PART 70 OPERATING PERMIT APPLICATION

Blake Production Co., Inc / Cypress 1816 1-35H

Prepared By:

TRINITY CONSULTANTS
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December 2024

1. INTRODUCTION

Blake Production Co., Inc. (Blake) is submitting a Title V Operating Permit application for the existing facility known as Cypress 1816 1-35H, located in Dewey County. Blake submitted an application to operate under the Permit by Rule for Oil and Gas Facilities on August 1, 2024. There are no changes at the site or information presented in that application.

This application is being submitted as the result of an enforcement case. This application is classified as a Tier II based on the request for an initial operating permit for a Part 70 source. The permit should be converted to a PBR-OGF Authorization to Operate after submittal of this application.

2. FACILITY DESCRIPTION

The facility is made up of one well, Cypress 1816 1-35H, and is located at the wellhead.

The well streams will enter the facility through a separator, where condensate and water are removed and sent to the heater treater. Gas from the separator and the heater treater is routed to the sales line. The remaining liquids from the heater treater are stored in the condensate and produced water tanks as appropriate. The storage tanks are controlled by an enclosed combustor and unloaded by truck.

There are no changes from the previous PBR-OGF application.

3. OKLAHOMA DEQ ADMINISTRATIVE FORMS

DEQ LANDOWNER NOTIFICATION AFFIDAVIT

Tier I, II, or III permit applicants must provide notice to the landowner(s). The basis for this requirement is Title 27A of the Oklahoma Statutes, Supplement 1996, § 2-14-103(9), as described in OAC 252:4-7-13 (b).

Please note that you MUST fill out and return this affidavit even if you don't have to give any landowner notice.

A	NOTICE TO THE LANDOWNER(S) IS NOT REQUIRED because: (check one)
	My application does not involve any land.
	My application involves only land owned by me (or applicant business).
X	I have a current lease given to accomplish the permitted purpose.
	I have a current easement given to accomplish the permitted purpose.

OR

B	NOTICE TO THE LANDOWNER(S) IS REQUIRED because the land is owned by someone other than myself or the applicant business AND I HAVE NOTIFIED the following (check one):		
	Landowner(s)		Lessor or Administrator or Executor of the land
METHOD OF DELIVERY (check one):			
	Actual notice, for which I have a signed and dated receipt		
	Service by Sheriff or private process server, for which I have an affidavit		
	Service by certified mail, restricted delivery, for which I have a signed return receipt		
	Legal publication, for which I have an affidavit of publication from the newspaper, because the landowners could not be located through due diligence		

LANDOWNER AFFIDAVIT CERTIFICATION			
I, as the applicant or an authorized representative of the applicant, hereby certify that I own the real property, have a current lease or easement which is given to accomplish the permitted purpose (per Option A above), or have provided legal notice to the landowner(s) (per Option B above) about the permit application for the facility described below.			
Company Name	Blake Production Co, Inc.	Facility Name	Cypress 1816 1-35H
Facility Address or Legal Description.	Section 31, Township 18N, Range 16W, Dewey County		
Responsible Official (signature)		Date Signed	12-9-24
Responsible Official (typed)	Kody Ewing	Title	Engineer

If the landowner notice applies to your application (Option B above) you can send the following form to them as your notice:

NOTICE TO LANDOWNER OF FILING

Dear Landowner: (Name) _____

(Applicant name) _____ has filed a permit application with the Oklahoma Department of Environmental Quality for (Facility Name) _____ facility.

This application involves the land owned by you located at:

Address or Legal Description: _____

_____

Signed: _____ Date: _____

AIR QUALITY PERMIT APPLICATION
GENERAL FACILITY INFORMATION

APPLICATION NUMBER (AQD Use Only)	

1	COMPANY INFORMATION	Name	Blake Production Co, Inc.				
Mailing Address	1601 NW Expressway, Suite 777	City	Oklahoma City	State	OK	Zip	73118

2	APPLICATION TYPE		Applicability Determination		Construction Permit	X	Operating Permit				
	GP Authorization To Operate		GP Authorization To Construct		GP Name:						
	Renewal		Modification		Relocation		PBR	PBR Type:			
Permit Number(s) (If Applicable)											
Est. Date of Construction/Modification Start:				Operational Start-up:	6/16/2022						
Construction Permit Public Review Process:				Traditional		Enhanced					

3	IS CONFIDENTIAL INFORMATION INCLUDED?		YES	X	NO

By including confidential information, Applicant acknowledges that such information may be shared with the U.S. Environmental Protection Agency for purposes consistent with the Federal Clean Air Act, 42 U.S.C. §§ 4201 et. seq.

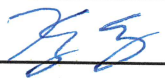
4	TIER CLASSIFICATION		Tier I	X	Tier II		Tier III		N/A – AD only		
FACILITY TYPE		X	Major		Minor		Synthetic Minor				

5	FEES SUBMITTED	$ 7,500.00	CHECK #		DATE

6	TECHNICAL CONTACT	Name	Kody Ewing				
Phone	405-996-6785		Email Address	kody.ewing@blakeproduction.com			
Company Name	Blake Production Co, Inc.						
Street Address	1601 NW Expressway, Suite 777	City	Oklahoma City	State	OK	Zip	73118

7	FACILITY INFORMATION	Name	Cypress 1816 1-35H						
SIC Code(s)	1311			NAICS Code(s)	211120				
Contact Person	Kody Ewing	Title	Engineer	Phone	405-996-6785				
LEGAL DESCRIPTION	Sub Section	--	Section	31	Township	18N	Range	16W	
Physical Address or Driving Directions	From Taloga, Oklahoma, drive south for 2.7 mi. Turn left onto E0700 Rd and drive for 1.0 mi. Turn right and follow the road for 2.6 mi. Turn right onto N2290 Rd and drive 0.2 mi. Turn left and follow the road onto E0710 Rd for 2.3 mi. The facility is to the left.								
City or Nearest Town	Taloga	Zip	73667	County	Dewey				

8	GEOGRAPHIC COORDINATES	Latitude (to 5 Decimals)	35.98638	Longitude (to 5 Decimals)	-98.88132
REFERENCE POINT	X	Facility Entrance Point or First Gate of Lease Property (preferred above all other options)			
	Center of Facility		Other (Specify):		

9	APPLICATION CERTIFICATION	**This application, including all attachments, has been submitted as required by OAC 252:100.**					
I certify that (a) I am the Responsible Official for this company as defined in OAC 252:100-3; and (b) based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.							
Responsible Official (name)	Kody Ewing			Title	Engineer		
Responsible Official (signature)				Date	12-9-24		
Phone	405-996-6785		Email Address	kody.ewing@blakeproduction.com			
Street Address	1601 NW Expressway, Suite 777	City	Oklahoma City	State	OK	Zip	73118

AIR QUALITY DIVISION **CLASSIFICATION OF AQ PERMIT APPLICATIONS** **& APPLICATION FEES**	Received Stamp (DEQ Use Only)	Application Number (AQD Use Only)	

Company Name	Blake Production Co, Inc.						
Facility Name	Cypress 1816 1-35H						
Mailing Address	1601 NW Expressway, Suite 777	City	Oklahoma City	State	OK	Zip	73118

This form is used to document both a preliminary determination of the Tier classification and any associated Application Fee.

Step 1: APPLICATION CLASSIFICATION AND TIER DETERMINATION

DEQ's "Uniform Permitting" system, under OAC 252:004, categorizes different types of applications as Tier I, II, or III, depending on their complexity and the amount of public interest. The main effect of a Tier classification is the amount of public review given the application. For Air Quality permits, Tier I basically includes minor facilities and most synthetic minor facilities. Tier II covers major sources, and Tier III covers only very large sources such as those requiring PSD review. Additional information to make a preliminary determination of the Tier classification is provided on the next page. This determination will be verified before permit issuance.

Note that all Tier II and III applications require public notice of the application in one newspaper local to the site or facility as soon after the filing date as possible. Other public participation requirements, such as notice of draft and proposed permit, and notice of public meeting may also be required. Contact our office for more information on these requirements.

TIER CLASSIFICATION		Tier I	X	Tier II		Tier III		N/A – AD only	
FACILITY TYPE	X	Major		Minor		Synthetic Minor		Confirmed/Corrected by: (AQD Use Only)	

Step 2: APPLICATION TYPE & FEE

Application fee may be determined according to the following schedule. The emissions level is based on the single criteria pollutant with the highest emissions rate. Fees are subject to change – please refer to OAC 252:100-7-3 or 252:100-8-1.7 for the latest fee schedule.

	MAJOR SOURCE	Fee		MINOR OR SYNTHETIC MINOR SOURCE	Fee
	Applicability Determination (100734)	$500		Applicability Determination (100922)	$500
	GP- Authorization to Construct (100778)	$900		PBR – Construct (100985)	$250
	GP- Authorization to Operate (100788)	$900		PBR – Operate (100989)	$100
	Part 70 Construction (100150)	$7,500		GP – Authorization to Construct (100826)	$500
	Part 70 Construction Modification (100779)	$5,000		GP – Authorization to Operate (100827)	$500
X	Part 70 Operation (100733)	$7,500		Construction (100829)	$2,000
	Part 70 Minor Modification (100781)	$3,000		Permit Amendment – no emission increase (100830)	$500
	Part 70 Significant Modification (100786)	$6,000		Operating Permit (100831)	$750
	Part 70 Renewal (100787)	$7,500		Operating Permit Modification (100833)	$750
	Part 70 Relocation (100782)	$500		Relocation (100834)	$250
Application Type Confirmed – (AQD Use Only)					

GP or PBR Name (If Applicable):	N/A	Existing Permit Number (If Applicable):	

PAYMENT INFORMATION

Please choose one payment type, and attach payment – payable to the Department of Environmental Quality (no cash can be accepted). Please reference the facility name (or existing permit or Authorization number) on the check or money order.

Payment Type		X	Check		Money Order	Amount/Receipt Confirmed by: (DEQ Use Only)	
Amount:	$ 7,500.00		Check or Money Order Number:			Date:	

TIER DETERMINATION INFORMATION

OAC 252:004-7 categorizes different types of Air Quality applications as Tier I, II, or III, depending on their complexity and the amount of public interest under DEQ's "Uniform Permitting" system. The Tier classification affects the amount of public review given the application. Applicants may use the following format as a checklist for determining Tier classification.

OAC 252:4-7-32. Air quality applications - Tier I

No Public Notice Requirement

_____ (1) Relocation permit for a minor facility.
_____ (2) Modification of an existing FESOP that is based on the operating conditions of a construction permit that was processed under Tier I and completed the web-based public notice requirement and does not differ from those construction permit conditions in any way considered significant. [FESOP Enhanced NSR]
_____ (3) Extension of expiration date of a minor facility construction permit.
_____ (4) Modification of any Part 70 source operating permit condition that is based on the operating conditions of a construction permit that was processed under Tier I (with web-based public notice), Tier II, or Tier III and OAC 252:100-8-8 and does not differ from those construction permit conditions in any way considered significant under OAC 252:100-8-7.2(b)(2). [Enhanced NSR]
_____ (5) Extension of expiration date of a Part 70 source's construction permit.
_____ (6) New, modified, and renewed individual authorizations under general permits for which a schedule of compliance is not required by OAC 252:100-8-5(e)(8)(B)(i).
_____ (7) Burn approvals.
_____ (8) Administrative amendments of all air quality permits and other authorizations.

No Public Notice Requirement, 45-Day EPA Review Requirement

_____ (1) Minor modification to a Part 70 source operating permit where the facility obtained a prior construction permit for the modification as required by OAC 252:100-8-4(a)(1)(B)(iv). [Traditional NSR]
_____ (2) Minor modification under OAC 252:100-8-7.2(b)(1) to a Part 70 source operating permit that did not trigger an NSR permitting action.

Web-based Public Notice Requirement

_____ (1) New minor NSR construction permit for a minor facility.
_____ (2) Initial operating permit for a new minor facility.
_____ (3) Modification of a construction permit for a minor facility.
_____ (4) Modification of an existing minor operating permit that was issued prior to September 15, 2021, and that will now become a FESOP.
_____ (5) Modification of a minor operating permit that did not undergo the *FESOP Enhanced NSR Process.* [Traditional NSR]
_____ (6) Construction permit for an existing Part 70 source for any facility change considered to be a minor modification under OAC 252:100-8-7.2(b)(1).

OAC 252:4-7-33. Air quality applications - Tier II

_____ (1) A minor facility seeking a permit for a facility modification that when completed would turn it into a Part 70 source.
_____ (2) Any permit application for a Part 70 source that would result, on issuance, with the facility being covered by a FESOP (PBR, GP, or individual facility operating permit).
_____ (3) Construction permit for a new Part 70 source not classified under Tier III.
_____ (4) Construction permit for an existing Part 70 source for any facility change considered significant under OAC 252:100-8-7.2(b)(2) and which is not classified under Tier III.
__X__ (5) Initial operating permit for a Part 70 source.
_____ (6) Acid rain permit that is independent of a Part 70 permit application.
_____ (7) Temporary source permit under OAC 252:100-8-6.2.
_____ (8) Significant modification, as described in OAC 252:100-8-7.2(b)(2), of a Part 70 operating permit that did not undergo the *Enhanced NSR Process.* [Traditional NSR]
_____ (9) Modification of a Part 70 operating permit when the conditions proposed for modification differ from the underlying construction permit's operating conditions in any way considered significant under OAC 252:100-8-7.2(b)(2). [Traditional NSR]
_____ (10) A Part 70 construction permit modification considered significant under OAC 252:100-8-7.2(b)(2) and which is not classified under Tier III.
_____ (11) Renewals of operating permits for Part 70 sources.
_____ (12) New, modified, and renewed general permits.
_____ (13) Individual authorizations under any general permit for which a schedule of compliance is required by OAC 252:100-8-5(e)(8)(B)(i).
_____ (14) Plant-wide emission plan approval under OAC 252:100-37-25(b) or OAC 252:100-39-46(j).

OAC 252:4-7-34. Air quality applications - Tier III

(a) A construction permit for any new major stationary source listed in this subsection requires a Tier III application. For purposes of this section, "Major stationary source" means:

_____ (1) Any of the following sources of air pollutants which emits, or has the PTE, 100 TPY or more of any pollutant subject to regulation:

____ (A) carbon black plants (furnace process),
____ (B) charcoal production plants,
____ (C) chemical process plants,
____ (D) coal cleaning plants (with thermal dryers),
____ (E) coke oven batteries,
____ (F) fossil-fuel boilers (or combustion thereof), totaling more than 250 million BTU per hour heat input,
____ (G) fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input,
____ (H) fuel conversion plants,
____ (I) glass fiber processing plants,
____ (J) hydrofluoric, sulfuric or nitric acid plants,
____ (K) iron and steel mill plants,
____ (L) kraft pulp mills,
____ (M) lime plants,
____ (N) incinerators, except where used exclusively as air pollution control devices,
____ (O) petroleum refineries,
____ (P) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,
____ (Q) phosphate rock processing plant,
____ (R) portland cement plants,
____ (S) primary aluminum ore reduction plants,
____ (T) primary copper smelters,
____ (U) primary lead smelters,
____ (V) primary zinc smelters,
____ (W) secondary metal production plants,
____ (X) sintering plants,
____ (Y) sulfur recovery plants, or
____ (Z) taconite ore processing plants, and

____ (2) Any other source not specified in paragraph (1) of this definition which emits, or has the PTE, 250 TPY or more of any pollutant subject to regulation.

(b) Existing incinerators. An application for any change in emissions or potential to emit, or any change in any permit condition, that would have caused an incinerator to be defined as a major stationary source when originally permitted shall require a Tier III application.

PART 1a DEQ

Emissions Inventory

1		
	COMPANY NAME	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H
	COUNTY	Dewey

2 ANNUAL EMISSIONS INVENTORY

The following annual emissions inventory represents the emissions from the facility and should be used in the AQD evaluation and preparation of the permit. **Check only one in Box 2 or see Box 3.**

☐ Use the annual emissions inventory as it appears in the most recent "Turn Around Document" dated ____ which is on file with AQD. The inventory is accurate, complete, and uses the same numbering and naming conventions as presented in this Title V Permit Application and includes supporting information to document emissions calculations pursuant to OAC 252:100-7-4(d)(2).

☐ Use the annual emissions inventory as it appears in the attached new or revised "Turn Around Document" dated _____. This inventory is accurate, complete, and uses the same numbering and naming conventions as presented in the Major Source Operating Permit Application Guide and includes supporting information to document emissions calculations pursuant to OAC 252:100-7-4(d)(2). This information is included in Appendix ___.

3 ALTERNATIVE METHODS TO INVENTORY EMISSIONS

The following alternate method represents the emission from the facility and should be used in the AQD evaluation and preparation of the permit. **Check as appropriate.**

☐ Referenced emissions listed in a current permit, permit number(s):

_____

which have been summarized in Appendix __ using the same numbering and naming conventions as presented in the Major Source Operating Permit Application Guide.

☐ A worksheet developed by the Agency for specific industries included in Appendix ___ using the same numbering and naming conventions as presented in the Major Source Operating Permit Application Guide.

☒ Other method(s) to be approved by DEQ with all associated justifications, documentation, and calculations pursuant to OAC 252:100-8-5(d)(3) located in Appendix A using the same numbering and naming conventions as presented in the Major Source Operating Permit Application Guide.

PART 1b Insignificant Activities DEQ

Check the box if the insignificant activity, unless otherwise regulated by applicable state or federal regulations, is performed at the facility.

COMPANY NAME	Blake Production Co, Inc.
FACILITY NAME	Cypress 1816 1-35H

	COMBUSTION EQUIPMENT
☐	* Stationary reciprocating engines burning natural gas, gasoline, aircraft fuels, or diesel fuel which are either used exclusively for emergency power generation or for peaking power service not exceeding 500 hours/year.
☐	Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTU/hr heat input (commercial natural gas).
☐	Emissions from stationary internal combustion engines rated less than 50 hp output.
☐	Emissions from gas turbines with less than 215 kilowatt rating of electric output.
	STORAGE TANKS/DISTRIBUTION
☐	* Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period.
☐	* Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature.
☐	* Bulk gasoline or other fuel distribution with a daily average throughput less than 2,175 gallons per day, including dispensing, averaged over a 30-day period
☐	Gasoline and aircraft fuel handling facilities, equipment, and storage tanks except those subject to New Source Performance Standards and standards in OAC 252:100-37-15, 252:100-39-30, 252:100-39-41, and 252:100-39-48.
☐	Emissions from condensate tanks with a design capacity of 400 gallons or less in ozone attainment areas.
☐	Emissions from crude oil and condensate marine and truck loading equipment operations at crude oil and natural gas production sites where the loading rate does not exceed 10,000 gallons per day averaged over a 30-day period.
☐	* Emissions from crude oil and condensate storage tanks with a capacity of less than or equal to 420,000 gallons that store crude oil and condensate prior to custody transfer.
☐	* Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature
	ANALYSIS/LABORATORY ACTIVITIES
☐	Additions or upgrades of instrumentation or control systems that result in emissions increases less than the pollutant quantities specified in OAC 252:100-8-3(e)(1).
	EQUIPMENT
☐	Alkaline/phosphate washers and associated burners.
☐	Cold degreasing operations utilizing solvents that are denser than air.
☐	* Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes
☐	Wood chipping operations not associated with the primary process operation
☐	* Torch cutting and welding of under 200,000 tons of steel fabricated per year
	REMEDIATION
☐	Site restoration and/or bioremediation activities of < 5 years expected duration.
☐	Hydrocarbon contaminated soil aeration pads utilized for soils excavated at the facility only.
☐	Emissions from the operation of groundwater remediation wells including but not limited to emissions from venting, pumping, and collecting activities subject to de minimis limits for air toxics (OAC 252:100-41-43) and HAPs (§112(b) of CAAA90).
	SOLID WASTE
☐	* Non-commercial water washing operations (less than 2,250 barrels/year) and drum crushing operations of empty barrels less than or equal to 55 gallons with less than three percent by volume of residual material.
☐	Hazardous waste and hazardous materials drum staging areas.
☐	Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift station).
☐	Emissions from landfills and land farms unless otherwise regulated by an applicable state or federal regulation.
	COATINGS
☐	* Automobile body shops located in an ozone attainment area emitting less than 5 tons/year of volatile organic solvents.
☐	Electrophoretic-process coating application operations (i.e., paint bath positively charged, painted object negatively charged).
☐	* Surface coating operations which do not exceed a combined total usage of more than 60 gallons/month of coatings, thinners, and clean-up solvents at any one emissions unit.
	MISCELLANEOUS
☐	Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas.
☐	Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone
☒	* Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant (see instructions).

* Appropriate records of hours, quantity, or capacity must be kept on the activity to verify its insignificance.

PART 1c

DEQ

Shield Request (Optional)

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2 **REQUEST OPTIONS**

Based on the information included in this application, it is requested that the following determinations be conducted during the review of this application and issuance of the air operation permit under OAC 252:100-8.

☒ Permit Shield as provided by OAC 252:100-8-6(f)(1)

☒ Non Applicable Requirements as provided by OAC 252:100-8-6(f)(2)

☒ Requirements which are not federally enforceable will be specifically designated in the permit as non-federally enforceable, state-only requirements

☐ Application Shield as alluded to in OAC 252:100-8-7(b)(2)

☐ Condition changes identified on PART 5c(s) be reviewed and accepted

☒ Insignificant Activities identified in PART 1b be reviewed and accepted

☐ Other requests:

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EUG**	1 - Engines	3	**SCENARIO**	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	**(b) Point ID#**	**(c) EU Name/Model**	**(d) Construction/ Modification Date**
ENG-1	ENG-1	145-hp Caterpiller G3306 Engine	8/7/2013

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	ENG-1	**EUG #**	1	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	40 CFR Part 60, Subpart JJJJ	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	The engines will be subject to NSPS JJJJ. The engines will comply with applicable requirements.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Submittal of applicable notifications and reports required under NSPS JJJJ to ODEQ.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**	40 CFR Part 63, Subpart ZZZZ	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	The engines will comply with NESHAP ZZZZ by complying with NSPS JJJJ.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Submittal of applicable notifications and reports required under NSPS JJJJ to ODEQ.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**	OAC 252:100-43, Initial and Quarterly Testing for the applicable engines.	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Testing for the engines will demonstrate compliance with hourly permit limits. CO emissions will be limited to 2.0 g/hp-hr. NOx emissions will be limited to 1.0 g/hp-hr.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Submittal of initial and quarterly testing results to ODEQ with Semi-Annual Reports (SARs).	N/A
6	**Other Requirements**	N/A	N/A

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	COMPANY NAME	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	EUG	2 - Tanks	3	SCENARIO	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	(b) Point ID#	(c) EU Name/Model	(d) Construction/ Modification Date
T-1	T-1	400-bbl Condensate Tank	2022
T-2	T-2	400-bbl Condensate Tank	2022
T-3	T-3	400-bbl Condensate Tank	2022
T-4	T-4	400-bbl Condensate Tank	2022
PW-1	PW-1	400-bbl Prod. Water Tank	2022
PW-2	PW-2	400-bbl Prod. Water Tank	2022

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	T-1 to PW-2	**EUG #**	2	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	OAC 252:100-37, Volatile Organic Compounds	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	All condensate storage tanks will be equipped with a permanent submerged fill pipe.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Compliance will be certified annually.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**	OAC 252: 100-43, Testing, Monitoring, and Recordkeeping	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Tank vapors will be routed to an enclosed flare or equivalent control device.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Condensate throughput will be recorded (monthly and 12-month rolling).	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**	40 CFR Part 60, Subpart OOOOa	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	The tanks are subject to NSPS OOOOa and the tanks will comply with applicable requirements.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Submittal of applicable notifications and reports required under NSPS OOOOa.	N/A
6	**Other Requirements**	N/A	N/A

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	COMPANY NAME	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	EUG	3 - Loading	3	SCENARIO	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	(b) Point ID#	(c) EU Name/Model	(d) Construction/ Modification Date
LOAD-1	LOAD-1	Condensate Truck Loading	N/A
LOAD-2	LOAD-2	Prod. Water Truck Loading	N/A

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	LOAD-1 & LOAD-2	**EUG #**	3	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	OAC 252:100-43, Testing, Monitoring, and Recordkeeping	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Condensate throughput will not exceed 1,379,700 gallons/yr.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Condensate throughput will be recorded (monthly and 12-month rolling).	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EUG**	4 - Heater	3	**SCENARIO**	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	**(b) Point ID#**	**(c) EU Name/Model**	**(d) Construction/ Modification Date**
H-1	H-1	0.5 MMBTU/hr Heater Treater	2022

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	H-1	**EUG #**	4	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	OAC 252:100-43, Testing, Monitoring, and Recordkeeping	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Maintain good combustion practices	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Maintain applicable records and certify compliance annually.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EUG**	5 - Flare	3	**SCENARIO**	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	**(b) Point ID#**	**(c) EU Name/Model**	**(d) Construction/ Modification Date**
F-1	F-1	Flare (Tank Control)	2022

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	F-1	**EUG #**	5	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	OAC 252:100-8-6	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Maintain good combustion practices	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Follow manufacturer's guidance and certify compliance annually.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**	OAC 252:100-43, Testing, Monitoring, and Recordkeeping	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	Flares will be equipped with a continuous pilot and a thermocouple monitoring device. Flares will be designed to achieve a VOC destruction efficiency of at least 98 wt%.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Maintain records of flare downtime. Maintain manufacturer's guarantee. Certify compliance annually.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		

PART 3 DEQ

Emissions Unit Group (EUG) Description

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EUG**	6 - Fugitives	3	**SCENARIO**	Normal

4	EMISSION UNIT (EU) INFORMATION		
(a) EU ID#	**(b) Point ID#**	**(c) EU Name/Model**	**(d) Construction/ Modification Date**
FUG-1	FUG-1	Fugitive Equipment Leaks	N/A

5	Include a Process Flow or Block Diagram as Appendix N/A - Included and A Narrative Description of the Facility as Appendix N/A - Included

PART 5 DEQ

Emissions Unit Group Compliance Demonstration

1	**COMPANY NAME**	Blake Production Co, Inc.
	FACILITY NAME	Cypress 1816 1-35H

2	**EU #(s)**	FUG-1	**EUG #**	6	**SCENARIO**	Normal

		DESCRIPTION	APPENDIX
3	**Citation/Method**	40 CFR Part 60, Subpart OOOOa	N/A
4	**Initial Compliance Limits, Demonstration, and Status**	The facility will be subject to fugitive component monitoring under this rule.	N/A
5	**Proposed Compliance Assurance Certification and Reporting**	Submittal of applicable notifications and reports required under NSPS OOOOa.	N/A
6	**Other Requirements**	N/A	N/A
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		
3	**Citation/Method**		
4	**Initial Compliance Limits, Demonstration, and Status**		
5	**Proposed Compliance Assurance Certification and Reporting**		
6	**Other Requirements**		

OIL & GAS REPRESENTATIVE SAMPLE INFORMATION FORM

Please complete this form for each sample used to estimate emissions at the facility and attach to sample lab analysis.

✓	Sample Follows Representative Sampling Guidance Document	OR		Requesting a Case-By-Case Determination*

* - Please fill out Additional Justification on Page 3.

1	ACTUAL FACILITY INFORMATION				
Company Name	Blake Production Co Inc				
Facility Name	Cypress 1816 1-35H				
Latitude / Longitude (to 5 decimal places)	Latitude	35.98638	Longitude	-98.88132	
List All Current Air Quality Permit Numbers At This Facility					

Please select the Facility Type:							
✓	Well Site		Natural Gas Compressor Station (Gathering)		Natural Gas Compressor Station (Transmission)		Natural Gas Processing Plant

Permit Action					
	Construction*		Modification*	✓	Operation

* - If application is submitted prior to new construction or modification, Box 4 (Facility-Specific Operating Data) and considerations following (Pages 2-3) may be left blank.

2	REPRESENTATIVE FACILITY INFORMATION				
Company Name					
Facility Name					
Latitude / Longitude (to 5 decimal places)	Latitude		Longitude		
List All Current Air Quality Permit Numbers At This Facility					

Please select the Facility Type:							
	Well Site		Natural Gas Compressor Station (Gathering)		Natural Gas Compressor Station (Transmission)		Natural Gas Processing Plant

3	SAMPLE INFORMATION				
Sample Being Utilized	✓	Facility-Specific Sample		Representative Facility Sample	
Sample is Used to Estimate Emissions for Which Units	Tanks, loading, combustor				
Sample Date	1/8/2024	Sample Name or Number	YL03803CX/X08071		
Sample Point	inlet separator	Type of Sample	pressurized liquid		
Sample Conditions	Pressure (psig)	20	Temperature (°F)	58	

Please Select and Specify the Sampling Method:					
	ASTM	✓	GPA		Other	Specify Method: 2145-16

4	FACILITY-SPECIFIC OPERATING DATA				
Operating Conditions	Pressure (psig)	20	Temperature (°F)	58	
API Gravity of Sales Oil		Type of Control & Efficiency	Flare - 96%		

Mark the Following That Apply (Based on Calculated Emission Estimates):							
	Facility-Wide VOC Emissions > 80 TPY		Facility-Wide VOC Emissions > 200 TPY	✓	Tank and Loading VOC emissions > 50% Total VOC Emissions		Storage Tanks, w/o control, with VOC Emissions > 4 TPY per Tank

Is Facility-Wide Throughput:							
	< 10 bbl/day	✓	< 1,200 bbl/day and controlled by > 95%		> 10 bbl/day and uncontrolled		> 1,200 bbl/day

If requesting a case-by-case determination, the following considerations are not required.

No.	All Sample Considerations	Yes	No
1	Is sample more than three (3) calendar years old?		✓
If the above answer is yes, a new sample is required or the sample shall be evaluated on a case-by-case basis.			

Only fill out the following tables when using a representative sample.

No.	Calculated Emission Considerations	Yes	No
2a	For true minor and synthetic minor facilities, are VOC emissions more than 80 TPY and then do storage tank and truck loading VOC emissions account for more than 50% of facility-wide VOC emissions?		✓
2b	For major facilities, are VOC emissions more than 200 TPY?		✓
3	Are individual storage tank emissions, not controlled by a combustion device, more than 4 TPY VOC?		✓
4	Are facility-wide emissions of a single HAP greater than 8 TPY or are total HAP emissions greater than 20 TPY? (Excluding HAP emissions from engines)		✓
If any of the above answers are yes, a facility-specific sample is required.			

No.	Throughput Considerations	Yes	No
5a	Is facility-wide throughput less than 10 bbl/day?[1]		✓
5b	Is facility-wide throughput less than 1,200 bbl/day and controlled by more than 95% with a VRU and/or combustion device?[2]	✓	
If either of the above answers are yes, the representative sample does not have to meet the requirements of distance, sampling point and operating parameters.			

Only fill out the following tables for the facility type being represented.

No.	Well Site Considerations	Yes	No
6a	Is Representative Facility less than 10 miles from the Actual Facility and produced in the same formation?		
7a	Is the sample point of the Representative Facility within ± 20°C (36°F) of the Actual Facility?		
8a	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9a	Is the sales oil of the Representative Facility within ±5° API gravity of the Actual Facility?		
10a	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required.			

[1] – This applies to Well Sites and Natural Gas Compressor Stations (Gathering and Transmissions);
[2] – This applies to Well Sites and Natural Gas Compressor Station (Gathering).

No.	Natural Gas Compressor Station (Gathering) Considerations	Yes	No
6b	Is Representative Facility less than 10 miles from the Actual Facility?		
7b	Is the sample point of the Representative Facility within ± 20°C (36°F) of the Actual Facility?		
8b	Is the sample point of the Representative Facility within ± 20 psig of the Actual Facility if greater than 30 psig or is the sample pressure greater than half that of the actual facility if the actual facility operates at less than 30 psig.		
9b	Is the sales oil of the Representative Facility within ±5° API gravity of the Actual Facility?		
10b	Was the representative sample taken at or before the last stage of separation of the actual facility, comparatively?		
If any of the above answers are no, a facility-specific sample is required.[3]			

No.	Natural Gas Compressor Station (Transmission) Considerations	Yes	No
6c	Is Representative Facility upstream from the Actual Facility and on the same pipeline?		
If any of the above answers are no, a facility-specific sample is required.			

No.	Natural Gas Processing Plant Considerations	Yes	No
6d	Is the condensate treated in a condensate stabilizer prior to entering storage tanks or are storage tanks controlled by greater than 95% with a VRU and/or combustion device?		
If any of the above answers are no, a facility-specific sample is required.			

Additional Justification: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

[3] - A representative sample may be use if all the criteria identified above are met except that the representative facility is located at a distance greater than 10 miles from the actual facility, provided a strong written justification is given for the specific instances where no representative facility that meets the above criteria may exist.

OIL & GAS REPRESENTATIVE SAMPLE INFORMATION FORM

Please complete this form for each sample used to estimate emissions at the facility and attach to sample lab analysis.

☐	Sample Follows Representative Sampling Guidance Document	OR ☐	Requesting a Case-By-Case Determination*

* - Please fill out Additional Justification on Page 3.

1	ACTUAL FACILITY INFORMATION			
Company Name	No representative gas sample used, assumed 100% VOC for fugitives			
Facility Name				
Latitude / Longitude (to 5 decimal places)	Latitude		Longitude	
List All Current Air Quality Permit Numbers At This Facility				

Please select the Facility Type:			
☐ Well Site	☐ Natural Gas Compressor Station (Gathering)	☐ Natural Gas Compressor Station (Transmission)	☐ Natural Gas Processing Plant

Permit Action		
☐ Construction*	☐ Modification*	☐ Operation

* - If application is submitted prior to new construction or modification, Box 4 (Facility-Specific Operating Data) and considerations following (Pages 2-3) may be left blank.

2	REPRESENTATIVE FACILITY INFORMATION			
Company Name				
Facility Name				
Latitude / Longitude (to 5 decimal places)	Latitude		Longitude	
List All Current Air Quality Permit Numbers At This Facility				

Please select the Facility Type:			
☐ Well Site	☐ Natural Gas Compressor Station (Gathering)	☐ Natural Gas Compressor Station (Transmission)	☐ Natural Gas Processing Plant

3	SAMPLE INFORMATION			
Sample Being Utilized	☐ Facility-Specific Sample		☐ Representative Facility Sample	
Sample is Used to Estimate Emissions for Which Units				
Sample Date		Sample Name or Number		
Sample Point		Type of Sample		
Sample Conditions	Pressure (psig)		Temperature (°F)	

Please Select and Specify the Sampling Method:			
☐ ASTM ☐ GPA	☐ Other	Specify Method:	

4	FACILITY-SPECIFIC OPERATING DATA			
Operating Conditions	Pressure (psig)		Temperature (°F)	
API Gravity of Sales Oil		Type of Control & Efficiency		

Mark the Following That Apply (Based on Calculated Emission Estimates):			
☐ Facility-Wide VOC Emissions > 80 TPY	☐ Facility-Wide VOC Emissions > 200 TPY	☐ Tank and Loading VOC emissions > 50% Total VOC Emissions	☐ Storage Tanks, w/o control, with VOC Emissions > 4 TPY per Tank

Is Facility-Wide Throughput:			
☐ < 10 bbl/day	☐ < 1,200 bbl/day and controlled by > 95%	☐ > 10 bbl/day and uncontrolled	☐ > 1,200 bbl/day

APPENDIX A. EMISSION CALCULATIONS

Emissions represented in the existing permit are not being updated at this time.

Site-Wide Emissions Summary

Unit ID	Description	NO_x		CO		VOC		$PM_{10/2.5}$		SO_2		Total HAP	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
T-1	VFR Condensate Tank	--	--	--	--	0.09	0.39	--	--	--	--	<0.01	0.01
T-2	VFR Condensate Tank	--	--	--	--	0.09	0.39	--	--	--	--	<0.01	0.01
T-3	VFR Condensate Tank	--	--	--	--	0.09	0.39	--	--	--	--	<0.01	0.01
T-4	VFR Condensate Tank	--	--	--	--	0.09	0.39	--	--	--	--	<0.01	0.01
PW-1	VFR Prod. Water Tank	--	--	--	--	0.02	0.07	--	--	--	--	<0.01	<0.01
PW-2	VFR Prod. Water Tank	--	--	--	--	0.02	0.07	--	--	--	--	<0.01	<0.01
LOAD-1	Condensate Truck Loading	--	--	--	--	49.34	4.25	--	--	--	--	1.79	0.15
LOAD-2	Prod. Water Truck Loading	--	--	--	--	0.49	<0.01	--	--	--	--	0.02	<0.01
H-1	Heater Treater	0.05	0.21	0.04	0.18	<0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
ENG-1	Compressor Engine	0.32	1.40	0.64	2.80	0.25	1.08	0.02	0.09	<0.01	<0.01	0.04	0.16
F-1	Flare/Comb (Tank Control)	0.06	0.27	0.26	1.13	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01
FUG-1	Fugitive Emissions	--	--	--	--	0.49	2.14	--	--	--	--	0.02	0.09
MSS-BD	Compressor Blowdowns	--	--	--	--	0.43	1.90	--	--	--	--	0.02	0.08
TOTAL		0.43	1.89	0.94	4.11	51.39	11.10	0.03	0.14	<0.01	<0.01	1.90	0.54

Engine Emissions

Engine Data Summary

Unit ID	ENG-1
Engine Make	Caterpillar
Engine Model	G3306
Engine Design	4SRB
Manufacture Date	8/7/2013
NSPS/NESHAP?	JJJJ/ZZZZ
Control Device	Cat. Converter
Max Horsepower	145
BSFC (Btu/hp-hr)	7,543
Operating Hours	8,760
NO_X (g/hp-hr)	**1.00**
CO (g/hp-hr)	**2.00**
VOC (g/hp-hr)	**0.70**
VOC + CH_2O (g/hp-hr)	0.77
CH_2O(g/hp-hr)	*7.01E-02*
SO_2 (g/hp-hr)	*2.01E-03*
$PM_{10/2.5}$ (g/hp-hr)	*6.64E-02*
HAP (g/hp-hr)	*4.07E-02*

[1] Parameters taken from manufacturer's data sheet
[2] Italicized factors taken from AP-42 Ch. 3.2

Uncontrolled Emissions

Pollutant	ENG-1	
	lb/hr	tpy
NO_X	0.32	1.40
CO	0.64	2.80
VOC (incl. CH_2O)	0.25	1.08
CH_2O	0.02	0.10
SO_2	<0.01	<0.01
$PM_{10/2.5}$	0.02	0.09
HAP (incl. CH_2O)	0.04	0.16

Storage Tank Emissions

Storage Tank Data Summary

Unit ID	T-1	T-1 to T-4	PW-1	PW-1 to PW-2
Tank Type	VFR	VFR	VFR	VFR
Storage Material	Condensate	Condensate	Prod. Water	Prod. Water
Capacity (bbl)	400	400	400	400
Height (ft)	20	20	20	20
Diameter (ft)	12	12	12	12
Tank Color	Gray	Gray	Gray	Gray
VOC Flash Factor (tpy/bpd)	3.11E-01	3.11E-01	3.11E-01	3.11E-01
HAP Flash Factor (tpy/bpd)	9.80E-03	9.80E-03	9.80E-03	9.80E-03
CH4 Flash Factor (tpy/bpd)	3.90E-02	3.90E-02	3.90E-02	3.90E-02
Daily TP (bbl/day)	22.5	90.0	8.0	16.0
Annual TP (gal/yr)	344,925	1,379,700	122,640	245,280
Control Device	Flare	Flare	Flare	Flare
Capture Eff. %	98.0%	98.0%	98.0%	98.0%
VOC/HAP DRE %	98.0%	98.0%	98.0%	98.0%

Emissions Summary

Pollutant	T-1		T-1 to T-4		PW-1		PW-1 to PW-2	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Uncontrolled Flash VOC	1.60	7.00	6.39	27.98	<0.01	0.02	0.01	0.05
Uncontrolled W&B VOC	0.66	2.87	2.62	11.49	0.40	1.76	0.81	3.53
Controlled Flash VOC	0.06	0.28	0.25	1.11	<0.01	<0.01	<0.01	<0.01
Controlled W&B VOC	0.03	0.11	0.10	0.45	0.02	0.07	0.03	0.14
Total VOC	0.09	0.39	0.36	1.56	0.02	0.07	0.03	0.14
Total HAP	<0.01	0.01	0.01	0.06	<0.01	<0.01	<0.01	<0.01
Total Methane	0.05	0.22	0.20	0.87	<0.01	0.04	0.02	0.08

[1] Working and breathing emissions estimated using AP-42, November 2019, Section 7.1.3.1, which conservatively assumes RVP 11 for condensate

[2] Flashing emissions estimated using a flash factor from a representative sample

[3] Produced water flashing emissions estimated to be 1% of crude tank emissions

Loading Losses

Loading Data Summary

Unit ID	LOAD-1	LOAD-2
Loading Mode	Submerged	Submerged
Service	Dedicated Normal	Dedicated Normal
Loading Vessel	Tank Truck	Tank Truck
Material	Condensate	Prod. Water
Control Device	None	None

Loading Loss Calculations

Parameter	LOAD-1	LOAD-2	Notes
S Factor	0.6	0.6	Saturation factor based on AP-42, Table 5.2-1
Average P (psia)	6.695	6.695	Avg. Crude TVP (AP-42 Default: OKC, OK)
Max Hourly P (psia)	10.264	10.264	Max July Crude TVP (AP-42 Default: OKC, OK)
M (lb/lbmol)	65.0	65.0	Crude Vapor MW (AP-42 Table 7.1-2)
Average T (˚R)	527.51	527.51	Avg. Surface Temp. (AP-42 Default: OKC, OK)
Max Hourly T (˚R)	551.57	551.57	Max July Surface Temp. (AP-42 Default: OKC, OK)
Annual L (lb/Mgal)	6.167	6.167	L=12.46*S*P*M/T from AP-42, Section 5-2
Hourly L (lb/Mgal)	9.043	9.043	Based on maximum hourly pressure and temperature
Throughput (gal/yr)	1,379,700	245,280	Maximum annual throughput
Throughput (gal/hr)	8,000	8,000	Max hourly throughput based on tank truck capacity
Headers	1	1	Number of loading headers

Emissions Summary

Pollutant	LOAD-1		LOAD-2	
	lb/hr	tpy	lb/hr	tpy
VOC	49.34	4.25	0.49	<0.01
HAP	1.79	0.15	0.02	<0.01

[1] HAP speciation based on ProMax

Heater Emissions

Heater Data Summary

Unit ID	H-1
Heater Description	Heater Treater
Rating (MMBtu/hr)	0.50
Hours of Operation	8,760

Emissions Summary

Pollutant	Factor	H-1	
	lb/MMBtu	lb/hr	tpy
NO_x	9.80E-02	0.05	0.21
CO	8.24E-02	0.04	0.18
VOC	5.39E-03	<0.01	0.01
Total HAP	1.84E-03	<0.01	<0.01
$PM_{10/2.5}$	7.45E-03	<0.01	0.02
SO_2	5.88E-04	<0.01	<0.01

[1] Factors taken from AP-42, Table 1.4-1 & 1.4-2

Control Device Emissions

Input Data Summary

Unit ID	F-1
Unit Description	Flare/Combustor
Combustion Use	Tank Control
Tank Gas Rate (MMBtu/hr)	0.81
Pilot Rating (MMBtu/hr)	0.07
Hours of Operation	8,760

[1] Waste gas rates obtained from tank emissions

[1] Pilot rating from EPA/452/B-02-001, Ch. 1 "Flares" (9/00)

Emissions Calculations

Pollutant	Factor	F-1	
	lb/MMBtu	lb/hr	tpy
NO_x (Waste)	6.80E-02	0.06	0.24
NO_x (Pilot)	9.80E-02	<0.01	0.03
NO_x (Total)	--	0.06	0.27
CO (Waste)	3.10E-01	0.25	1.10
CO (Pilot)	8.24E-02	<0.01	0.03
CO (Total)	--	0.26	1.13
VOC (Pilot)	5.39E-03	<0.01	<0.01
Total HAPs	1.84E-03	<0.01	<0.01
$PM_{10/2.5}$	7.45E-03	<0.01	0.03
SO_2	5.88E-04	<0.01	<0.01

[1] CO & NO_X factors taken from AP-42, Table 13.5-1

[2] VOC, PM, SO_2, & HAP factors taken from AP-42, Chapter 1.4

[3] VOC & HAP emissions only account for pilot

Fugitive Emissions (FUG-1)

Emissions Summary

Component	Service	Quantity [1]	VOC [2] Wt%	HAP [2] Wt%	TOC Factor [3] lb/hr/comp	VOC		HAP	
						lb/hr	tpy	lb/hr	tpy
Valves	Gas	24	100	4.0	9.92E-03	0.24	1.04	<0.01	0.04
	Light Oil	24	100	4.0	5.51E-03	0.13	0.58	<0.01	0.02
	Water/Oil	0	100	2.0	2.16E-04	<0.01	<0.01	0.00	0.00
Pump Seals	Gas	0	100	4.0	5.29E-03	<0.01	<0.01	<0.01	<0.01
	Light Oil	0	100	4.0	2.87E-02	<0.01	<0.01	<0.01	<0.01
	Water/Oil	0	100	2.0	5.29E-05	<0.01	<0.01	0.00	0.00
Other	Gas	1	100	4.0	1.94E-02	0.02	0.08	<0.01	<0.01
	Light Oil	1	100	4.0	1.65E-02	0.02	0.07	0.00	0.00
	Water/Oil	0	100	2.0	3.09E-02	<0.01	<0.01	0.00	0.00
Connectors	Gas	38	100	4.0	4.41E-04	0.02	0.07	<0.01	<0.01
	Light Oil	38	100	4.0	4.63E-04	0.02	0.08	<0.01	<0.01
	Water/Oil	0	100	2.0	2.43E-04	<0.01	<0.01	0.00	0.00
Flanges	Gas	44	100	4.0	8.60E-04	0.04	0.17	<0.01	<0.01
	Light Oil	44	100	4.0	2.43E-04	0.01	0.05	<0.01	<0.01
	Water/Oil	0	100	2.0	6.39E-06	<0.01	<0.01	0.00	0.00
TOTAL						**0.49**	**2.14**	**0.02**	**0.09**

[1] Component count estimated using 40 CFR Part 98, Subpart W, Table W-1C and 2x safety factor

[2] VOC & HAP content conservatively based on EPA default speciations (SPECIATE 4.4 Sample 1208)

[3] Factors taken from Table 2-4 in "Protocol for Equipment Leak Emission Estimates" EPA-453/R-95-017

Blowdown Maintenance Emissions (MSS-BD)

Blowdown (BD) Parameters

Blowdown ID	MSS-BD
Blowdown Unit	Compressor Engine
BD Volume (acf/unit)	84
BD Pressure (psig)	101
BD Volume (scf/unit)	659
Gas MW (lb/lbmol)	26.0
VOC Content (wt%)	100.0%
HAP Content (wt%)	4.0%
BDs (events/unit/yr)	84
Number of Units	1
Control Device	None
VOC/HAP DRE %	0.0%

[1] Blowdown volumes estimated based on similar facilities
[2] MW is based on conservative field gas composition

Uncontrolled Emissions Summary

Pollutant	MSS-BD	
	lb/hr	tpy
VOC	0.43	1.90
Total HAP	0.02	0.08

Fixed-Roof Tank Emissions

Based on AP-42, June 2020, Section 7.1.3.1.

Tank Identification	T-1	PW-1
Location for Calculation Purposes	Oklahoma City, Oklahoma	Oklahoma City, Oklahoma
Type of Substance	Petroleum Distillate	Petroleum Distillate
Contents of Tank	Gasoline (RVP 11)	Gasoline (RVP 11)
Tank/Roof Type	Cone	Cone
Aboveground/Underground?	Aboveground	Aboveground
Diameter, ft	12.0	12.0
Shell Height or Length, ft	20.0	20.0
Nominal Capacity, gal	*16,800*	*16800*
Throughput, gallons/yr	344,925	122,640
Tank Paint Color	Gray/Medium	Gray/Medium
Tank Paint Condition	Average	Average
Does Tank Have Flashing or Vapor Balance?	No	No
Effective Diameter, ft (Eq. 1-14)	12.0	12.0
Geometric Capacity, gal	16,920	16,920
Maximum Liquid Height, ft	19.0	19.0
Minimum Liquid Height, ft	1.0	1.0
Average Liquid Height, ft	10.0	10.0
Cone Tank Roof Slope, ft/ft	0.0625	0.0625
Dome Tank Roof Radius, ft	N/A	N/A
Dome Tank Roof Height, ft	N/A	N/A
Roof Outage, ft (Eq. 1-17 & 1-19)	0.125	0.125
Vapor Space Outage, ft (Eq. 1-16)	10.13	10.13
Vapor Space Volume, ft^3 (Eq. 1-3)	1145	1145
Avg. Daily Minimum Ambient Temperature, F	50.32	50.32
Avg. Daily Maximum Ambient Temperature, F	71.08	71.08
Daily Total Solar Insolation Factor, Btu/ft^2/day	1479	1479
Daily Average Ambient Temperature, F (Eq. 1-30)	60.7	60.7
Tank Paint Solar Absorbance, dimensionless	0.71	0.71
Daily Vapor Temperature Range, R (Eq. 1-6)	33.9	33.9
Daily Average Liquid Surf. Temperature, F (Eq. 1-27)	66.5	66.5
Daily Minimum Liquid Surf. Temp., F (Fig. 7.1-17)	58.1	58.1
Daily Maximum Liquid Surf. Temp., F (Fig. 7.1-17)	75.0	75.0
Daily Average Vapor Temperature, F (Eq. 1-33)	71.1	71.1
Liquid Bulk Temperature, F (Eq. 1-31)	63.8	63.8
Vapor Molecular Weight, lb/lbmol	65.0	65.0
Antoine's Coefficient A	N/A	N/A
Antoine's Coefficient B	N/A	N/A
Antoine's Coefficient C	N/A	N/A
TVP at Daily Avg. Liquid Surf. Temp., psia	6.5364	6.5364
TVP at Daily Min. Liquid Surf. Temp., psia	5.5668	5.5668
TVP at Daily Max. Liquid Surf. Temp., psia	7.6360	7.6360
Vapor Pressure Calculation Method	AP-42 Figure 7.1-14b: RVP=11 ASTM Slope=3	AP-42 Figure 7.1-14b: RVP=11 ASTM Slope=3
Vapor Density, lb/ft^3 (Eq. 1-22)	0.074592	0.074592
Daily Vapor Pressure Range, psi (Eq. 1-9)	2.069	2.069
Breather Vent Pressure Setting, psig	0.0300	0.0300
Breather Vent Vacuum Setting, psig	-0.0300	-0.0300
Breather Vent Pressure Setting Range, psig (Eq. 1-10)	0.0600	0.0600
Vent Setting Correction Factor (Eq. 1-41)	1.0000	1.0000
Ambient Pressure, psia	14.0	14.0
Vapor Space Expansion Factor (Eq. 1-5)	0.3332	0.3332
Vented Vapor Saturation Factor (Eq. 1-21)	0.2218	0.2218
Annual Turnovers (Eq. 1-37)	22.65	8.05
Turnover Factor	1.00	1.00
Working Loss Product Factor	1.00	1.00
Standing Storage Loss, lb/yr (Eq. 1-2)	2304.61	2304.61
Working Loss, lb/yr (Eq. 1-35)	3439.04	1222.77
Total Losses, lb/yr	5743.65	3527.38
Total Losses, tpy	**2.87**	**1.76**

From: Roxanne Bueckers
To: DEQ AQD-Permit Updates
Cc: Richard Kienlen
Subject: FW: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request
Date: Tuesday, December 10, 2024 2:11:13 PM
Attachments: Blake Cypress TV Application.pdf

Application 2/3. Check was sent separately.

Roxanne
AQD Surveillance
4143

From: Kody Ewing <kody.ewing@blakeproduction.com>
Sent: Monday, December 9, 2024 4:06 PM
To: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Cc: Kyle Dunn <KDunn@trinityconsultants.com>
Subject: [EXTERNAL] RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Cypress Application attached.

From: Kody Ewing
Sent: Monday, December 9, 2024 3:56 PM
To: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Cc: Kyle Dunn <KDunn@trinityconsultants.com>
Subject: RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Roxanne,

Please see attached applications. Would you like us to mail in copies as well or is this sufficient?

Thanks,
Kody

From: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Sent: Monday, December 9, 2024 8:56 AM
To: Kody Ewing <kody.ewing@blakeproduction.com>
Subject: RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Okay great. I'll watch for everything and keep you updated.

Thanks!

Roxanne

From: Kody Ewing <kody.ewing@blakeproduction.com>
Sent: Monday, December 9, 2024 8:46 AM
To: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Subject: [EXTERNAL] Re: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Separately, I believe Kyle is handling the applications. We sent the check ourselves.

Thanks,
Kody

Get Outlook for iOS

From: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Sent: Monday, December 9, 2024 8:45:28 AM
To: Kody Ewing <kody.ewing@blakeproduction.com>
Subject: RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Dear Kody,

Yes, I can definitely do that. Do you know if the check was sent in with the applications or separately?

Roxanne

From: Kody Ewing <kody.ewing@blakeproduction.com>
Sent: Monday, December 9, 2024 8:25 AM
To: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Subject: [EXTERNAL] RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Thank you. Could you let me know when you receive the check, please. our accounting said it went out last week but just want to make sure that it is received in time.

Thanks,
Kody

From: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Sent: Monday, December 2, 2024 1:59 PM
To: Kody Ewing <kody.ewing@blakeproduction.com>
Subject: RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Dear Kody,

Yes, this is correct. Please also reference the facility names on the check.

Thank you.

Roxanne

From: Kody Ewing <kody.ewing@blakeproduction.com>
Sent: Monday, December 2, 2024 1:48 PM
To: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Subject: [EXTERNAL] RE: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Roxanne,

Do we make our check out to OK Department of Environmental Quality? Mail to 707 N Robinson address?

Thanks,
Kody

From: Roxanne Bueckers <Roxanne.Bueckers@deq.ok.gov>
Sent: Friday, November 15, 2024 12:20 PM
To: Kody Ewing <kody.ewing@blakeproduction.com>
Cc: Maria Maynard <Maria.Maynard@deq.ok.gov>
Subject: Enforcement ID 12659 - ODEQ Air Quality Division - ODEQ Request

Dear Kody,

Good afternoon. Attached is the recap letter for the meeting held on November 7, 2024. Please note that the letter contains time-sensitive requests of the company. A hard copy of the attachment will not be mailed.

Please feel free to contact me if you have any questions.

Thank you.

Roxanne Bueckers
Environmental Programs Specialist
Surveillance Section
Air Quality Division
OK Department of Environmental Quality
(405) 702-4143