



REGION 8

DENVER, CO 80202

Petro-Hunt L.L.C. – Various Well Pads Partial Compliance Evaluation (PCE) On-Site Clean Air Act (CAA) Inspections

Inspection Date(s): October 21-22, 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
Taylor Waanders, 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 OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (NSPS OOOOa)

Compliance Assistance

None

Enforcement History

None

Areas of Concern

1. The EPA detected visible emissions from an operating utility flare at the following well pads:
 - USA 2D-3-1H (CTB); USA 11B-2-2H (CTB); USA 153-95-11C-2-1HS (CTB) Pad
 - STATE 154-94-31C-32-1HS, 1H, 2H, 3H, 4H, 5H, 6H; USA 154-95-36D-35-2H, 3H Pad
 - USA 153-95-3B-10-1H, 2H, 3H; USA 153-95-3A-10-4H Pad

See Table 1 below for more details regarding inspected locations and Table 2 for control device inspection observation details for all pads. A log of images and videos captured during the inspections is provided in Appendix A.

General Inspection Information

Unannounced well pad inspections were conducted jointly by U.S. EPA and North Dakota Department of Environmental Quality – Division of Air Quality inspectors (Inspectors) on October 21-22, 2024, at multiple Petro-Hunt L.L.C. (Petro-Hunt) facilities located in North Dakota.

The Inspectors evaluated each well site listed in Table 1 using audio, visual, and olfactory (AVO) inspection methods including the use of an optical gas imaging (OGI) camera and EPA Reference Method 22. At each facility, 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 regulations.

Each well pad 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 each inspected well pad. 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 of Facilities Inspected						
Date	Arrival Time	Departure Time	Well Pad Name	API Number(s)	Latitude	Longitude
10/21/24	10:22	10:30	USA 146-97-29B-32-2H	3302504528 3302504529 3302504530	47.4426331	-103.071659
10/22/24	14:17	14:23	USA 153-95-23D-14-1H, 2H, 3H, 1HS	3305308095 3305308094 3305308093 3305308092	48.0511865	-102.851498
10/22/24	14:32	14:43	USA 2D-3-1H (CTB); USA 11B-2-2H (CTB); USA 153-95-11C-2-1HS (CTB)	3305309488 3305302768 3305301906 3305300911	48.086123	-102.869567
10/22/24	14:50	15:01	STATE 154-94-31C-32-1HS, 1H, 2H, 3H, 4H, 5H, 6H; USA 154-95-36D-35-2H, 3H	3305304468 3305304469 3305304470 3305304471 3305304472 3305304473 3305305600 3305308300 3305308301	48.1124968	-102.82788
10/22/24	15:04	15:08	Phelps Mineral Trust 6S-2-1H	3305302856	48.1098449	-102.827674
10/22/24	15:12	15:16	USA 153-95-1A-7-2H, 3H, 4H, 5H	3305307045 3305307044 3305307043 3305303458	48.1099006	-102.837921
10/22/24	15:23	15:29	USA 153-95-2B-11-1H; USA 153-95-2A-11-2H, 3H	3305309275 3305309274 3305309273	48.108971	-102.859633

Date	Arrival Time	Departure Time	Well Pad Name	API Number(s)	Latitude	Longitude
10/22/24	15:33	15:40	USA 3D-4-4H; USA 153-95-3D-10-5H, 6H	3305308444 3305308443 3305302945 3305309796 3305309797 3305309798 3305309799 3305309800	48.0984795	-102.872113
10/22/24	15:48	16:00	USA 153-95-3B-10-1H, 2H, 3H; USA 153-95-3A-10-4H	3305308448 3305308447 3305308446 3305308445	48.1130159	-102.885236

Observations and Regulatory Applicability

NSPS OOOOa regulations which are potentially relevant to the Areas of Concern observed during the inspections are summarized in this section. NSPS OOOOa regulations are also incorporated into the ND SIP, within ND SIP Chapter 12.

Table 2 at the end of this report summarizes details of control devices and related observations. See Appendix A for a log of images and videos taken during the inspections.

NSPS OOOOa Applicability

Based on Petro-Hunt's NSPS OOOOa annual reporting, the EPA believes that storage vessels and associated emissions control equipment at the following well pads are potentially subject to requirements for storage vessel affected facilities in NSPS OOOOa, and as incorporated by reference in ND SIP Chapter 12:

- USA 2D-3-1H (CTB); USA 11B-2-2H (CTB); USA 153-95-11C-2-1HS (CTB) Pad
- STATE 154-94-31C-32-1HS, 1H, 2H, 3H, 4H, 5H, 6H; USA 154-95-36D-35-2H, 3H Pad
- USA 153-95-3B-10-1H, 2H, 3H; USA 153-95-3A-10-4H Pad

Control Device Requirements [§ 60.5412a(d)]

Per § 60.5412a(d)(1)(iii), owners and operators must, "Operate the combustion control device with no visible emissions, except for periods not to exceed a total of 1 minute during any 15-minute period." The EPA observed black smoke continuously for more than one minute (per Method 22) at 3 of 9 inspected well pads. See Area of Concern #1 above.

Table 2: Inspection Details: Control Devices and AVO/OGI Observations						
Well Pad Name	Number of Control Device(s)	Control Device Type(s)	Visible Pilot Flame (Y/N)	Active Flaring (Y/N)	Method 22 Observations	Emission Description
USA 146-97-29B-32-2H	2	High-Low	N	N	None	
		High-Low	N	N	None	
USA 153-95-23D-14-1H, 2H, 3H, 1HS	1	High-Low	Y	Y	None	
USA 2D-3-1H (CTB); USA 11B-2-2H (CTB); USA 153-95-11C-2-1HS (CTB)	2	LP	Y	Y	Yes	Continuous smoking from the flare. Method 22 was performed.
		HP	Y	Y	Yes	Continuous smoking from the flare. Method 22 was performed.
STATE 154-94-31C-32-1HS, 1H, 2H, 3H, 4H, 5H, 6H; USA 154-95-36D-35-2H, 3H	1	HP	Y	Y	Yes	Continuous smoking from the flare. Method 22 was performed.
Phelps Mineral Trust 6S-2-1H	1	High-Low	Y	N	None	
USA 153-95-1A-7-2H, 3H, 4H, 5H	1	High-Low	Y	Y	None	
USA 153-95-2B-11-1H; USA 153-95-2A-11-2H, 3H	1	High-Low 3-prong	Y	Y	None	
USA 3D-4-4H; USA 153-95-3D-10-5H, 6H	1	High-Low	N	N	None	
USA 153-95-3B-10-1H, 2H, 3H; USA 153-95-3A-10-4H	2	High-Low	Y	Y	None	Continuous smoking from the flare. Method 22 was performed.
		LP	Y	Y	Yes	

APPENDIX A: Photograph and Video Log

Media File	Description	Well Pad Name
entrysign-20241021-162441.jpg	Entry Sign	USA 146-97-29B-32-2H
entrysign-20241022-191834.jpg	Entry Sign	USA 153-95-23D-14-1H, 2H, 3H, 1HS
entrysign-20241022-193410.jpg	Entry Sign	USA 2D-3-1H (CTB); USA 11B-2-2H (CTB); USA 153-95-11C-2-1HS (CTB)
entrysign-20241022-200009.jpg	Entry Sign	STATE 154-94-31C-32-1HS, 1H, 2H, 3H, 4H, 5H, 6H; USA 154-95-36D-35-2H, 3H
entrysign-20241022-200448.jpg	Entry Sign	Phelps Mineral Trust 6S-2-1H
entrysign-20241022-201313.jpg	Entry Sign	USA 153-95-1A-7-2H, 3H, 4H, 5H
entrysign-20241022-202438.jpg	Entry Sign	USA 153-95-2B-11-1H; USA 153-95-2A-11-2H, 3H
entrysign-20241022-203436.jpg	Entry Sign	USA 3D-4-4H; USA 153-95-3D-10-5H, 6H
entrysign-20241022-205608.jpg	Entry Sign	USA 153-95-3B-10-1H, 2H, 3H; USA 153-95-3A-10-4H