

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

B915163786

FACILITY: Lambda Energy Resources LLC - Grant 29		SRN / ID: B9151
LOCATION: 10466 JEWELL RD, TRAVERSE CITY		DISTRICT: Cadillac
CITY: TRAVERSE CITY		COUNTY: GRAND TRAVERSE
CONTACT:		ACTIVITY DATE: 07/15/2022
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2022 FCE.		
RESOLVED COMPLAINTS:		

I conducted an inspection of the Lambda Energy Grant 29 opt out source on July 15, 2022, to determine compliance with Permit to Install number 637-96 and the air pollution control rules. This source is located on Jewell Rd., Grant Twp. Grand Traverse County. At the time of the inspection the weather was overcast, 70⁰ with calm winds. No visible emissions were observed. There were fairly strong (Level 3) petroleum odors present that were determined to originate from the underground blow down vault vent pipe. Vapors were also visible from this pipe. I had made note of vapors and odors from this tank and vent pipe in the previous inspection. At that time, EGLE Office of Oil, Gas, and Minerals staff stated, "Observed emissions may have been from lighter hydrocarbons flashing off any liquids present or perhaps from a faulty relief valve that was leaking."

The AQD has not received any odor complaints regarding this facility, which is in a rural location with only one house nearby north of the facility. At the time of the inspection, that home did not appear to be occupied.

At the time of the inspection, the equipment on-site included:

- Nine 400 bbl ASTs with vapor recovery tanks and one blow down tank
- One V-12 Waukesha compressor engine
- One glycol dehydrator
- Four natural gas fired heaters

The tanks were equipped with vapor recovery and it did appear to be operating at the time of the inspection.

The compressor engine was operating at around 599 RPM. The engine is equipped with a catalytic converter and the inlet temperature was 857⁰ while the outlet temperature was 835⁰. Log sheets in the compressor building indicate these are normal ranges though the outlet temperature normally is slightly higher than the inlet temperature. The compressor engine is also equipped with an air to fuel ratio controller and these readings are also recorded on the log sheets.

The glycol dehydrator was also appeared to be operating at the time of the inspection as the glycol recirculation pump could be heard operating. The dehy is equipped with a condenser and there were no odors or vapors present.

Records regarding this facility were requested following the inspection (see attached) and indicate that CO, VOCs, and NOx emissions are well within the PTI limit of 99 tpy each. Records indicate the 12-mos rolling average NOx emissions are 3 tons per year and CO emissions are 4 tons per year. This is all attributed to the compressor engine. There are also limits on HAP emissions of 10 tpy for each HAP

and 25 tpy for combined HAPs. Records indicate HAP emissions from tanks and the dehy average 0.078 tons per month and 0.9 tons per 12-month rolling average. The engine also contributes 0.43 tons VOC per 12-mos rolling average.

Maintenance records were provided and indicate regular maintenance of the compressor, dehy, VRU, tanks, and heaters.

Following are the findings of this inspection by permit Special Condition:

13. The Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Oxides of Nitrogen (NOx) annual emission rates from the oil and gas production facility (OGF) individually shall not exceed 99 tons per year based on a twelve-month rolling period. As stated above, records provided by the facility indicate that CO emissions average 4 tpy, VOC emissions average 0.43 tpy, and NOx emissions average 3 tpy, all based on a 12-month rolling time period as of June 2022.

14. The annual emission rate of any individual Hazardous Air Pollutant (HAP) from the OGF shall be maintained below 10.0 tons per year based on a twelve-month rolling period, and the annual emission rate of total HAPs from the OGF shall be maintained below 25.0 tons per year based on a twelve-month rolling period. Records provided by the facility indicate total HAPs average 1 tpy based on a 12-month rolling time period as of June 2022.

15. The facility is required to perform emissions calculations monthly. Review of submitted records indicates emissions calculations for the facility have been performed in a timely and correct manner.

16. Records of the following are required to be kept. A sample of these are attached to this report:

Monthly fuel consumption, in million cubic feet (MMcf).

Monthly crude/condensate throughput to the tanks, in barrels (bbls)

Monthly hydrocarbon liquid trucked (bbls)

Glycol circulated through the dehydrator , in gallons per minute (gpm)

17. All records are required to be available to the agency upon request. As described above, when requested, records were submitted promptly.

18. MAERS reporting for this facility has been completed in a timely and correct manner. See MACES for further details.

19. A maintenance log for this facility is required to be kept and is attached to this report

20. Pursuant to Rules 604 and 605, no tanks at this facility are to have a capacity greater than 952 barrels. All tanks noted on site were smaller (400 bbl).

21. The facility is required to keep records of any bypass of engine control equipment. There are no records of bypass of the control equipment in the last 12 months.

22. This facility is not subject to 40 CFR 60 Subpart KKK, therefore this condition does not apply.

23. As of the date of this inspection, stack testing has not been requested for this facility and is not recommended at this time.

24. Only sweet gas as defined in Rule 119 is used in the process.

At the time of the inspection, this facility was in compliance with permit to install 637-96.

NAME 

DATE _____

SUPERVISOR _____