EPA United States Environmental Protection Agency

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	09/21/2022	
Media Program:	Water	
Regulatory Program(s)	Clean Water Act – National Pollution Discharge Elimination System (Brine)	
Company Name:	Unassigned Lease	
Facility Name:	Adair E #1 Well	
Facility Physical Location:	Latitude: 36.332448, Longitude: -95.937440	
(city, state, zip code)	Skiatook, Oklahoma, 74070	
Mailing address:	n/a	
(city, state, zip code)	n/a	
County/Parish:	Tulsa County	
Facility Phone Number	n/a	
Facility Contact:	n/a	Owner/Operator
	n/a	
FRS Number:	n/a	
Identification/Permit Number:	OKU002111	
Media Identifier Number:	n/a	
NAICS:	211111	
SIC:	1311	

Personnel participating in inspection:		
Matthew Allen	EPA, Region 6 ECDW	Inspector
Ben O'Dell	OCC	Oil and Gas Inspector

EPA Lead Inspector Signature/Date	MATTHEW ALLEN Digitally signed by MATTHEW ALLEN DN: c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=MATTHEW ALLEN, 0.9.2342.19200300.100.1.1=68001004162907 Date: 2022.10.26 16:46:22 -05'00'	
	Matthew Allen	Date
Supervisor Signature/Date	JEANNE ECKHART Digitally signed by JEANNE ECKHART Date: 2022.10.27 13:37:47 -05'00'	
	Jeanne Eckhart (*acting)*	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Matthew Allen arrived at the Adair E 1 Well (EPA ID No. OKU002111), at 10:00 AM on 09/21/2022 for an unannounced inspection, in response to a citizen complaint and NRC Spill Report (NRC # 1347707). Matthew Allen was the lead inspector for the inspection. There was no company representative present at the inspection. The inspection was conducted by the authority of the Clean Water Act to determine compliance with Environmental Protection Agency (EPA) regulations. Oklahoma Corporation Commission (OCC) Oil and Gas Inspector, Ben O'Dell , was present and participated during the inspection. There was no other Federal, State or Local agency present at the time of the inspection.

FACILITY DESCRIPTION

EPA conducted an inspection beginning at the Adair E #1 Well, where water was leaking from the well and had previously impacted a nearby unnamed tributary of Bird Creek. The Adair E 1 well was in Tulsa County, southeast of Skiatook, Oklahoma. The leaking well was locating in the front yard of the residential address :12303 North Harvard Ave, Skiatook, Oklahoma.

Section II – OBSERVATIONS

I observed the Adair E # 1 well leaking brine from the casing of the well. The brine was flowing downgrade to the southeast toward an unnamed tributary of Bird Creek, see photo No. 1 in Appendix 1 (photo log) attached to this inspection report for additional description, location information and visual confirmation.

I observed the flowpath from the Adair E 1 well toward the unnamed tributary. The flowpath was void of any vegetation, evidence the leak/purge was an ongoing long-term issue. At the time of the inspection, the brine was not actively impacting the tributary across the surface of the land but additional observations during the inspection suggested the leak was likely impacting the tributary through an underground pathway. See photos No. 1, 2 and 3.

I observed the point of entry (POE) into the unnamed tributary. At the time of the inspection, there was no visible surface connection to the tributary but lack of vegetation, salt crystals and TDS field readings taken later during the inspection confirmed the tributary was being impacted by the leaking well. See photo No. 4.

I observed an elevated TDS field reading of 23,146 mg/L in a pool of water approximately 15 feet downstream from the POE. The TDS field reding was taken with a properly calibrated YSI Pro 30 conductivity meter. This was the only pool of water I encountered along a ¾ mile stretch of the tributary

I traveled during the inspection. The area had been experiencing significant drought conditions for several months and this impacted pool was the only water present in the tributary. Based on the findings at the time of the inspection, I believe the leaking well was constantly supplying water to the tributary through an underground pathway. See photos 5 and 6.

Section III – AREAS OF CONCERN

EPA inspector and enforcement staff were unable to identify a responsible party to pursue clean up and remediation efforts.

EPA Region 6 inspector observed ongoing brine impacts across the flowpath and in the main channel of the nearby unnamed tributary of Bird Creek.

Section IV – FOLLOW UP

EPA referred the case to the local OCC inspector for resolution.

OCC Inspector Ben O'Dell was able to get a previous lease operator to properly plug the well on 09/22/2022.

No follow up needed.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 6 photos taken 09/21/2022

Appendix 1

Photograph Log
6 Photos

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0811
Orientation: SE
Date of Photo: 09/21/2022
Time of Photo: 10:12 AM
Latitude: 36.332448
Longitude: -95.937440
Photographer: Matthew Allen
Description: This was the Adair E # 1 well. The well was actively leaking brine onto the land and appeared to have been doing so for a significant amount of time. The impacted area reached a nearby unnamed tributary of Bird Creek, though the brine was not actively spilling across the surface into the tributary at the time of the inspection.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0812
Orientation: n/a
Date of Photo: 09/21/2022
Time of Photo: 10:15 AM
Latitude: 36.332345
Longitude: -95.937337
Photographer: Matthew Allen
Description: This was a photo showing the brine approximately 6 feet from spilling into the unnamed tributary at the time of the inspection. The leak was likely impacting the tributary from underground, as the only pool of water in the tributary was very near to the point of entry.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0813
Orientation: N
Date of Photo: 09/21/2022
Time of Photo: 10:16 AM
Latitude: 36.332345
Longitude: -95.937337
Photographer: Matthew Allen
Description: This was a view from the north bank of the impacted tributary with a view to the north, looking toward the leaking well. The flowpath was completely devoid of vegetation, evidence that the well had been leaking/purging for a significant amount of time.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0814
Orientation: SE
Date of Photo: 09/21/2022
Time of Photo: 10:17 AM
Latitude: 36.332345
Longitude: -95.937337
Photographer: Matthew Allen
Description: This was the point of entry into the unnamed tributary of Bird Creek. The bed was moist, and there was a pool of water approximately 10 feet downstream. I walked approximately ¾ of a mile downstream and was unable to find any additional pools of water.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0815
Orientation: n/a
Date of Photo: 09/21/2022
Time of Photo: 10:19 AM
Latitude: 36.332267
Longitude: -95.937400
Photographer: Matthew Allen
Description: This was a TDS field reading of 23,146 mg/L taken in the only pool of water along the impacted tributary.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 36.332448, -95.937440		
City: Skiatook	County/Parish: Tulsa	State: Oklahoma

Photo File Name: DSCN0816
Orientation: SE
Date of Photo: 09/21/2022
Time of Photo: 10:21 AM
Latitude: 36.332267
Longitude: -95.937400
Photographer: Matthew Allen
Description: This was a photo of the pool of water where the TDS reading from photo No. 5 was taken. This was the only pool of water I encountered for ¾ of a mile along the tributary. I believe the leaking well was supplying water to the pool as the area has been experiencing significant drought conditions for several months.