

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	02/15/2022	
Media Program:	Water	
Regulatory Program(s)	Clean Water Act – National Pollution Discharge Elimination System (Brine)	
Company Name:	Calgary Energy, LLC	
Facility Name:	Tidal Osage Lease	
Facility Physical Location:	Latitude: 36.5425877, Longitude: -96.4004179	
(city, state, zip code)	Wynona, Oklahoma	
Mailing address:	4444 E. 146 th St. N.	
(city, state, zip code)	Skiatook, Oklahoma 74070	
County/Parish:	Osage County	
Facility Phone Number	918-798-4510	
Facility Contact:	Blaine Haag	Co-Owner
	bhaag.calgaryenergyllc@gmail.com	
FRS Number:	n/a	
Identification/Permit Number:	OKU000893	
Media Identifier Number:	n/a	
NAICS:	211111	
SIC:	1311	
Personnel participating in inspection:		
Jeanne Eckhart	EPA, Region 6ECDW	Inspector
Matthew Allen	EPA, Region 6ECDW	Inspector
Carl Wills	EPA, Region 6ECDW	Inspector
EPA Lead Inspector Signature/Date		
	Jeanne Eckhart	Date
Supervisor Signature/Date		
	Matthew Rudolph (<i>acting</i>)	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Jeanne Eckhart, Matthew Allen, and Carl Wills arrived at the Calgary Energy, LLC, Tidal Osage I Lease (EPA ID No. OKU000893) at approximately 10:15 AM on 02/15/2022 for an unannounced inspection. There were no representatives of Calgary Energy, LLC present for the inspection. There were several other representatives present during the inspection, including landowners and Bureau of Indian Affairs – Osage Agency representative. The inspection was conducted by the authority of the Clean Water Act and Safe Drinking Water Act to determine compliance with Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

EPA conducted an inspection at a temporary flowline junction over a tributary of Little Hominy Creek on the Tidal Osage I Lease, in response to a citizen complaint (landowner). This temporary flowline of injection fluids was installed approximately November 2021 on the lease.

Section II - OBSERVATIONS

On-site, Carl Wills successfully calibrated the YSI Pro 30 meter, which was used to take several Total Dissolved Solids (TDS) field readings during the inspection. I observed elevated levels of TDS in the tributary to Little Hominy Creek. The tributary had defined banks and approximately 50 yards from the installed junction of the temporary flowline the tributary flowed into Little Hominy Creek. I observed elevated levels of TDS in Little Hominy Creek directly downstream from the confluence of the tributary with Little Hominy Creek.

Section III – AREAS OF CONCERN

EPA Region 6 inspectors observed elevated levels of TDS in the tributary to Little Hominy Creek and Little Hominy Creek, as seen in the Appendix 1 Photograph Log.

Section IV – FOLLOW UP

EPA is conducting a follow up conference call with the facility about this inspection that is planned for March 25, 2022.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 18 photos taken 2/15/2022

Appendix 1

Photograph Log

18 Photos



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0525.JPG

Orientation: West and looking down

Date of Photo: 2/15/2022

Time of Photo: 10:57 am

Latitude: 36.5425877N

Longitude: -96.4004179W

Photographer: Jeanne Eckhart

Description: This is a "top view" of the temporary flowline associated with the Tidal Osage I lease, which flows to injection well no. 8-7 (EPA Inventory ID No. OS6522000). Salt crystallization occurred on the flowline in this location, indicating a slow leak, or drip, occurring over time. The leak was dripping directly into a ditch that the temporary line was located above.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0503.JPG

Orientation: Northeast

Date of Photo: 2/15/2022

Time of Photo: 10:35 am

Latitude: 36.5425877N

Longitude: -96.4004179W

Photographer: Jeanne Eckhart

Description: This is a temporary flowline associated with the Tidal Osage I lease and flows to injection well no. 8-7 (EPA Inventory ID No. OS6522000). Salt crystallization occurred on the flowline in this location, indicating a slow leak, or drip, occurring over time. The leak was dripping directly into a ditch that was in a side tributary of Little Hominy Creek. Two blue arrows have been inserted in this photo to show the salt stalactites and their locations where the leak was occurring on the flowline.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0505.JPG

Orientation: Northeast

Date of Photo: 2/15/2022

Time of Photo: 10:36 am

Latitude: 36.5425877N

Longitude: -96.4004179W

Photographer: Jeanne Eckhart

Description: This is a temporary flowline associated with the Tidal Osage I lease and flows to injection well no. 8-7 (EPA Inventory ID No. OS6522000). Salt crystallization occurred on the flowline in this location, indicating a slow leak, or drip, occurring over time. The leak was dripping directly into a ditch that was in a side tributary of Little Hominy Creek. The tributary was had puddles of water that were observed and appeared not to be flowing during the time of the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0506.JPG

Orientation: East

Date of Photo: 2/15/2022

Time of Photo: 10:37 am

Latitude: 36.5425877N

Longitude: -96.4004179W

Photographer: Jeanne Eckhart

Description: This is a temporary flowline associated with the Tidal Osage I lease and flows to injection well no. 8-7 (EPA Inventory ID No. OS6522000). Salt crystallization occurred on the flowline in this location, indicating a slow leak, or drip, occurring over time. The leak was dripping directly into a ditch that was in a side tributary of Little Hominy Creek. The tributary was had puddles of water that were observed and appeared not to be flowing during the time of the inspection. This photo shows an upstream view of the road culvert or ditch underneath the road where water in the tributary flows west towards Little Hominy Creek and water was seen in this part of the tributary during the inspection. Two blue arrows have been inserted in this photo to show the salt stalactites and their locations where the leak was occurring on the flowline.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0507.JPG

Orientation: East

Date of Photo: 2/15/2022

Time of Photo: 10:38 am

Latitude: 36.5425877N

Longitude: -96.4004179W

Photographer: Jeanne Eckhart

Description: This photo shows a downstream view of the tributary that flows west to Little Hominy Creek. During the inspection, the tributary had puddles of water that were observed and appeared not to be flowing during the time of the inspection. Conditions indicated water was flowing through this tributary were observed in the ravine of the tributary during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0509.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:42 am

Latitude: 36.543000N

Longitude: -96.400000W

Photographer: Jeanne Eckhart

Description: This photo shows a downstream view of the tributary that flows west to Little Hominy Creek. During the inspection, the tributary had puddles of water that were observed and appeared not to be flowing during the time of the inspection. Conditions indicated water was flowing through this tributary were observed in the ravine of the tributary during the inspection. At this location, I was able to take a YSI Pro 30-meter reading.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0508.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:42 am

Latitude: 36.543000N

Longitude: -96.400000W

Photographer: Jeanne Eckhart

Description: This photo shows a picture of the meter reading at the downstream point in the tributary that flows west to Little Hominy Creek. This is the same location as Photo No. 6. During the inspection, the calibrated YSI Pro 30 conductivity meter measured 2,879 milligrams per liter (mg/L) Total Dissolved Solids (TDS) during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0512.JPG

Orientation: Southwest

Date of Photo: 2/15/2022

Time of Photo: 10:50 am

Latitude: 36.542494N

Longitude: -96.400508W

Photographer: Jeanne Eckhart

Description: This photo shows a downstream view of Little Hominy Creek during the inspection, at the point of entry where the tributary flows into Little Hominy Creek. Conditions indicated ongoing flow in this location of Little Hominy Creek were present, including flowing water, debris high water mark lines and tall bed/bank along the flowing creek during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0510.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:47 am

Latitude: 36.542494N

Longitude: -96.400508W

Photographer: Jeanne Eckhart

Description: This photo shows a picture of the meter reading at the downstream point in Little Hominy Creek after the confluence of the tributary with Little Hominy Creek that flows. This is the same location as Photo No. 8. During the inspection, the calibrated YSI Pro 30 conductivity meter measured 2,238 mg/L TDS during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0513.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:50 am

Latitude: 36.542611N

Longitude: -96.400619W

Photographer: Jeanne Eckhart

Description: This photo shows a cross section view of Little Hominy Creek, approximately 20 feet upstream from the location where Photo No. 8 was taken. Conditions indicated ongoing flow in this location of Little Hominy Creek were present, including debris high water mark lines and tall bed/bank along the flowing creek during the inspection. The creek at this point was approximately 25 feet across in width.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0514.JPG

Orientation: Northwest

Date of Photo: 2/15/2022

Time of Photo: 10:50 am

Latitude: 36.542611N

Longitude: -96.400619W

Photographer: Jeanne Eckhart

Description: This photo shows an upstream view of Little Hominy Creek, approximately 20 feet upstream from the location where Photo No. 7 was taken. Conditions indicated ongoing flow in this location of Little Hominy Creek were present, including debris high water mark lines and tall bed/bank along the flowing creek during the inspection. Debris dammed upstream was observed, blocking some flow downstream in Little Hominy Creek. The creek was flowing during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0515.JPG

Orientation: Southwest

Date of Photo: 2/15/2022

Time of Photo: 10:51 am

Latitude: 36.542519N

Longitude: -96.400519W

Photographer: Jeanne Eckhart

Description: This photo shows a downstream view of Little Hominy Creek, approximately 20 feet upstream from the location where Photo No. 7 was taken, which is above the confluence of the tributary where contamination was observed from the temporary flowline and Little Hominy Creek. Conditions indicated ongoing flow in this location of Little Hominy Creek were present, including debris high water mark lines and tall bed/bank along the flowing creek during the inspection. The confluence of the tributary and Little Hominy Creek is observed in this image, shown by the blue arrow that has been inserted. There was flow from the tributary into Little Hominy Creek during the time of the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0516.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:51 am

Latitude: 36.542519N

Longitude: -96.400519W

Photographer: Jeanne Eckhart

Description: This photo shows an additional view of the confluence of the tributary and Little Hominy Creek, described in Photo No. 12. The location where the image was taken was an overlook from above the creek confluence. A blue arrow has been inserted in the picture to indicate where the confluence was observed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0517.JPG

Orientation: East

Date of Photo: 2/15/2022

Time of Photo: 10:52 am

Latitude: 36.542519N

Longitude: -96.400519W

Photographer: Jeanne Eckhart

Description: This photo shows an upstream view of the tributary of Little Hominy Creek directly upstream from the confluence of the tributary with Little Hominy Creek shown in Photo No. 13. The location where the image was taken was an overlook from above the creek confluence. Two blue arrows have been inserted in the picture to indicate where the tributary was in the image through the vegetation observed. Some pooling of water was visible in this image during the time of the inspection and can be seen pointed to with the bottom blue arrow.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0518.JPG

Orientation: East

Date of Photo: 2/15/2022

Time of Photo: 10:52 am

Latitude: 36.542647N

Longitude: -96.400442W

Photographer: Jeanne Eckhart

Description: This photo shows an upstream view of the tributary of Little Hominy Creek approximately 50 feet upstream from the discharge location shown in Photo Nos. 1-4 of this Photo Log. The location where the image was taken was an overlook from above the tributary. The bed of the tributary was observed here, as well as the man-made ditch under a county road. The flowline junction that was leaking with a drip is seen suspended over the ditch within the tributary. Large rocks and eroded bank walls were observed during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0522.JPG

Orientation: Northwest

Date of Photo: 2/15/2022

Time of Photo: 10:55 am

Latitude: 36.542700N

Longitude: -96.400064W

Photographer: Jeanne Eckhart

Description: This photo shows an upstream view of the man-made ditch, or culvert that connects the tributary underneath a county road. This location is the east side of the county road. The discharge location shown in Photo Nos. 1-4 is on the west side of this county road (downstream from Photo No. 16). This tributary flows west from this location to Little Hominy Creek. The flowline was suspended through the ditch with a small tree laying on top of the flowline.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0523.JPG

Orientation: West

Date of Photo: 2/15/2022

Time of Photo: 10:56 am

Latitude: 36.542700N

Longitude: -96.400064W

Photographer: Jeanne Eckhart

Description: This photo shows an additional view of the upstream location along the tributary of Little Hominy Creek. This upstream view of the tributary connects the flow from the tributary through a man-made ditch underneath a county road towards Little Hominy Creek. This tributary flows west from this location to Little Hominy Creek. The flowline was suspended through the ditch, which is identified by the blue arrow added to this picture.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: 36.5425877, -96.4004179		
City: Wynona	County/Parish: Osage	State: Oklahoma



Photo File Name: DSCN0520.JPG

Orientation: East

Date of Photo: 2/15/2022

Time of Photo: 10:56 am

Latitude: 36.542700N

Longitude: -96.400064W

Photographer: Jeanne Eckhart

Description: This photo shows an additional view of the upstream location along the tributary of Little Hominy Creek. This upstream view of the tributary connects the flow from the tributary through a man-made ditch underneath a county road towards Little Hominy Creek. This tributary flows west from this location to Little Hominy Creek. The flowline was suspended through the ditch. I took a field meter reading with the calibrated YSI Pro 30 conductivity meter of 555 mg/L TDS. This field meter reading is similar to uncontaminated conditions in this watershed area, also called, "background."