P0544
MANILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P054454909

FACILITY: WEST BAY EXPLORATION COMPANY-LIVONIA 6 CTB		**SRN / ID:** P0544
LOCATION: 39020 Seven Mile Road, LIVONIA		**DISTRICT:** Detroit
CITY: LIVONIA		**COUNTY:** WAYNE
CONTACT: Tim Baker , Vice President		**ACTIVITY DATE:** 06/11/2020
STAFF: Jill Zimmerman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : **June 11, 2020**

TIME OF INSPECTION : **2:00 pm**

NAICS CODE : **213112**

EPA POLLUTANT CLASS : **CO2, NOx**

INSPECTED BY : **Jill Zimmerman**

FACILITY PHONE NUMBER : **231-409-9149**

EMAIL ADDRESS : **Tim@Westbayexploration.com**

EJohnson@WestshoreConsulting.com

FACILITY BACKGROUND

Westbay Exploration is involved in the oil and gas industry. The facility operates two gas wells, which pulls crude oil from underground. A byproduct from the crude oil extraction is natural gas. The facility purifies the natural gas and sells it to Schoolcraft College, which is located nearby. The facility is unmanned most of the time, with a technician arriving onsite twice a day to inspect all equipment. All monitoring equipment is also able to be reviewed remotely online.

REQUIRED PPE

During the onsite inspection, steel toed shoes, hardhat, and a safety vest were worn.

COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility. No violations have been issued for this facility.

PROCESS EQUIPMENT AND CONTROLS

The facility operates two oil wells; a third well was capped in December 2018 due to a lack of production. These wells pull crude oil from underground. The crude oil is stored in one of

four above ground storage tanks. Natural gas is also pulled up from underground. The natural gas is compressed by the reciprocating engine that Westbay rents. The owner of the engine is responsible for all repairs of the engine. The natural gas is either piped to Schoolcraft College to be used as a fuel in their boilers or is stored in an aboveground storage tank.

INSPECTION NARRATIVE

I arrived in the area at 10:30 am to observe the flare. Typically, this is an unmanned site with an employee arriving daily to maintain all equipment and ensure that the equipment is operating properly. I observed that the flare was operating properly.

APPLICABLE RULES/PERMIT CONDITIONS

Westbay Exploration is currently operating under Opt-Out permit 131-14. The conditions are as follows:

EUENGINE – A natural gas fired reciprocating engine. No pollution control equipment.

I. Emission Limits:
   1. Compliance – Based on MAERS for 2019, the facility emitted 23.61 tons of NOx. Based on the records received from the company, the facility emitted 20.97 tons of NOx in the 12-month time period ending in May 2020. This value is less than the permitted limit of 51 tons per year.
   2. Compliance – Based on the amount of CO reportedly emitted in 2019 through MAERS, the facility emitted about 1.74 tons. Based on the records received from the company, the facility emitted 1.55 tons of CO in the 12-month time period ending in May 2020. This value is less than the permitted limit of 4 tons per year.

II. Material Limits – NA

III. Process / Operational Restrictions
   1. Compliance – An acceptable PM/ MAP was received on July 29, 2019.
   2. NA – There is no add-on equipment on the engine.

IV. Design / Equipment Parameters
   1. NA – There are no add-on devices on this equipment.
   2. Compliance – There was a device to monitor the natural gas usage installed on the equipment. The technician records the value as part of his daily checklist.

V. Testing / Sampling
   1. NA – No stack testing is required at this time.

VI. Monitoring / Recordkeeping
   1. Compliance – The monthly records are kept off site and available for review at any time.
   2. Compliance – The facility has installed a flowmeter to monitor the natural gas.
   3. Compliance – The facility's technician completes a daily checklist of all the equipment onsite. The facility has an app on employees' devices that can monitor or control the operating parameters at any time.

4. NA – There are no add-on devices on the equipment.
5. Compliance – The NOx emission calculations are maintained monthly and on a twelve month rolling average. The records are attached to this report.
6. Compliance – The CO emission calculations are maintained monthly and on a twelve month rolling average. The records are attached to this report.

VII. Reporting
1. NA – The engine has not been replaced since it was installed.

VIII. Stack / Vent Restrictions: Compliance – The stack was installed to the required height and diameter and has not been modified since it was installed.

IX. Other Requirements
1. Compliance – The natural gas monitoring device has been installed.
2. Compliance – The stack was installed in 2014 to the required height and diameter. No changes have been made to the stack since it was installed.

There are four green storage tanks on site. These tanks have the capacity to store either crude product or a water brine solution. Typically, three tanks hold crude and the fourth tank holds the brine solution. All four tanks are the same size, 400 barrels which converts to 16,800 gallons. These tanks are exempt from permitting by Rule 284(e) because they are all smaller than 40,000 gallons. There is a fifth tank that is used to store the light gases such as butane. This tank is 10,000 gallons and is exempt from permitted by Rule 284(b). The emissions from the tanks were completed by calculating the potential to emit based on guidelines in 40 CFR 98, Subpart W.

The four storage tanks are piped together. There is a thief hatch on each of these tanks with a pressure relief of 8 ounces. When the pressure is high enough to open the hatch, the gas from these store tanks is piped to a flare onsite. This flare is exempt from permitting by Rule 288 (2)(c). The facility only works with sweet gas.

MAERS REPORT REVIEW

The MAERS was received on March 11, 2020 on time. Usage data was attached to this report and was used to calculate the emissions for NOx and CO. These calculations appear to have been completed accurately. All other emissions were based on the MAERS emission factors.

FINAL COMPLIANCE DETERMINATION

Westbay Exploration appears to be operating in compliance with all state and federal regulations as well as all permit conditions.

NAME _____ DATE 5/13/22 SUPERVISOR JK