

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

Inspection Date(s):	August 2, 2018		
Media:	Water (CWA)		
Regulatory Program(s)	NPDES – Brine		
Company Name:	Wachtman-Schroeder		
Facility Name:	<i>Whitetail Stuart Lease</i>		
Facility Physical Location:	36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
(city, state, zip code)	Pawhuska, Oklahoma 74056		
Mailing address:	P.O. Box 1138		
(city, state, zip code)	Pawhuska, Oklahoma 74056		
County/Parish:	Osage		
Facility Contact:	Mike Wachtman		
	702-303-7954; or 918-287-3122		
FRS Number:	N/A		
Identification/Permit Number:	OKU000872		
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			
	Kent W. Sanborn		Date
Supervisor Signature/Date			9/04/2018
	Guy Tidmore		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn arrived at the Wachtman-Schroeder, Inc. / Whitetail Stuart lease on a property near Pawhuska, Oklahoma at about 2:00 pm on August 2, 2018 for an inspection. The inspection was initiated by a reported discharge of fluids, specifically produced water or brine, into a nearby tributary of Elm Creek by Bureau of Indian Affairs (BIA) representative, Joe Nave. There were no company representatives at the site. 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.

FACILITY DESCRIPTION

The facility was known as the Whitetail Stuart Lease. The origination point of discharge was from a single fiberglass brine tank and associated secondary containment area. The brine appeared to have overflowed the secondary containment area, or pit, and down the hill to the tributary of Elm Creek.

Section II – OBSERVATIONS

I initially arrived at the Wachtman-Schroeder, Inc. / Whitetail Stuart lease at about 2 pm on August 2, 2018. Joe Nave of the Bureau of Indian Affairs reported that a tank and pit had flowed over to a nearby tributary of Elm Creek. I observed that, based on the amount and extent of the dead vegetation, prior discharges had occurred at this site. There were no cleanup activities during the inspection. Photo 1 is the identification sign located at the brine facility, which was the source of the discharge of fluids, including brine. Photo 2 is where the storage tank was located at the site that holds brine prior to injection into the disposal well (Photo 3). The pit shown in Photo 4 overflowed with brine, in what appeared to be a recurring discharge towards the tributary of Elm Creek. I observed that it was evident that discharge and damage has occurred in the past towards the tributary of Elm Creek (Photos 4-6). This flow path area was dry during the inspection. Photo 7 taken from the creek entry point showed the extent of damage from the brine and the flow path or brine to the tributary of Elm Creek. The brine entered the tributary at Photos 8 and 9. I smelled brine and observed some oil staining present at the point of entry location. A Total Dissolved Solids (TDS) reading of 49,810mg/l, taken with a calibrated YSI Pro 30 Conductivity meter, was measured at the point of entry (Photo 10). Photo 11 shows the tributary of Elm Creek downstream several yards from the point of entry of brine into the tributary. I observed salt staining and minor oil staining at this downstream location. The tributary was observed further downstream, south of the entry point (Photo 12). The TDS at the location in Photo 12 was 19,638 mg/L (Photo 13). Farther south, downstream in the tributary of Elm Creek (Photo 14) the TDS was measured at 14,150 mg/L (Photo 15). Photos 16 and 17 were taken of the tributary near the location of Photo 14. I observed salt staining with minor oil staining at this location in the tributary. The last and farthest point south of the discharge entry point is shown in Photo 18. The TDS at the last point was 1,515 mg/L (Photo 19). Photo 20 shows the tributary of Elm Creek upstream of the point of entry of brine to the

tributary. I observed it was dry with green vegetation. A background TDS reading was not taken because the tributary was dry upstream during the inspection.

Section III – AREAS OF CONCERN

The observed elevated levels of TDS in the tributary of Elm Creek during the inspection were of concern. The continued and evident historic discharge(s) of fluids, including brine, from the facility towards the tributary of Elm Creek had killed vegetation and caused surface damage along the flow path. The secondary containment area was not containing fluids and fluids were leaving the facility and reaching the tributary of Elm Creek. There were no remedial activities during the inspection, despite efforts to contact the operator from both the EPA and the BIA to identify the concerns observed on site. There was some oil staining and salt staining observed along the flow path and in the tributary. The source of the discharge had not been adequately addressed to prevent future discharge of fluids.

Section IV – FOLLOW UP

A follow up inspection will be conducted as needed.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 20 photos taken August 2, 2018

Appendix 1

Photographic Log (20 photos)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 1 (DSC_0028)

Orientation: South

Date of Photo: 08/01/2018

Time of Photo: 3:23 pm

Latitude: 36.785116N

Longitude: -96.268005W

Photographer: K.W. Sanborn

Description: This is the sign of the facility where the discharge originated.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 2 (DSC_0002)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 3:23 pm

Latitude: 36.785116N

Longitude: -96.268005W

Photographer: K.W. Sanborn

Description: The fluids, including brine overflowed from this tank into the secondary containment, or pit before discharging. The fluids flowed from the discharge point to the tributary of Elm Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 3 (DSC_0034)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 3:23 pm

Latitude: 36.785116N

Longitude: -96.268005W

Photographer: K.W. Sanborn

Description: The injection well was located a few feet west of the tank. I observed that the injection well appeared to be operating on a vacuum.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 4 (DSC_0029)

Orientation: East

Date of Photo: 08/02/2018

Time of Photo: 3:23 pm

Latitude: 36.785116N

Longitude: -96.268005W

Photographer: K.W. Sanborn

Description: I observed a large pit at the site that was a part of the source of the fluids discharged from the facility. The tributary of Elm Creek was located along the tree line east of the pit seen in this photo.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 5 (DSC_0031)

Orientation: East

Date of Photo: 08/02/2018

Time of Photo: 3:23 pm

Latitude: 36.785155N

Longitude: -96.267965W

Photographer: K.W. Sanborn

Description: I observed surface damage to the north and south sides of the pit and flow path. There was dead vegetation along the flow path and previous brine spill had killed the vegetation towards Elm Creek. This photo shows the north side of the flow path.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 6 (DSC_0030)

Orientation: Southeast

Date of Photo: 08/02/2018

Time of Photo: 3:23 pm

Latitude: 36.785057N

Longitude: -96.267999W

Photographer: K.W. Sanborn

Description: The current discharge of fluids occurred on the south side of the facility from the secondary containment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 7 (DSC_0027)

Orientation: West

Date of Photo: 08/02/2018

Time of Photo: 3:03 pm

Latitude: 36.784862N

Longitude: -96.267364W

Photographer: K.W. Sanborn

Description: This is a view of the brine discharge and flow path from the pit and tank area to the tributary of Elm Creek. The flow path went south from the facility towards the tributary of Elm Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 8 (DSC_0002)

Orientation: East

Date of Photo: 08/02/2018

Time of Photo: 2:36 pm

Latitude: 36.784862N

Longitude: -96.267364W

Photographer: K.W. Sanborn

Description: The point of entry to the tributary of Elm Creek was shown here. The flow path had no vegetation along it and there were visible salt crystals in the area as well.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 9 (DSC_0003)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:37 pm

Latitude: 36.784862N

Longitude: -96.267364W

Photographer: K.W. Sanborn

Description: This is the entry point to the tributary of Elm Creek. I observed pools of brine and some oil in the tributary and I smelled brine fluids as well. There was bed and bank at this location in the tributary of Elm Creek.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 10 (DSC_0004)

Orientation: East

Date of Photo: 08/02/2018

Time of Photo: 2:37 pm

Latitude: 36.784862N

Longitude: -96.267364W

Photographer: K.W. Sanborn

Description: With a calibrated YSI Pro 30 conductivity meter, a Total Dissolved Solids (TDS) reading of the tributary of Elm Creek was taken the point of entry and was 49,810 milligrams per liter (mg/L).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 11 (DSC_0006)

Orientation: Southeast

Date of Photo: 08/02/2018

Time of Photo: 2:38 pm

Latitude: 36.784862N

Longitude: -96.267364W

Photographer: K.W. Sanborn

Description: This photo shows the tributary of Elm Creek, downstream and near the point of entry depicted in Photos 9. I observed brine fluids in the tributary and some oil staining along the banks of the tributary during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 12 (DSC_0009)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:39 pm

Latitude: 36.784533N

Longitude: -96.267293W

Photographer: K.W. Sanborn

Description: Further south along the tributary of Elm Creek, from the discharge entry point, I observed some oil staining. The tributary had a slight flow south in it during the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 13 (DSC_0008)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:39 pm

Latitude: 36.784533N

Longitude: -96.267293W

Photographer: K.W. Sanborn

Description: A TDS reading of the tributary of Elm Creek shown in Photo 12 was 19,638 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 14 (DSC_0011)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:40 pm

Latitude: 36.782688N

Longitude: -96.267978W

Photographer: K.W. Sanborn

Description: This is the tributary of Elm Creek farther south of the point shown in Photo 12. I observed bed and bank at this location in the tributary.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma

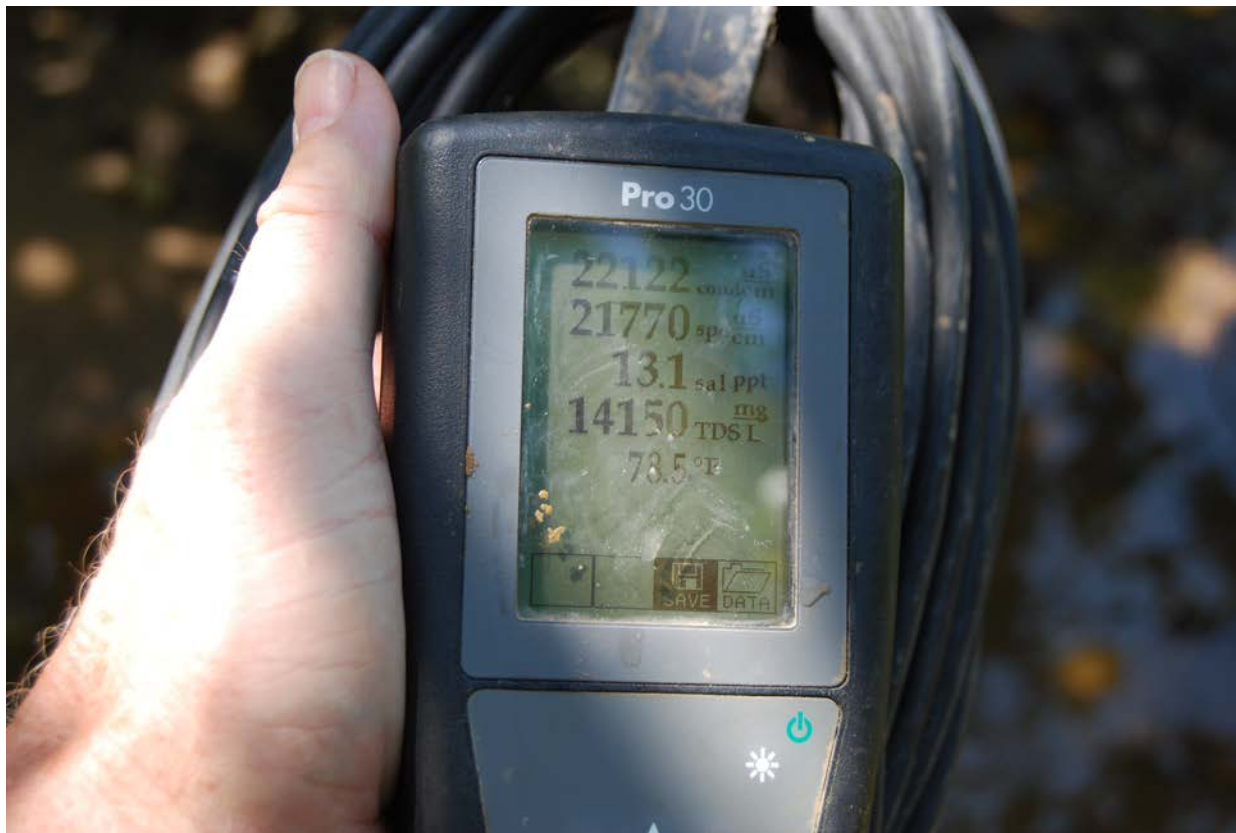


Photo File Name: Photo 15 (DSC_0012)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:40 pm

Latitude: 36.782688N

Longitude: -96.267978W

Photographer: K.W. Sanborn

Description: The TDS of the tributary shown in Photo 14 was 14,150 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 16 (DSC_0015)

Orientation: Southeast

Date of Photo: 08/02/2018

Time of Photo: 2:44 pm

Latitude: 36.782688N

Longitude: -96.267978W

Photographer: K.W. Sanborn

Description: The tributary at this location, south of Photo 14, had oil staining on the vegetation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 17 (DSC_0016)

Orientation: Southeast

Date of Photo: 08/02/2018

Time of Photo: 2:44 pm

Latitude: 36.782688N

Longitude: -96.267978W

Photographer: K.W. Sanborn

Description: I observed that salt staining was also present in the tributary of Elm Creek, as seen here in this photo.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 18 (DSC_0024)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:53 pm

Latitude: 36.7809N

Longitude: -96.2678W

Photographer: K.W. Sanborn

Description: I observed the farthest point measured south, downstream, from the discharge entry point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo file Name: Photo 19 (DSC_0023)

Orientation: South

Date of Photo: 08/02/2018

Time of Photo: 2:52 pm

Latitude: 36.7809N

Longitude: -96.2678W

Photographer: K.W. Sanborn

Description: The TDS at the location shown in Photo 18 was 1,515 mg/L.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

36.785175N, -96.268220W (Sect. 30, T 27N, R 10E)		
City: Pawhuska	County: Osage	State: Oklahoma



Photo File Name: Photo 20 (DSC_0007)

Orientation: North

Date of Photo: 08/02/2018

Time of Photo: 2:38 pm

Latitude: 36.784934N

Longitude: -96.267304W

Photographer: K.W. Sanborn

Description: This was a view upstream of the discharge entry point. I observed that the tributary of Elm Creek was dry at this location and had live vegetation.