

**FORM
INSP**Rev
X/15**State of Colorado
Oil and Gas Conservation Commission**1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Inspection Date:

05/04/2018

Submitted Date:

05/17/2018

Document Number:

689100140**FIELD INSPECTION FORM**Loc ID _____ Inspector Name: LUJAN, CARLOS On-Site Inspection ☐ 2A Doc Num: _____**Operator Information:**OGCC Operator Number: 10442Name of Operator: HUNTER RIDGE ENERGY SERVICES LLCAddress: 370 17TH STREET #1700City: DENVER State: CO Zip: 80202**Status Summary:**

- ☐ THIS IS A FOLLOW UP INSPECTION
- ☒ FOLLOW UP INSPECTION REQUIRED
- ☐ NO FOLLOW UP INSPECTION REQUIRED

Findings:8 Number of Comments1 Number of Corrective Actions☒ Corrective Action Response Requested**Contact Information:**

Contact Name	Phone	Email	Comment
Lujan, Carlos		carlos.lujan@state.co.us	EPS, NW Region
Spencer, Stan		stan.spencer@state.co.us	EPS, NW Region
Keil, John		John.Keil@encana.com	Director, EH&S – Western Operations
Buck, Paul		Paul.Buck@encana.com	Manager, Field Environmental, Western Operations
Fischer, Alex		alex.fischer@state.co.us	Environmental Supervisor, NW

General Comment:

Environmental Inspection conducted from May 01, through May 04, 2018. The four days on site coincided with the time Olson Engineering, a company retained by COGCC was on site to conduct a geophysical study. The objective of the project was to gain a better understanding of the geology, hydrogeology and hydrocarbon plume flowpath and evaluate the usefulness of geophysics to support the site assessment and remediation work in such a complex environment. The report to be presented by Olson will be shared with Encana. The first couple of days were cloudy and cold. Days 3 and 4 were sunny and pleasant.

COGCC staff took advantage of the time spent on site to walk the creek from the location of the springs (the ones identified in June 2016 as the source of condensate and impacted surface water that flowed down the creek) to the collection vault. In the past, several seeps had been identified downgradient (north) of the springs. No condensate or black staining had been observed downgradient of the springs, so it was considered that the LNAPL plume ended at the springs. There was a concern, nonetheless, that the LNAPL plume would or could progress and extend beyond the springs. It seems that the concern was well founded. The series of photos in the attached photo report shows condensate flowing from the hill side (east side of the creek), black staining around the seeps, and puddles of black fluid near the seeps. All impacted seeps were identified between the springs and a shale outcrop (there is a cottonwood near the outcrop). The distance from the springs to the outcrop is about 2,000 feet. The distance from the outcrop to the collection vault is about 500 feet. The newly observed impacted seeps suggest that the LNAPL plume has progressed 1,500 to 2,000 feet beyond the springs.

The field work for the geophysical study was successfully completed by May 04, 2018. The attached photo report shows Olson scientists conducting the electric resistivity tomography (ERT) and the Frequency Domain Electromagnetic (FDEM) mapping.

Environmental**Spills/Releases:**

Type of Spill: _____

Estimated Spill Volume: _____

Comment: The series of photos in the attached photo report shows condensate flowing from the hill side (east side of the creek), black staining around the seeps, and puddles of black fluid near the seeps. All impacted seeps were identified between the springs and a shale outcrop (there is a cottonwood near the outcrop). The distance from the springs to the outcrop is about 2,000 feet. The distance from the outcrop to the collection vault is about 500 feet. The newly observed impacted seeps suggest that the LNAPL plume has progressed 1,500 to 2,000 feet beyond the springs. The field work for the geophysical study was successfully completed by May 04, 2018. The attached photo report shows Olson scientists conducting the electric resistivity tomography (ERT) and the Frequency Domain Electromagnetic (FDEM) mapping.

Corrective Action: Extend the area of concern (originally from the POR to the springs), to the outcrop, 2000 ft downstream of the springs. Sample the stained soils by the seeps to confirm or discard that the LNAPL plume has progressed beyond the springs.

Date: 06/15/2018

Reportable: _____

GPS: Lat _____

Long _____

Proximity to Surface Water: _____

Depth to Ground Water: _____

Water Well Complaint:

Lat _____ Long _____

DWR Receipt Num: _____

Owner Name: _____

GPS : _____

Field Parameters:

Sample Location: _____

Comment: _____

COGCC Comments

Comment	User	Date
Periodic inspections will be conducted to follow-up on site assessment and remediation activities.	Iujanc	05/17/2018

Attached DocumentsYou can go to COGCC Images (<https://cogcc.state.co.us/weblink/>) and search by document number:

Document Num	Description	URL
401645016	INSPECTION SUBMITTED	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4467117
689100141	A27 new impacted seeps and geophysics	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4467116