



REGION 8

DENVER, CO 80202

**White Rock Oil & Gas, LLC. – Mormon Butte 5-25-2B Well Pad
Partial Compliance Evaluation (PCE)
On-Site Clean Air Act (CAA) Inspection**

Inspection Date: October 21, 2024

Inspection Report Date: December 27, 2024

US EPA Region 8 Katelyn Bergl, Clean Air Act Inspector
Representatives: Youn Joo Kim, Clean Air Act Inspector

North Dakota Division of Russel Martin, Inspector
Air Quality Representatives: Myles Erb, Inspector

Company Representatives: None

Inspection Report Prepared Katelyn Bergl
By: Youn Joo Kim

Inspection Report Reviewed Scott Patefield, Manager, Enforcement and Compliance
By: Assurance Division, Air and Toxics Enforcement Branch

Applicable Rules: North Dakota Administrative Code, Title 33.1, Article 15, as incorporated into North Dakota's EPA-approved State Implementation Plan at 40 C.F.R. Part 52, Subpart JJ – North Dakota (ND SIP), including the following chapters:

- Chapter 7, Control of Organic Compound Emissions (ND SIP Chapter 7);
- Chapter 12, Standards of Performance for New Stationary Sources (ND SIP Chapter 12); and
- Chapter 20, Control of Emissions from Oil and Gas Well Production Facilities (ND SIP Chapter 20)

40 C.F.R. Part 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015

Compliance Assistance

None

Enforcement History

White Rock Oil & Gas, LLC. (White Rock) was issued a Notice of Violation (NOV) on July 26, 2024, under Docket Number CAA-08-2024-0013.

Areas of Concern

1. North Dakota Department of Environmental Quality (NDDEQ), Division of Air Quality (DoAQ) inspectors detected hydrocarbon emissions from the storage tanks co-located with the following well:
 - Mormon Butte Fed 5-25-2B
2. The EPA detected visible emissions from an operating utility flare co-located with the following well:
 - Mormon Butte Fed 5-25-2B

See Table 1 below for more details regarding the inspected facility location and Tables 2 and 3 for inspection observation details related to storage vessels and control devices. A log of images and videos captured during the inspections is provided in Appendix A.

General Inspection Information

An unannounced well pad inspection was conducted jointly by U.S. EPA and NDDEQ – DoAQ inspectors (Inspectors) on October 21, 2024, at the well pad co-located with White Rock’s Mormon Butte Fed 5-25-2B well (Facility) located in North Dakota.

The Inspectors evaluated the Facility using audio, visual, and olfactory (AVO) inspection methods including the use of an optical gas imaging (OGI) camera and EPA Reference Method 22. Inspectors scanned the crude and/or water storage tanks, closed vent system and flares onsite for any detectable emissions. Specifically, Inspectors scanned storage tank covers and closed vent systems for hydrocarbon emissions to determine compliance with the Clean Air Act, including the North Dakota SIP and NSPS OOOO.

The Facility inspection followed the approach below:

1. Record the entry sign of the well pad when available. Survey the entire well pad with OGI camera.
2. Record the number and type of site process equipment such as well heads, tanks, and emission control devices.
3. Record AVO indications of emissions from the storage tanks, closed vent system to the control devices and control devices.
4. Using the OGI camera, survey each process in infrared modes (auto, manual, and/or high-sensitivity modes). Record any uncontrolled emissions with the OGI camera and describe the frequency and magnitude of emissions in the field notebook.
5. Observe control devices (enclosed combustor or utility flare) for visible emissions. If there is visible emissions present, conduct Method 22 and record the observations.

6. Using another OGI camera, if available, confirm any observations of uncontrolled emissions with another inspector.
7. If there are operators present onsite, share any Areas of Concern.

Table 1 lists general inspection and well pad details for the Facility. The well pad information located in Table 1 is from the North Dakota Industrial Commission (NDIC) well index located online at <https://www.dmr.nd.gov/oilgas/>.

Table 1: Inspection and Facility Details						
Date	Arrival Time	Departure Time	Well Name	API Number	Latitude	Longitude
10/21/24	14:46	14:55	Mormon Butte Fed 5-25-2B	3305301524	47.52943283	-103.1026934

Observations and Regulatory Applicability

North Dakota SIP regulations which are potentially relevant to the Areas of Concern observed during the inspections are summarized in this section. The visible emissions requirements of NSPS OOOO relevant to the Area of Concern #2 are unlikely to apply to the Facility according to drilling and production information reported to the NDIC well index by White Rock, so those requirements are not included in this report.

Tables 2 and 3 at the end of this report summarize inspection observations and findings. Table 2 summarizes storage tank observations. Table 3 includes details of control devices and related observations. See Appendix A for a log of images and videos taken during the inspections.

ND SIP Applicability

Chapter 7 Applicability [33.1-15-07]

The provisions of ND SIP Chapter 7 apply to all facilities constructed on or after July 1, 1970, which are located in the state of North Dakota and produce volatile organic compound (VOC) emissions (ND SIP Chapter 7, 33.1-15-07-01.1). The Facility was constructed in 1985, otherwise meets the applicability requirements, and is thus subject to the ND SIP Chapter 7.

Chapter 20 Applicability [33.1-15-20]

The provisions of ND SIP Chapter 20 “apply to any oil or gas well facility which emits air contaminants to the atmosphere” which are located in the state of North Dakota (ND SIP Chapter 20, 33.1-15-20-01.1). The Facility is an oil and gas well facility located in North Dakota and is thus subject to the ND SIP Chapter 20.

ND SIP Requirements relevant to Areas of Concern

ND SIP Facility-wide Emission Requirements [33.1-15-07-02.1 & 33.1-15-20-04]

Per 33.1-15-07-02.1, “No person may cause or permit the emission of organic compounds gases and vapors, except from an emergency vapor blowdown system or emergency relief system, unless these gases and vapors are burned by flares, or an equally effective control device...” The NDDEQ-DoAQ inspectors, using an OGI camera, detected organic

compound vapor emissions from production and storage tanks co-located with the Mormon Butte Fed 5-25-2B well. See Area of Concern #1 above.

Per 33.1-15-20-04.4, "Routine inspections and maintenance of tanks, hatches, compressors, vent lines, pressure relief valves, packing elements, and couplings must be conducted to minimize emissions from equipment at a production facility. Tank hatches must hold a positive working pressure or must be repaired or replaced." The NDDEQ-DoAQ inspectors, using an OGI camera, detected emissions from production and storage tanks co-located with the Mormon Butte Fed 5-25-2B well. See Area of Concern #1 above.

Table 2: Inspection Details: Storage Tank Observations				
Well Name	Number of Storage Tanks	AVO (Audio, visual, olfactory) Observations	Emission Observation Description	Media File Name
Mormon Butte Fed 5-25 2B	4		NDDEQ-DoAQ inspectors observed continuous emissions from the tanks.	None – media files were recorded by NDDEQ-DoAQ inspectors only

Table 3: Inspection Details: Control Device and AVO/OGI Observations								
Well Name	Number of Control Device(s)	Control Device Type(s)	Visible Pilot Flame (Y/N)	Active Flaring (Y/N)	Method 22 Observations	Emission Observation Description	Media File Name	Slope to K/O Drum
Mormon Butte Fed 5-25 2B	1	HP Flare	Y	Y	Yes	Continuous smoking from the flare. Method 22 was performed.	None	

APPENDIX A: Photograph and Video Log

Media File	Description	Well Pad Name
entrysign-20241021-205445.jpg	Entry Sign	Mormon Butte Fed 5-25 2B