

6ENFORM-019-R6 (10/6/14)

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 11:02 am on November 19, 2015 for an unannounced inspection. We met with Mr. George Dietrich (owner of the property) and presented my credentials. 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 Lease and is located in Luling, Caldwell County, Texas. The facility is located on an oil and gas lease at Latitude 29.686138N and Longitude -97.643579W. See Photo N°1 and Photo N°2 in Appendix 1. 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 Lease** on November 19, 2015, we observed that there was not a containment area around the tank, there was a standing pond of fluids, a flow path of fluids and dead vegetation away from the tank battery. See Photo N°3 in Appendix 1. The site showed one produced water (brine) storage tank. The tank was in-service and oil was visible on both the sides of the tank and the associated PVC flow line at the tank. There was dead vegetation around the tank. See Photo N°3 and photo N°4 in Appendix 1. The flow path of fluids was approximately 45 feet from the tank battery. It smelled strongly of hydrocarbons near the tank battery area at the time of the inspection. The tank battery is at approximately 373 feet elevation. Photo N°1 in Appendix 1

Downstream Measurements of Salt Branch Creek

We followed the flow path southeast from the tank position, approximately 2.704 miles, to Salt Branch Creek, which is a tributary to Plum Creek, and performed different measurements to determine TSS concentrations. A calibrated YSI 30 Salinity Conductivity Meter was used to measure the Total Soluble Salts (TSS) and obtained a reading of 11,740 parts-per-million (ppm) at salt branch Creek. This is the first Point of Entry (POE) to Salt Branch Creek, approximately 427 feet from the tank, located at Latitude 29.687261 N and Longitude -97.642986 W at approximately 356 feet elevation. See Photo N°5 and

Photo N°6 in Appendix 1. Downstream, a second TSS reading of 5,900 ppm, approximately 630 feet from the tank, was obtained from Salt Branch Creek located at Latitude 29.687496 N and Longitude -97.642431 W. See Photo N°8 in Appendix 1. At this point, the creek 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 35 feet wide. See Photo N°7 and Photo N°9 in Appendix 1. At approximately 1.030 feet distance downstream from the first POE, we obtained a third TSS reading of 1,300 ppm at Latitude 29.687275 N and Longitude -97.639888 W at approximately 356 feet elevation. See Photo N°10 in Appendix 1. At approximately 1.26 miles distance downstream from the first POE, we obtained a fourth TSS reading of 900 ppm at Latitude 29.686192 N and -97.628506 W at approximately 338 feet elevation. See Photo N°11 in Appendix 1. At approximately 2.556 miles distance downstream from the first POE, we obtained a fifth TSS reading of 700 ppm at Latitude 29.676527 N and -97.624766 W at approximately 332 feet elevation. See Photo N°12 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° 12 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 0.49 miles upstream from the first 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°13 in Appendix 1.

Section III – AREAS OF CONCERN

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

- Tank with PVC flow line with potential to discharge fluids into Salt Branch Creek.
- Absent of a secondary containment around the tank.
- And, high concentrations of TSS in 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 – 13 photos taken 11/19/15

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

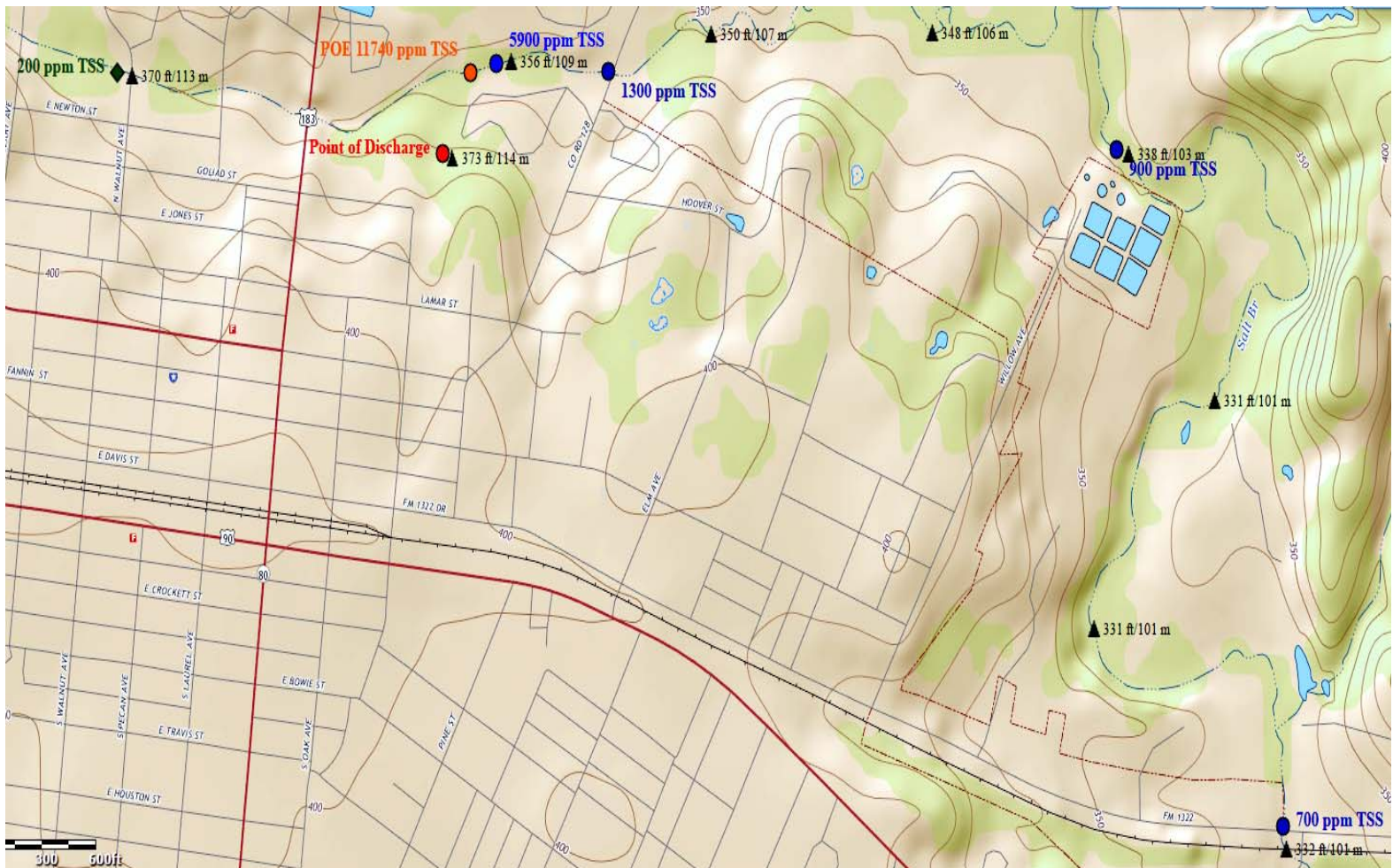
Photo No. 1

Location: 0.182 Miles East of Highway 183

City: Luling, TX

County/Parish: Caldwell

State: Texas



Photograph File Name: Lutex Cora Malone_USGSTopographicMap_11Jan2016.png

Date of Photograph: 01/26/2016

Latitude: 29.686138 N

Longitude: -97.643579 W

Author: Jack Arias

Description: This image shows a USGS Topographic Map of Lutex Oil, Ltd / Cora Malone Lease. This is a layout of Lutex Oil Ltd. Red colored label indicates the location of tank and point source of discharge. The orange colored labels indicates the point of entry (POE) 11,740 ppm Total Soluble Salts (TSS). Blue color indicates TSS readings taken during the inspection (700 – 5,900 ppm TSS). Green color indicates background data (200 ppm TSS). The black colored labels indicated the elevation at that position in feet.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0439.JPG

Date of Photograph: 11/19/2015

Latitude: 29.686138 N

Longitude: -97.643579 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 11:02 am

Photographer: Jack Arias

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0440.JPG

Date of Photograph: 11/19/2015

Latitude: 29.686488 N

Longitude: -97.643486 W

Orientation: SW

Map Datum: WGS-84

Time of Photo: 11:06 am

Photographer: Jack Arias

Description: This image shows the facility with one operational tank. There was not a containment area around the tank, a standing pond of fluids, a flow path of fluids and dead vegetation.

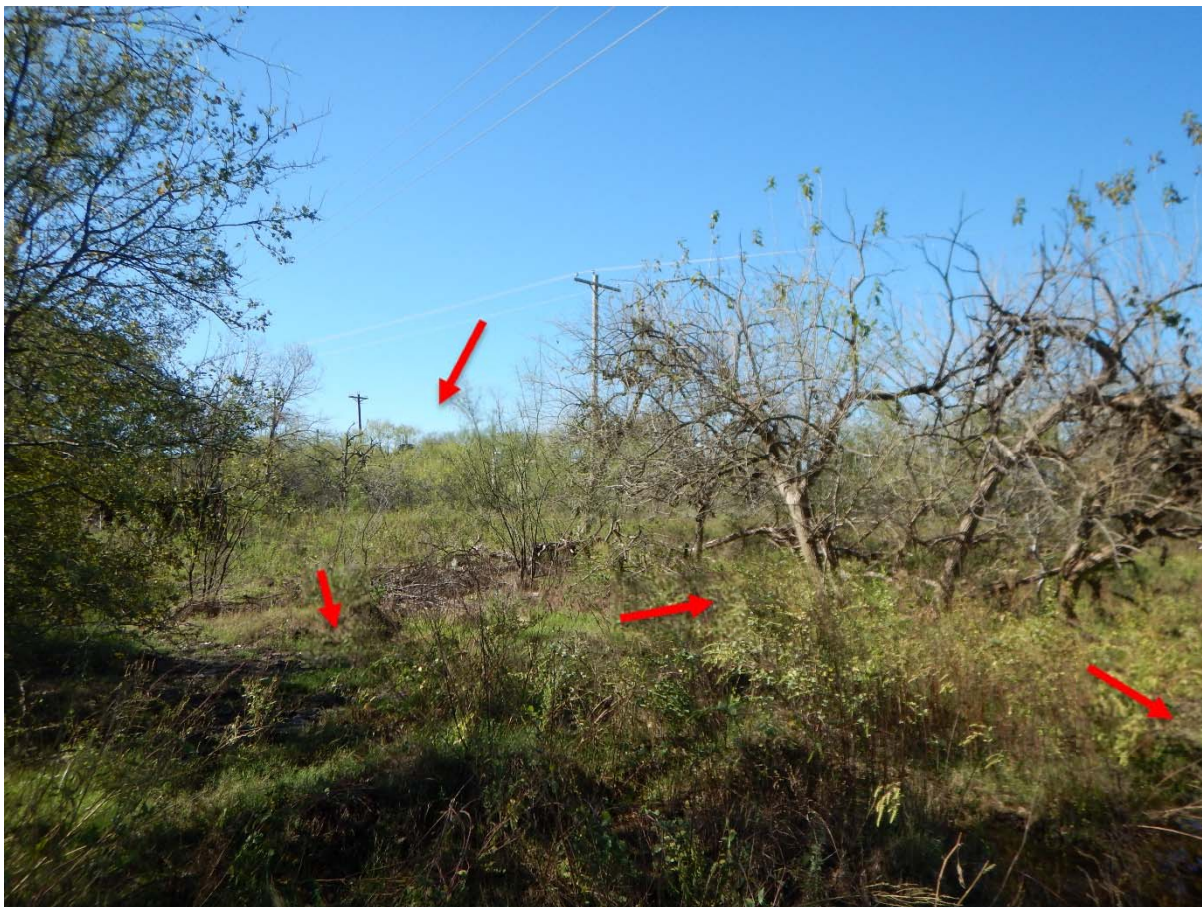


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0441.JPG

Date of Photograph: 11/19/2015

Latitude: 29.686592 N

Longitude: -97.643428 W

Orientation: W

Map Datum: WGS-84

Time of Photo: 11:08 am

Photographer: Jack Arias

Description: This image shows standing pond of fluids, a flow path of fluids and dead vegetation away from the tank battery.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0444.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687282 N

Longitude: -97.643106 W

Orientation: NW

Map Datum: WGS-84

Time of Photo: 11:24 am

Photographer: Jack Arias

Description: This image shows the Point of Entry (POE) to Salt Branch Creek, approximately 497 feet from the tank.

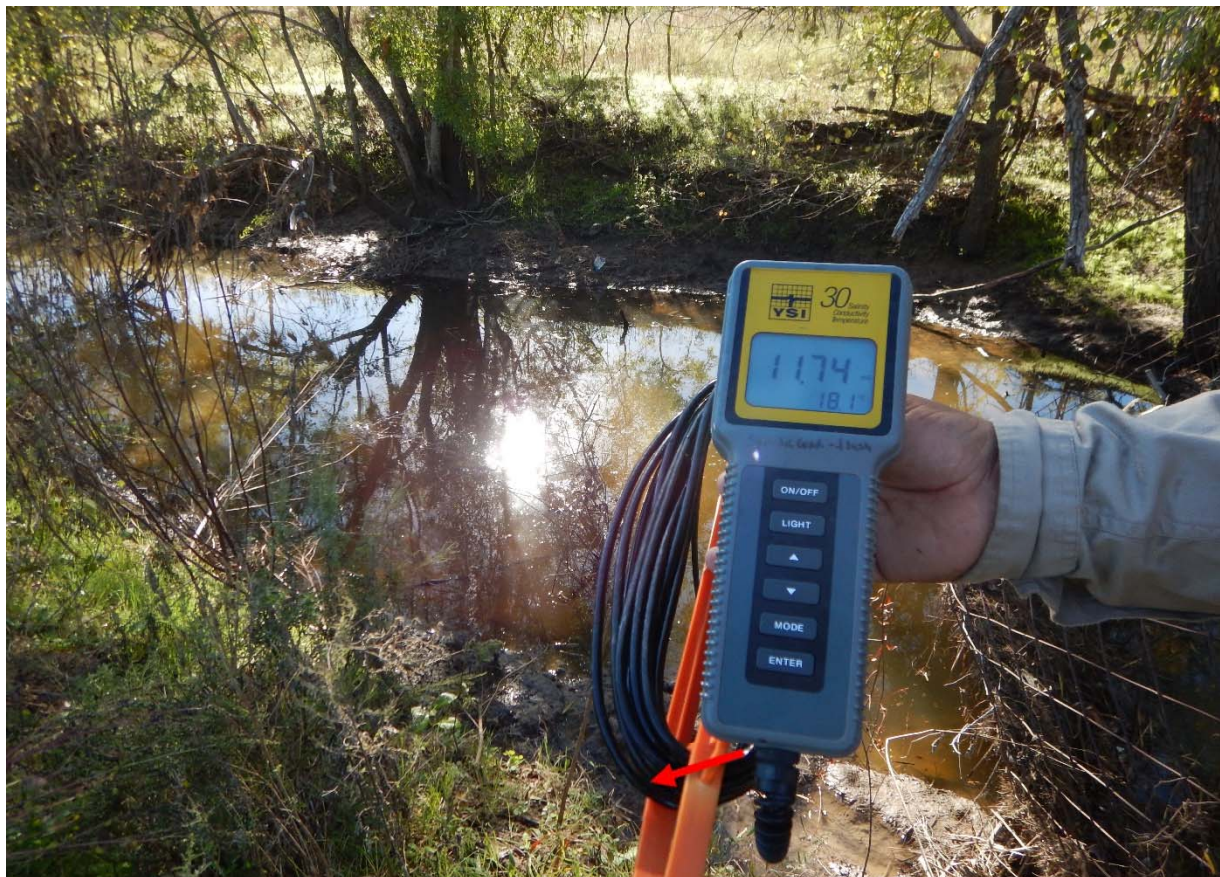


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0421.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687261 N

Longitude: -97.642986 W

Orientation: SE

Map Datum: WGS-84

Time of Photo: 9:39 am

Photographer: Jack Arias

Description: This image shows the calibrated YSI 30 Salinity Conductivity Meter and the Total Soluble Salts (TSS) reading of 11,740 parts-per-million (ppm) obtained at salt branch Creek. This is the Point of Entry (POE) to Salt Branch Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0420.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687448 N

Longitude: -97.642544 W

Orientation: SE

Map Datum: WGS-84

Time of Photo: 9:29 am

Photographer: Jack Arias

Description: This image shows Salt Branch Creek with defined bed and bank and evidence of plants growing along the tributary, evidence of sediments, debris, and plants growing along the creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: 0.182 Miles East of Highway 183		
City: Luling, TX	County/Parish: Caldwell	State: Texas



Photograph File Name: DSCN0419.JPG

Date of Photograph: 11/19/2015

Latitude: 29.687496 N

Longitude: -97.642431 W

Orientation: SW

Map Datum: WGS-84

Time of Photo: 9:27 am

Photographer: Jack Arias

Description: This image shows a second TSS reading of 5,900 ppm, approximately 630 feet from the tank, obtained downstream from Salt Branch Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: 0.182 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 the creek with 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 35 feet wide by 4 feet deep.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: 0.182 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, at approximately 1.030 feet downstream from the first POE, a third TSS reading of 1,300 ppm.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: 0.182 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 at approximately 1.26 miles downstream from the first POE, a fourth TSS reading of 900 ppm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: 0.182 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, at approximately 2.556 miles downstream from the first POE, a fifth TSS reading of 700 ppm.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: 0.182 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 at approximately 0.49 miles upstream from the first POE, a TSS reading of 200 ppm. This is a background measurement upstream of Salt Branch Creek.