



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

Inspection Date(s):	11/18/2015 – 11/19/2015		
Media:	CWA (Water)		
Regulatory Program(s)	NPDES - BRINE		
Company Name:	Lutex Oil, Ltd		
Facility Name:	Cora Malone A Lease		
Facility Physical Location:	0.369 Miles East of Highway 183 (29.689176N, -97.640039W)		
(city, state, zip code)	Luling, TX 78648		
Mailing address:	2564 San Marcos Highway		
(city, state, zip code)	Luling, TX 78648		
County/Parish:	Caldwell		
Facility Contact:	Mr. Lloyd L. Tiller	President	512-738-1427
	Mr. George Dietrich	Registered Agent	512-738-1431
FRS Number:	N/A		
Identification/Permit Number:	TXU011086		
Media Number:	N/A		
NAICS:	211111		
SIC:	1311		
Personnel participating in inspection:			
Jack Arias	6EN-WR	Environmental Scientist	214-665-8164
Jeanne Eckhart	6EN-WR	Environmental Scientist	214-665-8174
EPA Lead Inspector			
Signature/Date	Jack A Arias		Date
Supervisor			
Signature/Date	Willie Lane, Jr.		Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

The purpose of the inspection was to determine if the facility complied with Section 301 of the Clean Water Act (CWA), and to identify and document discharges of produced wastewater (brine) to waters of the United States. The Inspection was conducted under the authority of Section 308 of the CWA. EPA Region 6 inspectors, Jack Arias and Jeanne Eckhart, arrived at the facility at approximately 5:45 pm on November 18, 2015 for an unannounced inspection. There were no representatives present at the time of entry. We proceeded to conduct an oil and gas, produced/brine water Clean Water Act (CWA) inspection. The scope of the inspection was to evaluate the facility's tanks, flow lines, flow paths, ponds, tributaries, creeks, and other related factors that are connected to the CWA at the facility.

FACILITY DESCRIPTION

The facility is known as the Lutex Oil Ltd. Cora Malone A Lease and is located in Luling, Caldwell County, Texas. See Photo N°1 and Photo N°2 in Appendix 1. The facility is located on an oil and gas lease at Latitude 29.689176N and Longitude -97.640039W. The lease consists of production wells, injection wells, vessels, flow lines, collection points, and other equipment used for the production of crude oil and natural gas. Production wells produce a mixture of produced water and crude oil (well fluids). Flow lines are used to transport well fluids from various locations on the leases. Collection points known as tank batteries consist of various tanks, vessels, and equipment used to separate and store the produced water, brine water, and crude oil. Produced water is typically high in salts and is commonly known as oil field brine. The crude oil is sold for profit and the produced water, and/or brine, is transported to and disposed of in various injection wells.

Section II - OBSERVATIONS

When we arrived at **Cora Malone A Lease** on November 18, 2015, we observed that the secondary containment structures around the tanks and flow lines appeared to be improperly constructed and inadequate for the size of the facility. There were standing ponds of fluids within the containment area, flow paths of fluids away from the tank battery, and a PVC flow lines with unknown usage and destination. See Photo N°3 in Appendix 1. The site showed at total of two produced water (brine) storage tanks. The tanks were in-service and oil was visible on both the sides of the tank and the associated PVC flow lines at the tanks. There were also PVC flow lines coming out and connected to the tanks. See Photo N°3 and photo N°4 in Appendix 1. At this tank battery, it was also observed an open ended PVC flow line going through the secondary containment wall towards the tributary of Salt Branch Creek. We also observed standing pond of fluids within the containment area. The PVC flow line is used as a drainage system for fluids within the containment area. Photo N°4, photo N°6, and photo N°7 in Appendix 1. We observed flow paths of fluids 30 feet from the tank battery. It smelled strongly of hydrocarbons near the tank battery area at the time of the inspection. Photo N°8 and photo N°9 in Appendix 1. A calibrated YSI 30 Salinity Conductivity Meter was used to measure the Total Soluble Salts (TSS) and obtained a reading of 35,300 parts-per-million (ppm) at the standing pond of fluids within the containment area located at Latitude 29.689015 N and Longitude -97.640035 W. This is the first Point of Entry (POE) to Salt Branch Creek. During the reading we were able to distinguish a strong smell of hydrocarbons. See Photo N°5 in Appendix 1. A flow path was observed along with dead vegetation and

oil sheens at Latitude 29.688012 N and Longitude -97.640408 W. See Photo N°8 and photo N°9 in Appendix 1. A second TSS reading of 2,100 ppm, approximately 500 feet from the tanks, was obtained from Salt Branch Creek located at Latitude 29.687614 N and Longitude -97.641193 W. This is the second Point of Entry (POE) to Salt Branch Creek. At this point, the tributary shows a defined bed and bank and evidence of plants growing along the tributary, evidence of sediments, debris, and plants growing along the creek. Salt Branch Creek was approximately 4 feet deep and approximately 25 feet wide. See Photo N°10 and Photo N°11 in Appendix 1.

Downstream Measurements of Salt Branch Creek

We followed the flow path southeast from the tank battery location approximately 2.45 Miles, to Salt Branch Creek, which is a tributary to Plum Creek, and performed different measurements to determine TSS concentrations. The tank battery is at approximately 361 feet elevation. We obtained a second POE TSS reading of 2,100 ppm at Latitude 29.687614 N and Longitude -97.641193 W. The second POE, where fluids reached Salt Branch Creek, was located at 500 feet from tanks and 352 feet elevation. At this location, Salt Branch Creek was approximately 4 feet deep and approximately 25 feet wide. See Photo N°10 in Appendix 1. We obtained at approximately 431 feet distance downstream from the second POE another TSS reading of 1,500 ppm at Latitude 29.687275 N and -97.639888 W at approximately 350 feet elevation. See Photo N°12 in Appendix 1. At approximately 1.126 miles distance downstream from the second POE, we obtained a third TSS reading of 900 ppm at Latitude 29.686192 N and -97.628506 W at approximately 335 feet elevation. See Photo N°13 in Appendix 1. Approximately 2.45 miles distance downstream from the second POE, we obtained a fourth TSS reading of 700 ppm at Latitude 29.676527 N and -97.624766 W at approximately 333 feet elevation. See Photo N°14 in Appendix 1. At this location Salt Branch Creek, which is a tributary of Plum Creek, was approximately 3 feet deep and approximately 55 feet wide. See Photo N° 14 in Appendix 1.

Background Measurements upstream of Salt Branch Creek

We measured the TSS to determine water quality data, such as water quality in the area. Therefore at approximately 0.728 miles upstream from the second POE, we measured the TSS and obtained a reading of 200 ppm at Latitude 29.687389 N and Longitude -97.650809 W. See Photo N°15 in Appendix 1.

Section III – AREAS OF CONCERN

We observed during the inspection areas of concerns at this facility that included:

- PVC flow lines and open ended PVC flow lines with potential to discharge fluids into Salt Branch Creek.
- Secondary containments around the tanks were improperly constructed.
- Flow lines improperly placed within the tanks.
- And, high concentrations of TSS within the containment area and Salt Branch Creek.

Section IV – FOLLOW UP

The following follow-up actions will be conducted:

- EPA will send a copy of the inspection report to the facility and coordinate with the Rail Road Commission (RRC) or any other entity or representative that might become involved with actions at this facility about the areas of concern.
- EPA will continue to work with the facility to enable it to come into compliance with the requirements of the CWA.

- EPA will have a conference call with the facility to discuss the inspection report.
- EPA will discuss the inspection report with management to determine compliance and follow-up needs.
- EPA will refer the facility to the SPCC program.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 15 photos taken 11/18-19/15

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

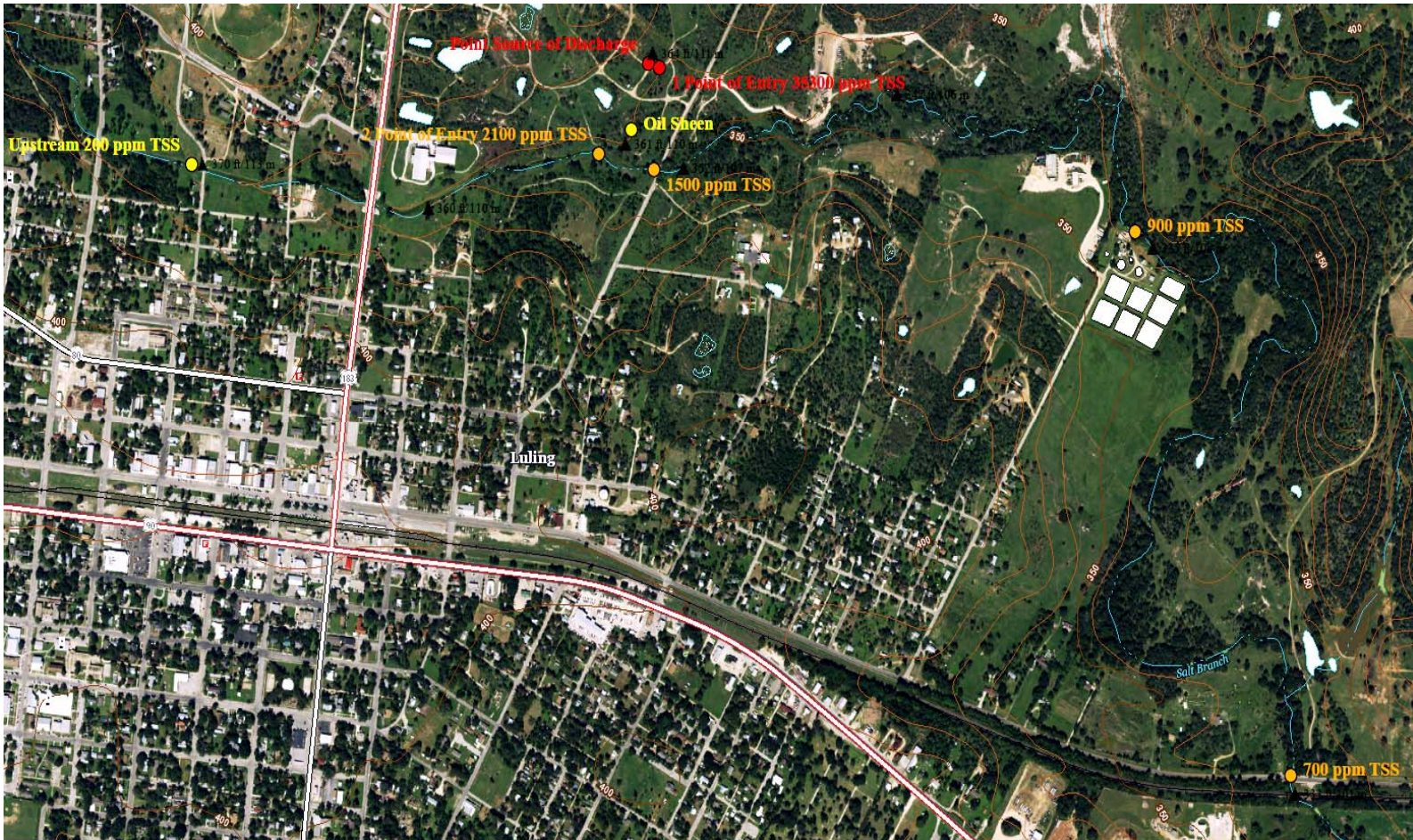
Photo No. 1

Location: 0.369 Miles East of Highway 183

City: Luling, TX

County/Parish: Caldwell

State: Texas



Photograph File Name: Lutex Cora Malone_USGSAerialMap_11Jan2016.png

Date of Photograph: 01/11/2016

Latitude: 29.689176 N

Longitude: -97.640039 W

Author: Jack Arias

Description: This image shows a USGS Aerial Map of Lutex Oil, Ltd / Cora Malone A Lease. This is a layout of Lutex Oil Ltd. Red colored label indicates the location of tanks and point source of discharge 35,300 ppm Total Soluble Salts (TSS). The orange colored labels indicates TSS readings taken during the inspection (700 – 35,300 ppm TSS). Yellow colored label indicates background data and oil sheen. The black colored labels indicated the elevation at that position in feet.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0405.JPG

Date of Photograph: 11/18/2015

Latitude: 29.689176 N

Longitude: -97.640039 W

Orientation: NE

Map Datum: WGS-84

Time of Photo: 5:45 pm

Photographer: Jack Arias

Description: This image shows the sign of Lutex Oil Ltd. - Cora Malone A Lease at the facility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0406.JPG
Date of Photograph: 11/18/2015
Latitude: 29.689094 N
Longitude: -97.639824 TSS W
Orientation: NW
Map Datum: WGS-84
Time of Photo: 5:48 pm
Photographer: Jack Arias
Description:

This image shows the facility with two operational tanks. The secondary containment walls are improperly constructed and inadequate for the size of the facility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0408.JPG

Date of Photograph: 11/18/2015

Latitude: 29.689017 N

Longitude: -97.639907 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 5:52 pm

Photographer: Jack Arias

Description: This image shows two tanks associated with the facility, standing pond of fluids within the containment area, and visible oil on the sides of the tanks and the associated PVC flow lines at the tanks. There were also PVC flow lines coming out and connected to the tanks and a PVC pipe with unknown usage and destination.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0407.JPG

Date of Photograph: 11/18/2015

Latitude: 29.689015 N

Longitude: -97.640035 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 5:51 pm

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 35,300 parts per million (ppm) at a standing pond of fluids which is the first Point of Entry (POE) to Salt Branch Creek. During the reading, we were able to distinguish a strong smell of hydrocarbons.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0409.JPG

Date of Photograph: 11/18/2015

Latitude: 29.689077 N

Longitude: -97.639859 W

Orientation: N

Map Datum: WGS-84

Time of Photo: 5:55 pm

Photographer: Jack Arias

Description: This image shows a flow path of fluids away from the tank battery, and a PVC pipe.. At this tank battery, it was also observed an open ended PVC flow line going through the secondary containment wall towards the tributary of Salt Branch Creek. The PVC flow line is used as a drainage system for fluids within the containment area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0410.JPG

Date of Photograph: 11/18/2015

Latitude: 29.689036 N

Longitude: -97.639883 W

Orientation: N

Map Datum: WGS-84

Time of Photo: 5:56 pm

Photographer: Jack Arias

Description: This image shows an open ended PVC flow line going through the secondary containment wall towards the tributary of Salt Branch Creek. The PVC flow line is used as a drainage system for fluids within the containment area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0412.JPG

Date of Photograph: 11/19/2015

Latitude: 29.688297 N

Longitude: -97.643959 W

Orientation: South

Map Datum: WGS-84

Time of Photo: 8:59 am

Photographer: Jack Arias

Description: This image shows a flow path of fluids away from the tank battery towards the tributary of Salt Branch Creek. Also we observe dead vegetation and oil sheens.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0418.JPG

Date of Photograph: 11/18/2015

Latitude: 29.688012 N

Longitude: -97.640408 W

Orientation: W

Map Datum: WGS-84

Time of Photo: 9:19 am

Photographer: Jack Arias

Description: This image shows a flow path of fluids, oil sheens, and dead vegetation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0415.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687596 N

Longitude: -97.641196 W

Orientation: South

Map Datum: WGS-84

Time of Photo: 9:12 am

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 2,100 parts per million (ppm) at the second Point of Entry (POE) to Salt Branch Creek. This point is located approximately 500 feet southeast from the tanks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0416.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687598 N

Longitude: -97.641206 W

Orientation: E

Map Datum: WGS-84

Time of Photo: 9:12 am

Photographer: Jack Arias

Description: This image shows Salt Branch Creek flowing at the time of the inspection. The creek shows a defined bed and bank, evidence of plants growing along the tributary, evidence of sediments, debris, and plants growing along the creek. The creek is approximately 25 feet wide by 4 feet deep.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0469.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687275 N

Longitude: -97.639888 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 3:44 pm

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 1,500 parts per million (ppm) downstream from the second POE of Salt Branch Creek. This point is located approximately 431 feet southeast from the second POE.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0456.JPG

Date of Photograph: 11/19/2015

Latitude: 29.686192 N

Longitude: -97.628506 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 2:02 pm

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 900 parts per million (ppm) downstream from the second POE of Salt Branch Creek. This point is located approximately 1.126 Miles southeast from the second POE.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0454.JPG

Date of Photograph: 11/19/2015

Latitude: 29.676527 N

Longitude: -97.624766 W

Orientation: N

Map Datum: WGS-84

Time of Photo: 1:15 pm

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 700 parts per million (ppm) downstream from the second POE to the tributary of Salt Branch Creek. This point is located approximately 2.45 Miles southeast from the second POE.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: 0.369 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0477.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687389 N

Longitude: -97.650809 W

Orientation: SE

Map Datum: WGS-84

Time of Photo: 4:25 pm

Photographer: Jack Arias

Description: This image shows a Total Soluble Salts (TSS) reading of 700 parts per million (ppm) downstream from the second POE to the tributary of Salt Branch Creek. This point is located approximately 2.45 Miles southeast from the second POE.