## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

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FACILITY: JORDAN DEVE	OPMENT COMPANY, L.L.C COLFAX 29	SRN / ID: N7873	
LOCATION: NE SE SE SE	30 COLFAX TWP, THOMPSONVILLE	DISTRICT: Cadillac	
CITY: THOMPSONVILLE		COUNTY: BENZIE	
CONTACT:		ACTIVITY DATE: 01/18/2017	
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: 2017 FCE.			
RESOLVED COMPLAINTS			

Full Compliance Evaluation (FCE), site inspection and records review

Jordan Development Company, LLC

Colfax 29 Central Processing Facility (CPF)

On January 18, 2017 I conducted an inspection of the Colfax 29 CPF to determine compliance with Permit to Install 311-07 and the Air Pollution Control Rules. This facility is an Opt-out source located on Thurman Rd. in Colfax Twp., Benzie County. At the time of the inspection the facility consisted of one brine tank in containment and a single building housing both the compressor/engine and the glycol dehydrator. There were no other tanks, heaters, engines, or flares.

## **EUENGINE1**

The compressor engine observed on site was mounted on a skid identified as GCS 801 and the Unit ID on the log sheet was 0XX20642-018. The engine was identified as a Caterpillar G399. The engine identified PTI 311-07 is a Cat G399TA, Unit #C190135 so it appeared the engine or engine/compressor have been changed out for a similar engine since the last inspection in 2013, at that time the engine was identified as unit C190135. I requested verification of change-out and submittal of the information required for change-out demonstrating the replacement engine is equal or lower emitting per special condition 2.8 of PTI 311-07. Mr. Troy Molby of Jordan Exploration Company provided a response by email stating that the engine at the Colfax 29 has not been changed out and that the unit ID is still C190135.

At the time of the inspection the engine was operating at 885 RPM and 60 psi oil pressure. The catalyst inlet temperature was 909 degrees F and the outlet temperature was 1011 degrees F. The engine is equipped with an Air to fuel ratio controller and the readings were as follows:

	Volts	Stepper motor
Left	0.795	1339
Right	0.778	1338

All observed readings were consistent with readings on the log sheet which was up to date. There were no visible emissions or odors from the stack which appeared to meet the permit specifications of 8" maximum diameter and 30' minimum height. The engine appeared to be operating properly.

Prior to the inspection JDC provided copies of recordkeeping required by the PTI including fuel usage and monthly emission calculations as well as maintenance records from Archrock, the records are attached. The records indicate that the engine did not run without the catalytic converter during the year. Annual NOx emissions were 4.23 tons and CO emissions were 6.58. PTI emission limits are 15 tpy NOx and 20 TPY CO.

The maintenance records indicate the engine was analyzed for emissions three times in 2016. The first test on 1/15/16 indicated problems with the catalyst since the NOx and CO conversion factors were only 56.3% and 72.7% respectively. The catalyst differential pressure (0.5") was also lower than normal. The records also indicate that maintenance was performed on the catalyst at that time. Emissions analysis from June and September demonstrate a return to normal operation. Engine maintenance records for the year were also provided demonstrating regular and proper maintenance of the engine.

## **EUDEHY**

At the time of the inspection the dehy was operating, no odors or visible emissions were present. This is a small glycol dehydrator and did not appear to be equipped with a condenser. This facility is an area source with regard to 40 CFR 63, Subpart HH but may be exempt based on natural gas throughput (<85,000 cubic meters) or benzene emissions (<0.90 megagram per year). Additional information provided by Mr. Molby and attached to this report demonstrates daily natural gas throughput averages 27,382.39 cubic meters.

Summary

As a result of this site inspection and records review it appears that the Source N7873 is in compliance with PTI 311-07 and the air pollution control rules at this time.

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