

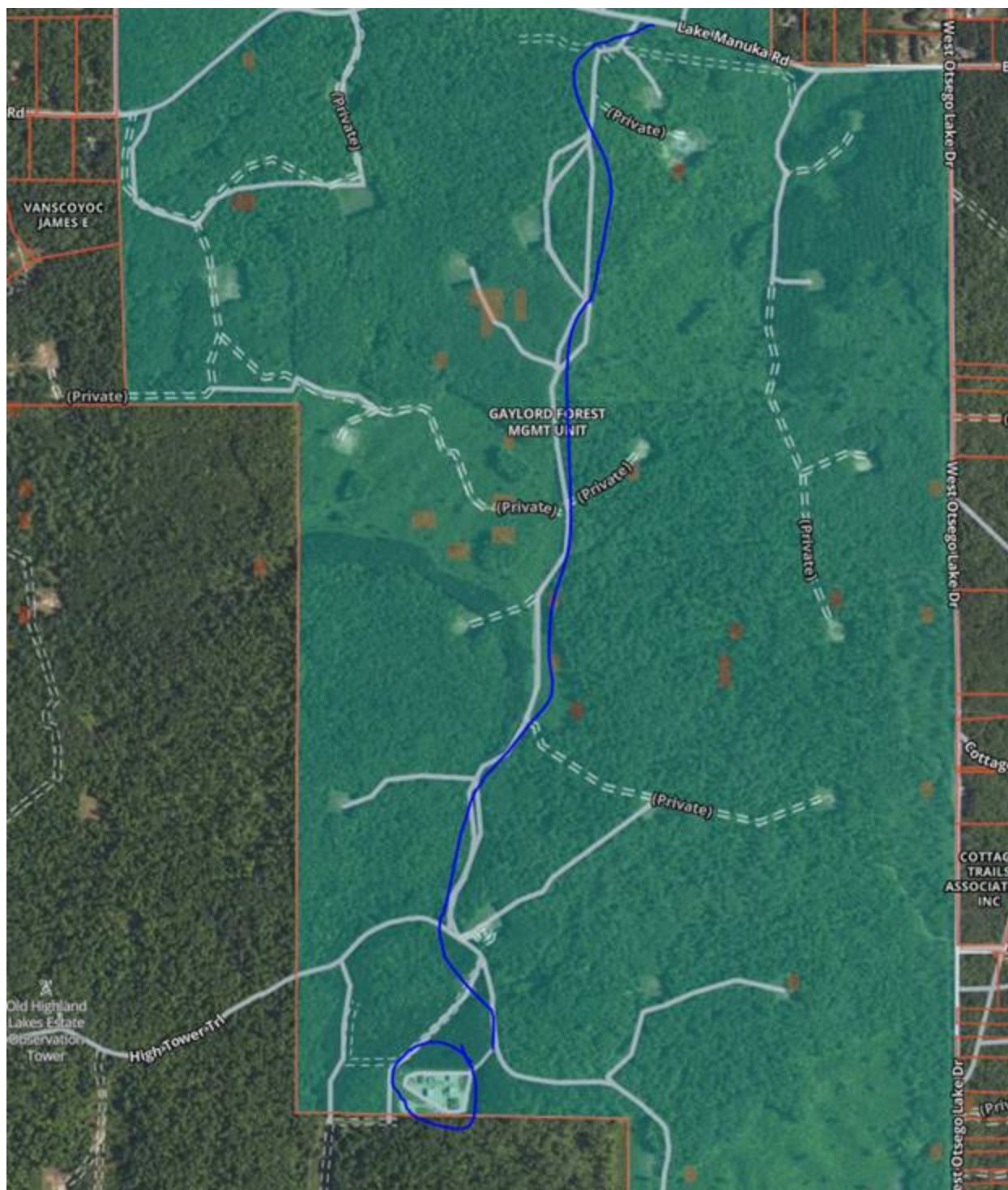
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

B566769542

FACILITY: Lambda Energy Resources LLC - Otsego 6		SRN / ID: B5667
LOCATION: 2443 LAKE MANUKA RD SEC 6 OTSEGO LAKE TWP, GAYLORD		DISTRICT: Gaylord
CITY: GAYLORD		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 10/06/2023
STAFF: David Bowman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: scheduled inspection for FY 24		
RESOLVED COMPLAINTS:		

On 6 October 2023 I, David Bowman MI EGLE AQD, conducted a site inspection for B5667 Lambda Energy Resources – Otsego 6, operating under the conditions of permit to install (PTI) 442-99B. As part of the inspection I reviewed the malfunction abatement plan (MAP that is on file in the gaylord office to ensure the site is complying with the MAP requirements.

The site address is 2443 Manuka Lake rd, Gaylord. But it is on a trail that intersects with Manuka Lake rd, but not at the 2443 address when using my GPS. The site has a 2443 marker at the gate, but it is located on an unnamed trail that travels south from Mankua Lake Trail. The unnamed road turns in High Tower Trail and the site is located on that trail. The trail continues on to Otsego Lake Dr, but that part of the trail becomes an ORV trail and is not suited for vehicular travel. The site is difficult to locate due so refer to the map below for location:



The weather was partly sunny and windy. 71°F, 42% humidity, 13.9 psi pressure. At the gate I recorded the following data from the Atmo Tube:

PM1.0 µg/M ³	PM 2.5 µg/M ³	PM 10 µg/M ³	VOC PPM
1.0	1.9	3.0	0.24

The site was operating and there were no discernable odors nor any visible signs of spills or problems on the grounds.

Emission Units associated with PTI 53-04A:

Emission Unit	Description	Stack
EUDEHY	glycol dehydrator	SVDEHY
EUENGINE1	natural gas fired engine	SVENGINE1

EUDEHY:

1.1 Permittee shall comply with 40 CFR Part 63, subpart HH...

Discussion – Michigan does not have delegated authority for this subpart, so no determination is made for compliance. There were no indications that they are not complying so there is no reason to refer to US EPA for compliance determination.

1.2 Shall not operate EUDEHY unless a flash tank is installed....

Discussion- I observed the flash tank. It appeared to be maintained and operating as required.

1.3 Shall not operate EUDEHY unless a flare is installed...

Discussion – I observed the flare, and the pilot was lit. As noted in previous inspections there was the occasional puff of dark VE, but it was infrequent. Using the Nikon Forestry Pro I estimated the height of the flare to be 82' above ground level.

There are no stack restrictions listed in the PTI. There was no visible emission from the stack, but the heater was on, and flow could be heard in the dehy.

I recorded the following readings from the Atmo tube at the stack for EUDEHY:

PM1.0 $\mu\text{g}/\text{M}^3$	PM 2.5 $\mu\text{g}/\text{M}^3$	PM 10 $\mu\text{g}/\text{M}^3$	VOC PPM
3.2	5.1	6.2	0.00

EUENGINE1

2.3 Permittee is required to submit MAP...

Discussion – The MAP on file in the Gaylord AQD office is dated 13 January 2014 and is from Merit Energy, the previous site operator to Lambda. The MAP does not meet the requirements listed in PTI 442-99B. Lambda is creating an updated MAP for submission. Once that MAP is submitted a MACES entry is going to be made.

2.4, 2.5, and 2.10 refer to control device requirements...

Discussion – there is a catalyst installed in the exhaust piping for the engine. Previous inspections reported no control present and that the company reported no control. The 2022 MAERS input does not list any control for the engine. The daily check sheet is not tracking data for a control either. I spoke with source over the phone and was informed that the entire unit is a rental that comes with a catalyst, but the catalyst is not being used for this engine. They are reporting to MAERS (now MI ENVIRO) that the engine is without catalyst, no catalyst operating data is being recorded, the MAP for the site is without a catalyst. They cannot remove it due to being rental but confirm that it is not being used.

I reviewed the data submitted for the engine from the swap that placed this engine in operation, on file in the Gaylord AQD office dated 24 Oct 2013. The data submitted is for an engine without control and the emissions calculations are consistent with an engine without control. I have no reason to believe that the catalyst is in operation, nor that it would be required to operate for the source to be in compliance with its limits.

2.7 permittee shall install device for monitoring natural gas usage...

Discussion – I did not see a device, but the source is tracking fuel usage so there must be a device or system used to monitor and record this data.

2.13 Stack Vent restrictions

Stack/Vent ID	Max diameter	Estimated	Min stack Height	Estimated
SVENGINE1	8"	6" to 8"	27'	27'

Stack height estimated using the Nikon Forestry Pro.

The engine was operational at the time of the inspection. Unit number GCS 397 a CAT engine. I could not find a data plate for it. Operating parameters at time of inspection that I could find on the display 1300 RPM, 72 PSI oil, and there was no VE from the stack.

I recorded the following readings from the Atmo tube at the stack for EUENGINE1:

PM1.0 $\mu\text{g}/\text{M}^3$	PM 2.5 $\mu\text{g}/\text{M}^3$	PM 10 $\mu\text{g}/\text{M}^3$	VOC PPM
1.6	2.8	3.6	0.00

FGFACILITY:

3.2 Shall not burn sour gas...

Discussion – the was no indication that sour gas is used at the facility. The facility does have two iron sponges and as indicated in previous inspections, may indicate that some sour gas is/was processed at the location.

Comments:

There are 6 preheaters/treaters on the site. They are located inside berms. I did not see any heat shimmer or VE from any of the stacks. I could hear that there was flow in some of the devices but did not confirm if they were operating.

There is a large, six - 400 bbl tank battery in secondary containment. One is labeled not in service, and the others range from process water to oil. There was no odors or indications of spillage.

I recorded the following readings from the Atmo tube at the tank battery:

PM1.0 µg/M ³	PM 2.5 µg/M ³	PM 10 µg/M ³	VOC PPM
1.0	2.2	2.7	0.00

NAME DRB

DATE 11-20-23

SUPERVISOR Shane Nixon