

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

B913963779

<b>FACILITY:</b> Lambda Energy Resources LLC - Blair 36		<b>SRN / ID:</b> B9139
<b>LOCATION:</b> 550 Clous Road, KINGSLEY		<b>DISTRICT:</b> Cadillac
<b>CITY:</b> KINGSLEY		<b>COUNTY:</b> GRAND TRAVERSE
<b>CONTACT:</b> Nick Summerland , HSE Manager		<b>ACTIVITY DATE:</b> 07/15/2022
<b>STAFF:</b> Kurt Childs	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> 2022 FCE.		
<b>RESOLVED COMPLAINTS:</b>		

I conducted an inspection of the Lambda Energy Blair 36 opt out source to determine compliance with Permit to Install number 632-96B and the air pollution control rules. This source is located on Clous Rd. in Blair Twp. Grand Traverse County. At the time of the inspection the weather was overcast, 70<sup>0</sup> with calm winds. No visible emissions or odors were present. The equipment on-site included:

- Five 400 bbl AST's with vapor recovery tanks and one blow down tank
- One V-12 compressor engine (not in operation)
- One 181 hp inline 6 cyl. F1197 G Waukesha engine (Universal Compression Unit 231)
- One glycol dehydrator
- Four natural gas fired heaters

The tanks were equipped with vapor recovery. The vent stack on the blown down tank that had previously been damaged has been repaired.

The electric motor has been replaced by the new 6 cylinder Waukesha engine (181 hp). An updated Malfunction Abatement Plan was submitted in December 2021 for the addition of this exempt engine. The engine is not equipped with a catalytic converter and has a short vertical stack that exists about 12 feet above ground but below the roof of the building (see photo). The engine was running at 1068 rpms at the time of the inspection.

Records regarding this facility were requested following the inspection (see attached) and indicate that NO<sub>x</sub> emissions are well within the PTI limit of 89 TPY. The highest 12 month rolling average during the review period were 10.85 tons 10.65 of which came from the new engine. Very low emissions of CO, VOCs, SO<sub>2</sub> and PM<sub>10</sub> were also reported.

Maintenance records are up to date 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 H<sub>2</sub>S (see attached records).

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

Glycol Dehydrator - This EU is equipped with a flash tank and condenser.

1.1 This EU is required to be in compliance with all provisions of 40 CFR 60 Subpart HH. This source appears to be exempt from HH based on gas throughput less than 85,000 cubic meters per day.

**1.2 This EU is required to have a flash tank installed on it. A condenser and flash tank are in place. No vapors or odors were detected.**

**1.3 A wet gas analysis of the gas coming into the EU is required once per year. This analysis, dated 5/11/2022, is attached to this report.**

**1.4 Natural gas flow to the EU is required to be measured and reported to demonstrate it meets the exemption criteria pursuant to 40 CFR 63.764(e)(1)(i) (must be less than 85,000 cu. meters/day based on an annual average). Records indicate this is being performed and a sample of this record is attached. The records provided indicate the daily average was approximately 3500 cubic meters per day.**

**1.5 If the facility chooses to meet the exemption criteria pursuant to 40 CFR 63.764(e)(1)(ii), benzene emissions must be recorded. The facility has chosen to meet the exemption criteria pursuant to 63.764(e)(1)(I), therefore, this condition does not apply. (See item 1.8)**

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

**1.7 Records of the wet gas analysis of the gas coming into the EU are required to be kept. This analysis is maintained and has been provided.**

**1.8 If the EU meets the exemption criteria pursuant to 40 CFR 63.764(e)(1)(i) for glycol dehydrators, records of natural gas throughput are required. The EU meets the exemption and these records are attached to this report.**

**1.9 If the EU meets the exemption criteria in 40 CFR 63.764(e)(1)(i) for glycol dehydrators, records of VOC emissions are required. These records are being kept.**

**1.10 The facility is required to submit notifications and reports for this EU pursuant to the MACT. MACT notification for this EU was received on 1/27/11. No other reporting is required.**

**1.11 Stack parameters for this EU do not appear to have changed and appear correct.**

**Compressor - The compressor is a Waukesha model, V-12 with no add on control device. This engine was not in operation at the time of the inspection.**

**2.1 NOx emissions from this EU are limited to 86.3 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Records submitted by the facility indicate that this engine has not operated during the review period.**

**2.2 The natural gas usage for this EU is limited to 22 million cubic feet per 12-month rolling time period as determined at the end of each calendar month. Records submitted by the facility indicate that this engine has not operated during the review period.**

**and therefore had zero natural gas usage.**

**2.3 A PM\MAP for this EU is required and was submitted on 12/11/2007 and is on file. The most recent update of the MAP does not include this engine since it is no longer operating.**

**2.4 The facility is not allowed to bypass any control device for this EU for more than 200 hours per year. The compressor does not have an add-on control device. Therefore, this condition does not apply.**

**2.5 The facility must maintain a control device for this EU if used. The compressor does not have an add-on control device. Therefore, this condition does not apply.**

**2.6 If requested by the AQD, the facility must perform stack testing on this EU to verify emission rates. As of the date of this inspection, stack testing has not been requested for this facility. Given the engine is not in use a request for testing is not anticipated.**

**2.7 The facility is required to maintain a device to measure natural gas usage for this EU. This device was in place.**

**2.8 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.**

**2.9 A maintenance log for this EU is required to be kept and is attached to this report.**

**2.10 The facility is required to keep records of any bypass of any control device. The compressor does not have an add-on control device. Therefore, this condition does not apply.**

**2.11 Natural gas usage records for this EU are required to be kept. Natural gas usage is included in the monthly emission calculation records which were provided and are attached.**

**2.12 NOx emissions records for this EU are required to be kept. These are being performed monthly in a satisfactory manner as indicated in the attached records.**

**2.13 Stack parameters for this unit do not appear to have changed and appear correct. The new engine is being operated as exempt and does not have any stack requirements.**

**2.14 A natural gas monitoring device is to be installed within 60 days of permit issuance. This condition is historic and has been performed by the facility.**

**2.15 The stack height is to apply within 60 days of permit issuance. This condition is historic and has been performed by the facility.**

### **Facility Wide**

**3.1 NOx emissions from the facility are limited to 89.9 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Records submitted by the facility indicate that as of 6/2022, NOx emissions were 10.85 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Almost all of this was attributed to the 10.65 tons for the new compressor engine.**

**3.2 The facility is required to only burn sweet natural gas. An attached analysis of the gas indicates it is sweet per AQD's definition.**

**3.3 The facility may be required to verify H2S and sulfur content of the gas. The analysis provided documented that the natural gas is non-detect for H2S**

**3.4, 3.5** 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.

**As a result of this inspection it appears the source is in compliance with PTI 632-96B and the Air Pollution Control Rules.**



**Image 1(Blair 36)** : Compressor engine stacks. Unit 231 in foreground.

NAME 

DATE \_\_\_\_\_

SUPERVISOR \_\_\_\_\_