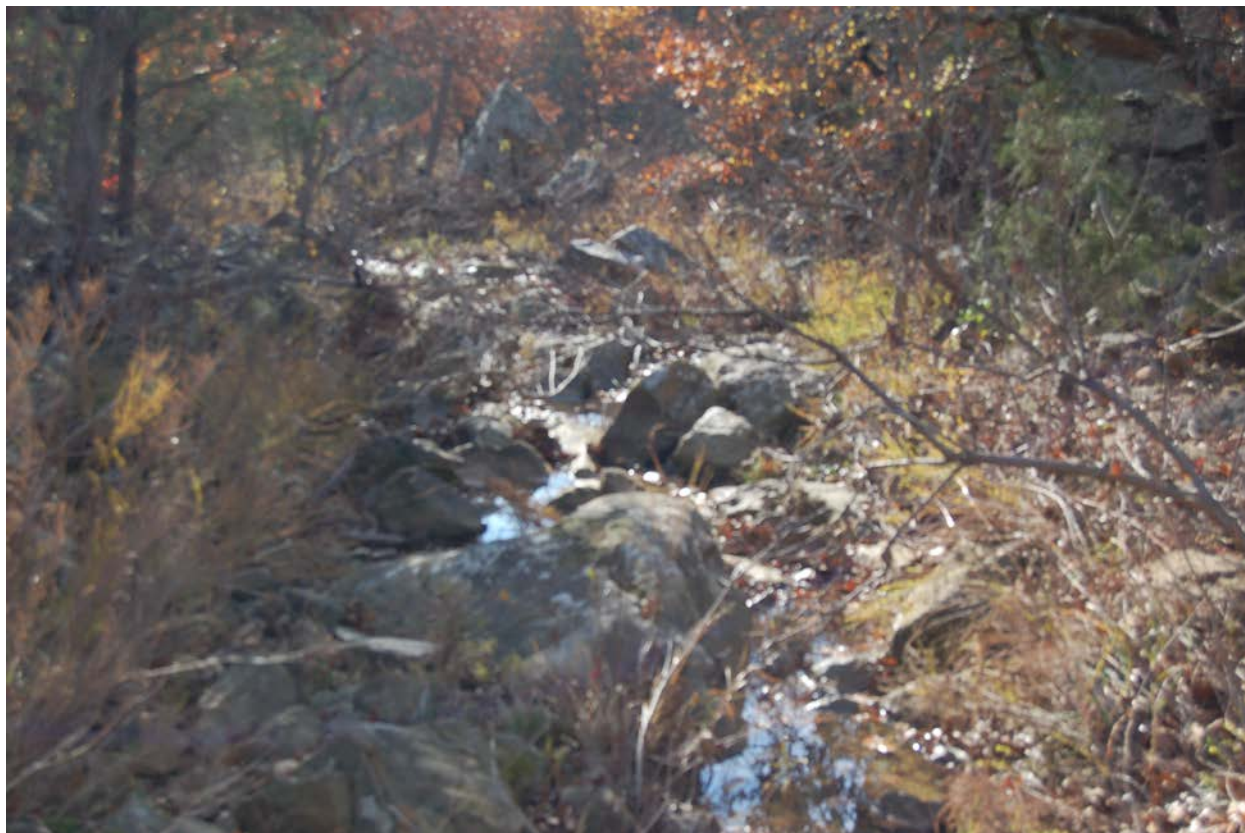


Photo File Name: Photo 17 (DSC_0057)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 4:14 PM

Latitude: 35.0710N

Longitude: -96.1699W

Photographer: K.W. Sanborn

Description: A temporary dam will be built near this location and flushing operations will begin on the tributary.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 18 (DSC_0055)

Orientation: South

Date of Photo: 11/17/2017

Time of Photo: 3:30 pm

Latitude: 35.0710N

Longitude: -96.1699W

Photographer: K.W. Sanborn

Description: TDS of the location shown in photo 17 was 91,360 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 19 (DSC_0033)

Orientation: West

Date of Photo: 11/17/2017

Time of Photo: 1:51 pm

Latitude: 33.0653N

Longitude: -96.1658W

Photographer: K.W. Sanborn

Description: This photo shows the location where the tributary enters Coal Creek. I observed that no brine or oil has reached this point during the inspection. TDS ranged from 150-250 mg/L (background TDS readings for this area).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: 35.075407N, -96.167297W		
City: Lamar	County: Hughes	State: Oklahoma



Photo File Name: Photo 20 (DSC_0032)

Orientation: West

Date of Photo: 11/17/2017

Time of Photo: 1:37 pm

Latitude: 35.07028N

Longitude: -96.15806W

Photographer: K.W. Sanborn

Description: This was the main part of Coal Creek even farther east of the location shown in Photo 19.

TDS ranged from 150-250 mg/L (background).