

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

B915149869

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: Vicki Kniss , Environmental Affairs Manager		ACTIVITY DATE: 08/01/2019
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2019 FCE PTI 637-96.		
RESOLVED COMPLAINTS:		

I conducted an inspection of the Lambda Energy Grant 29 opt out source to determine compliance with Permit to Install number 637-96 and the air pollution control rules. This source is located on Jewell Rd. At the time of the inspection the weather was clear, 65⁰ with light winds from the south. No visible emissions or odors were present. The equipment on-site included:

Nine 400 bbl AST's 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 623 RPM, though the engine was surging. The engine is equipped with a catalytic converter and the inlet temperature was 780⁰ while the outlet temperature was 773⁰. 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.

There was a pit on the south side of the property that contained some piping and appeared to be connected to a vertical vent pipe outside the pit that was releasing what appeared to be natural gas based on visible vapors and odors. I discussed this process with OGMD staff who provided the following information:

It is a blow down pit that receives all of the high pressure reliefs of the production equipment and the compressor when it needs to be blown down. There is an underground tank or vault that is vented through the pipe I observed. Observed emissions may have been from lighter hydrocarbons flashing off any liquids present or perhaps from a faulty relief valve that was leaking.

Following the inspection I notified Lambda of my observations.

Records regarding this facility were requested prior to the inspection (see attached) and indicate that CO, VOCs, and NOx emissions are well within the PTI limit of 99 tpy each. There are also limits on HAP emissions of 10 tpy for each HAP and 25 tpy for combined HAPs. Records indicate HAP emissions average 0.078 tons per month and 0.9 tons per 12-month rolling average.

Maintenance records are maintained and indicate regular maintenance of the compressor, dehy, VRU, tanks, and heaters. A copy of the gas analysis was provided that demonstrates the gas was non-detect for H2S.

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. Records provided by the facility indicate that CO emissions average 5.09 tpy, VOC emissions average 0.51 tpy, and NOx emissions average 3.67 tpy, all based on a 12-month rolling time period as of September 2018.
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 2.85 tpy based on a 12-month rolling time period as of September 2018.
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 their air permit.

NAME  DATE 8-12-19 SUPERVISOR 