

# Venture Oil & Gas, Inc.

Oil AND GAS EXPLORATION, DEVELOPMENT & OPERATIONS

140 MAYFAIR ROAD, SUITE 900 HATTIESBURG, MS 39402

PHONE: 601-428-7725 Fax: 601-450-4448

October 1, 2023

RECEIVED
UUI U3 KUKS

Ms. Krystal Rudolph, P.E. Chief Environmental Permits Division Mississippi Department of Environmental Quality PO Box 2261 Jackson, MS 39225-2261

Dear Ms. Rudolph:

Re: Venture Oil & Gas Inc. Nina Daly 10-6 No. 1 Tank Battery

Oil Production General Permit NOI

Venture Oil & Gas Inc. is submitting the enclosed NOI for coverage under the Oil Production General Permit for the proposed Nina Daly 10-6 No. 1 facility in Jones County, MS. Also enclosed is a copy of the public notice which is to be published October 5, 2023.

If you have any questions, please feel free to contact me at (601) 428-2257.

Sincerely,

Dan Watts HSE Director

# 

# Oil Production General Permit Public Notice Mississippi Environmental Quality Permit Board P. O. Box 2261 Jackson, Mississippi 39225 Telephone No. (601) 961-5171

### Public Notice Start Date: 10/5/2023

Venture Oil & Gas Nina Daly 10-6 No. 1 facility located at Lat.31.76539, Long-89.08892, Jones county, MS, approximately 1 mile east of Sharon Road on Clifton Walker Road, in Section 10, T9N, R11W, (601) 518-0622, has applied to the Mississippi Department of Environmental Quality (MDEQ) for coverage under MDEQ's Oil Production General Permit to construct and operate an oil production facility.

The Oil Production General Permit has been developed to ensure compliance with all State and Federal regulations. Facilities granted coverage under this permit and adhering to the conditions contained therein should operate within State and Federal environmental laws and standards concerning the operation of air emissions equipment.

The proposed project consists of construction and/or operation of an oil and gas production site including well, separators, oil and water storage tanks, engine for a well pump, and a flare to control gas emissions. Venture is requesting a federally enforceable permit requirement that the storage tank emissions be routed to the flare at all times the facility is in operation. The facility will operate control(s) such that criteria pollutant emissions will not exceed emission rates restricted in the Oil Production General Permit, nor will hazardous air pollutant (HAP) emissions exceed any HAP emission rates restricted in the Oil Production General Permit. This project will result in new sources of potential emissions of regulated air pollutants. However, emissions will be below the Prevention of Significant Deterioration significance levels as specified in the Mississippi Regulations for the Prevention of Significant Deterioration of Air Quality, 11 Miss. Admin. Code Pt. 2, Ch. 5., and in 40 CFR Part 52.21. Potential emissions will also be below the Air Title V Major Source thresholds as specified in 11 Miss. Admin. Code Pt. 2, Ch. 6. and in 40 CFR Part 70.

Persons wishing to comment upon or object to the proposed request are invited to submit comments in writing to the Air 1 Branch Chief, Environmental Permits Division at the Permit Board's address shown above no later than 30-days from the date of publication of this notice. All comments received or postmarked by this date will be considered in the determination regarding the coverage approval. After receipt of public comments and thorough consideration of all comments, MDEQ will formulate its recommendations regarding coverage approval.

Additional details about the proposed project are available by writing or calling the **Air 1 Branch Chief, Environmental Permits Division** at the above Permit Board address and telephone number and on the MDEQ's website at: <a href="https://www.mdeq.ms.gov/ensearch/recently-received-general-permit-noi/">https://www.mdeq.ms.gov/ensearch/recently-received-general-permit-noi/</a>. This information is also available for review at the following locations during normal business hours:

Mississippi Department of Environmental Quality
Office of Pollution Control
515 East Amite Street,
Jackson, MS 39201
(601) 961-5171

Laurel-Jones County Library 530 Commerce Street Laurel, MS 39440

Please bring the foregoing to the attention of persons whom you know will be interested.

•

•

.

# OIL PRODUCTION GENERAL PERMIT NOTICE OF INTENT





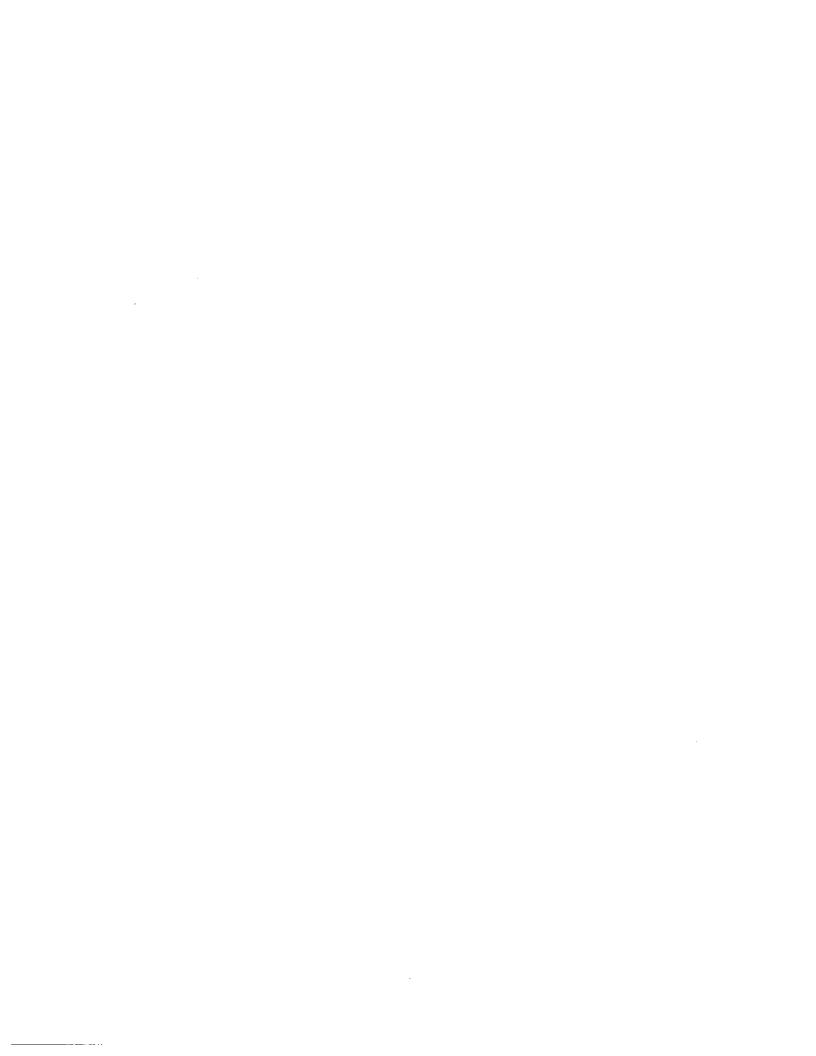
VENTURE OIL & GAS, INC Nina Daly 10-6 No.1 Facility Jones County, Mississippi

Submittal Date: October 2023

PREPARED BY:

FC&E ENGINEERING, LLC 917 MARQUETTE ROAD BRANDON, MISSISSIPPI 39042 (601) 824-1860





## **EXECUTIVE SUMMARY**

Venture Oil & Gas Inc. (Venture) has driled a new well for the purposes of oil and gas production. The well (Nina Daly 10-6 No. 1) and the proposed tank battery are located in Section 10, Township 9N, Range 11W, in Jones County, Mississippi. The proposed site will include a conventional tank battery, flare, and associated well pad activities. Based on engineering estimates, the maximum production rates are estimated to be up to 1.000 thousand cubic feet (MCF) of gas produced per day and 200 barrels (bbl) of oil produced per day, along with 10 bbl/day of produced water.

A pipeline outlet does not currently exist for the gas, therefore, Venture proposes to flare the produced gas. If/when gas sales become available, all gas will be sold except for low pressure streams such as the storage tank emissions and the gas produced by low pressure separators. Venture will collect produced water into a 400-bbl water tank prior to offsite transport to a disposal well. Oil will be collected into three (3) 400-bbl oil storage tanks and one(1) 500 bbl oil storage tank before being trucked to market. Venture will route emissions from the oil and water storage tanks, as well as the separators and heater treater to the flare, and is requesting a federally enforceable requirement for flaring of tank emissions. Emissions associated with truck loading will be vented to the atmosphere. Venture may also operate various small chemical storage vessels, including totes and drums, which are typically associated with well pad activities. Venture intends to install and operate a natural gas fueled engine if/when a pumping unit is required for production from the well. This engine will be classified as "existing" under 40 CFR 63, Subpart ZZZZ.

Consequently, Venture is submitting the attached Notice of Intent (NOI) and associated information for issuance of coverage under the Oil Production General Permit. Based on the facility's potential to emit, the facility's uncontrolled potential emissions of Volatile Organic Compounds (VOC), n-hexane, and total HAPs exceed the threshold limits to be classified as a True Minor Source. Therefore, Venture proposes to restrict facility operations such that the flare is operated at all times during gas venting. Combustion of produced gas from the well during possible upsets or unavailability of gas sales, process gas from the low pressure separators, and gas off of the oil and water storage tanks will ensure VOC emissions from the facility do not exceed the Air Title V Major Source threshold of 100 tons per year and the General permit limit of 95 tons per year. Venture will monitor the volume of gas sold and the volume of gas flared, except that the volume of gas from the tanks will be calculated using an approved methodology. Venture will calculate corresponding monthly VOC emissions due to flaring of gas from all sources. A flow meter will be used to measure monthly flow of produced gas to the flare. Monthly oil production records and E&P TANKS software will be utilized to calculate emissions from the storage tanks to the flare. Emissions calculations will be maintained on a monthly and rolling, consecutive 12-month basis to ensure compliance with permitted emissions thresholds.

Also included with the NOI are associated maps and figures. Detailed air emissions calculations are provided in Appendix A, and pertinent backup documentation is provided in Appendix B.

# NOTICE OF INTENT (NOI) FORMS

Service of the servic

# ORIGINAL

Facility (Agency Interest) Informat	ion			Section OPGP - A
1. Name, Address, and Location of	Facility			o e n V 恒
A. Owner/Company Name:	Venture Oi	l & Gas Inc	. 7	DECEIVE
B. Facility Name (if different than A.	above):	Venture N	ina Daly 10-6	Nd. 1 Facility 3 2023
C. Facility Air Permit/Coverage No.	(if known)	:		MDEO
D. Agency Interest No. (if known):				•
E. Physical Address				
1. Street Address: Field Road	off of Clift	on Walker l	Road	
2. City: Laurel			3. State:	MS
4. County: Jones		_	5. Zip Code:	39443
6. Telephone No.: 601-428-77	25		7. Fax No.:	
8. Are facility records kept at this loo	cation?	☐ Yes	☑ No. I	Please complete Item 10.
F. Mailing Address				
	207 South	13th Avenu	e	
2. City: Laurel			3. State:	MS
4. Zip Code: 39440				
G. Latitude/Longitude Data				
1. Collection Point (check one):				
Site Entrance	[J]	Other:	Well head	
2. Method of Collection ( <i>check one</i> )	1:			
☐ GPS Specify coo		tem (NAD	83, etc.)	
✓ Map Interpolation (God	-			Other:
3. Latitude (degrees/minutes/seconds	_	31/45/55.4	_	
4. Longitude (degrees/minutes/secon	=	neg89/05/2		
5. Elevation (feet): 412	,			
H. SIC Code: 1311		-		
		•		
2. Name and Address of Facility Co	ntact		···	
A. Name: Dan Watts		-	Title:	EHS Director
B. Mailing Address				
<u> </u>	140 Mayfa	ir Road, Su	ite 900	
2. City: Hattiesburg			3. State:	MS
4. Zip Code: 39402		•	5. Fax No.:	601-450-4448
6. Telephone No.: 601-428-77	<del></del> 25	•		
7. Email: dwatts@venture-in		=		
		•		

Facility (Agen	cy Interest) Information			Section OPGP - A
	Address of Air Contact (if different)	from 1	Facility Con	tact)
A. Name:			Title:	
B. Mailing A				
	dress or P.O. Box:		0.51.1	
2. City:			3. State:	
4. Zip Code:			5. Fax No.:	
6. Telephon	e No.:			
7. Email:				
4. Name and A	Address of Responsible Official for	the Fa		
	be signed by a Responsible Official as def	-		nin. Code Pt.2, R. 2.1.C(24).
	3 7 1 33			
A. Name:	Adam Barham		Title:	VP-Operations
				····
B. Mailing A	Address			
1. Street Ad-	dress or P.O. Box: 140 Mayfair Ro	ad, Sui	ite 900	
2. City:	Hattiesburg		3. State:	MS
4. Zip Code:	39402		5. Fax No.:	601-450-4448
6. Telephone	e No.: 601-518-0624			
7. Email:	abarham@venture-inc.com			
Ô	son above a duly authorized representati Yes   No		•	
If yes, has w	ritten notification of such authorization			
	Yes		Request for	authorization is attached
5 Tomo of Oil	Duadwation Nation of Intent (Charle	- ~11 +1-	at annh	
5. Type of On	Production Notice of Intent (Check	au in	at appty)	
<b>V</b>	Initial Coverage		Re-Coverage	e for existing Coverage
	Modification with Public Notice		Modification	n without Public Notice
	Update Compliance Plan			

Facility (Agency Interest)		Section OPGP - A
6. Equipment List (Check	all that apply)	
Complete supporting emission	calculations must be included for each potential e	emission unit selected below.
<ul> <li>✓ Condensation Storage Ve</li> <li>✓ Water Storage Vessel. Inc</li> <li>✓ Internal Combustion Enging</li> <li>✓ Flare. Include a complete</li> <li>✓ Oil Truck Loading (Section 1)</li> </ul>	completed Section OPGP-C Form for each unit. essel. Include a completed Section OPGP-E Form clude a completed Section OPGP-E Form for each ine. Include a completed Section OPGP-D Form and Section OPGP-F Form for each unit. on OPGP-B Form) assions (Section OPGP-B Form)	<u>m</u> for each unit. ch unit.
7. Process/Product Details	s	
	kimum Anticipated Well(s) Production for Facili	
Produced Material	Throughput	Units
Gas	1.0	MMCF/day
Oil	200	barrels/day
Water	10	barrels/day
Other (Specify)		
• • • • • • • • • • • • • • • • • • • •	Inimated Thursday for Delay 1 1 D. 1 1/1/	s applicable \.
	ticipated Throughput for Principal Product(s) (a.	Units
Produced Material	Throughput	MMCF/day
Flared Gas Oil	200	barrels/day
Water	10	barrels/day
Other (Specify)	10	
Onter (opecity)		<u></u>
8. Zoning	-	
A. Is the facility (either exist county zoning ordinance Yes  B. Is the facility (either exist)	sting or proposed) located in accordance with an es? If no, please explain sting or proposed) required to obtain any zoning y at this site? If yes, please explain.	
No No	,, <u>k</u>	



Facility (Agency Interest) Information

Section OPGP - A

9. MS Secretary of State Registration / Certificate of Good Standing

No permit will be issued to a company that is not authorized to conduct business in Mississippi. If the company applying for the permit is a corporation, limited liability company, a partnership or a business trust, the application package should include proof of registration with the Mississippi Secretary of State and/or a copy of the company's Certificate of Good Standing. The name listed on the permit will include the company name as it is registered with the Mississippi Secretary of State.

It should be noted that for an application submitted in accordance with 11 Miss. Admin. Code Pt. 2, R. 2.8.B. to renew a State Permit to Operate or in accordance with 11 Miss. Admin. Code Pt. 2, R. 6.2.A(1)(c). to renew a Title V Permit to be considered timely and complete, the applicant shall be registered and in good standing with the Mississippi Secretary of State to conduct business in Mississippi.

Physical Address  1. Street Address: 140 Mayfair Road, Suite 900  2. City: Hattiesburg 3. State: MS  4. County: Lamar 5. Zip Code: 39402	Address and	s and Location	of Facility Records		<u>.                                    </u>
2. City:       Hattiesburg       3. State:       MS         4. County:       Lamar       5. Zip Code:       39402	-		140 M. C. D. J. C. 40 000		·
4. County: Lamar 5. Zip Code: 39402					
	2. City: <u>I</u>	Hattiesburg	· ·	3. State:	MS
7. F. N. (01.450.4	4. County: I	ty: Lamar		<ol><li>Zip Code:</li></ol>	39402
6. Telephone No.: 601-518-0624 7. Fax No.: 601-450-4	6. Telephone	hone No.:	601-518-0624	7. Fax No.:	601-450-4448

EMISSIONS EQUIPMENT AT A SYNTHETIC	
Facility (Agency Interest) Information	Section OPGP - A

### 11. Certification

The Form must be signed by a Responsible Official as defined in 11 Miss. Admin. Code Pt. 2, R. 2.1.C.(24).

I certify that to the best of my knowledge and belief formed after reasonable inquiry, the statements and information in this application are true, complete, and accurate, and that as a responsible official, my signature shall constitute an agreement that the applicant assumes the responsibility for any alteration, additions, or changes in operation that may be necessary to achieve and maintain compliance with all applicable Rules and Regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Adulal	9/29/202
Signature of Responsible Official/DAR	Date '
Adam Barham	
Printed Name	Date

·		

# Section B.4: Greenhouse Gas Emissions

Applicants must report potential emission rates in SHORT TONS per year, as opposed to metric tons required by Part 98. Emission Point numbering must be consistent throughout the application package and, for existing emission points, should match any MDEQ ID's in the current permit.

		CO <sub>2</sub> (non-	° 700	N,O	CH	$SF_c$	PFC/HFC <sup>3</sup>				Tot	Fotal GHG	Total CO2e
		biogenic) ton/yr	(biogenic) <sup>2</sup> ton/yr	ton/yr	ton/yr	ton/yr	ton/yr				Ma	Mass Basis ton/yr <sup>5</sup>	ton/yr <sup>6</sup>
Emission Point ID	GWPs 1	1	1	298	25	22,800	footnote 4						
100	BHS Sam	26036.79	0	0.05	126.84	0	0		_		26	26163.68	N/A
AA-UUI	C02e	26036.79	0	14.99	3171.02	0	0		Į			N/A	29222.81
000	mass GHG	25.59	0	0.00	00'0	0	0	_			[	25.59	N/A
AA-UUIB	C02e	25.59	0	0.01	10.0	0	0					N/A	25.62
5	mass GHG	L	0	0.00	0.01	0	0				9	524.24	N/A
AA-002	CO2e	624.23	0	0.35	0.29	0	0					N/A	624.88
	SHS ssem												
	COZe												
	mass GHG	0.00	0	0.00	0.33	0	0					0.33	N/A
AA-003	C02¢	0.00	0	0.00	8.28	0	0					N/A	8.28
700	mass GHG	0	0	0	0	0	0					0.00	N/A
AA-004	CO2e	0	0	0	0	0	0					N/A	0.00
200	mass GHG	0	0	0	0	0	0		1			0.00	N/A
AA-UUS	CO2e	0	0	0	0	0	0					N/A	0.00
200	mass GHG	0	0	0	0	0	0					0.00	N/A
AA-UU6	CO <sub>2</sub> e	0	0	0	0	0	0					N/A	0.00
	mass GHG	255.45	0	0.00	0.00	0	0					255.46	N/A
AA-Ulba	co,e	255.45	0	0.14	0.12	0	0					N/A	255.71
200	mass GHG	0	0	0	0	0	0					0.00	N/A
AA-00/	COze	0	0	0	0	0	0					N/A	0.00
900	mass GHG	0 ]	0	0	0	0	0			_		0.00	N/A
AA-008	202¢	0	0	0	0	0	0					N/A	0.00
98	mass GHG	0.03	0	0	0.18	0	0					0.21	N/A
AA-009	CO <sub>2</sub> e	0.03	0	0	4.50	0	0					N/A	4.53
9.5	mass GHG	255.45	0	0.00	00.0	0	0				2	255.46	N/A
AA-UIU	CO2e	255.45	0	0.14	0.12	0	0					N/A	255.71
FACILITY	mass GHG	27197.55	0	0.05	127.37	0.00	000				27	27324.98	N/A
TOTAL	CO2e	27197.55	0	15.65	3184.36	0.00	0.00					N/A	30397.55

<sup>&</sup>lt;sup>2</sup> Biogenic CO2 is defined as carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or <sup>1</sup> GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

micro-organisms.

<sup>&</sup>lt;sup>3</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>&</sup>lt;sup>4</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>&</sup>lt;sup>5</sup> Greenhouse gas emissions on a mass basis is the ton per year greenhouse gas emission before adjustment with its GWP. Do not include biogenic CO, in this total.

<sup>6</sup> CO2c means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the greenhouse gas by its GWP. Do not include biogenic CO2e in this total.

	•		
٠			

Section B.5: Stack Parameters and Exit Conditions

Emission Point numbering must be consistent throughout the application package and, for existing emission points, should match any MDEQ ID's in the current permit.

Emission Point ID	Orientation (H- Horizontal	Rain Caps	Height Above Ground	Base Elevation	Exit Temp.	Inside Diameter or Dimensions	Velocity	Moisture by Volume	Geographic Position (degrees/minutes/seconds)	c Position utes/seconds)
A OTHER ALL	V=Vertical)	(Yes or No)	(ft)	(ft)	(°F)	(ft)	(ft/sec)	(%)	Latitude	Longitude
AA-001	Н	No	40	415	1800	0.50	100	TBD	31/45/55	89/05/20
AA-002	Н	Yes	7	415	TBD	Твр	TBD	TBD	31/45/55	89/05/20
AA-003	N/A-Fugitives	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-004	N/A-Separator	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-005	N/A-Separator	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-006	N/A-Heater Treater	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-006a	TBD	TBD	TBD	415	TBD	TBD	TBD	TBD	31/45/55	89/05/20
AA-007	N/A-Tanks	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-008	N/A-Tanks	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-009	N/A-Truck Loading	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/05/20
AA-010	Line heater	N/A	N/A	415	N/A	N/A	N/A	N/A	31/45/55	89/02/20

<sup>1</sup> A WAAS-capable GPS receiver should be used and in the WGS84 or NAD83 coordinate system.

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE Fuel Burning Equipment – External Combustion **Section OPGP-C** Sources **Emission Point Description** 1. AA-010 Emission Point Designation (Ref. No.): A. Equipment Description: Line heater В. D. Date of Manufacture and No.: 2020 Manufacturer: custom C. F. Nominal Heat E. Maximum Heat Input 0.25 MMBtu/hr Input Capacity: 0.50 MMBtu/hr (higher heating value): TEG Burner Heater Treater ☐ Line Heater Use: G. Other (describe): \_\_\_\_\_\_ Process Heat Space Heat M Indirect Direct Heat Mechanism: H. Burner Type (e.g., forced draft, natural draft, I. Natural draft etc.): Additional Design Controls (e.g., FGR, etc.): none J. ☐ Under Construction $\boxtimes$ Proposed Operating K. Status: 2. Fuel Type Complete the following table, identifying each type of fuel and the amount used. Specify the units for heat content, hourly usage, and yearly usage. % SULFUR % ASH MAXIMUM MAXIMUM FUEL TYPE HEAT YEARLY HOURLY CONTENT **USAGE USAGE** 2.15 MMCF < 0.001 245 < 0.001 Field gas 1000 Please list any fuel components that are hazardous air pollutants and the percentage in the fuel:

•			

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE Fuel Burning Equipment – External Combustion **Section OPGP-C** Sources **Emission Point Description** 1. Emission Point Designation (Ref. No.): AA-006A A. Equipment Description: One (1) Heater Treater, with a 0.5 MMBTUH burner. B. D. Date of Manufacture and No.: 2019 Custom Manufacturer: C. F. Nominal Heat E. Maximum Heat Input Input Capacity: 0.5 MMBtu/hr (higher heating value): 0.5 MMBtu/hr Heater Treater TEG Burner Line Heater G. Use: Other (describe): Process Heat Space Heat П 冈 Direct Indirect Heat Mechanism: H. Burner Type (e.g., forced draft, natural draft, I. Forced Draft Additional Design Controls (e.g., FGR, etc.): N/A J. Under Construction Proposed Operating $\boxtimes$ K. Status: 2. Fuel Type Complete the following table, identifying each type of fuel and the amount used. Specify the units for heat content, hourly usage, and yearly usage. MAXIMUM % SULFUR % ASH MAXIMUM HEAT **FUEL TYPE** HOURLY YEARLY CONTENT **USAGE USAGE** 4.3 MMCF < 0.001 490 < 0.001 1.000 BTU/CF Field Gas Please list any fuel components that are hazardous air pollutants and the percentage in the fuel: No analyzed HAP's have been identified as components in the fuel; however, AP-42, Tables 1.4-2, 1.4-3, and 1.4-4 project certain HAP's to be potentially present in exhaust vapors.


	el Bugines	_	quipment –	Internal (	Combustic	on	Sect	ion OP	GP- D
1.			nt Descriptio	n					
	A.	Emission Po	int Designation (Re	f. No.): <u>AA-</u>	002				
	В.	Equipment I	Description (including	ng serial number	: 165 HP RIC	E for power of	oil pump		
	C.	Manufacture	er: <u>TBD</u>		D. Date of and Moo	Manufacture lel No.:	Pre- 200	)6	
	E.	Maximum H	Ieat Input (higher he	eating value):	1.22	MMBtu/hr			
	F.	Rated Power	r: 165	hp	123	- kW			
	G.	Is the engine	e an EPA-certified e	ngine?	No No	Yes or No			
	H.	Use:	⊠ Non-emergen	су	☐ Emer	gency			
	I.	Displaceme	nt per cylinder:		rs 🔲	10 to <30 Lit	ers	<b>□</b> ≥30	Liters
	J.	Engine Igni	tion Type:	Spark Ign	ition	Compre	ession Igni	tion	
	K.	Engine Burn		4-stroke	2-stroke	e 🛛	Rich Bu	m 🗆	Lean Burn
	L.	Status:		Operating	⊠ Propose	ed 🗌	Under C	onstruction	
	M.	Date of con existing sou	struction, reconstru- arces) or date of anti	ction, or most rec cipated construc	cent modification	n (for	Pre	- 2006	_
2.	Fu	el Type				1.0		6	
			owing table, identify			ount used. S	pecity unit	s or measur	ement.
	FU	JEL TYPE	HEAT CONTENT	% SULFUR	% ASH	MAXIN HOURLY	USAGE	MAXIM YEARLY	USAGE
	G	Nat. as/propane	1020 BTU/Ft3	0.00004	0.0	1.20 M	ICF	10,4	78

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Emission Point Description** AA-008 (Power Oil Tank No. 1) Emission Point Designation (Ref. No.): Product(s) Stored: Oil В. ☐ Under Construction X Proposed Status: Operating D. Date of construction, reconstruction, or most recent modification (for existing sources) or date of anticipated 2021 construction: **Tank Data** 2. Tank Specifications: 21,000 gallons Design capacity 1. ambient 11.55 psia @ True vapor pressure at storage temperature: ambient ٥F 11.55 psia @ Maximum true vapor pressure (as defined in 3. §60.111b) ambient 11.55 psia @ Reid vapor pressure at storage temperature: 4. lb/gal Density of product at storage temperature: 7.2 5. 48 lb/lbmol Molecular weight of product vapor at storage temp. 6. Horizontal 冈 Vertical B. Tank Orientation: C. Type of Tank: Internal Floating Roof External Floating Roof Fixed Roof Other: Variable Vapor Space Pressure X D. Is the tank equipped with a Vapor Recovery System Yes No and/or flare? If yes, describe below and include the efficiency of each. The tanks will be vented to the flare. If a VRU is necessary, it will be installed. Closest City: E. Mobile, AL Tupelo, MS Meridian, MS Baton Rouge, LA Memphis, TN New Orleans, LA ⊠ Yes □ No Is an E&P or similar report described in Condition 5.4(5) of the General Permit included for this tank in the Notice of Intent?

# MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL FORM 5 MDEQ QUALITY APPLICATION FOR AIR POLLUTION CONTROL **PERMIT**

Ta	nk	Summary	ection H
3.	Ho	izontal Fixed Roof Tank	
	A. B. C. D. E. F. G.	Shell Length:         feet           Shell Diameter:         feet           Working Volume:         gal           Maximum Throughput:         gal/yr           Is the tank heated?         Yes         No           Is the tank underground?         Yes         No           Shell Color/Shade:         Aluminum/Specular         Aluminum	ı/Diffuse
		☐ Gray/Light ☐ Gray/Medium ☐ Red/Prime	er
	H.	Shell Condition: Good Poor	
4.	Ve	tical Fixed Roof Tank	
	A.	Dimensions:       25       feet         1. Shell Height:       12       feet         2. Shell Diameter:       12       feet         3. Maximum Liquid Height:       24.8       feet         4. Average Liquid Height:       18       feet         5. Working Volume:       21,000       gal         6. Turnovers per year:       159.1         7. Maximum throughput:       3,340,554       gal/yr         8. Is the tank heated?       Yes       No	
	B.	Shell Characteristics:  1. Shell Color/Shade:	ı/Diffuse
		☐ Gray/Light ☐ Gray/Medium ☐ Red/Prime	r
		2. Shell Condition: 🛛 Good 🔲 Poor	
	C.	Roof Characteristics:  1. Roof Color/Shade:	Diffuse
		2. Roof Condition: 🛛 Good 🔲 Poor	
		3. Type: $\square$ Cone $\boxtimes$ Dome	
		4. Height: 0.1 feet	

# MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL FORM 5 MDEQ QUALITY APPLICATION FOR AIR POLLUTION CONTROL

To	nk	Sur	nmary	Section H
<u>1 a</u> 5.			l Floating Roof Tank	
J,	11111	CI IIA	I I TOWARD ITOUR I WARE	
	A.	1. 2. 3. 4. 5. 6. 7.	Characteristics: Diameter:	☐ Unknown
		9.	☐ White/White ☐ Aluminum/Specular ☐ Alumin	um/Diffuse
			☐ Gray/Light ☐ Gray/Medium ☐ Red/Pri	mer
		10. 11.	External Shell Condition:  Roof Color/Shade:  White/White  Aluminum/Specular  Aluminum/Diff	fuse
			☐ Gray/Light ☐ Gray/Medium ☐ Red/Primer	
		12.	Roof Condition: Good Poor	
	В.	Rim 1.	Seal System: Primary Seal:	Vapor-mounted  ☐ None
	C.		k Characteristics: Deck Type:	
		2.	Deck Fitting Category:   Typical   Detail	
6.	Ex	tern	al Floating Roof Tank	
	A.	Tan 1. 2. 3. 4. 5.	k Characteristics Diameter: Tank Volume: Turnovers per year: Maximum Throughput: Internal Shell Condition: Light Rust  feet gal gal/yr Gunite Linit	ng

		:

### FORM 5 | MDEQ |

### MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY APPLICATION FOR AIR POLLUTION CONTROL PERMIT

		l _										
nk S	um	ma	ry									Section ]
			ating Roc	of Ta	nk (co	ontinue	ed)			··		
_	ank	Chara Paint	cteristics (co Color/Shade White/White	ntinued :	d):	Aluminu		lar		Aluminum	/Diffu	se
			Gray/Light			Gray/Me	dium			Red/Prime	r	
7	7.	Paint	Condition:			Good			Poor	•		
			acteristics Type:		Ponto	oon			] Dou	ble Deck		
2	2.	Roof	Fitting Cates	gory:			☐ T;	pical		☐ Detail		
	Γank l.		truction and i		eal Syst	tem:	□ w	elded		☐ Rivete	ed	
_	2.	Prima	ary Seal:									
2	۷.		Mechanical	Shoe		☐ Li	iquid-mo	unted		☐ Vapor	-mour	ited
3	3.	Secon	Mechanical ndary Seal None		Shoe-m	Li			m-mount	_		
3	3.	Secon	Mechanical ndary Seal		Shoe-m				m-mount	_		
Polls A1	3.  uta	Second Se	Mechanical ndary Seal None	<u> </u>			- 	Ris		_	Tota	eather shiel
Polls  A. 1	3.  uta	Seco.  nt E	Mechanical ndary Seal None missions	<u> </u>		ounted	- 	Rin	thing Lo	ted [	Tota	eather shield
Polls A. I	3. utar Fixed Pollu	Secondary Market	Mechanical ndary Seal None missions	<u> </u>		ounted	- 	Rin	thing Lo	oss (tons/yr)	Tota	al Emissions tons/yr)* 30.96 2.8191
Polls  A. 1	utar Fixed Pollu	Secondary Management Secondary	Mechanical ndary Seal None missions	<u> </u>		ounted	- 	Rin	othing Lo	ess (tons/yr)  AB 0.91	Tota	leather shield al Emissions tons/yr)*
Polls  A. []	Fixed Pollu VOC Hexa Benz	Secondary Management Secondary	Mechanical ndary Seal None missions f Emissions:	<u> </u>		ounted	- 	Rin	otal W8 0.14 0.03	ess (tons/yr)  RB 0.91  39  355	Tota	al Emissions tons/yr)* 30.96 2.8191 0.6979 0.0102
Polls A. I	Fixed Pollu VOC Hexa Benz	Secondariant End Roomana End R	Mechanical ndary Seal None missions f Emissions:	<u> </u>		ounted	- 	Rin	otal W8	ess (tons/yr)  RB 0.91  39  355	Tota	Teather shield temissions (tons/yr)* 30.96 2.8191 0.6979 0.0102 0.3890
Polls A. I	Fixed Pollu VOC Hexa Benz Ethy	Secondary Management Secondary	Mechanical ndary Seal None missions f Emissions:	<u> </u>		ounted	- 	Rin	otal W8 0.14 0.03	oss (tons/yr)  AB 0.91  39  355  005	Tota	al Emissions tons/yr)* 30.96 2.8191 0.6979 0.0102
Polls A. I	Fixed Pollu VOC Hexa Benz Ethy Tolu Xyle	Secondariant de Roocutant de Ro	Mechanical ndary Seal None missions f Emissions:			ounted	- 	Rin	otal W8 0.14 0.03 0.00	ess (tons/yr)  AB 0.91  39  355  005  201	Tota (	Teather shield al Emissions (tons/yr)* 30.96 2.8191 0.6979 0.0102 0.3890
Polls A. I	Fixed Pollu VOC Hexa Benz Ethy Tolu Xyle	Secondary Management Secondary	Mechanical ndary Seal None missions f Emissions:	V V		g Loss (to	- 	Brea	otal W8 0.14 0.03 0.00	oss (tons/yr)  AB 0.91  39  355  005	Tota (	reather shield al Emissions (tons/yr)* 30.96 2.8191 0.6979 0.0102 0.3890 0.2248
Polls A. I	Fixed Pollu VOC Hexa Benz Ethy Tolu Xyle	Secondary Management Secondary	Mechanical ndary Seal None missions f Emissions:	V V	Vorking	g Loss (to	ons/yr)	Brea	otal W8 0.14 0.03 0.00 0.02	ess (tons/yr)  AB 0.91  39  355  005  201	Tota	Total Emissions
Polls A. I	Fixed Pollu VOC Hexa Benz Ethy Tolu Xyle	Secondary Management Secondary	Mechanical ndary Seal None missions f Emissions:	S V	Vorking	g Loss (to	ons/yr)	Brea To	otal W8 0.14 0.03 0.00 0.02 0.03	ss (tons/yr)  BB 0.91  39  555  005  201  Landing L	Tota	al Emissions (tons/yr)* 30.96 2.8191 0.6979 0.0102 0.3890 0.2248

2. Landing losses should be determined according to the procedures in Organic Liquid Storage Tanks chapter of EPA's AP-42 emission factors. If the roof is not landed at least once/yr, enter "NA".

<sup>1.</sup> All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance with the Permit Application Instructions. A list of regulated air pollutants and hazardous air pollutants is provided in the Application Instructions.

 	<del></del> .			

## MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

Ta	nk	Summary	Section OPGP-E
1.	Em	nission Point Description	
	A. B. C.	Emission Point Designation (Ref. No.):  AA-008 (Oil Storage Tank No. 2)  Product(s) Stored:  Oil  Status:  Operating  Proposed  Un	2) nder Construction
	D.	Date of construction, reconstruction, or most recent modification (for existing sources) or date of anticipated construction:  2021	
2.	Ta	nk Data	
	A. B. C.	Tank Specifications:  1. Design capacity 2. True vapor pressure at storage temperature: 3. Maximum true vapor pressure (as defined in \$60.111b) 4. Reid vapor pressure at storage temperature: 5. Density of product at storage temperature: 6. Molecular weight of product vapor at storage temp.  Tank Orientation:  Vertical  Design capacity  11.55 psia (1)  11.55 psia (	ambient °F ambient °F ambient °F ambient °F  ambient °F  oF ambient °F  ambient °F
		☐ Fixed Roof ☐ External Floating Roof ☐ Interna	l Floating Roof
	D.	Pressure	 ⊠ No
	E.	Closest City:  ☐ Jackson, MS ☐ Meridian, MS ☐ Tupelo, MS ☐ New Orleans, LA ☐ Memphis, TN ☐ Baton Rouge, L	☐ Mobile, AL
	F.	Is an E&P or similar report described in Condition 5.4(5) of the General Permit included for this tank in the Notice of Intent?	Yes □ No

•			

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary Horizontal Fixed Roof Tank feet Shell Length: feet Shell Diameter: В. C. Working Volume: gal gal/yr D. Maximum Throughput: No Is the tank heated? Yes E. No Is the tank underground? Yes F. Shell Color/Shade: ☐ Aluminum/Diffuse Aluminum/Specular Red/Primer Gray/Medium Gray/Light Poor Good H. Shell Condition: **Vertical Fixed Roof Tank** Dimensions: A. feet 20 Shell Height: 1. 12 feet Shell Diameter: 2. 19 feet Maximum Liquid Height: 3. ~10 feet Average Liquid Height: 4. gal 16,800 Working Volume: 5. (est. for each oil storage tank) 91.25 Turnovers per year: 6. MMgal/yr (for entire tank battery) 3.066 Maximum throughput: 7. ⊠ No Is the tank heated? Yes Shell Characteristics: Shell Color/Shade: Aluminum/Diffuse Aluminum/Specular 冈 White/White Red/Primer П Gray/Medium Gray/Light Poor $\boxtimes$ Good 2. Shell Condition: Roof Characteristics: Roof Color/Shade: Aluminum/Diffuse Aluminum/Specular 冈 White/White Red/Primer Gray/Medium Gray/Light Good Poor **Roof Condition:** $\boxtimes$ Dome Cone 3. Type: feet Height: 1

-	 		

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Internal Floating Roof Tank** Tank Characteristics: Diameter: 1. gal 2. Tank Volume: Turnovers per year: 3. gal/yr Maximum Throughput: 4. Number of Columns: 5. □ No ☐ Yes Self-Supporting Roof? 6. Effective Column Diameter: 7. Unknown 8" Diameter Pipe 9"x7" Built-up Column Internal Shell Condition: 8. Gunite Lining Dense Rust Light Rust External Shell Color/Shade: 9. Aluminum/Diffuse Aluminum/Specular White/White Red/Primer Grav/Medium Gray/Light ☐ Poor ☐ Good 10. External Shell Condition: 11. Roof Color/Shade: Aluminum/Diffuse Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Poor Good 12. Roof Condition: Rim Seal System: Vapor-mounted Liquid-mounted Mechanical Shoe Primary Seal: 1. None Rim-mounted Shoe-mounted Secondary Seal: 2. Deck Characteristics: Welded Bolted 1. Deck Type: ☐ Detail Typical Deck Fitting Category: 2. **External Floating Roof Tank** Tank Characteristics Α. 1. Diameter: Tank Volume: 2. Turnovers per year: 3. gal/yr Maximum Throughput: 4. Internal Shell Condition: 5. Gunite Lining Dense Rust ☐ Light Rust

·		

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

						IVIII	NOK SU	UK			<del></del>		<del></del>
Ta	nk	Sun	nma	ry								Sect	tion OPGP-E
6.	Ex	tern	al Fl	oating Roo	f Tank	(conti	inued)						
	A.		c Char	acteristics (cor Color/Shade: White/White			num/Spe	cular			Alumin	um/Dif	fuse
				Gray/Light		Gray/I	Medium				Red/Pri	mer	
		7.	Paint	Condition:		Good				Poor			
	B.	Roof		acteristics Type:	☐ Pont	toon				Doub	ole Deck		
		2.	Roof	Fitting Catego	ory:			Typ	ical			Detail	
	C.	Tank 1.		struction and R Construction:		ystem:		We	lded			Rivet	ed
		2.	Prim	ary Seal: Mechanical S	hoe		Liquid-	-mou	nted			Vapor	-mounted
		3.	Seco	ndary Seal None	☐ Shoe-	-mounte	ed		Rin	n-mou	nted		Weather shield
7.	Po	lluta	nt E	missions									
	A.	Fixe		f Emissions:	Worki	ing Loss	s (tons/yr	<b>a</b>	Bran	thing l	Loss (ton	s/vr)	Total Emissions
		FUII	шаш		WOIK	ing Los:	s (tolis/yi	'	Bica	unng i	2022 (1011	5/y1 <i>)</i>	(tons/yr)
		VOC	C/HA	.P	No e	mission	s occur fi	rom t	he tanl	ks sinc	e gasses a	are rou	ted to the flare.
												-	,
	B.			oof Emissions		. 1							
	Poll	utant <sup>1</sup>		Rim Seal Loss (tons/yr)	Withdra Loss (tons/y	s	Deck Fit Loss (tons/y	_	L	Seam oss is/yr)	Landin Loss (tons/y	2	Total Emissions (tons/yr)
	with polls 2. L	the Outants in the contract of	GP Ap is prov g losse	plication Instruction ided in the OGP	ctions. A li Application rmined acc	st of reg on Instru ording t	ulated air ctions. o the proc	pollu edure	tants an s in <i>Org</i>	id a linl g <i>anic L</i>	c to EPA's	s list of	e listed in accordance hazardous air

•		

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Emission Point Description** AA-008 (Oil Storage Tank No. 3) Emission Point Designation (Ref. No.): Qil Product(s) Stored: В. Under Construction $\boxtimes$ Proposed Operating C. Status: D. Date of construction, reconstruction, or most recent modification (for existing sources) or date of anticipated 2021 construction: **Tank Data** Tank Specifications: 16,800 gallons 1. Design capacity ٥F ambient 11.55 psia @ True vapor pressure at storage temperature: 2. ambient Maximum true vapor pressure (as defined in 11.55 psia @ 3. §60.111b) ambient Reid vapor pressure at storage temperature: 11.55 psia @ 4. 7.2 lb/gal Density of product at storage temperature: 5. lb/lbmol Molecular weight of product vapor at storage temp. 48 6. Horizontal Vertical 冈 Tank Orientation: В. Type of Tank: Internal Floating Roof **External Floating Roof** Fixed Roof Other: Variable Vapor Space Pressure $\boxtimes$ No Is the tank equipped with a Vapor Recovery System П Yes and/or flare? If yes, describe below and include the efficiency of each. The tanks will be vented to the flare. If a VRU is necessary, it will be installed. Closest City: Mobile, AL Tupelo, MS Meridian, MS Jackson, MS Baton Rouge, LA Memphis, TN New Orleans, LA 冈 Yes 🗀 No Is an E&P or similar report described in Condition 5.4(5) of the General Permit included for this tank in the Notice of Intent?

#### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Horizontal Fixed Roof Tank** feet Shell Length: feet Shell Diameter: B. gal C. Working Volume: gal/yr D. Maximum Throughput: Yes No Is the tank heated? E. No Yes Is the tank underground? F. Shell Color/Shade: G. Aluminum/Diffuse Aluminum/Specular Ш Red/Primer Gray/Medium Gray/Light Poor Good H. Shell Condition: **Vertical Fixed Roof Tank** Dimensions: A. 20 feet Shell Height: 1. 12 feet Shell Diameter: 2. 19 feet Maximum Liquid Height: 3. ~10 feet Average Liquid Height: 4. 16,800 gal Working Volume: 5. (est. for each oil storage tank) 91.25 Turnovers per year: 6. MMgal/yr (for entire tank battery) 3.066 Maximum throughput: 7. 冈 No Yes 8. Is the tank heated? Shell Characteristics: В. Shell Color/Shade: 1. Aluminum/Diffuse Aluminum/Specular 冈 White/White Red/Primer Gray/Medium П Gray/Light $\boxtimes$ Good Poor Shell Condition: 2.. Roof Characteristics: Roof Color/Shade: Aluminum/Diffuse 図 Aluminum/Specular White/White ☐ Red/Primer Gray/Light Gray/Medium Poor 冈 Good 2. **Roof Condition:** $\boxtimes$ Dome Cone 3. Type: \_\_ 1 Height:

(		

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Internal Floating Roof Tank** Tank Characteristics: Diameter: 1. gal 2. Tank Volume: Turnovers per year: 3. gal/yr Maximum Throughput: 4. Number of Columns: 5. No Yes Self-Supporting Roof? 6. Effective Column Diameter: 7. Unknown 8" Diameter Pipe 9"x7" Built-up Column Internal Shell Condition: 8. Gunite Lining Dense Rust Light Rust External Shell Color/Shade: 9. Aluminum/Diffuse Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light ☐ Poor ☐ Good 10. External Shell Condition: 11. Roof Color/Shade: Aluminum/Diffuse ☐ Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Good Poor 12. Roof Condition: Rim Seal System: ☐ Vapor-mounted Liquid-mounted Mechanical Shoe Primary Seal: 1. None Rim-mounted Shoe-mounted 2. Secondary Seal: Deck Characteristics: Welded Bolted 1. Deck Type: ☐ Detail Typical Deck Fitting Category: 2. **External Floating Roof Tank** Tank Characteristics A. 1. Diameter: Tank Volume: 2. Turnovers per year: 3. gal/yr Maximum Throughput: 4. Internal Shell Condition: 5. Gunite Lining Dense Rust Light Rust

ŧ		

# MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

anl	k Sur	nma	ry							Sect	ion OPGP-E
E	xtern	al Flo	oating Roo	f Tank	(contir	nued)					
A	Tanl	<u>Pa</u> int	acteristics (co Color/Shade: White/White		Alumin	um/Specul	ar		Aluminu	ım/Dif	fuse
			Gray/Light		Gray/M	ledium			Red/Prin	ner	
	7.	Paint	Condition:		Good			Poor			
В.	Roos		acteristics Type:	☐ Pon	toon			Doub	ole Deck		
	2.	Roof	Fitting Catego	ory:		☐ Ty	pical			Detail	
C.	Tanl 1.		truction and R Construction:		system:	□ w	elded			Rivete	e <b>d</b>
	2.	Prima	ary Seal: Mechanical S	Shoe		Liquid-mo	unted			Vapor-	-mounted
	3.	Secon	ndary Seal None [	☐ Shoe	-mounted	ı [	] Rir	n-mou	nted		] Weather shield
P	olluta	nt E	nissions								
A.	Fixe	d Roof	Emissions:								
		utant <sup>1</sup>		Work	ing Loss	(tons/yr)	Brea	thing 1	Loss (tons	/yr)	Total Emissions (tons/yr)
	VOC	C/HA	P	No e	missions	occur from	the tan	ks s <u>inc</u>	e gasses a	re rout	ed to the flare.
				<u> </u>							<u></u>
B.	Floa Ilutant <sup>1</sup>		Rim Seal Loss (tons/yr)	Withdra Los (tons/	s	Deck Fitting Loss (tons/yr)		s Seam loss ns/yr)	Landin Loss <sup>2</sup> (tons/y	!	Total Emissions (tons/yr)
1			<del>-</del>								listed in accordance

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Emission Point Description** AA-008 (Oil Storage Tank No. 4) Emission Point Designation (Ref. No.): Product(s) Stored: Oil Under Construction Proposed $\boxtimes$ Operating Status: D. Date of construction, reconstruction, or most recent modification (for existing sources) or date of anticipated 2021 construction: **Tank Data** 2. Tank Specifications: A. 16,800 gallons Design capacity 1. ambient 11.55 psia @ True vapor pressure at storage temperature: 2. ambient Maximum true vapor pressure (as defined in 11.55 psia @ 3. §60.111b) ambient Reid vapor pressure at storage temperature: 11.55 psia @ 4. lb/gal 7.2 Density of product at storage temperature: 5. lb/lbmol Molecular weight of product vapor at storage temp. 48 6. П Horizontal 冈 Vertical Tank Orientation: В. C. Type of Tank: Internal Floating Roof External Floating Roof Fixed Roof Other: Variable Vapor Space Pressure $\boxtimes$ No D. Is the tank equipped with a Vapor Recovery System Yes and/or flare? If yes, describe below and include the efficiency of each. The tanks will be vented to the flare. If a VRU is necessary, it will be installed. Closest City: E. Mobile, AL Tupelo, MS Meridian, MS Jackson, MS Baton Rouge, LA П Memphis, TN New Orleans, LA Yes $\square$ Is an E&P or similar report described in Condition 5.4(5) of the $\boxtimes$ No General Permit included for this tank in the Notice of Intent?

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Horizontal Fixed Roof Tank** Shell Length: feet Α. Shell Diameter: feet B. C. Working Volume: gal gal/yr D. Maximum Throughput: Is the tank heated? E. Yes F. Is the tank underground? Yes No Shell Color/Shade: ☐ Aluminum/Diffuse Aluminum/Specular Gray/Medium Red/Primer Gray/Light Shell Condition: Good Poor Vertical Fixed Roof Tank Dimensions: Shell Height: 20 1. feet 2. 12 feet Shell Diameter: Maximum Liquid Height: 19 feet 3. ~10 Average Liquid Height: feet 4. 5. Working Volume: 16,800 gal (est. for each oil storage tank) Turnovers per year: 91.25 6. 7. Maximum throughput: 3.066 MMgal/yr (for entire tank battery) No 8. Is the tank heated? Yes Shell Characteristics: В. Shell Color/Shade: $\boxtimes$ Aluminum/Specular Aluminum/Diffuse ☐ White/White Gray/Light Gray/Medium Red/Primer X Poor 2. Shell Condition: Good Roof Characteristics: Roof Color/Shade: 1. Aluminum/Specular Aluminum/Diffuse White/White Gray/Medium Red/Primer Gray/Light

Good

Cone

Poor

Dome

X

2.

3.

4.

**Roof Condition:** 

Type:

Height:

	· ·	

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Internal Floating Roof Tank** Tank Characteristics: Diameter: 1. gal Tank Volume: 2. Turnovers per year: 3. gal/yr Maximum Throughput: 4. Number of Columns: 5. Yes No Self-Supporting Roof? 6. Effective Column Diameter: 7. Unknown 8" Diameter Pipe 9"x7" Built-up Column Internal Shell Condition: 8. Gunite Lining Dense Rust Light Rust External Shell Color/Shade: 9. Aluminum/Diffuse П Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light ☐ Poor ☐ Good 10. External Shell Condition: 11. Roof Color/Shade: Aluminum/Diffuse ☐ Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Good Poor 12. Roof Condition: Rim Seal System: Vapor-mounted Liquid-mounted Mechanical Shoe Primary Seal: None Rim-mounted Shoe-mounted Secondary Seal: 2. Deck Characteristics: Welded **Bolted** Deck Type: 1. Typical Detail Deck Fitting Category: 2. **External Floating Roof Tank** Tank Characteristics Α. 1. Diameter: Tank Volume: 2. Turnovers per year: 3. gal/yr Maximum Throughput: 4. Internal Shell Condition: 5. Gunite Lining Dense Rust ☐ Light Rust


### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary 6. External Floating Roof Tank (continued) Tank Characteristics (continued): Paint Color/Shade: ☐ White/White Aluminum/Specular ☐ Aluminum/Diffuse Red/Primer Gray/Light Gray/Medium Paint Condition: Good Poor 7. Roof Characteristics Pontoon Double Deck Roof Type: Roof Fitting Category: Typical Detail 2. Tank Construction and Rim-Seal System: Tank Construction: Welded Riveted Primary Seal: 2. Mechanical Shoe Liquid-mounted Vapor-mounted 3. Secondary Seal None Shoe-mounted Rim-mounted Weather shield **Pollutant Emissions** Fixed Roof Emissions: Pollutant1 Working Loss (tons/yr) Breathing Loss (tons/yr) **Total Emissions** (tons/yr) No emissions occur from the tanks since gasses are routed to the flare. VOC / HAP B. Floating Roof Emissions: Deck Fitting Deck Seam **Total Emissions** Pollutant1 Rim Seal Withdrawal Landing Loss Loss<sup>2</sup> (tons/yr) Loss Loss Loss (tons/yr) (tons/yr) (tons/yr) (tons/yr) (tons/yr) 1. All regulated air pollutants including hazardous air pollutants emitted from this source should be listed in accordance

2. Landing losses should be determined according to the procedures in Organic Liquid Storage Tanks chapter of EPA's AP-42 emission factors. If the roof is not landed at least once/yr, enter "NA".

with the OGP Application Instructions. A list of regulated air pollutants and a link to EPA's list of hazardous air pollutants is provided in the OGP Application Instructions.

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Emission Point Description** AA-008 (Water Storage Tank No. 1) Emission Point Designation (Ref. No.): Produced Water Product(s) Stored: В. **Under Construction** Proposed X Status: Operating C. D. Date of construction, reconstruction, or most recent modification (for existing sources) or date of anticipated 2021 construction: **Tank Data** 2. Tank Specifications: 16,800 gallons Design capacity 1. ٥F ambient psia @ 1.15 True vapor pressure at storage temperature: 2. ambient Maximum true vapor pressure (as defined in 1.15 psia @ 3. §60.111b) ambient 1.15 psia @ Reid vapor pressure at storage temperature: 4. 7.2 lb/gal Density of product at storage temperature: 5. lb/lbmol Molecular weight of product vapor at storage temp. 48 6. Horizontal 冈 Vertical Tank Orientation: В. C. Type of Tank: Internal Floating Roof External Floating Roof Fixed Roof Other: Variable Vapor Space Pressure Ø No D. Is the tank equipped with a Vapor Recovery System Yes and/or flare? If yes, describe below and include the efficiency of each. The tanks will be vented to the flare. If a VRU is necessary, it will be installed. Closest City: E. Mobile, AL Tupelo, MS Meridian, MS Jackson, MS Baton Rouge, LA Memphis, TN New Orleans, LA Is an E&P or similar report described in Condition 5.4(5) of the $\boxtimes$ Yes $\square$ No General Permit included for this tank in the Notice of Intent?

#### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary **Horizontal Fixed Roof Tank** feet Shell Length: Α. feet Shell Diameter: В. gal Working Volume: C. gal/yr D. Maximum Throughput: Yes No Is the tank heated? E. No Is the tank underground? Yes F. Shell Color/Shade: G. Aluminum/Diffuse Aluminum/Specular Red/Primer Gray/Medium Gray/Light Poor Good H. Shell Condition: **Vertical Fixed Roof Tank** Dimensions: A. 20 feet Shell Height: 1. 12 feet Shell Diameter: 2. feet 19 Maximum Liquid Height: 3. ~10 feet Average Liquid Height: 4. gal 16,800 Working Volume: 5. 1 Turnovers per year: 6. 15,330 gal/yr Maximum throughput: 7. No Yes 8. Is the tank heated? Shell Characteristics: B. Shell Color/Shade: 1. Aluminum/Diffuse Aluminum/Specular 図 White/White Red/Primer Gray/Medium Gray/Light Poor 冈 Good Shell Condition: 2. Roof Characteristics: Roof Color/Shade: Aluminum/Diffuse $\boxtimes$ Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Poor 冈 **Roof Condition:** Good 2. $\boxtimes$ Dome Cone 3. Type: 1 feet Height:

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-E** Tank Summary 5. Internal Floating Roof Tank Tank Characteristics: Diameter: 1. Tank Volume: 2. Turnovers per year: 3. gal/yr Maximum Throughput: 4. Number of Columns: 5. □ No ☐ Yes Self-Supporting Roof? 6. Effective Column Diameter: 7. Unknown 8" Diameter Pipe 9"x7" Built-up Column Internal Shell Condition: 8. **Gunite Lining** Dense Rust ☐ Light Rust External Shell Color/Shade: 9. Aluminum/Diffuse Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Poor ☐ Good 10. External Shell Condition: 11. Roof Color/Shade: Aluminum/Diffuse ☐ Aluminum/Specular White/White Red/Primer Gray/Medium Gray/Light Good Poor 12. Roof Condition: Rim Seal System: Vapor-mounted Liquid-mounted Mechanical Shoe Primary Seal: None Rim-mounted Shoe-mounted Secondary Seal: 2. Deck Characteristics: Welded **Bolted** Deck Type: 1. ☐ Detail Typical Deck Fitting Category: 2. **External Floating Roof Tank** Tank Characteristics Α. 1. Diameter: Tank Volume: 2. Turnovers per year: 3. \_\_\_\_\_ gal/yr Maximum Throughput: 4. Internal Shell Condition: 5. Gunite Lining Dense Rust ☐ Light Rust

 	<del></del> _		

ADEC PER	NO' MIT	TICE O	F INTENT NSTRUCT	FOR COPERA	TE A	RAGE UND AIR EMISS NOR SOUR	ONS	EQUI EQUI	L PRO PMEN	DUC. ΓAΤ.	TION GENERAL A SYNTHETIC
ank	Sum	mary	<u> </u>		IVEAL	TOR BOOK				Sect	ion OPGP-E
			ting Roof	Tank (	conti	nued)					
A.	"	Characte Paint Co	eristics (cont blor/Shade: hite/White	nued):		num/Specula			Alumin	um/Di1	ffuse
		☐ Gr	ay/Light		Gray/	Medium			Red/Pri	mer	
	7.	Paint Co	ondition:		Good			Poor			
В.	Roof	Characte Roof Ty	_	Ponto	on			Doub	le Deck		
	2.	Roof Fi	tting Categoi	y:		□ Ту	oical			Detai	1
C.	Tank 1.		ection and Risonstruction:	m-Seäl Sy	stem:	□ w	lded			Rivet	ted
	2.	Primary	<sup>,</sup> Seal: Iechanical Sl	noe		Liquid-mo	ınted			Vapo	r-mounted
	3.	□ N	ary Seal	Shoe-	mount	ed [	] Ri	m-moui	nted	[	Weather shield
. Po	lluta	nt Em	issions _								
A.		ed Roof E utant <sup>1</sup>	Emissions:	Worki	ng Lo	ss (tons/yr)	Bre	athing l	Loss (to	ns/yr)	Total Emissions (tons/yr)
	VO	C/HAP		No emissions occur from the tank since gasses			are rou	ited to the flare.			
В.	Floa	ating Roc	of Emissions:							<del></del> _	
	llutant		Rim Seal Loss (tons/yr)	Withdra Loss (tons/y	}	Deck Fitting Loss (tons/yr)	' ]         :	ck Seam Loss ons/yr)	Land Los (tons	$\mathbf{s}^2$	Total Emissions (tons/yr)
	<u> </u>										
wit pol	th the Clutants Landir	OGP Appl is provid	ication Instructed in the OGF in the detection in the OGF in the detection	tions. A li Application rmined acc	st of re on Inst ording	egulated air pol	res in C	and a mi Organic I	K to EFF	7 2 1121 (	be listed in accordance of hazardous air  Canks chapter of EPA's

·				

### MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Section OPGP-F** Flare **Equipment Description** 1. Emission Point Designation (Ref. No.): AA-001 Equipment Description (include the process(es) that the flare controls emissions В. from): The flare is utilized to combust produced gas, and to combust emissions from the heater treater and oil and water storage tanks. D. Model: Custom Manufacturer: Custom C. Under Construction Operating Proposed E. Status: Requesting a federally enforceable condition to route tank emissions to the flare. F. System Data 2. Controlling the following pollutant(s): VOC 98 Efficiency: Controlling the following pollutant(s): 98 Efficiency: Reason for different efficiency: Flare Data (if applicable): В. Non-assisted Steam-assisted Air-assisted 1. Flare type: Other: Net heating value of combusted gas: Est. 1,000 Btu/scf 2. Design exit velocity: N/A ft/sec 3. ☐ Continuous Flame System: 4. Is the presence of a flare pilot flame monitored? No Yes 5. If yes, please describe the monitoring: thermocouple No ⊠ Yes Is the auto-ignitor system monitored? 6. If yes, please describe the monitoring: Daily inspections

### Section OPGP-G MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Compliance Plan**

List all equipment and the corresponding federal and/or state regulation that is applicable. Clearly identify federal regulations from state requirements. Provide the expected or actual construction date, startup date and removal date if the equipment is no longer on site. Equipment List Part 1.

EMISSION UNIT (Ref No.)	FEDERAL or STATE REGULATION  Ex. 40 CFR Part , Subpart  Ex. 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	CONSTRUCTION DATE	STARTUP DATE	REMOVAL DATE
Example: Engines	40 CFR 63, Subpart ZZZZ	10/01/2002	11/15/2019	N/A
Example: Fugitive Emissions	40 CFR 60, Subpart OOOOa	10/01/2019	11/15/2019 N/A	N/A
Example: Flare	11 Miss. Admin. Code Pt. 2, R.1.4.B(2).	12/01/2019	12/02/2019 N/A	N/A
This list of examples should be completed.	This list of examples is not intended to be conclusive for each type of emission source. This list only provides examples of how the table should be completed.	s list only provides ex	camples of ho	w the table
AA-001 Flare and facility wide	11 Miss. Admin. Code Pt. 2, R.1.4.B(2).	10/15/2023	11/1/2023	N/A
AA-002, Engine	40 CFR 63, Subpart ZZZZ	2024 (estimated)	2024 (estimated)	N/A
AA-002, AA-006a, AA-010	11 Miss. Admin. Code Pt. 2, R.1.3.B.	10/15/2023	11/1/2023	N/A
AA-002, AA-006a, AA-010	11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a).	10/15/2023	11/1/2023	N/A
AA-003 Fugitive Emissions	40 CFR 60, Subpart OOOOa	10/15/2023	11/1/2023	N/A

### Section OPGP-G MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE Compliance Plan

List all equipment and the corresponding federal and/or state regulation that is applicable. Clearly identify federal regulations from state requirements. Provide the expected or actual construction date, startup date and removal date if the equipment is no longer on site. **Equipment List** 

Part 1.

	FEDERAL or STATE REGULATION	CONSTRUCTION	STARTUP	REMOVAL
Ex. 40 CFR Part Subpart Ex. 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	rt 2, R. 1.4.B(2).	DATE	DATE	DATE
40 CFR 60, Subpart OOOOa		2024 (estimated)	(estimated)	N/A
			-	


### Section OPGP-G MDEO NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE **Compliance Plan**

Part 2. Applicable Requirements

demonstrate compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the List all applicable state and federal requirements, including emission limits, operating restrictions, etc., and the applicable test methods or monitoring used to day the application is signed.

EMISSION UNIT (Ref No.)	APPLICABLE REQUIREMENT (Specific Regulatory citation)	POLLUTANT	LIMITS/ REQUIREMENTS	TEST METHOD/ COMPLIANCE MONITORING
Example: Compressor	Item 8 of Table 2d of 40 CFR 63, Subpart ZZZZ	HAPs	Change oil and filter every 2,160 hours of operation or annually, whichever comes first; Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	Monitoring of compressor hours of operation
Example: Tanks	Example: Tanks 40 CFR 60.5395(a)(2)	VOC and Methane	Must reduce VOC emissions by 95.0 percent within 60 days after startup of production.	Tank emissions are routed to the flare for destruction at all times of operations.
Example: Flare	11 Miss. Admin. Code Pt. 2, R.1.4.B(2).	H <sub>2</sub> S	1 grain H <sub>2</sub> S per 100 standard cubic feet (1 gr/100 scf)	Recordkeeping of H2S composition of gas by gas analysis; Maintenance of continuous flame for gas combustion.

This list of examples is not intended to be conclusive for each type of emission source. This list only provides examples of how the table should be completed.

AA-001, Flare & facility wide	1 Miss. Admin. Code Pt. 2, R.1.4.B(2).	H <sub>2</sub> S	Any gas stream containing as much as 1 grain H <sub>2</sub> S per 100 standard cubic feet (1 gr/100 scf) must be incinerated prior to discharge to the atmosphere	Recordkeeping of H2S composition of gas by gas analysis; Maintenance of continuous flame for gas combustion.
AA-002	40 CFR 63, subpart ZZZZ, (§63.6590(a))	HAP	Applicability	Applicability Only
AA-002,	40 CFR 63, subpart ZZZZ, (§63.6603 & Table 2(d))	HAP	Change oil and filter every 1,440 hours of operation or annually, whichever comes first; b. Inspect spark plugs every	Monitoring engine hours of operation

# Section OPGP-G MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

Compliance Plan

Part 2. Applicable Requirements

List all applicable state and federal requirements, including emission limits, operating restrictions, etc., and the applicable test methods or monitoring used to demonstrate compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the day the application is signed.

TEST METHOD/	COMPLIANCE MONITORING		Process Knowledge	Process Knowledge		Recordkeeping	Recordkeeping	Reporting	Applicability
	LIMITS/ REQUIREMENTS	1,440 hours of operation or annually, whichever comes first, and replace as necessary c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	Continous compliance and General Duty to operate and maintain in a manner consistent with safety and good air pollution control practies to minimize emissions	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or	ii. Develop and follow your own maintenance plan	Recordkeeping Requiremnts	General recordkeeping requirements	Report any failure to perform a required work practice as scheduled	Applicable requirements under 40 CFR 63 subpart A
	POLLUTANT		HAP	HAP		HAP	HAP	HAP	HAP
THOIL IS SEPTION.	APPLICABLE REQUIREMENT (Specific Regulatory citation)		40 CFR 63, subpart ZZZZ, (§63.6605)	40 CFR 63, subpart ZZZZ, (§63.6640 (a) and Table 6)		40 CFR 63, subpart ZZZZ, (§63.6655 (a),(d) and	40 CFR 63, subpart ZZZZ, (§63.6660 (a),(b) and	40 CFR 63, subpart ZZZZ,	(§63.6640 (b) 40 CFR 63, subpart ZZZZ, (§63.6665 (a) and Table 8)
uay une appiroation is signed	EMISSION UNIT (Ref No.)		AA-002	AA-002		AA-002	AA-002	AA-002	AA-002

# MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

Compliance Plan

Section OPGP-G

Part 2. Applicable Requirements

demonstrate compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the List all applicable state and federal requirements, including emission limits, operating restrictions, etc., and the applicable test methods or monitoring used to day the application is signed.

EMISSION UNIT (Ref No.)	APPLICABLE REQUIREMENT (Specific Regulatory citation)	POLLUTANT	LIMITS/ REQUIREMENTS	TEST METHOD/ COMPLIANCE MONITORING
40	40 CFR 60.5365a(i)	VOC and Methane	Applicability	Applicability only
94	40 CFR 60.5397a(a-g)	VOC and Methane	Develop a fugitive emission monitoring plan	Upon Startup
4	40 CFR 60.5397a(h)	VOC and Methane	Fugitive emission source repair or replacement requirements	Written Plan development
4	40 CFR 60.5425a and Table 3	VOC and Methane	Applicability of General Provisions of 40 CFR 60, Subpart A	Applicability only
7	40 CFR 60.5410a(j)	VOC and Methane	Demonstration of initial compliance	Monitoring
7	40 CFR 60.415a(h)	VOC and Methane	Demonstration of continuous compliance	Monitoring
7	40 CFR 60.5420a(c)	VOC and Methane	Recordkeeping requirements	Monitoring and Recordkeeping
4	40 CFR 60.5420a(b)	VOC and Methane	Reporting requirements	Reporting
	40 CFR 60.5365a(e)	VOC and Methane	Applicability determination may take into account legally and practically enforceable limit on tank emissions	Applicability Only. Federally enforceable limit requested for avoidance.

# Section OPGP-G MDEQ NOTICE OF INTENT FOR COVERAGE UNDER THE OIL PRODUCTION GENERAL PERMIT TO CONSTRUCT/OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

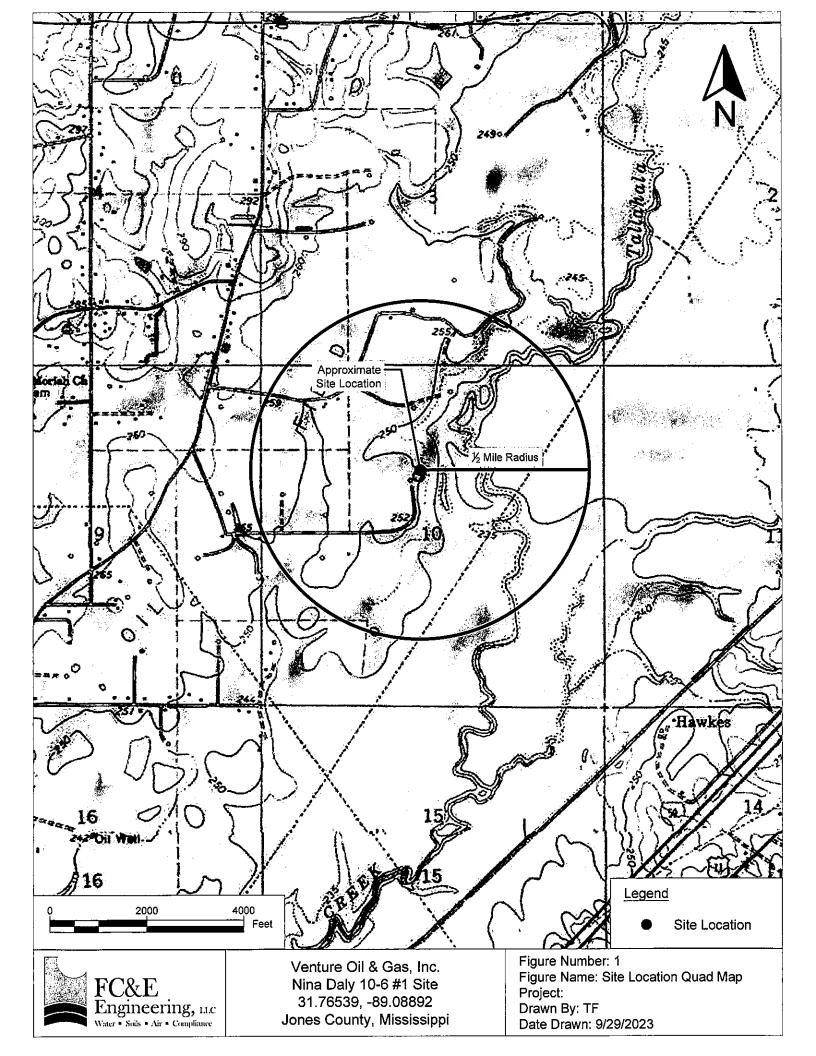
Compliance Plan

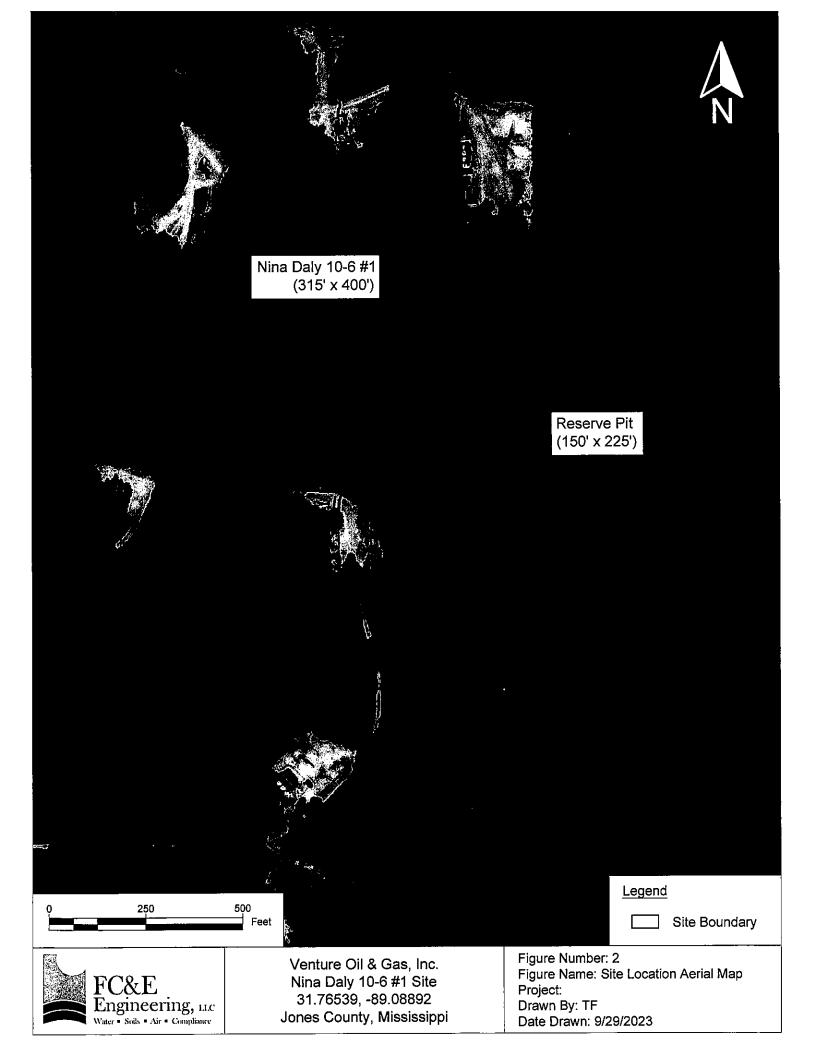
Part 2. Applicable Requirements

List all applicable state and federal requirements, including emission limits, operating restrictions, etc., and the applicable test methods or monitoring used to demonstrate compliance with each applicable requirement. Clearly identify federal regulations from state requirements. Provide the compliance status as of the day the application is signed.

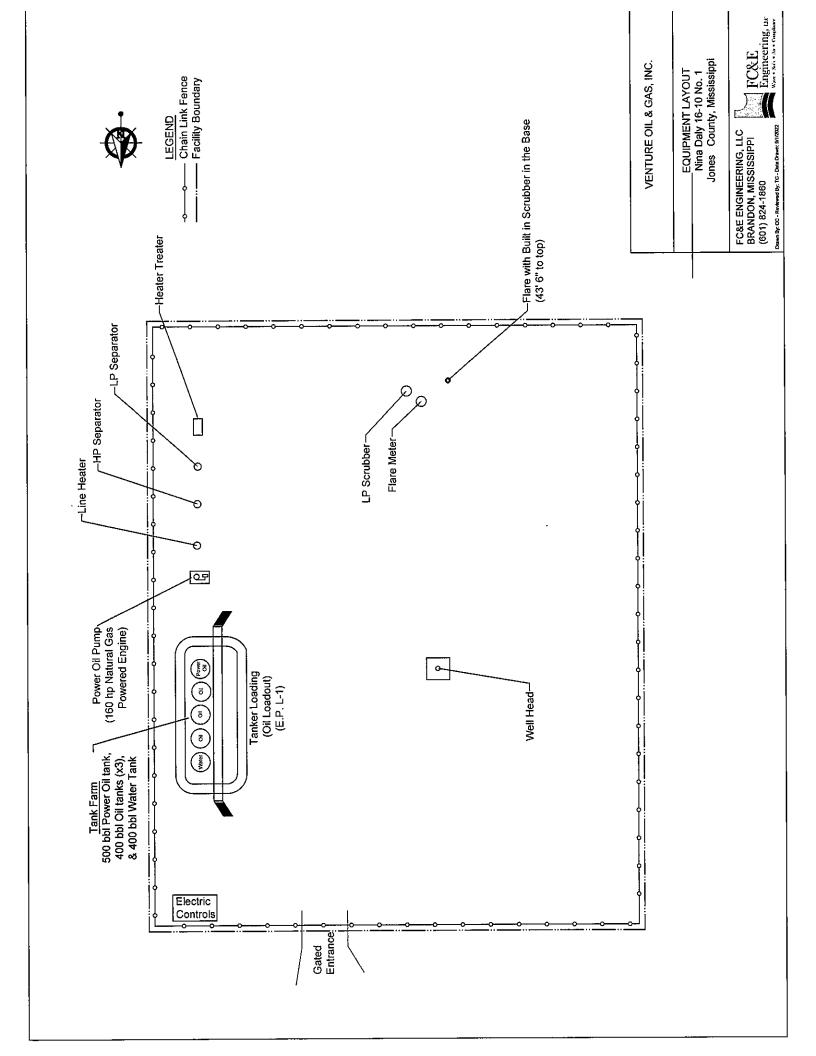
		<del></del> -		<del></del>	<del></del> -		 	Τ-	 	<u> </u>	$\neg$
TEST METHOD/	COMPLIANCE MONITORING	Process Knowledge	Process Knowledge	Recordkeeping and Reporting	Recordkeeping and Reporting						
	LIMITS/ REQUIREMENTS	Applicability	Completion standards/procedures for VOC control	Submit notification, annual report, maintain log of records, as applicable	Specific notification, recordkeeping and reporting requirements.						
	POLLUTANT	VOC	voc	NOC	NOC						
	APPLICABLE REQUIREMENT (Specific Regulatory citation)	40 CFR 60.5365a(a)	40 CFR 60.5375a(a)	40 CFR 60.5410a(a) 40 CFR 60.5415a(a)	40 CFR 60.5420a						
	EMISSION UNIT (Ref No.)	AA-000 Well affected	AA-000 Well affected	AA-000 Well affected	facility AA-000 Well affected	facility					

### **FIGURES**

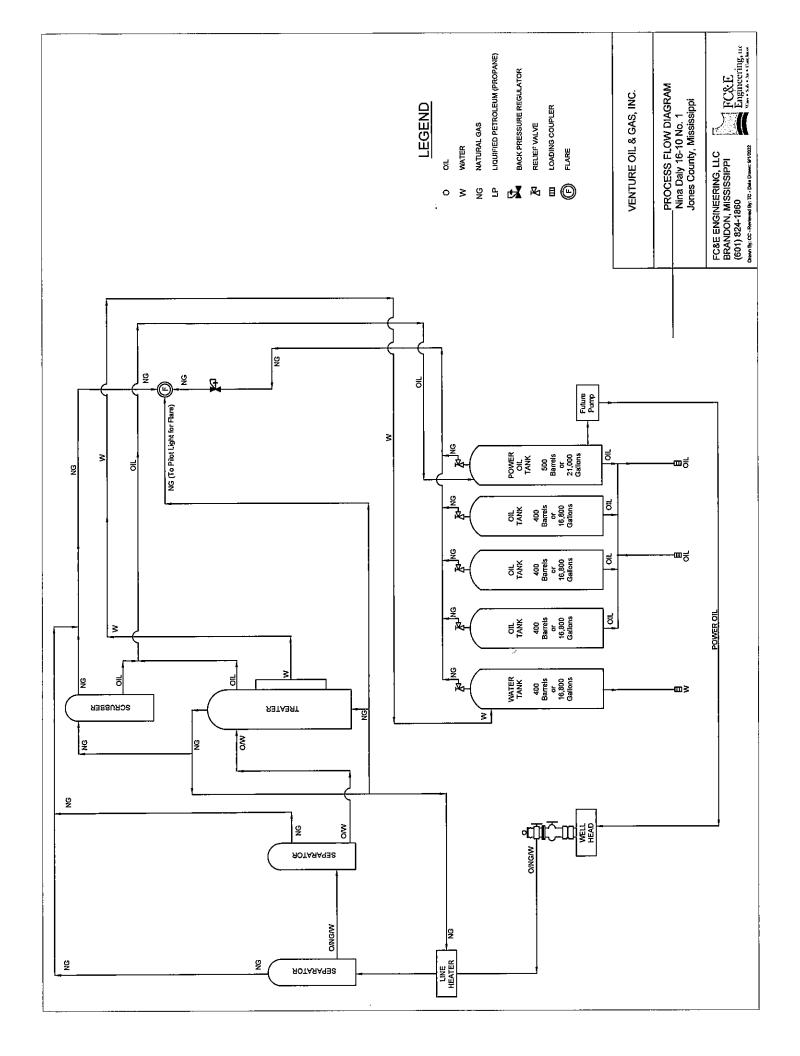




	·	



-··	 	 -	<del></del>	<del></del>



### **ATTACHMENT A**

Calculations for Nina Daly 10-6 No. 1 Tank Battery

9/30/2023 1 of 22

### Site Information for Calculations

				(expected maximum daily production)	(expected maximum daily production)	(expected maximum daily production)		of (estimated using E&P Tanks)	of (estimated using E&P Tanks)	ol (using 1% of oil tank emissions)	ol (using 1% of oil tank emissions)		
	73,000 bbl/yr	365,000 mcf/yr	3,650 bbl/yr	200 bbl/day (expe	1000 mcf/day (exper	10 bbl/day (expe	20	1.31 SCF/stock tank bbl	73.74 SCF/stock tank bbl	0.0131 SCF/stock tank bbl	0.7374 SCF/stock tank bbl	0.00%	%00.86
Site Name:Nina Daly 10-6 No. 1 Tank Battery	Potential Crude Production	Potential Gas production	Potential Produced Water	Initial Crude Production	Initial Gas Production	Initial Water Production	Crude Gravity	Oil tank W&B Losses	Oil tank Flash Gas	Water tank W&B Losses	Water tankflash Gas	VRU recovery efficiency	Flare destruction efficiency

1/2073

2 of 22

,		
	······	

### **Emission Point Summary**

AA-001	Flare	10.25	MMBtu/hr	8760
AA-001a	Flare Pilot	0.05	MMBtu/hr	8760
AA-002	Power Oil Pump Engine	165	hp	8760
AA-003	Fugitive emissions- equipment leaks	-	-	8760
AA-004	High Pressure Separator	-	-	8760
AA-005	Low Pressure Separator	-	<b>-</b>	8760
AA-006	Heater Treater	-	-	8760
AA-006a	Heater Treater (burner)	0.5	mmBtu/hr	8760
AA-007	Misc. Chemical Tanks	-	-	8760
AA-008	Oil and Water Storage Tanks	-	-	8760
AA-009	Truck Loading	16000	gal/hr	As needed
AA-010	Line Heater	0.5	MMBtu/hr	8760

Note: Storage tanks, separators, and heater treater vent to the flare.

9/30/2023 3 of 22

### Proposed Annual Emissions, controlled

	ලනුව	29222.81	25.62	624.88	0.03				255.71	255.71	-		4.16	30388192
ර්රිබනු, රචුර	(NEO	0.05	0.00	00:00	0:00				0.00	0.00	-		0	6005
ලසල ≢ක්පම්බාස, භූහ	   -  -	126.84	0.00	0.01	0.00				00.0	00.0			0.17	(30%24)
	<b>1</b>	26036.79	25.59	624.23	0.03				255.45	255.45	•		0.03	3,074.9 [24/07/458]
	1621 17273	2.3605	0.0004	0.1735	0.0134				0.0041	0.0041	0.0190		0.5000	3:07/49
	308	00.0	0.00	0.003					0.00129	0.00129	ı			ගැලැ
(E)	මෙ	71.98	0.02	19.91	-				0.18035	0.18035	-			95:00
ssions,	NOX	15.79	0.02	11.83	-				0.21471	0.01181 0.21471 0.18035	-	:		738107/
<u>Annual Emissions, ശ്രു</u>	) Voc	49.59	0.00	0.16	0.25	lare	lare	lare	0.01181	0.01181	0.02	lare	11.17	(K,222)
(Vin)	erre	0.43	00.0	0.104	,	Gas routed to Flare	Gas routed to Flare	Gas routed to Flare	0.00408 0.01632 0.01632 0.01181 0.21471 0.18035 0.00129	0.01632	-	as routed to flare		/X5H0
	PENO	0.43	0.00	0.104	-	Gas	Gas	Gas	0.01632	0.00408 0.01632	-	Gas		ASKO
	F	0.43	0.00	0.051					0.00408	0.00408	,			070
	මික්යිහිත ඔබ්යි	Flare	Flare Pilot	Power Oil Pump Engine	Fugitive emissions- equipment leaks	High Pressure Separator	Low Pressure Separator	Heater Treater	Heater Treater (burner)	Line heater	Misc. Chemical Tanks (4)	Oil and Water Tanks (4)	Truck Loading	्रोल्ह्याङ १५६९
		AA-001	AA-001a	AA-002	AA-003	AA-004	AA-005	AA-006	AA-006a	AA-010	AA-007	AA-008	AA-009	

Notes: Storage tanks emissions are included in flare emissions.

4 of 22 9/30/2023



## Potential Annual Emissions, uncontrolled

	ලෙනුව	156416.57	624.88	8.32				232.47	232.47	1		4.16	1575181861
ලෝලා ජාක්යන්තය, ආ	OZN	0.00	00.0	0.00				0.00	0.00			0	0010
<b>CHOIEM</b>	THE	6234.95	0.01	0.33				0.00	00:00	ı		0.17	<b>11</b> 623545 <b>11</b> 1000 <b>1</b>
	යමම	542.88	624.23	0.03				232.23	232.23	1		0.03	[ 1000   1000   1000
		118.02	0.17	0.01				0.0041	0.0041	0.02		0.5000	[ 983373]
	302	-	0.003	•				0.00	0.00	t			1010
(53)	මම	-	19.91	١				0.18	0.18				NZ-073
scions,	KOX	-	11.83	_				0.21	0.21	-			0279)
Annuall≢missions,⊕y	wee	2479.62	0.16	0.25	Flare	Flare	Flare	10.0	0.01	0.02	flare	11.17	व्यक्ता विद्यावस्
May /	PLRE	,	0.104	•	is routed to Flare	is routed to Flare	s routed to Flare	0.02	0.02	-	as routed to flare		0.923
	)	-	0.104	•	Gas	Gas	Gas	0.02	0.02	-	Gas		0.623
	PM	,	0.051	-				0.00	0.00	-			9000
	Emicston Unit	Facility gas emissions	Power Oil Pump Engine	Fugitive emissions- equipment leaks	High Pressure Separator	Low Pressure Separator	Heater Treater	Heater Treater (burner)	Line heater	Misc. Chemical Tanks	Oil and Water Storage Tanks	Truck Loading	) (CAIS
	Ameston Origin	AA-001	AA-002	AA-003	AA-004	AA-005	AA-006	AA-006a	AA-010	AA-007	AA-008	AA-009	

Notes: Storage tanks emissions are included in flare emissions, AA-001.

5 of 22


# Facility Maximum Hourly Emissions, Controlled

	ලෙන	6671.87	5.85	142.67	#REF!		0.01				58.38	58.38	00.00		0.95	HREE!						
CHC Emissions, (b/hr.	୍ ତୟଏ	0.01	0.00	00'0	#REF!		0.00				0.00	0.00	1		0	#REFI						
<b>GHGIEMIS</b>	(XIII)	28.96	00:0	00.00	#REF!		0.00				00.0	0.00	-		0.04	*KEFI						
	ශාම	5944.47	5.84	142.52	#REF!		0.01				58.32	58.32	-	UTED TO FLARE	0.01	(KREP)						
	MARS HARS	0.54	0.00	0.04	#REF!		0.00				0.00	0.00	0.00		5.27	KER						
	300	00'0	00.0	00'0	#REF!		•				0.04 0.00	0.00	-		•	統시되게						
	89	16.43	0.00	4.55	#REF!			ARE	ARE	ARE		0.04	-		•	#REFI						
Emissions, Ilian	NOx	3.61	00.0	2.70	#REF!		•	GAS ROUTED TO FLARE	GAS ROUTED TO FLARE	GAS ROUTED TO FLARE	0.05	0.05	-		1	<b>ERREA</b>						
<u>Emissio</u>	NOG	11.32	0.00	0.04	#REF!		90.0	GAS ROU		GAS ROU	0.00 0.00	0.00	0.00		117.72	*REF						
	PLPG	0.10	0.00	0.02	#REF!		1					0.00	-		1	<b>ERRAP!</b>						
	DITHO	0.10	0.00	0.02	#REF!		-				00.0	0.00	•		I	SKER						
		0.10	0.00	0.01	#REF!		1											0.00	0.00	-		1
	Embsion Walk	Flare	Flare Pilot	Power Oil Pump Engine	Compressor Engine	Fugitive emissions- equipment	leaks	High Pressure Separator	Low Pressure Separator	Heater Treater	Heater Treater (burner)	Line Heater	Misc. Chemical Tanks	Oil and Water Storage Tanks	Truck Loading	IOFE						
	Jank Len Unik le	AA-001	AA-001a	AA-002	AA-002a		AA-003	AA-004	AA-005	AA-006	AA-006a	AA-010	AA-007	AA-008	AA-009							

### Notes:

Storage tanks emissions are included in flare emissions. Truck loading hourly emissions are dictated by the capacity of the transfer pump

4.38 tpy = 1 PPH

6 of 22

		`
 	<del></del>	

### Flash Gas Analysis and Conversions

Component	VOC and/or HAP?	Mol %	Wt %	
Total S	None	***	0.00000%	
CO2	None	0.362%	0.160%	
N2	None	0.000%	0.000%	
Methane	None	11.546%	1.852%	
Ethane	None	6.480%	1.949%	
Propane	VOC	19.755%	8.712%	
Isobutane	VOC	20.171%	11.724%	
Butane	VOC	12.576%	7.309%	
Isopentane	VOC	9.194%	6.633%	
Pentane	VOC	5.953%	4.295%	
Hexane	VOC	3.906%	3.366%	
Heptanes	VOC	6.630%	6.644%	
Benzene	VOC and HAP	0.390%	0.544%	
Toluene	VOC and HAP	0.388%	0.639%	
e-Benzene	VOC and HAP	0.015%	0.028%	
Xylenes	VOC and HAP	0.211%	0.400%	
n-hexane	VOC and HAP	2.422%	3.726%	
Total VOC		79.190%	54.020%	
Total HAP		3.426%	5.337%	

Heat of combustion, Btu/ft <sup>3</sup>	2465.9
Molecular weight	46.02

Gas analysis generated by E&P Tanks software.

9/30/2023 7 of 22

 		 ·	

\_

### **Produced Gas Analysis and Conversions**

Component	VOC and/or HAP?	Mol %	Wt %
Total S	None	0.000%	0.00000%
CO2	None	2.600%	5.140%
N2	None	1.230%	1.545%
Methane	None	82.100%	59.037%
Ethane	None	9.250%	12.470%
Propane	VOC	2.880%	5.694%
Isobutane	VOC	0.500%	1.303%
Butane	voc	0.730%	1.902%
Isopentane	voc	0.210%	0.679%
Pentane	voc	0.180%	0.582%
Hexane	VOC	0.220%	0.850%
n-Hexane	VOC and HAP	0.136%	0.565%
Heptanes+	voc	0.100%	8.030%
Benzene	VOC and HAP	0.042%	0.051%
Toluene	VOC and HAP	0.010%	0.039%
e-Benzene	VOC and HAP	0.001%	0.004%
Xylenes	VOC and HAP	0.007%	0.020%
Total VOC		4.820%	21.808%
Total HAP		0.196%	0.679%

Heat of combustion, Btu/ft <sup>3</sup>	1236.0
Molecular weight	21.94

9/30/2023 8 of 22

		·

TANK W & B GAS COMPOSITION

Component	VOC and/or HAP?	Mol %	Wt %			
Total S	None	0.000%	0.00000%	1		
CO2	None	0.32%	0.25%	44.1	0.140414	
N2	None	0.00%	0.00%	28.01	0	
Methane	None	4.76%	1.35%	16.04	0.762878	
Ethane	None	7.23%	3.86%	30.07	2.174783	
Propane	VOC	24.31%	19.03%	44.1	10.72005	
Isobutane	VOC	23.60%	24.34%	58.12	13.71649	
Butane	VOC	14.17%	14.62%	58.12	8.235546	
Isopentane	VOC	9.38%	12.01%	72.15	6.766083	
Pentane	VOC	5.77%	7.39%	72.15	4.163055	
Hexane	VOC	3.28%	5.02%	86.18	2.8286	
Heptanes+	VOC	4.52%	8.03%	100.21	4.526586	
Benzene	VOC and HAP	0.32%	0.44%	78.11	0.247531	0.499956
Toluene	VOC and HAP	0.27%	0.44%	92.14	0.245092	
e-Benzene	VOC and HAP	0.01%	0.02%	106.17	0.009449	
Xylenes	VOC and HAP	0.12%	0.23%	106.16	0.129091	
n-hexane		1.95%	2.98%	86.18	1.677235	
Total VOC		85.75%	91.56%		56.34289	
Total HAP		2.660%	4.10%			

Heat of combustion, Btu/ft<sup>3</sup> 2796.8 Molecular weight 51.43

Note: W&B vapors and truck loading vapors assumed to have same composition Gas analysis generated by E&P Tanks software.

9/30/2023 9 of 22

•		

### **Tank Uncontrolled Emissions Summary**

	Potential		Initial Production	
Total flash gas ,	5,385,712	SCF/yr	615	SCF/hr
Total flash gas ,	319.97	tpy	73.05	lb/hr
Total tank W&B loss	95,678	SCF/yr	11	SCF/hr
Total tank W&B losses	6.35	tpy	1.45	lb/hr
Total tank emissions	326.32	tpy	74.50	lb/hr
Tank emissions to flare	326.32	tpy	74.50	lb/hr

### Notes:

- 1. Total flash gas calculated using gas/oil ratio from E&P tanks program and potential crude and water production
- 2. All tank emissions included with flare, Emission Point AA-001.

9/30/2023 10 of 22

### Calculation of Criteria and Hazardous Flare Emissions Using Average Production Values

### Gas Flow to Flare:

day flow to flow.		<u>Potential</u>
Flow to flare of tank flash gas	=	319.97 tpy
Flow to flare of tank W&B emissions		6.35 tpy
flow to flare from truck loading	=	0.00 tpy
Total process gas to flare	=	326.32 tpy
Produced gas to flare	=	10550.86 tpy
-	=	365000.00 mcf/yr
Produced gas combustion heat	=	451140.00 MMBtu/yr
process gas combustion heat	=	13271.52 MMBtu/yr
flare gas combustion heat, total	=	464411.52 MMBtu/yr

			Potential Emissions			<u>Potential Er</u>	<u>missions</u>
!	Pollutant Pollutant	Emission factor, lbs/MMBtu	<u>lb/hr</u>	<u>tpy</u>	<u>Pollutant</u>	<u>lb/hr</u>	<u>tpy</u>
	NOx	0.068	3.605	15.790	n-hexane	0.4601	2.0154
Calculation	CO	0.31	16.435	71.984	benzene	0.0327	0.1430
	PM	0.00186	0.003	0.432	e-benzene	0.0023	0.0103
	VOC	mass balance	11.322	49.592	toluene	0.0282	0.1237
	SO <sub>2</sub>	mass balance	0.000	0.000	xylenes	0.0155	0.0681
Р	M10/PM2.5	0.00745	0.395	1.730	Total HAPs	0.5389	2.3605

### Notes:

- 1. Emission factors from AP-42, Table 13.5-1, are used to calculate NOx and CO emissions, and PM emission factor from AP-42, Table 1.4-2.
- 2. Mass balance calculations utilize flare input gas flow and a flare destruction efficiency of 98% minimum.
- 3. Mass balance for sulfur assumes all sulfur converted to SO2 in flare.

ank Battery HAP emissions calculated using mass balance and 98% destruction efficiency Oil General Permit Coverage Application

9/30/2023 11 of 22


### Calculation of Maximum Hourly Criteria and Hazardous Flare Emissions Using Initial Production Values

### Gas Flow to Flare:

	<u>Potential</u>
=	73.05 lbs/hr
	1.45 lbs/hr
=	0.00 lbs/hr
=	74.50 lbs/hr
=	2408.87 lbs/hr
=	41.67 mcf/hr
=	51.50 MMBtu/hr
=	1.52 MMBtu/hr
=	53.02 MMBtu/hr
	= = =

			Maximum Hourly Emissions		Potential Emissions
	Pollutant	Emission factor, lbs/MMBtu	<u>lb/hr</u>	<u>Pollutant</u>	<u>lb/hr</u>
	NOx	0.068	3.605	n-hexane	0.4601
Calculation	CO	0.37	19.616	benzene	0.0327
	PM	0.00745	0.395	e-benzene	0.0023
	VOC	mass balance	11.322	toluene	0.0282
	SO <sub>2</sub>	mass balance	0.000	xylenes	0.0155
	-			Total HAPs	0.5389

### Notes:

- 1. Emission factors from AP-42, Table 13.5-1, are used to calculate NOx and CO emissions, and PM emission factor from AP-42, Table 1.4-2.
- 2. Mass balance calculations utilize flare input process gas flow and a flare destruction efficiency of 98% minimum.
- 3. Mass balance for sulfur assumes all sulfur converted to SO2 in flare.
- 4. HAP emissions calculated using mass balance and 98% destruction efficiency

9/30/2023 12 of 22

### **Calculation of Uncontrolled Emissions of Produced Gas**

		<u>Potential</u>
Flow to flare from tank flash gas	=	319.97 tpy
Flow to flare from tank W&B emissions	=	6.35
flow to flare from truck loading	=	0.00 tpy
Produced gas to flare from separators	=	10550.86 tpy

		<u>Potential</u>	<u>Emissions</u>
<u>Pollutant</u>	Emission factor, lbs/MMBtu	<u>lb/hr</u>	<u>tpy</u>
VOC	mass balance	566.124	2479.62
H2S	mass balance	0.000	0.00
n-hexane	mass balance	23.007	100.77
benzene	mass balance	1.633	7.15
e-benzene	mass balance	0.117	0.51
toluene	mass balance	1.412	6.19
Calculation xylenes	mass balance	0.777	3.40
total HAPs	mass balance	26.946	118.02
methane	mass balance	1423.504	6234.95
CO2	mass balance	123.944	542.88

Note: For calculation of uncontrolled emissions, flare efficiency is 0%.

9/30/2023 13 of 22

	<u>.                                    </u>	

### **Calculation of Flare GHG Emissions**

Process gas to flare, mmcf/yr 5.38
N2O emission factor, kg/mmBtu 0.0001
HHV, mmBtu/scf 0.001235
CO2 density, kg/ft3 0.052600
CH4 density, kg/ft3 0.019200
flare efficiency 98.00%

### **PROCESS GAS**

carbon	CO2 (from o	ombustion)	CO2 input	CH4, unco	mbusted	N2O	CO2e
atoms	cubic ft.	tpy	tpy	cubic ft.	tpy¹	tpy <sup>1</sup>	tpy
	1		1.13E+00	1.24E+04	2.62E-01	7.31E-04	7.91E+00
1	6.09E+05	3.52E+01	*				3.52E+01
2	6.84E+05	3.96E+01					3.96E+01
3	3.13E+06	1.81E+02					1.81E+02
4	6.91E+06	4.00E+02					4.00E+02
5+	7.04E+06	4.07E+02					4.07E+02
Total	1.84E+07	1.06E+03	1.13E+00	1.24E+04	2.62E-01	7.31E-04	1.07E+03

### **PRODUCED GAS**

produced gas to flare, mmcf/yr

365.00

carbon	CO2 (from c	ombustion)	CO2 input	CH4, unco	mbusted	N2O	CO2e
atoms	cubic ft.	tpy	tpy	cubic ft.	tpy	tpy	tpy
<u> </u>			5.49E+02	5.99E+06	1.27E+02	4.96E-02	3.73E+03
1	2.94E+08	1.70E+04				ļ	1.70E+04
2	6.62E+07	3.83E+03					3.83E+03
3	3.09E+07	1.79E+03					1.79E+03
4	1.76E+07	1.02E+03					1.02E+03
5+	1.38E+07	7.97E+02					7.97E+02
Total	4.22E+08	2.44E+04	5.49E+02	5.99E+06	1.27E+02	4.96E-02	2.82E+04

Note: GHG emissions calculated using procedures from 40 CFR 98.233(n)(4)

70690.72

9/30/2023 14 of 22

•			
		 - 1444 24 144 24	<u> </u>

# **Equipment Component Fugitive Emissions**

Valves:         37         scf/hr/component         lbs/hr           Valves:         37         ccf/hr/component         lbs/hr           gas/vapor         24         0.027         0.037462767           light oil²         13         0.05         0.037578393           Pumps:         0         0.005         0         0           Light oil         0         0         0         0           heavy oil         0         0         0         0           Flanges:         46         0.003         0.007978182         0           light oil         46         0.0003         0.007978182         0           heavy oil         0         0.0009         0         0           Relief Valve:         4         0.004         0.009250066           Connectors:         101         0.009250066         0           Gas/vapor         67         0.003         0.011620395           light oil         34         0.007         0.013759473           heavy oil         0         0.0003         0	Components	Counts	Emission Factor <sup>1</sup>	Emissions	Wt. Fraction	VOC Emissions	ssions	%20A	HAP Emissions	issions	GHG E	GHG Emissions, ton/yr	on/yr
37   0.027   0.05   0			scf/hr/component	lbs/hr	00x	lb/hr	tpy	HAP³	lb/hr	tpy	C02	CH4	CO2e
iss/vapor         24         0.027         0           ight oil²         13         0.05         0           eavy oil         0         0.01         0           eavy oil         0         0         0           eavy oil         46         0         0           isylvapor         46         0.003         0           ight oil         4         0.003         0           as/vapor         4         0.003         0           tors:         101         0.007         0           iight oil         34         0.007         0           ieavy oil         0         0.0003         0	ves:	37											
ight oil²         13         0.05         0           eavy oil         0         0.0005         0           light oil         0         0         0           eavy oil         46         0         0           eavy oil         0         0.0003         0           eavy oil         0         0.0009         0           alve:         4         0.04         0           tors:         101         0.003         0           ight oil         34         0.003         0           ight oil         34         0.007         0           ight oil         0         0.0003         0	gas/vapor	24	0.027		0.22	0.008	0.04	%89'0	0.000	0.001	0.008543	0.098427	2.47
light oil 0 0.0005  as/vapor 0 0.001  as/vapor 0 0.003  ight oil 46 0.003  ight oil 0 0.0009  as/vapor 4 0.04 0  tors: 101  as/vapor 67 0.003  ight oil 34 0.007  ight oil 0 0.0003	light oil <sup>2</sup>	13	0.05		0.54	0.020	60.0	5.34%	0.002	0.009	0.008569	0.089756	2.25
Light oil         0         0.01           eavy oil         0         0           as/vapor         46         0           light oil         46         0.003         0           leavy oil         0         0.0009         0           as/vapor         4         0.04         0           tors:         101         0.003         0           light oil         34         0.007         0           leavy oil         0         0.0003         0	heavy oil	0	0.0005	0	0.22	0.000	0.00	%89.0	0.000	0.000	0	0	0.00
ight oil 0 0.01  eavy oil 0 0.01  ss/vapor 46 0.003 0 0.0009  light oil 0 0.0009  as/vapor 4 0.004 0 0.003  tors: 101 0.003 0 0.001  ight oil 34 0.007 0 0.003	ups:			0	0.22			%89'0	000'0	0.000	0	0	0.00
avy oil 0 0 0  46 0  i/vapor 46 0.003 0  int oil 46 0.0009  avy oil 0 0.004 0  i/vapor 4 0.004 0  i/vapor 67 0.003 0  avy oil 34 0.007 0  avy oil 0 0.0003	Light oil	0	0.01	0	0.73	0.000	0.00	1.66%	000'0	0.000	0	0	0.00
Afe 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	heavy oil	0	0	0	0.22			%89.0	0.000	0.000	0	0	0.00
sivapor         0           pht oil         46         0.003         0           avy oil         0         0.0009         0           Ive:         4         0.04         0           sivapor         67         0.003         0           sivapor         67         0.007         0           pht oil         0         0.0003         0           avy oil         0         0.0003         0	nges:	46		0	0.22			%89.0	000.0	0.000	0	0	0.00
oil 46 0.003 0.  oil 0 0.003 0.  oor 4 0.04 0.  ior 67 0.003 0.  oil 0 0.0003	gas/vapor		0	0	0.22	0.000	0.00	%89.0	0.000	0.000	0	0	0.00
oil 0 0.0009  oor 4 0.004 0  oor 67 0.003 0  oil 0 0.0003	light oil	46	0.003	0.007978182	0.73	0.006	0.03	1.66%	0.000	0.001	0.001819	0.019056	0.48
Sor         4         0.04         0           101         0.003         0           sor         67         0.007         0           oil         0         0.0003	heavy oil	0	0.0009	0	0,22	0.000	0.00	%89.0	0.000	0.000	0	٥	0.00
Sor         4         0.04         0           101         0.003         0           sor         67         0.007         0           oil         0         0.0003	ief Valve:			0	0.22			%89.0	0.000	0.000	0	0	0.00
101     0.003     0       iii     34     0.007     0       oil     0     0.0003	gas/vapor	4	0.04	0.009250066	0.22	0.002	0.01	%89'0	0.000	0.000	0.002109	0.022094	0.55
Sor         67         0.003         0.01           iii         34         0.007         0.0003           oil         0         0.0003	nnectors:	101		0	0.22			%89'0	0000	0.000	0	,	0.00
34 0.007 0 0 0.0003	gas/vapor	29	0.003	0.011620395	0.22	0.003	0.01	%89'0	0:000	0.000	0.00265	0.027755	0.70
0 0.0003	light oil	34	0.007	0.013759473	0.73	0.010	0.04	1.66%	0.000	0.001	0.003138	0.032864	0.82
	heavy oil	0	0.0003	0	0.22	0.000	0.02	0.68%	0.000	0.000	0	0	0.00
Other 1 0.3 0.017343874	Other	_	0.3	0.017343874	0.22	0.004	0.02	1.66%	0000	0.001	0.003955	0.041426	1.04
					Totals	0.053	0.247		0.003	0.013	0.031	0.331	8.315

# Notes:

1. Emission factors and equipment counts taken from 40 CFR 98, subpart W.

2. Light oil is defined as having API gravity greater than or equal to 20 degrees API.

heater treater Equipment wellhead 3. Vapors emitted from gas service equipment assumed to be same as produced gas, vapor from liquid service equipment assumed to be the same as flash gas.

0 0

0 0

20

n w

Other

킯

Flanges Fittings 10

Valves

Count

000

	0	0	0	4	0	4
	0	70	0	57	0	101
	0	24	0	0	0	46
	0	12	0	12	0	37
	0	2	0	П	0	total
	header	separator	meters/piping	compressor	dehydrator	
	tpy	0.01673	0.00100	0.00008	0.00077	0.00039
	lb/hr	0.00382	0.00023	0.00002	0.00018	0.00009
ולחום ככו אוכה בלתוליווים ווי מבסמווים כב בים בים		n-hexane	benzene	ethyl benzene	toluene	xylene 0.00009

		·

# **ENGINE POTENTIAL EMISSIONS CALCULATIONS**

		Heat Input				Em	Emissions, tpy				GHG E	GHG Emissions, tons/y	ons/yr
Engine No.	롸	mmBtu/hr	XON	20/	83	SO2	4S1	PM10	PM2.5	C02	CH4	N20	C02e
AA-002	165	1.22	11.83	0.16	19.91	0.00	0.05	0.10	0.10	624.23	624.23 1.18E-02	0.001	624.88
		गुर्मा	: M.88	<u> </u>	୍ୟ ପ୍ରଥିଲ	000	<b>6003</b>	050	050	( <b>320,23</b> 3)	000	0010	624 88
Security Security	A STATE OF THE PARTY OF THE PARTY.	ラースの大学 大学 日本 - 100 mm	CANAL STATES CO.	10000			15. 25.00			S			

GHG Emission	o lbs	0.0022046 kg/mmBtu	CO2 53.02	CH4 0.001			
AP-42	Pollutant <u>Emission Factor</u>				CO 3.72		

### **ENGINE HAP EMISSIONS CALCULATIONS**

	Natural Gas	AA-002			Total HAP
	Emission Factor,	HAP EMISSIONS			Emissions
HAP	lbs/mmBtu	lbs/hr	tpy		tpy
1,1,2,2-Tetrachloroethane	2.53E-05	3.09E-05	1.35E-04		1.35E-04
1,1,2-Trichloroethane	1.53E-05	1.87E-05	8.19E-05		8.19E-05
1,3-Butadiene	6.63E-04	8.10E-04	3.55E-03		3.55E-03
1,3-Dichloropropene	1.27E-05	1.55E-05	6.80E-05		6.80E-05
Acetaldehyde	2.79E-03	3.41E-03	1.49E-02		1.49E-02
Acrolein	2.63E-03	3.21E-03	1.41E-02		1.41E-02
Benzene	1.58E-03	1.93E-03	8.46E-03		8.46E-03
Carbon Tetrachloride	1.77E-05	2.16E-05	9.47E-05		9.47E-05
Chlorobenzene	1.29E-05	1.58E-05	6.90E-05		6.90E-05
Chloroform	1.37E-05	1.67E-05	7.33E-05		7.33E-05
Ethylbenzene	2.48E-05	3.03E-05	1.33E-04	ĺ	1.33E-04
Ethylene Dibromide	2.13E-05	2.60E-05	1.14E-04		1.14E-04
Formaldehyde	2.05E-02	2.50E-02	1.10E-01		1.10E-01
Methanol	3.06E-03	3.74E-03	1.64E-02		1.64E-02
Methylene Chloride	4.12E-05	5.03E-05	2.20E-04		2.20E-04
Naphthalene	9.71E-05	1.19E-04	5.20E-04		5.20E-04
PAH	1.41E-04	1.72E-04	7.55E-04		7.55E-04
Styrene	1.19E-05	1.45E-05	6.37E-05		6.37E-05
Toluene	5.58E-04	6.82E-04	2.99E-03		2.99E-03
Vinyl Chloride	7.18E-06	8.77E-06	3.84E-05		3.84E-05
Xylene	1.95E-04	2.38E-04	1.04E-03		1.04E-03
Total	<u></u>	3.96E-02	1.73E-01	ĺ	1.73E-01

AA-002 heat input=

1.22 mmBtu/hr

annual operating hours=

8760

Emission factors from AP-42, Table 3.2-3

9/30/2023 17 of 22

### Truck Loading Emissions Calculations 30-Day Average production

Basis: 30 day average production rates

 $L_L = 12.46 *(SPM)/T$ 

(from EPA AP-42 Section 5.2.2.1)

### Where:

L<sub>L</sub> = Loading loss, lbs per 1,000 gal of liquid loaded

S = Saturation factor

P = True vapor pressure of liquid, psia
M = Molecular weight of vapors, lb/lb-mole
T = Temperature of bulk liquid loaded, degrees R

### **CRUDE OIL**

EPA III	TrioVP Oi UmrHi	Mol. Wil. Oi Venor	බ්කුරි ග් ප්රාේර	Sales Volume	Loadin gRate	Uncomi Tickell	rolled las Infections Hydrogen	anded F Samuli
1.45	(psia) 	(Ib/Ib= mole) 48.00	(R) 545	(10° gallyn) 3.066	(gal/hr) 16,000	7.96	((I5/hr)) 127.30	(02X) -13.30

### PRODUCED WATER

Calculation

	EPA	utue VP	Mol. Wit	Jembr	Loaded	Loadin	Uncont	rolled Es	timated
I	_a@ <b>p</b>	വി	<b>@</b>	ග්	Volume	gRate	[ E	mission	3 <sub>0</sub>
ď	Frefor	<u>Ufrofd</u>	<b>Varous</b>	Liquid			ীৰ্তন	Hydroca	enodi
		(psia)	(DAD=	(ध)	(KOG CONOX)	(gal/hr)	LL.	(EQ(ED))	((CDX))
Ě			mole)	4,44,44	<b>建筑</b>		45.00 S.L.E.		
Γ	1.45	0.05	48.00	545	153	16,000	0.08	1.27	0.01

HAI	-s	топѕ/уг
Ben	zene	0.05361
Tol	ıene	0.053082
e-B	enzene	0.002047
Xyle	enes	0.027959
n-h	exane	0.363258
		0.499956

9/30/2023 18 of 22

### Truck Loading Emissions Calculations, Maximum Ibs/hr

 $L_L = 12.46 * (SPM)/T$  (from EPA AP-42 Section 5.2.2.1)

### Where:

L<sub>L</sub> = Loading loss, lbs per 1,000 gal of liquid loaded

S = Saturation factor

P = True vapor pressure of liquid, psia
M = Molecular weight of vapors, lb/lb-mole
T = Temperature of bulk liquid loaded, degrees R

### CRUDE OIL

EPA ESP ESP	ग्रेटंं अर ॐ भागमा	Mol Wil Of Verone	ीं(आ))). (व्हें (प्रीवार्गीवें	Sales Volume	Localin g Refe	اعوار الرابومار	EEI Bellou anderline recofovill	limated b Coma
1.45	(CGTD)	(Ib/Ib) mole)	(3)	(60° gallin)	(gal/hr) 16,000	7.96	(lb/hi) 127.30	

### PRODUCED WATER

Calculation

	@€\$D □35(7)	Mice As	OU. IMOPANE	രണം	Aoprima Freederin	രങ്ങ	Uncont		timated
ır	Factor	(Licuid)	Various)	Liquid	COLLING	6 K.3.3	ीर्जा	Hydroca	bons.
		(psib)		(A)	((O) (COLUM)	(Gt/m)	<u></u>	(GQQQ)	
	1.45	0.05	48.00	545	16.0	16,000	0.08	1.27	

HAPs	lbs/hr
Benzene	0.564848
Toluene	0.559285
e-Benzene	0.021562
Xylenes	0.294576
n-hexane	3.82734
total	5.267611

9/30/2023 19 of 22



# **External Combustion Equipment Emissions Calculations**

			0.00 0.00	0.00 0.00	0.00 0.00
			255.45	255.45	510.90
		HAP	0.004	0.000	0.004
		502	0.001	0.001	0.003
		NOC	0.012	0.012	0.024
	s, tons/yr	00	0.180	0.180	0.361
	Emissions	NOX	0.215	0.215	0.429
		Pm 2.5	0.016	0.016	0.033
		PM10	0.016	0.016	0.033
		ΡM	0.004	0.004	0.008
	Capacity	VIMBtu/hr	0.5	0.5	
		Source	Heater Tre	ine Heate	Totals

	40 CFR 98, subpart C	Emission Factors, kg/MMBtu	CO2 53.02	CH4 0.001	N2O 0.0001				
Ap-42 natural gas combustion	Emission Factors, lbs/MMBtu	0.001863	0.007451	0.007451	0.098039	0.082353	0.005392	0.000588	0.001851
Ap-42 na	Emission	Pm	PM10	PM2.5	Ň	8	VOC	202	HAPs

	÷	

### **Natural Gas Combustion HAP Calculations**

	Natural Gas	Heater	Treater	Flare	Pilot	Line H	leater
	Emission Factor,	HAP EN	IISSIONS	HAP EM	ISSIONS	HAP EMISSIONS	
HAP	lbs/mmBtu	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
Benzene	2.06E-06	1.03E-06	4.51E-06	1.03E-07	4.51E-07	1.03E-06	4.51E-06
Dichlorobenzene	1.18E-06	5.88E-07	2.58E-06	5.88E-08	2.58E-07	5.88E-07	2.58E-06
Formaldehyde	7.35E-05	3.68E-05	1.61E-04	3.68E-06	1.61E-05	3.68E-05	1.61E-04
Hexane	1.76E-03	8.82E-04	3.86E-03	8.82E-05	3.86E-04	8.82E-04	3.86E-03
Naphthalene	5.98E-07	2.99E-07	1.31E-06	2.99E-08	1.31E-07	2.99E-07	1.31E-06
Polycyclic Organic Matter	2.38E-05	1.19E-05	5.21E-05	1.19E-06	5.21E-06	1.19E-05	5.21E-05
Toluene	3.33E-06	1.67E-06	7.30E-06	1.67E-07	7.30E-07	1.67E-06	7.30E-06
Total		9.35E-04	4.09E-03	9.35E-05	4.09E-04	9.35E-04	4.09E-03

Burner Heat Input=

0.50 mmBtu/hr

Flare Pilot Heat Input=

0.05 mmBtu/hr

Line Heater Heat Input= annual operating hours= 0.50 8760

Emission factors from AP-42, Table 1.4-3

9/30/2023 21 of 22



### FLARE PILOT CALCULATIONS

Emission	Combustion	Capacity		Criteria Emissions, tons/yr								
Unit ID	Source	MMBTUH	PM	PM10	PM2.5	NOx	CO	VOC	SO2	HAP		
AA-001a	Flare (Pilot)	0.05	0.000	0.002	0.002	0.021	0.018	0.001	0.000	0.000		

Emission	Combustion	Capacity	GHG	Emissions	s, metric to	ns/yr	GHG Emissions, short tons/yr				
Unit ID	Source	MMBTUH	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	
AA-001a	Flare (Pilot)	0.05	23.223	0.000	0.000	23.246	25.59	0.00	0.00	25.62	

### Gas combustion

ission Factors, lbs/MMBtu	Emission	Factors, kg/MMBtu
0.001863	CO2	53.02
0.007451	CH4	0.001
0.007451	N2O	0.0001
0.098039		
0.082353		
0.005392		
0.000588		
0.001851		
	0.001863 0.007451 0.007451 0.098039 0.082353 0.005392 0.000588	0.001863 CO2 0.007451 CH4 0.007451 N2O 0.098039 0.082353 0.005392 0.000588

•		

# APPENDIX B: BACKUP DOCUMENTATION


### **TANKS 4.0.9d**

## Emissions Report - Summary Format Tank Indentification and Physical Characteristics

Identification

User Identification:
City:
Stringer
State:
Mississippi
Company:
Type of Tank:
Horizontal Tank

Description: 250-Gallon Anti-Foam Tank

**Tank Dimensions** 

 Shell Length (ft):
 5.00

 Diameter (ft):
 5.00

 Volume (gallons):
 250.00

 Turnovers:
 1.46

 Net Throughput(gal/yr):
 365.00

 Is Tank Heated (y/n):
 N

Is Tank Heated (y/n):

Is Tank Underground (y/n):

N

**Paint Characteristics** 

Shell Color/Shade: White/White Shell Condition Good

**Breather Vent Settings** 

Vacuum Settings (psig): -0.03 Pressure Settings (psig) 0.03

Meterological Data used in Emissions Calculations: Jackson, Mississippi (Avg Atmospheric Pressure = 14.59 psia)

### TANKS 4.0.9d Emissions Report - Summary Format Liquid Contents of Storage Tank

Anti-Foam Tank - Horizontal Tank Stringer, Mississippi

Mixture/Component  Toluene	Month	Avg. 66.19	Min. 60.06	Max. 72.32	(deg F)	Avg. 0,3992	Min. 0.3307	Max. 0.4793	Weight. 92.1300	Fract.	Fract.	Weight 92,13	Calculations  Option 2: A=6.954, B=1344,8, C=219.48
			aily Liquid S		Liquid Bulk Temp	Vana	r Pressure	(nain)	Vapor Moi.	Liquid Mass	Vapor Mass	Mol.	Basis for Vapor Pressure

# TANKS 4.0.9d Emissions Report - Summary Format Individual Tank Emission Totals

### **Emissions Report for: Annual**

Anti-Foam Tank - Horizontal Tank Stringer, Mississippi

	Losses(lbs)										
Components	Working Loss	Breathing Loss	Total Emissions								
Toluene	0.32	7.47	7.79								

·			
		<del>-</del>	

### **TANKS 4.0.9d**

# Emissions Report - Summary Format Tank Indentification and Physical Characteristics

Identification

User Identification:

Corrosion Inhibitor Tank

City: State: Company: Stringer Mississippi Venture Oil

Type of Tank: Description:

Horizontal Tank 55-Gallon Corrosion Inhibitor Drum(s)

**Tank Dimensions** 

 Shell Length (ft):
 5.00

 Diameter (ft):
 3.00

 Volume (gallons):
 55.00

 Turnovers:
 20.00

 Net Throughput(gal/yr):
 1,095.00

Is Tank Heated (y/n): Is Tank Underground (y/n):

**Paint Characteristics** 

Shell Color/Shade: Shell Condition

White/White

Good

**Breather Vent Settings** 

Vacuum Settings (psig): Pressure Settings (psig) -0.03

0.03

Meterological Data used in Emissions Calculations: Jackson, Mississippi (Avg Atmospheric Pressure = 14.59 psia)

### TANKS 4.0.9d Emissions Report - Summary Format

### Liquid Contents of Storage Tank

### Corrosion Inhibitor Tank - Horizontal Tank Stringer, Mississippi

			aily Liquid S sperature (d		Liquid Bulk Temp Vapor P		Vapor Pressure (psia)		Vapor Liquid Moi. Mass			Mal.	Basis for Vapor Pressure
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Welght	Calculations
Toluene	All	66.19	60.06	72.32	64.24	0,3992	0,3307	0,4793		-		92.13	Option 2: A=6.954, B=1344.8, C=219.48

### TANKS 4.0.9d Emissions Report - Summary Format Individual Tank Emission Totals

### **Emissions Report for: Annual**

Corrosion Inhibitor Tank - Horizontal Tank Stringer, Mississippi

	Losses(lbs)									
Components	Working Loss	Breathing Loss								
Toluene	0.96	2.74	3.70							

### **TANKS 4.0.9d**

### **Emissions Report - Summary Format** Tank Indentification and Physical Characteristics

Identification

User Identification:

Emulsion Breaker Tank

City: State: Company:

Stringer Mississippi Venture Oil

Type of Tank: Horizontal Tank Description:

250-Gallon Emulsion Breaker Tank

**Tank Dimensions** 

Shell Length (ft): 5.00 Diameter (ft): 5.00 250.00 Volume (gallons): Turnovers: 2.92 Net Throughput(gal/yr): 730,00

Is Tank Heated (y/n): Is Tank Underground (y/n):

**Paint Characteristics** 

Shell Color/Shade:

White/White Good

Shell Condition

**Breather Vent Settings** 

Vacuum Settings (psig): Pressure Settings (psig) -0.03 0.03

Meterological Data used in Emissions Calculations: Jackson, Mississippi (Avg Atmospheric Pressure = 14.59 psia)

## **TANKS 4.0.9d Emissions Report - Summary Format Liquid Contents of Storage Tank**

**Emulsion Breaker Tank - Horizontal Tank** Stringer, Mississippi

Daily Liquid Surf. Temperature (deg F)					Liquid Bulk Temp	Bulk		Vapor Liquid Mol. Mass	Vapor Mass	Mol.	Basis for Vapor Pressure		
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Toluene	All	66,19	60.06	72.32	64.24	0,3992	0.3307	0.4793	92.1300			92.13	Option 2: A=6.954, B=1344.8, C=219.48

### **TANKS 4.0.9d Emissions Report - Summary Format Individual Tank Emission Totals**

### **Emissions Report for: Annual**

**Emulsion Breaker Tank - Horizontal Tank** Stringer, Mississippi

	Losses(lbs)						
Components	Working Loss		Total Emissions				
Toluene	0.64	7.47					



#### **TANKS 4.0.9d**

# Emissions Report - Summary Format Tank Indentification and Physical Characteristics

Identification

User Identification: City: State: Company: Type of Tank: Methanol Tank Stringer Mississippi Venture Oil

Horizontal Tank 330-Gallon Methanol Tank

Tank Dimensions

Description:

Shell Length (ft): 5.00
Diameter (ft): 5.00
Volume (gallons): 330.00
Turnovers: 2.21
Net Throughput(gal/yr): 730.00
Is Tank Heated (y/n): N

is Tank Underground (y/n):

Paint Characteristics

Shell Color/Shade: Shell Condition White/White Good

Breather Vent Settings

Vacuum Settings (psig): Pressure Settings (psig) -0.03 0.03

0.00

Meterological Data used in Emissions Calculations: Jackson, Mississippi (Avg Atmospheric Pressure = 14.59 psia)

# TANKS 4.0.9d Emissions Report - Summary Format Liquid Contents of Storage Tank

Methanol Tank - Horizontal Tank Stringer, Mississippi

,			aily Liquid S perature (d		Liquid Bulk Temp	Vapo	r Pressure	(psia)	Vapor Mol.	Liquid Mass	Vapor Mass	Mol.	Basis for Vapor Pressure
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Methyl alcohol	All	66.19	60,06	72.32	64.24	1.7478	1.4448	2.1035	32.0400			32.04	Option 2: A=7.897, B=1474.08, C=229.13

# TANKS 4.0.9d Emissions Report - Summary Format Individual Tank Emission Totals

### **Emissions Report for: Annual**

Methanol Tank - Horizontal Tank Stringer, Mississippi

	Losses(lbs)						
Components	Working Loss	Breathing Loss	Total Emissions				
Methyl alcohol	0.97	17.15	18,13				

```
Project Setup Information
*****************************
Project File : Untitled.Ept
Flowsheet Selection : Oil Tank with Separator
Calculation Method : AP42
Control Efficiency : 100.0%
Known Separator Stream : Geographical Region
Geographical Region : All Regions in US
Entering Air Composition : No
                         : Venture Nina Daly 16-10 No. 1
Well ID
                         : 2023.08.18
Date
****************
* Data Input
*************************
Separator Pressure : 45.00[psig]
Separator Temperature : 140.00[F]
Ambient Pressure : 14.70[psia]
Ambient Temperature : 140.00[F]
C10+ SG : 0.8930
C10+ MW
                         : 277.00
-- Low Pressure Oil -----
   No. Component
                             mol %
                               0.0000
   1
         H2S
                               0.0000
   2
        02
        CO2
                              0.0400
   3
         N2
                               0.0000
   4
                              1.2100
   5
         C1
        C2
                              0.7600
        C3
i-C4
                              2.9200
   7
   8
                               4.1500
        n-C4
   9
                              3.0600
                              3.9300
3.0900
        i-C5
n-C5
C6
   10
   11
                              4.9100
   12
   13
        C7
                             13.0800
        C8
C9
C10+
                            14.6200
   14
   15
                               7.6300
                            31.1400
   16
                             0.6900
   17
        Benzene
        Toluene
E-Benzene
                              1.9400
   18
                              0.1900
   19
   20 Xylenes
                              2.9800
         n-C6
                               3.6600
   21
   22
          224Trimethylp
                               0.0000
Production Rate : 218[bbl/day]
Days of Annual Operation : 365 [days/year]
API Gravity : 47.0
Reid Vapor Pressure : 6.00[psia]
Rulk Temperature : 80.00[Fl
Bulk Temperature
                         : 80.00[F]
-- Tank and Shell Data -----
            : 21.00[ft]
: 16.00[ft]
Diameter
Shell Height : 16.00[rt]
Cone Roof Slope : 0.06
Average Liquid Height : 8.00[ft]
Vent Pressure Range : 0.06[psi]
Diameter
Page 1----- E&P TANK
-- Meteorological Data ------
City : Jackson, MS
Ambient Pressure : 14.70[psia]
Ambient Temperature : 140.00[F]
Ambient Temperature : 140.00[F]
Min Ambient Temperature : 52.70[F]
```


Max Ambient Temperature : 76.30[F]
Total Solar Insolation : 1409.00[Btu/ft^2\*day]

****	*****	_	*****	*****	*****	******	*****	*
*	Calculation Re	esults			*******	******	****	****
****	******	*****	*****					
	mission Summary			<b></b>	- <b></b>	- <b></b>	. <b></b>	<b></b>
		Uncontrolled	Uncontroll	ed				
Item			[lb/hr]					
mata	l HAPs	23.460	5.356					
		437.788	99.952					
			96.653					
	•	407.954	93.140					
VOCS	, сэ.	407.551	30.2.0					
IInco	ntrolled Recove	ry Info.						
Onco	Vanor	16.3600	[MSCFD]					
	HC Vanor	16.3100	[MSCFD]					
	Vapor HC Vapor GOR	75.05	[SCF/bbl]					
	0011	, 0.00	•==					
E	mission Composi	tion			<b></b>	<b></b>		
	Component							
		[ton/yr]						
1	H2S		0.000					
	02	0.000	0.000					
	CO2	1.257	0.287					
	N2	0.000	0.000					
5	C1	14.448	3.299					
6	C2	15.385	3.513					
	C3	68.917	15.734					
8	i-C4	92.659	21.155					
	n-C4	57.728	13.180					
	i-C5	52.289	11.938					
	n-C5	33.828	7.723					
12	C6	25.783	5.887					
13	C7	33.003	7.535					
14	C8	16.359	3.735					
15	C9	3.924	0.896					
	C10+	0.002	0.000					
	Benzene	2.395	0.547					
18	Toluene	2.803	0.640					
	E-Benzene	0.125	0.029					
	Xylenes		0.400					
	n-C6	16.388	3.742					
	224Trimethylp		0.000					
22	Total	439.045	100.239					
9	Stream Data							
	Component	MW	LP Oil	Flash Oil	Sale Oil	Flash Gas	W&S Gas	Total
	ssions							
			mol %	mol %	mol %	mol %	mol %	mol %
1	H2S	34.80	0.0000	0.0000				0.0000
2	02	32.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	CO2	44.01	0.0400	0.0037	0.0021	0.3632	0.3184	0.3624
4	N2	28.01	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	C1	16.04	1.2100	0.0481	0.0134	11.5462	4.7561	11.4290
6	C2	30.07	0.7600	0.1170	0.0860	6.4800	7.2324	6.4930
7	C3	44.10	2.9200	1.0276	0.9354	19.7545	24.3085	19.8331
8	i-C4	58.12	4.1500	2.3490	2.2672	20.1714	23.6003	20.2306
9	n-C4	58.12	3.0600	1.9902	1.9437	12.5764	14.1699	12.6039
10	i-C5	72.15	3.9300	3.3383	3.3160	9.1937	9.3778	9.1969
11	n-C5	72.15	3.0900	2.7682	2.7574	5.9530	5.7777	5.9499
12	C6	86.16	4.9100	5.0229	5.0308	3.9060	3.2822	3.8952
Page			<b></b>	<b>-</b>		E&		
13		100.20	13.0800	14.0626	14.1081	4.3385	3.1381	4.3178
14	C8	114.23	14.6200	16.0518	16.1129	1.8828	1.1624	1.8703
15	C9	128.28	7.6300	8.4418	8.4755	0.4082	0.2166	0.4049
16	C10+	166.00	31.1400	34.6405	34.7819	0.0001	0.0000	0.0001
17	Benzene	78.11	0.6900	0.7237	0.7254	0.3904	0.3169	0.3891
1.8	Toluene	92.13	1.9400	2.1144	2.1221	0.3882	0.2660	0.3861


20 Xylenes 21 n-C6	106.17 106.17 86.18 114.24	0.1900 2.9800 3.6600 0.0000	0.2097 3.2913 3.7992 0.0000	0.2105 3.3042 3.8073 0.0000	0.0150 0.2110 2.4215 0.0000	0.0089 0.1216 1.9462 0.0000	0.0149 0.2094 2.4133 0.0000
MW Stream Mole Ratio Heating Value	[BTU/SCF]	148.51 1.0000	158.95 0.8989	159.17 0.8972	55.71 0.1011 3108.39 1.92	56.35 0.0018 3147.61 1.95	55.72 0.1028 3109.06 1.92
Bubble Pt. @ 100F RVP @ 100F Spec. Gravity @ 100F	[psia] [psia]	59.52 129.92 0.743	10.16 49.63 0.751	8.49 46.58 0.751			

		·



# DELBERT HOSEMANN Secretary of State

This is not an official certificate of good standing.

Name History		
Name	Name Type	
VENTURE OIL & GAS INC.	Legal	
Designation Traffic and Add an		
Business Information		
Business Type:	Profit Corporation	
Business ID:	558492	
Status:	Good Standing	
Effective Date:	11/07/1988	
State of Incorporation:	Mississippi	
Principal Office Address:		
Registered Agent		
Name		_
JAY DONALD FENTON		
207 South 13th Avenue		
Laurel, MS 39440		
Officers & Directors		
Name	Title	_
Jay Donald Fenton		
332 Luther Hill Road, A	Incomparator	
Ellisville, MS 39437	Incorporator	
William Edward Carpenter		
112 Westminister Drive		
Hattiesburg, MS 39401	Incorporator	
Jay Donald Fenton		
332 Luther Hill Rd		
Ellisville, MS 39437	Director, President	
-		
Neil Scrimpshire		
9 Heritage Trail	Director, Secretary, Vice President	
Laurel, MS 39440	· · · · · · · · · · · · · · · · · · ·	

	Ĺ				
**					