

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	11/06/2019	
Media Program:	Water, Clean Water Act, National Pollution Discharge Elimination System	
Regulatory Program(s)	Oil and Gas, Produced Water	
Company Name:	Jamie Oil, Inc.	
Facility Name:	Ezzell Lease	
Facility Physical Location:	33.233913N, -92.595822W	
(city, state, zip code)	El Dorado, Arkansas 71730	
Mailing address:	117 Foxwood	
(city, state, zip code)	Hot Springs, Arkansas 71913	
County/Parish:	Union	
Facility Phone Number	870-814-5299	Main Office
Facility Contact:	Main Office	N/A
	N/A	
FRS Number:	N/A	
Identification/Permit Number:	ARU001167	
Media Identifier Number:	N/A	
NAICS:	211111	
SIC:	1311	
Personnel participating in inspection:		
Kent W. Sanborn	U.S. EPA, Region 6, ECDWE	918-557-1615
EPA Lead Inspector Signature/Date		
	Kent W. Sanborn	Date
Supervisor Signature/Date		25 NOV 2019
	Guy Tidmore	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn arrived at the Jamie Oil, Inc. Ezzell Lease located Northeast of El Dorado, Arkansas at about 4:00 PM on November 6, 2019 for an unannounced inspection. There were no company representatives at the site. The inspection was conducted to determine the facility's compliance with the Clean Water Act (CWA). The scope of the inspection was to determine if the facility was in compliance with the CWA, and to identify and document unauthorized discharges of produced wastewater (brine) to a water of the United States. The inspection was a follow-up to previous inspections that documented unauthorized discharges of produced water at the facility.

FACILITY DESCRIPTION

The discharge of produced water originated from the tank battery at the facility located on the Ezzell Lease, where brine was stored. The discharge of produced water had reached Salt Creek and the marsh adjacent to Salt Creek, which I observed during the inspection. I did not observe evidence of any remedial activity during the inspection. I observed that the discharge had recently occurred and could be several months old.

Section II - OBSERVATIONS

I initially arrived at the Jamie Oil, Inc., Ezzell Lease. Photo 1 identified the facility as the Ezzell B-2 Lease. I observed a release of produced water during the inspection, which was not reported to EPA. Photos 2 and 3 identified the source of the produced water, or brine, and oil as the brine facility. Photo 3 showed that the secondary containment pit had recently been drained. I observed that the pit was drained down the hill to the nearby Salt Creek through a pipe and valve (Photos 4 and 5). With a calibrated YSI Pro 30 conductivity meter, I took a Total Dissolved Solids (TDS) reading at the pipe, or point of discharge, and the reading was 46,368 milligrams per liter (mg/L) (Photo 6). I observed that oil staining was also present. Photos 7, 8, and 9 depicted the flow path of the produced water discharge towards Salt Creek and the adjacent marsh. I observed brine pooled up in many locations along the flow path route. I took TDS readings along the flow path and at the location shown in Photo 9, the TDS was 12,631 mg/L (Photo 10). The discharge path was shown again in Photo 11. I observed that the operator had another leak in this area from a flow line in the past (Photo 12), which also contributed to the elevated levels of TDS and flow path into Salt Creek and the marsh. I observed that the TDS at the location of Photo 11 was 8,010 mg/L (Photo 13). I observed that the produced water discharge entered Salt Creek as shown in Photos 14 and 15. I measured the TDS at the entry point to Salt Creek and the marsh and it read 15,041 mg/L (Photo 16). I observed that the marsh (Photo 17) was farther south of the discharge point of entry into Salt Creek. I took a TDS reading at the marsh and it measured to be 4,739 mg/L (Photo 18). I observed that there was a minor current at that point through the vegetation, including reeds, of the marsh. Photos 19 and 20 were observation points upstream in Salt Creek and the marsh. I measured TDS at these upstream points, and it measured 568 mg/L and 33.5 mg/L respectively. The lighting conditions at that time of the

inspection prevented photos of the measurements taken by the meter I took during the inspection at these upstream locations.

Section III – AREAS OF CONCERN

The discharge of produced water from the tank battery area and the flow line were observed. The pollutants reached Salt Creek and the adjacent marsh. Surface damage along the flow path and damage to vegetation at Salt Creek was observed.

Section IV – FOLLOW UP

A follow up inspection will be conducted as needed. This facility will be referred to EPA water enforcement.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 20 photos taken 11/6/2019.

Appendix 1

Photographic Log (20 photos)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 1 (DSC_0057)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 14:48 pm

Latitude: 33.234048N

Longitude: -92.595747W

Photographer: K.W. Sanborn

Description: The source of the discharge was the tank battery, or facility, associated with this lease.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 2 (DSC_0031)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:32 pm

Latitude: 33.233903N

Longitude: -92.595747W

Photographer: K.W. Sanborn

Description: An overview of the tank battery, or brine facility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 3 (DSC_0032)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:32 pm

Latitude: 33.233890N

Longitude: -92.595666W

Photographer: K.W. Sanborn

Description: A close-up of the brine facility, which the secondary containment pit had recently been drained.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 4 (DSC_0033)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:32 pm

Latitude: 33.233870N

Longitude: -92.595568W

Photographer: K.W. Sanborn

Description: This was the observed drain pipe recently used to empty the secondary containment at the brine facility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 5 (DSC_0055)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:46 pm

Latitude: 33.233870N

Longitude: -92.595568W

Photographer: K.W. Sanborn

Description: A close-up of drain pipe used to empty the secondary containment. I observed the valve/plug was leaking.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 6 (DSC_0054)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:46 pm

Latitude: 33.233870N

Longitude: -92.595568W

Photographer: K.W. Sanborn

Description: With a calibrated YSI Pro 30 Conductivity meter, I took a Total Dissolved Solids (TDS) reading at the drain valve, or point of discharge, which was measured 46,368 milligrams per liter (mg/L).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 7 (DSC_0034)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:33 pm

Latitude: 33.233870N

Longitude: -92.595568W

Photographer: K.W. Sanborn

Description: The flow of the discharge path was observed from the drain valve towards Salt Creek and the associated marsh.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 8 (DSC_0035)

Orientation: Southeast

Date of Photo: 11/6/2019

Time of Photo: 4:33 pm

Latitude: 33.233882N

Longitude: -92.595382W

Photographer: K.W. Sanborn

Description: The flow path of the discharge was observed here and then it flowed down the hill to Salt Creek and the adjacent marsh. I observed oil staining and pools of brine at this location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 9 (DSC_0036)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:33 pm

Latitude: 33.233882N

Longitude: -92.595382W

Photographer: K.W. Sanborn

Description: A pool of brine along the flow path was seen before the discharge descended the steep hill to Salt Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 10 (DSC_0037)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:33 pm

Latitude: 33.233882N

Longitude: -92.595382W

Photographer: K.W. Sanborn

Description: The TDS at the point shown in Photo 9 was measured 12,631 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 11 (DSC_0040)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:34 pm

Latitude: 33.233823N

Longitude: -92.595319W

Photographer: K.W. Sanborn

Description: This was the discharge flow path down the steep hill to Salt creek and the adjacent marsh.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 12 (DSC_0039)

Orientation: East

Date of Photo: 11/6/2019

Time of Photo: 4:34 pm

Latitude: 33.233823N

Longitude: -92.595319W

Photographer: K.W. Sanborn

Description: I discovered a recently repaired flow line that had leaked down the same hill to Salt Creek. It was located about ¼ of the way down the same hill and would have entered the same drainage flow path.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 13 (DSC_0041)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:37 pm

Latitude: 33.233823N

Longitude: -92.595319W

Photographer: K.W. Sanborn

Description: I took a TDS reading about half way down the hill along the flow path and it was measured 8,010 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 14 (DSC_0044)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:37 pm

Latitude: 33.233353N

Longitude: -92.595130W

Photographer: K.W. Sanborn

Description: The discharge entered the Salt Creek and the marsh here. I observed oil staining here as well.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 15 (DSC_0047)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:38 pm

Latitude: 33.233253N

Longitude: -92.595091W

Photographer: K.W. Sanborn

Description: Here was a close-up of the brine discharge that entered Salt Creek and the marsh.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 16 (DSC_0049)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:39 pm

Latitude: 33.233253N

Longitude: -92.595091W

Photographer: K.W. Sanborn

Description: The TDS of Salt Creek and the marsh at point of entry was measured 15,041 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 17 (DSC_0048)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:39 pm

Latitude: 33.233129N

Longitude: -92.594951W

Photographer: K.W. Sanborn

Description: This was the marsh slightly south (deeper and closer to Salt Creek) of the discharge entry point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 18 (DSC_0046)

Orientation: South

Date of Photo: 11//6/2019

Time of Photo: 4:38 pm

Latitude: 33.233129N

Longitude: -92.594951W

Photographer: K.W. Sanborn

Description: The TDS of the marsh farther south of the main entry point of the discharge was measured 4,739 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 19 (DSC_0051)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:42 pm

Latitude: 33.232999N

Longitude: -92.595206W

Photographer: K.W. Sanborn

Description: The TDS of Salt Creek upstream of the discharge entry point was measured 568 mg/L. Darkness (lighting) prevented a photo of the marsh and Salt Creek during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

33.233913N, -92.595822W		
City: El Dorado	County: Union	State: Arkansas



Photo File Name: Photo 20 (DSC_0052)

Orientation: South

Date of Photo: 11/6/2019

Time of Photo: 4:43 pm

Latitude: 33.232849N

Longitude: -92.595201W

Photographer: K.W. Sanborn

Description: The TDS of Salt Creek farther upstream of the location measured in Photo 19 was taken and the TDS measured here was 33.5 mg/L.