CDH Consulting, LLC
Thornton, Colorado
720.431.7468
www.CDHConsult.com

September 25, 2026

New Mexico Environment Department
Air Quality Bureau
Minor Source Permitting Section
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505-1816

RE: High Life Upslope Fed Com 1 CTB
NSR Permit #10432M1R4 Revision
Tap Rock Operating, LLC
2.3 mi S of Whites City, Eddy County, New Mexico

Dear NSR Permitting Team:

On behalf of Tap Rock Operating, LLC (Tap Rock), CDH Consulting, LLC (CDH) is submitting the attached revision application for the New Source Review (NSR) Construction Permit for the referenced facility in Eddy County, New Mexico.

This revision requests the removal of two generator engines and eight heater treaters. Flaring emissions have been adjusted for operational flexibility and the generator emission factors increased to NSPS Subpart JJJJ standards. Overall facility throughput has been increased as well.

All required forms, notices, and supplemental information are included in this submittal. Digital files will be submitted upon request.

If you have any questions or comments, please feel free to contact me at (303) 594-7951 or cmartinez@CDHConsult.com.

Sincerely,

Chris Martinez
Air Quality Engineer

Mail Application To:		**For Department use only:**
New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		

Universal Air Quality Permit Application

Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well.

This application is submitted as (check all that apply)**:** ☐ Request for a No Permit Required Determination (no fee)
☐ **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
Construction Status: ☐ Not Constructed ☒ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility
Minor Source: ☐ NOI 20.2.73 NMAC ☒ 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application
Title V Source: ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. ☐ TV Acid Rain: ☐ New ☐ Renewal
PSD Major Source: ☐ PSD major source (new) ☐ Minor Modification to a PSD source ☐ a PSD major modification

Acknowledgements:

☒ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.

☒ $500 NSR application Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).

☒ Check No.: **1366** in the amount of **$500**

☒ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.

☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.

☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full $500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: www.env.nm.gov/air-quality/small-biz-eap-2/.)

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.219.D(1) NMAC**
(e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known: **41218**	Updating Permit/NOI #: **10432**
1	Facility Name: **High Life Upslope Fed Com CTB**	Plant primary SIC Code (4 digits): **1311**	
		Plant NAIC code (6 digits): **211120**	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark):): **From Whites City: Drive 1.6 miles south on Hwy 180. Turn left onto Whites City Road. Follow Whites City Road east and then southeast for approximately 1.2 miles. Turn right (south) on new access road and follow 0.2 miles to facility.**		

2	Plant Operator Company Name: **Tap Rock Operating, LLC**	Phone/Fax: **(720) 772-5090**
a	Plant Operator Address: **1700 Lincoln Street, Suite 4700, Denver, CO 80403**	
b	Plant Operator's New Mexico Corporate ID or Tax ID:	
3	Plant Owner(s) name(s): **Tap Rock Operating, LLC**	Phone/Fax: **(720) 772-5090**
a	Plant Owner(s) Mailing Address(s): **1700 Lincoln Street, Suite 4700, Denver, CO 80403**	
4	Bill To (Company): **Tap Rock Operating, LLC**	Phone/Fax: **(720) 772-5090**
a	Mailing Address: **1700 Lincoln Street, Suite 4700, Denver, CO 80403**	E-mail: **--**
5	☒ Preparer: **Chris Martinez** ☒ Consultant: **CDH Consulting, LLC**	Phone/Fax: **(303) 594-7951**
a	Mailing Address: **P.O. Box 101330, Denver, CO 80250**	E-mail: **cmartinez@cdhconsult.com**
6	Plant Operator Contact: **Bill Ramsey**	Phone/Fax: **(720) 772-5090**
a	Address: **1700 Lincoln Street, Suite 4700, Denver, CO 80403**	E-mail: **bramsey@taprk.com**
7	Air Permit Contact: **Bill Ramsey**	Title: **Sr. Environmental and Regulatory Specialist**
a	E-mail: **bramsey@taprk.com**	Phone/Fax: **(720) 772-5090**
b	Mailing Address: **1700 Lincoln Street, Suite 4700, Denver, CO 80403**	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☒ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☒ Yes ☐ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes ☒ No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? ☒ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☒ No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? ☐ Yes ☐ No ☒ N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes ☒ No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: **10432**
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☒ No	If yes, the register No. is:

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly:	Daily:	Annually:
b	Proposed	Hourly:	Daily:	Annually:
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: **Oil: 175 bbl**	Daily: **Oil: 4,200 bbl**	Annually: **Oil: 1,533,000 bbl**

		Produced Water: 1,167 bbl **Natural Gas: 1,396 Mscf**	**Produced Water: 28,000 bbl** **Natural Gas: 33.5 MMscf**	**Produced Water: 10,220,000 bbl** **Natural Gas: 12,228 MMscf**
b	Proposed	Hourly: **Oil: 260.4 bbl** **Produced Water: 1,437.5 bbl** **Natural Gas: 2,166.7 Mscf**	Daily: **Oil: 6,250 bbl** **Produced Water: 34,500 bbl** **Natural Gas: 52.0 MMscf**	Annually: **Oil: 2,281,250 bbl** **Produced Water: 12,592,500 bbl** **Natural Gas: 18,980 MMscf**

Section 1-D: Facility Location Information

1	Latitude (decimal degrees): **32.142922**	Longitude (decimal degrees): **-104.376364**	County: **Eddy**	Elevation (ft): **3,510**
2	UTM Zone: ☐ 12 or ☒ 13	Datum: ☒ NAD 83 ☐ WGS 84		
a	UTM E (in meters, to nearest 10 meters): **558,814**	UTM N (in meters, to nearest 10 meters): **3,556,559**		
3	Name and zip code of nearest New Mexico town: **Whites City**			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): **From Whites City: Drive 1.6 miles south on Hwy 180. Turn left onto Whites City Road. Follow Whites City Road east and then southeast for approximately 1.2 miles. Turn right (south) on new access road and follow 0.2 miles to facility.**			
5	The facility is **2.3** (distance) miles **South** (direction) of **Whites City** (nearest town).			
6	Land Status of facility (check one): ☒ Private ☐ Indian/Pueblo ☐ Government ☐ BLM ☐ Forest Service ☐ Military			
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: **Located within Eddy County**			
8	**20.2.72** NMAC applications **only**: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/air-quality/modeling-publications/)? ☒ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: • **2.4 km from Carlsbad Caverns NP** • **15.9 km from Texas border**			
9	Name nearest Class I area: **Carlsbad Caverns NP**			
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): **2.4 km**			
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: **~2,011 meters**			
12	Method(s) used to delineate the Restricted Area: **Facility is constructed on a raised, leveled pad with steep grade and perimeter ditch and berm.** "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.			
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ Yes ☒ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.			
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility?			

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility **maximum** operating ($\frac{\text{hours}}{\text{day}}$): **24**	($\frac{\text{days}}{\text{week}}$): **7**	($\frac{\text{weeks}}{\text{year}}$): **52**	($\frac{\text{hours}}{\text{year}}$): **8,760**		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:		☐AM ☐PM	End:	☐AM ☐PM	

3	Month and year of anticipated start of construction: **Upon revision approval ~January 2027**
4	Month and year of anticipated construction completion: **1 week after start**
5	Month and year of anticipated startup of new or modified facility: **February 2027**
6	Will this facility operate at this site for more than one year? ☒ Yes ☐ No

Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? ☐ Yes ☒ No If yes, specify:		
a	If yes, NOV date or description of issue: **NA**		NOV Tracking No: **NA**
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☒ No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☒ Yes ☐ No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☐ **Major** (☐ ≥10 tpy of any single HAP **OR** ☐ ≥25 tpy of any combination of HAPS) **OR** ☒ **Minor** (☒ <10 tpy of any single HAP **AND** ☒ <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☒ No		
a	If yes, include the name of company providing commercial electric power to the facility: _____ Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only)

1	☐ I have filled out Section 18, "Addendum for Streamline Applications." ☒ N/A (This is not a Streamline application.)

Section 1-H: Current Title V Information - Required for all applications from TV Sources

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC):		Phone:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship):		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.):		
a	Address of Parent Company:		

5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:

Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (**NOI**), a 20.2.70 NMAC (**Title V**), a 20.2.72 NMAC (**NSR** minor source), or 20.2.74 NMAC (**PSD**) application package shall consist of the following:

Hard Copy Submittal Requirements:

1) One hard copy **original signed and notarized application package** **printed double sided** **'head-to-toe'** **2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.

2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This copy should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-to 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.

3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, two CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☒ Secure electronic transfer. Air Permit Contact Name **Chris Martinez**, Email **cmartinez@cdhconsult.com**

Phone number **(303) 594-7951** .

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.**

4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.

5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling ***summary report only*** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.

6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
   a. one additional CD copy for US EPA,
   b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,

c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.

2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc,), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.

4) The electronic file names shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the core permit number (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the section # (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the header information throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

Table of Contents

Section 1: General Facility Information
Section 2: Tables
Section 3: Application Summary
Section 4: Process Flow Sheet
Section 5: Plot Plan Drawn to Scale
Section 6: All Calculations
Section 7: Information Used to Determine Emissions
Section 8: Map(s)
Section 9: Proof of Public Notice
Section 10: Written Description of the Routine Operations of the Facility
Section 11: Source Determination
Section 12: PSD Applicability Determination for All Sources & Special Requirements for a PSD Application
Section 13: Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation
Section 14: Operational Plan to Mitigate Emissions
Section 15: Alternative Operating Scenarios
Section 16: Air Dispersion Modeling
Section 17: Compliance Test History

Section 18: Addendum for Streamline Applications (streamline applications only)
Section 19: Requirements for the Title V (20.2.70 NMAC) Program (Title V applications only)
Section 20: Other Relevant Information
Section 21: Addendum for Landfill Applications
Section 22: Certification Page

Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)		RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
ENG-1	Compressor Engine	Caterpillar	3516J	N6W01638	1380 HP	1380 HP	TBD TBD	CATALYST ENG-1	2-02-002-54	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SLB	
ENG-2	Compressor Engine	Caterpillar	G3516J	N6H00137	1500 HP	1500 HP	TBD TBD	CATALYST ENG-2	2-02-002-54	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SLB	
FUG-1	Equipment Fugitives	N/A	N/A	N/A	N/A	N/A	TBD TBD	 FUG-1	3-10-888-11	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-1	Heater Treater	Petrosmith	3-phase	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-1	3-10-004-04	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-2	Heater Treater	Petrosmith	3-phase	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-2	3-10-004-04	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-3	Heater Treater	Petrosmith	3-phase	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-3	3-10-004-04	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-4	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-4	3-10-004-04	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-5	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-5	3-10-004-04	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-6	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-6	3-10-004-04	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-7	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-7	3-10-004-04	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
HT-8	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD TBD	 HT-8	3-10-004-04	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
TK-1	Crude Oil Tank	Petrosmith	15.5' x 30'	22340	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
TK-2	Crude Oil Tank	Petrosmith	15.5' x 30'	22339	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
TK-3	Crude Oil Tank	Petrosmith	15.5' x 30'	22338	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
TK-4	Crude Oil Tank	Petrosmith	15.5' x 30'	22879	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
TK-5	Crude Oil Tank	Petrosmith	15.5' x 30'	22881	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)		RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
TK-6	Crude Oil Tank	Petrosmith	15.5' x 30'	22882	1000 bbl	9836.75 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-12	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
PWTK-1	Produced Water Tank	Petrosmith	15.5' x 30'	22336	1000 bbl	81,823.88 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-15	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
PWTK-2	Produced Water Tank	Petrosmith	15.5' x 30'	22337	1000 bbl	81,823.88 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-15	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
PWTK-3	Produced Water Tank	Petrosmith	15.5' x 30'	22878	1000 bbl	81,823.88 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-15	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
PWTK-4	Produced Water Tank	Petrosmith	15.5' x 30'	22880	1000 bbl	81,823.88 Mgal/yr	TBD TBD	VRU/FL-LP FL-LP	4-04-003-15	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
FL-LP	Low Pressure Flare	DBI	AF-668	5096A-UL	2.0 MMScf/d	2.0 MMScf/d	TBD TBD	 FL-LP	3-10-001-60	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
FL-LP SSM	Low Pressure Flare - SSM	DBI	AF-668	5096A-UL	2.0 MMScf/d	2.0 MMScf/d	TBD TBD	 FL-LP	3-10-001-60	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
FL-HP	High Pressure Flare	DBI	AF-668	5096A-UL	37.0 MMscf/d	37.0 MMscf/d	TBD TBD	 FL-HP	3-10-001-60	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
FL-HP SSM	High Pressure Flare - SSM	DBI	AF-668	5096A-UL	37.0 MMscf/d	37.0 MMscf/d	TBD TBD	 FL-HP	3-10-001-60	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
VRT	Vapor Recovery Towers	Petrosmith	4' x 40'	TBD	-	-	TBD TBD	VRU/FL-LP FL-LP	3-10-888-11	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced		
GEN-1	Generator Engine	PSI	14.6L	EEZOG400889	390 HP	390 HP	TBD TBD	CATALYST GEN-1	2-02-002-53	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	4SRB	
GEN-2	Generator Engine	PSI	14.6L	TBD	390 HP	390 HP	TBD TBD	CATALYST GEN-2	2-02-002-53	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
GEN-3	Generator Engine	PSI	14.6L	EEZOG401131	390 HP	390 HP	TBD TBD	CATALYST GEN-3	2-02-002-53	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	4SRB	
GEN-4	Generator Engine	PSI	14.6L	EEZOG501585	390 HP	390 HP	TBD TBD	CATALYST GEN-4	2-02-002-53	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	4SRB	
GEN-5	Generator Engine	PSI	14.6L	EEZOG501588	390 HP	390 HP	TBD TBD	CATALYST GEN-5	2-02-002-53	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	4SRB	
GEN-6	Generator Engine	PSI	14.6L	TBD	390 HP	390 HP	TBD TBD	CATALYST GEN-6	2-02-002-53	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)		RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
HT-9	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD / TBD	/ HT-9	3-10-004-04	☐ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☑ To be Removed ☐ Replacement Unit ☐ To be Replaced		
HT-10	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD / TBD	/ HT-10	3-10-004-04	☐ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☑ To be Removed ☐ Replacement Unit ☐ To be Replaced		
HT-11	Heater Treater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD / TBD	/ HT-11	3-10-004-04	☐ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☑ To be Removed ☐ Replacement Unit ☐ To be Replaced		
SSM	Start Up, Shut Down, Maintenance	NA	NA	NA	NA	NA	NA / NA	/ NA	3-10-888-11	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced		

[1] Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

[2] Specify dates required to determine regulatory applicability.

[3] To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

[4] "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

Table 2-B: Insignificant Activities[1] (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
OILLOAD-1	Oil truck loading	N/A	N/A / N/A	264,600 / gal/yr	20.2.72.202.B.5 (< 0.5 tpy VOC)		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
PWLOAD-1	Produced water truck loading	N/A	N/A / N/A	191,100 / gal/yr	20.2.72.202.B.5 (< 0.5 tpy VOC)		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

[1] Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

[2] Specify date(s) required to determine regulatory applicability.

Table 2-C: Emissions Control Equipment

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
CATALYST	Catalytic Reduction	TBD	CO	ENG-1	77	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	CO	ENG-2	76	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	VOCs	ENG-1	35	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	VOCs	ENG-2	54	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	NOx	GEN-1	92	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	CO	GEN-1	86	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	NOx	GEN-5	92	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	CO	GEN-5	86	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	NOx	GEN-3	92	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	CO	GEN-3	86	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	NOx	GEN-4	92	Manufacturer Specification
CATALYST	Catalytic Reduction	TBD	CO	GEN-4	86	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	TK-1	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-1	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	TK-2	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-2	98	Manufacturer Specification

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
VRU	Vapor Recovery Unit	TBD	VOCs	TK-3	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-3	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	TK-4	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-4	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	TK-5	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-5	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	TK-6	65	Design Calculation
FL-LP	Flare	TBD	VOCs	TK-6	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	PWTK-1	65	Design Calculation
FL-LP	Flare	TBD	VOCs	PWTK-1	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	PWTK-2	65	Design Calculation
FL-LP	Flare	TBD	VOCs	PWTK-2	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	PWTK-3	65	Design Calculation
FL-LP	Flare	TBD	VOCs	PWTK-3	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	PWTK-4	65	Design Calculation
FL-LP	Flare	TBD	VOCs	PWTK-4	98	Manufacturer Specification
VRU	Vapor Recovery Unit	TBD	VOCs	VRT	65	Design Calculation
FL-LP	Flare	TBD	VOCs	VRT	98	Manufacturer Specification

[1] List each control device on a separate line. For each control device, list all emission units controlled by the control device.

Table 2-D: Maximum Emissions (under normal operating conditions)

☐ **This Table was intentionally left blank because it would be identical to Table 2-E.**

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	3.04	13.33	7.91	34.65	3.26	14.26	0.005	0.022	-	-	0.100	0.440	0.100	0.440	-	-	-	-
ENG-2	0.99	4.35	8.20	35.92	3.57	15.64	0.006	0.025	-	-	0.099	0.435	0.099	0.435	-	-	-	-
GEN-1	11.18	48.96	12.04	52.72	0.60	2.64	0.002	0.007	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-3	11.18	48.96	12.04	52.72	0.60	2.64	0.002	0.007	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-4	11.18	48.96	12.04	52.72	0.60	2.64	0.002	0.007	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-5	11.18	48.96	12.04	52.72	0.60	2.64	0.002	0.007	-	-	0.066	0.287	0.066	0.287	-	-	-	-
FUG-1	-	-	-	-	0.10	0.42	-	-	-	-	-	-	-	-	-	-	-	-
HT-1	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05				
HT-2	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05				
HT-3	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05				
TK-1	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-3	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-4	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-5	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-6	-	-	-	-	19.41	85.00	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-1					5.03	22.03												
PWTK-2					5.03	22.03												
PWTK-3					5.03	22.03												
PWTK-4					5.03	22.03												
FL-LP	0.01	0.05	0.02	0.10	0.61	2.67	-	-	-	-	-	-	-	-	-	-	-	-
FL-LP SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-HP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-HP SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VRT	-	-	-	-	97.63	427.63	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Totals	49.21	215.49	64.65	283.17	244.15	1069.39	0.02	0.08	0.00	0.00	0.49	2.17	0.49	2.17	0.00	0.00	0.00	0.00

[1]**Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E^{-4}).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	1.52	6.66	1.83	8.00	2.75	12.04	0.006	0.025	-	-	0.100	0.441	0.100	0.441	-	-	-	-
ENG-2	0.99	4.35	1.98	8.69	2.32	10.14	0.006	0.028	-	-	0.099	0.435	0.099	0.435	-	-	-	-
GEN-1	0.86	3.77	1.72	7.53	0.68	2.98	0.002	0.008	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-3	0.86	3.77	1.72	7.53	0.68	2.98	0.002	0.008	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-4	0.86	3.77	1.72	7.53	0.68	2.98	0.002	0.008	-	-	0.066	0.287	0.066	0.287	-	-	-	-
GEN-5	0.86	3.77	1.72	7.53	0.68	2.98	0.002	0.008	-	-	0.066	0.287	0.066	0.287	-	-	-	-
FUG-1	-	-	-	-	0.10	0.42	-	-	-	-	-	-	-	-	-	-	-	-
HT-1	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05	-	-	-	-
HT-2	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05	-	-	-	-
HT-3	0.15	0.64	0.12	0.54	0.01	0.04	-	-	-	-	0.01	0.05	0.01	0.05	-	-	-	-
TK-1	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-3	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-4	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-5	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
TK-6	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-1	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-2	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-3	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-4	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
FL-LP	0.01	0.05	0.02	0.10	0.01	0.05	-	-	-	-	-	-	-	-	-	-	-	-
FL-LP SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-HP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-HP SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VRT	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
Totals	6.41	28.06	11.07	48.53	7.93	34.69	0.02	0.09	0.00	0.00	0.49	2.17	0.49	2.17	0.00	0.00	0.00	0.00
SSM (2-F)	308.35	22.56	615.57	45.05	345.89	43.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals (including SSM)	314.76	50.62	626.65	93.57	353.82	78.31	0.02	0.09	0.00	0.00	0.49	2.17	0.49	2.17	0.00	0.00	0.00	0.00

[1] **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

☐ This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scehduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance (SSM)[1], including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.env.nm.gov/aqb/permit/aqb_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM[2]		PM10[2]		PM2.5[2]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENG-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEN-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEN-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEN-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEN-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PWTK-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-LP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-LP SSM	1.57	2.41	3.14	4.81	7.42	11.38												
FL-HP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-HP SSM	306.774	20.1551	612.437	40.2371	338.47	22.24												
VRT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
Totals	308.346	22.5643	615.574	45.0469	345.892	43.6187	0	0	0	0	0	0	0	0	0	0	0	0

[1] **For instance**, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

[2] **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

☐ I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the "-" symbol and on significant figures.

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		☐ H_2S or ☐ Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
FL-LP	FL-LP, FL-LP SSM	1.58	2.46	3.16	4.91	7.44	11.43	-	-	-	-	-	-	-	-	-	-
Totals:																	

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box.

☑ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									**Total GHG** Mass Basis ton/yr[4]	**Total CO_2e** ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO2e															
Total	**mass GHG**															
	CO_2e															

[1] **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.

[2] For **HFCs** or **PFCs** describe the specific HFC or PFC compound and use a separate column for each individual compound.

[3] For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

[4] Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

[5] **CO_2e** means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
ENG-1	ENG-1	V	No	25	902	43.90	-	-	125.90	0.67
ENG-2	ENG-2	V	No	25	895	147.90	-	-	113.60	1.33
GEN-1	GEN-1	V	No	15	1382	31.60	-	-	361.90	0.33
GEN-3	GEN-3	V	No	15	1382	31.60	-	-	361.90	0.33
GEN-4	GEN-4	V	No	15	1382	31.60	-	-	361.90	0.33
GEN-5	GEN-5	V	No	15	1382	31.60	-	-	361.90	0.33
HT-1	HT-1	V	No	20	460	7.80	-	-	22.40	0.67
HT-2	HT-2	V	No	20	460	7.80	-	-	22.40	0.67
HT-3	HT-3	V	No	20	460	7.80	-	-	22.40	0.67
FL-LP	FL-LP	V	No	75	1500	31.25	-	-	159.00	0.50
FL-LP SSM	FL-LP SSM	V	No	75	1500	31.25	-	-	159.00	0.50
FL-HP	FL-HP	V	No	75	1500	266.00	-	-	755.00	0.67
FL-HP SSM	FL-HP SSM	V	No	75	1500	266.00	-	-	755.00	0.67

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde ☑ HAP or ☐ TAP		Acetaldehyde ☑ HAP or ☐ TAP		Acrolein ☑ HAP or ☐ TAP		Benzene ☑ HAP or ☐ TAP		Ethylbenzene ☑ HAP or ☐ TAP		n-Hexane ☑ HAP or ☐ TAP		Toluene ☑ HAP or ☐ TAP		Xylene ☑ HAP or ☐ TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	ENG-1	0.69	3.04	0.54	2.34	0.08	0.37	0.05	0.23	0.00	0.02	0.00	0.00	0.01	0.05	0.00	0.02	0.00	0.01
ENG-2	ENG-2	0.75	3.27	0.57	2.48	0.10	0.42	0.06	0.26	0.01	0.02	0.00	0.00	0.01	0.06	0.00	0.02	0.00	0.01
GEN-1	GEN-1	0.10	0.42	0.07	0.31	0.01	0.04	0.01	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
GEN-3	GEN-3	0.10	0.42	0.07	0.31	0.01	0.04	0.01	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
GEN-4	GEN-4	0.10	0.42	0.07	0.31	0.01	0.04	0.01	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
GEN-5	GEN-5	0.10	0.42	0.07	0.31	0.01	0.04	0.01	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
	FUG-1	0.00454	0.01988							2.2E-05	9.8E-05								
Totals:		1.82874	8.00988	1.37941	6.0418	0.21945	0.96117	0.14737	0.64547	0.03105	0.136	0.00118	0.00516	0.02388	0.1046	0.01645	0.07204	0.00663	0.02904

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, …)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage (MSCF/hr)	Annual Usage (MMSCF/y)	% Sulfur	% Ash
ENG-1	Natural Gas	Field Natural Gas	1026	9.820	86.000	0	0
ENG-2	Natural Gas	Field Natural Gas	1026	11.200	98.200	0	0
GEN-1	Natural Gas	Field Natural Gas	1026	3.296	28.873	0	0
GEN-3	Natural Gas	Field Natural Gas	1026	3.296	28.873	0	0
GEN-4	Natural Gas	Field Natural Gas	1026	3.296	28.873	0	0
GEN-5	Natural Gas	Field Natural Gas	1026	3.296	28.873	0	0
HT-1	Natural Gas	Field Natural Gas	1026	1.460	12.810	0	0
HT-2	Natural Gas	Field Natural Gas	1026	1.460	12.810	0	0
HT-3	Natural Gas	Field Natural Gas	1026	1.460	12.810	0	0
FL-LP	Natural Gas	Field Natural Gas	1026	0.055	0.482	0	0
FL-HP	Natural Gas	Field Natural Gas	1026	0.055	0.482	0	0

Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

Tank No.	SCC Code		Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
TK-1	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
TK-2	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
TK-3	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
TK-4	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
TK-5	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
TK-6	4-04-003-12	Crude Oil	Mixed Hydrocarbons	6.5	45.03	77	10.65	77	10.65
PWTK-1	4-04-003-15	Produced Water	99% Produced Water, 1% Oil	8.3	27.95	77	0.99	77	0.99
PWTK-2	4-04-003-15	Produced Water	99% Produced Water, 1% Oil	8.3	27.95	77	0.99	77	0.99
PWTK-3	4-04-003-15	Produced Water	99% Produced Water, 1% Oil	8.3	27.95	77	0.99	77	0.99
PWTK-4	4-04-003-15	Produced Water	99% Produced Water, 1% Oil	8.3	27.95	77	0.99	77	0.99

Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 0.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M^3)			Roof	Shell			
TK-1	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
TK-2	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
TK-3	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
TK-4	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
TK-5	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
TK-6	TBD	Crude Oil	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	15,968,750	380.21
PWTK-1	TBD	Produced Water	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	132,221,250	3148.13
PWTK-2	TBD	Produced Water	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	132,221,250	3148.13
PWTK-3	TBD	Produced Water	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	132,221,250	3148.13
PWTK-4	TBD	Produced Water	N/A	FX	1,000	159	6.6	4.65	Dk Grn	Dk Grn	Good	132,221,250	3148.13

Table 2-L2: Liquid Storage Tank Data Codes Reference Table

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
FX: Fixed Roof	**Mechanical Shoe Seal**	**Liquid-mounted resilient seal**	**Vapor-mounted resilient seal**	**Seal Type**	**WH**: White	Good
IF: Internal Floating Roof	**A**: Primary only	**A**: Primary only	**A**: Primary only	**A**: Mechanical shoe, primary only	**AS**: Aluminum (specular)	Poor
EF: External Floating Roof	**B**: Shoe-mounted secondary	**B**: Weather shield	**B**: Weather shield	**B**: Shoe-mounted secondary	**AD**: Aluminum (diffuse)	
P: Pressure	**C**: Rim-mounted secondary	**C**: Rim-mounted secondary	**C**: Rim-mounted secondary	**C**: Rim-mounted secondary	**LG**: Light Gray	
					MG: Medium Gray	
					BL: Black	
					OT: Other (specify)	

Note: 1.00 bbl = 0.159 M^3 = 42.0 gal

Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

Material Processed				Material Produced			
Description	**Chemical Composition**	**Phase (Gas, Liquid, or Solid)**	**Quantity (specify units)**	**Description**	**Chemical Composition**	**Phase**	**Quantity (specify units)**
				Crude Oil	Mixed Hydrocarbons	Liquid	6,250 bbl/d
				Produced Water	Produced Water	Liquid	34,500 bbl/d
				Natural Gas	Natural Gas	Gas	52.0 MMscf/d

Table 2-N: CEM Equipment

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
	N/A								

Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
	N/A							

Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Application Summary: This revision is being submitted to authorize the removal of two generator engines (GEN-2, GEN-6), update emission factors for four generators (GEN-1, GEN 3-5), removal of eight heater treaters (HT 4-11), and increase throughput and flaring limits. There are no other changes requested in this revision.

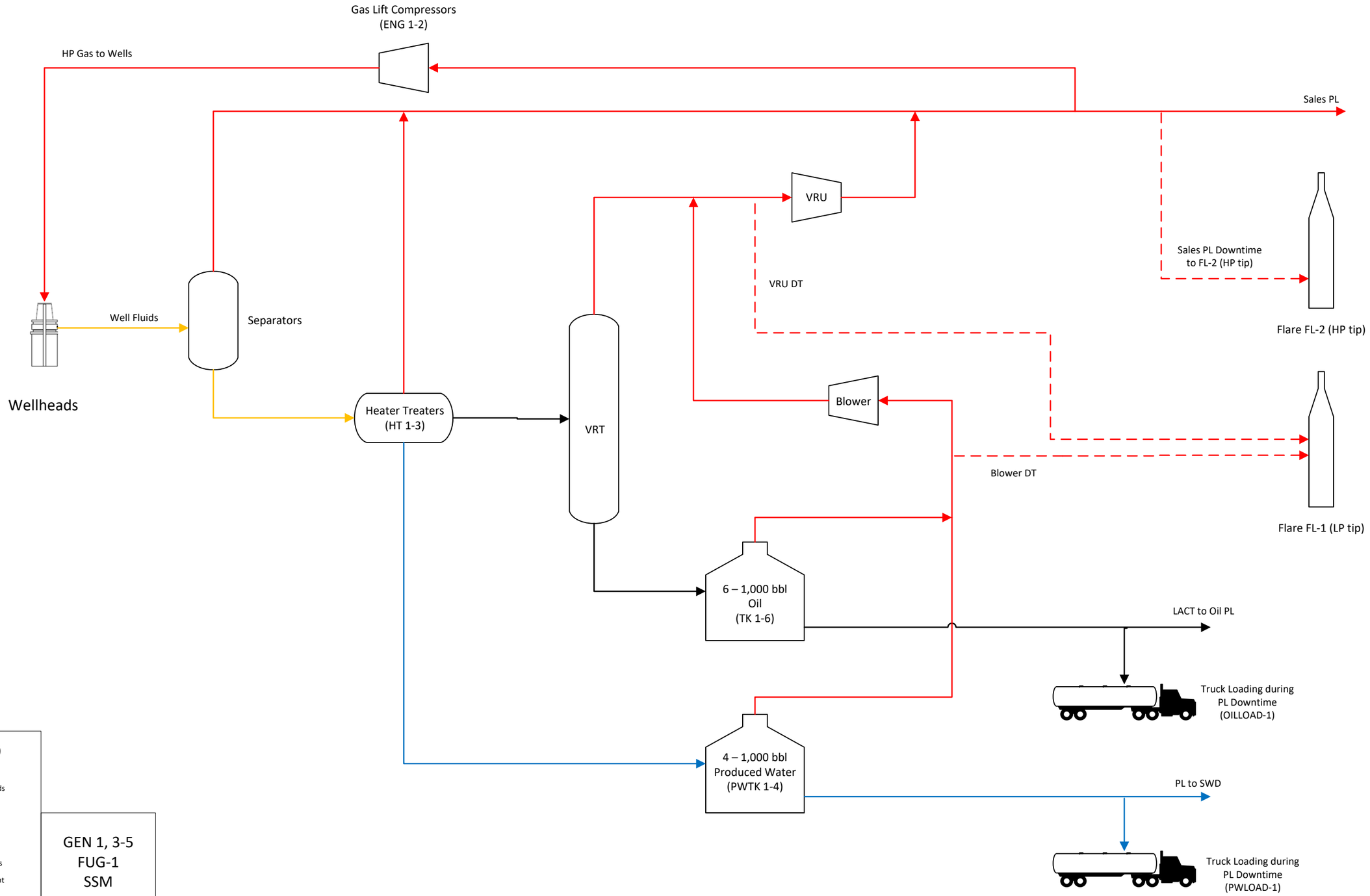
Process Summary: Well fluids are routed to individual initial separators where gas and liquids are separated. Liquids from the initial separators flow to heater treaters (HT 1-3). Oil from the heater treaters enters the vapor recovery towers (VRTs). Gas from the heater treaters joins the gas from the initial separators and is sent to the sales pipeline. Gas is sent to flare during short pipeline downtime periods (FL-2 (HP)). Prior to the sales point, a side stream of gas is removed and sent to gas lift compressors (ENG 1-2). The compressors direct the gas down hole to assist in bringing fluids to the surface. The compressor engines are gas fired and controlled with catalytic converters. Water from the heater treaters flows to atmospheric storage tanks (PWTK 1-4). Vapors from the water storage tanks are captured by the tank blower and routed to the VRU and then to the sales pipeline. When the blower is down for maintenance, the vapors are controlled by the low-pressure flare (FL-1 (BDT)). When enough water has accumulated in the tanks it is piped off-site for disposal. A small amount of truck loading is included for operational flexibility (PWLOAD-1, HR-1). Gas from the VRTs is routed to a Vapor Recovery Unit (VRU) and to the sales line. The oil from the VRTs is routed to the atmospheric oil storage tanks (TK 1-6). Vapors from the oil storage tanks are captured by the tank blower and routed to the VRU and then to the sales pipeline. When the blower is down for maintenance, the vapors are controlled by the flare (FL-1 (BDT)). When enough oil has accumulated in the tanks it is piped off-site for sale via LACT. A small amount of truck loading is included for operational flexibility (OILLOAD-1, HR-1). During periods of VRU downtime, the vapor stream is controlled by the flare (FL-1(VDT)). The facility utilizes four electrical generators (GEN-1, GEN 3-5) to provide power to the site.

Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions: VOCs during blower and VRU downtime are controlled by FL-LP. Sales gas pipeline downtime is routed to FL-HP. Blanket 10 tpy SSM-1 emissions are also requested.

Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.



LEGEND

- Mixed Fluids
- Oil
- Gas
- Water
- Continuous
- Intermittent

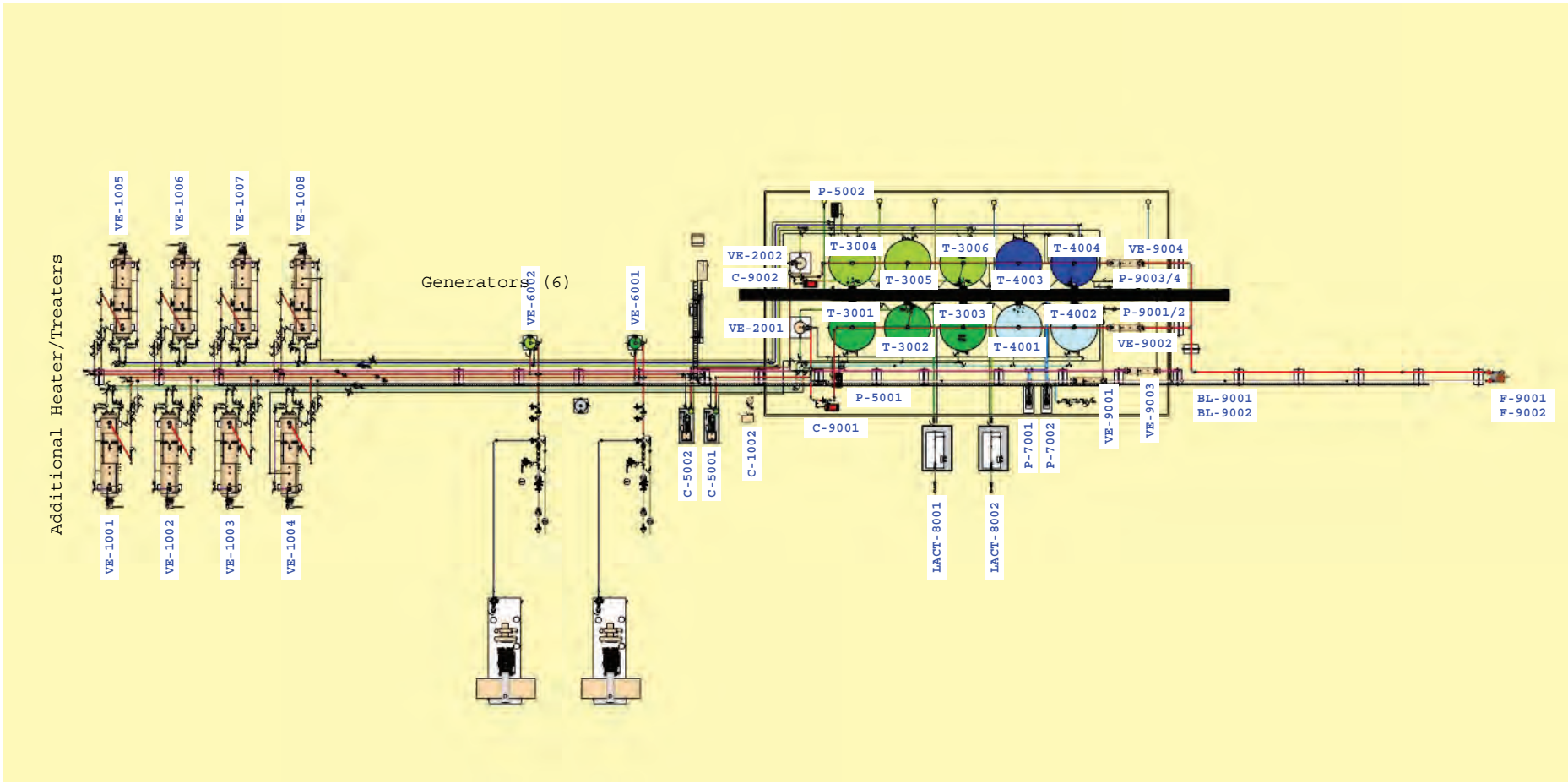
GEN 1, 3-5
FUG-1
SSM

CDH Consulting, LLC Thornton, CO	Process Flow Diagram September 2026	Tap Rock Operating, LLC High Life Upslope Fed Com CTB

Section 5

Plot Plan Drawn to Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.



BEAR

+P&, P"%*-.%/01/,0'"
.+*,%$R*0-

P, $%P,*-
"2+0P3"-$%,*4 +$

TAP ROCK

$*P%R #)
R"& +R#"&

0 1!2#e$\) 3() ')*

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Control Devices:

- **Catalytic Converters** - Engine emissions are controlled using catalytic converters to reduce NOx, CO, and VOCs.
- **Low-Pressure Blower** - Tank flash, working, and breathing vapors are controlled by a low-pressure blower which routes to the VRU inlet and then to the sales line.
- **Vapor Recovery Unit (VRU)** - VRT vapors are collected by the VRU and routed to the sales line.
- **Flare (FL**-1) – During periods of Blower downtime, stream is routed to the flare for destruction (FL-1(BDT))
- **Flare (FL**-1) – During periods of VRU downtime, stream is routed to the flare for destruction (FL-1(VDT))
- **Flare (FL**-2) – During periods of sales line downtime, stream is routed to the flare for destruction (FL-2(HP))

Supplemental Calculations
High Life Upslope Fed Com CTB
September 2026

Production

	bbl/yr	bbl/d	bbl/hr
Oil	2,281,250	6,250	260.4
Produced Water	12,592,500	34,500	1437.5

gal/yr/tank	turn/tank/yr
15,968,750	380
132,221,250	3,148

	MMscf/yr	MMscf/d	Mscf/hr
Gas	18,980	52.0	2166.7

LP Flare Calculations

DRE = 98%

Blower DT -->	10%	Uncontrolled Flash Downtime		Uncontrolled W&S Downtime		Total Uncontrolled Downtime		Capture Efficiency	Total Uncontrolled to Flare		Total Uncontrolled to Flare by fluid		Total Controlled after Flare	
Unit No.		pph	tpy	pph	tpy	pph	tpy	%	pph	tpy				
TK-1		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00				
TK-2		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00				
TK-3		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00				
TK-4		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00				
TK-5		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00				
TK-6		9.79	42.90	9.61	42.10	19.41	85.00	100%	19.41	85.00	116.43	509.98	2.33	1.02
PWTK-1		1.29	5.67	3.74	16.36	5.03	22.03	100%	5.03	22.03				
PWTK-2		1.29	5.67	3.74	16.36	5.03	22.03	100%	5.03	22.03				
PWTK-3		1.29	5.67	3.74	16.36	5.03	22.03	100%	5.03	22.03				
PWTK-4		1.29	5.67	3.74	16.36	5.03	22.03	100%	5.03	22.03	20.12	88.11	0.40	0.18
											136.55	**598.09**	**2.73**	**1.20**

lb/MMBtu (TCEQ) 0.138 0.2755

	MMSCFD (from ProMax)	(scf/hr)	Mscf/hr	MMscf/yr	Btu/scf	MW (lb/lbmol)	VOC wt%	VOC lb/hr	VOC tpy	wt% Benzene	wt% Toluene	wt% Ethylbenzene	wt% Xylene	wt% n-Hexane	MMBtu/hr	NOx (lb/hr)	NOx (tpy)	CO (lb/hr)	CO (tpy)
Pilot gas		78	0.08	0.6833	1026	19.12	15.48	0.61	2.67	0.0315	0.8037	0.0352	0.4678	2.2312	0.080	0.0110	0.0484	0.0220	0.0966
Tank Blower DT (FL-1 BDT)	0.062484	2603.50	2.60	7.9823	1573	32.6	61.06	136.73	209.60	0.0417	1.0654	0.0448	0.6201	2.0721	4.095	0.5652	0.8664	1.1283	1.7296
VRU DT (FL-1 VDT)	0.111773	4657.20	4.66	14.2790	1566	31.8	60.01	234.48	359.46	0.0315	0.8037	0.0352	0.4678	2.2312	7.293	1.0065	1.5429	2.0093	3.0802
Total Uncontrolled FL-1			7.26	22.26				371.21	569.07						11.469	1.572	2.409	3.138	4.810
Total Controlled FL-1 LP								**7.42**	**11.38**										
								2.73	**4.19**										
HP Flare Calculations								**4.69**	**7.19**										
Sales Gas DT (FL-2 HP)	52.0	2166666.67	2166.67	284.7000	1026	19.12	15.48	16923.37	1111.87	0.0315	0.8037	0.0352	0.4678	2.2312	2223	306.7740	20.1551	612.4365	40.2371
Total Uncontrolled FL-2 HP								16923.37	1111.87										
Total Controlled FL-2 HP								**338.47**	**22.24**										
Total Controlled from Flares (FL-1 LP + FL-2 HP)								**345.89**	**33.62**										

Flare HAP Calculations (uncontrolled tpy)

Stream	Benzene	Toluene	Ethylbenzene	Xylene	n-Hexane	Formaldehyde	Acetaldehyde	Acrolein	Total HAP
Tank Blower DT to FL-1 BDT	0.143	3.658	0.154	2.129	7.114	-	-	-	13.197
Total VRU DT to FL-1 VDT	0.189	4.815	0.211	2.802	13.366	-	-	-	21.382
Total to FL-1 LP	0.332	8.472	0.365	4.931	20.479	-	-	-	34.579
Total to FL-2 HP	2.262	57.719	2.531	33.591	160.228	-	-	-	256.330

Flare HAP Calculations (controlled tpy)

Stream	Benzene	Toluene	Ethylbenzene	Xylene	n-Hexane	Formaldehyde	Acetaldehyde	Acrolein	Total HAP
Tanks (FL-1 BDT)	0.003	0.073	0.003	0.043	0.142	-	-	-	0.264
Total VRU DT to FL-1 VDT	0.004	0.096	0.004	0.056	0.267	-	-	-	0.428
Total from FL-1 LP	0.007	0.169	0.007	0.099	0.410	-	-	-	0.692
Total from FL-2 HP	0.045	1.154	0.051	0.672	3.205	-	-	-	5.1266

Other HAP Calculations (controlled tpy)

Source	Benzene	Toluene	Ethylbenzene	Xylene	n-Hexane	Formaldehyde	Acetaldehyde	Acrolein	Total HAP
ENG-1 (G3516J)	0.01953	0.01809	0.00175	0.00815	0.04884	2.3437	0.37112	0.22815	3.04
ENG-2 (G3516J)	0.02229	0.02067	0.00201	0.00933	0.05576	2.4769	0.42377	0.26052	3.27
GEN-1 (14.6L)	0.02352	0.00832	0.00035	0.00289	0	0.3053	0.04157	0.0392	0.42
GEN-3 (14.6L)	0.02352	0.00832	0.00035	0.00289	0	0.3053	0.04157	0.0392	0.42
GEN-4 (14.6L)	0.02352	0.00832	0.00035	0.00289	0	0.3053	0.04157	0.0392	0.42
GEN-5 (14.6L)	0.02352	0.00832	0.00035	0.00289	0	0.3053	0.04157	0.0392	0.42
FUG-1	0.00010								0.0199
Controlled HAPs Grand Total	0.195	1.565	0.070	0.898	4.128	6.042	0.961	0.645	14.520

Truck Loading

LACT to pipeline is Normal Operations

	Capacity	#/yr		Volume (gal)
Oil Trucks	180	35	5 trucks/day for 7 days	264,600
Water Trucks	130	35	5 trucks/day for 7 days	191,100
Total		70		

Stack Parameters (General)

	MMBtu/hr	F-Factor (wscf/MMBtu)*	Temp (F)	Diam (ft)	Flow (acfh)	Flow (acfm)	Flow (acfs)	Velocity (fps)
HT-1	1.50	10610	460	0.67	28157	469	7.8	22.4
HT-2	1.50	10610	460	0.67	28157	469	7.8	22.4
HT-3	1.50	10610	460	0.67	28157	469	7.8	22.4
ENG-1 (G3516J)			902	0.67		2636	43.9	125.9
ENG-2 (G3516J)			895	1.00		9472	157.9	201.0
GEN-1 (14.6L)			1382	0.33		1895	31.6	361.9
GEN-3 (14.6L)			1382	0.33		1895	31.6	361.9
GEN-4 (14.6L)			1382	0.33		1895	31.6	361.9
GEN-5 (14.6L)			1382	0.33		1895	31.6	361.9
FL-LP			1500	0.50		1875	31.3	159.2
FL-HP			1500	0.67		15960	266.0	754.5

* 40 CFR 60, App A-7, Table 19-2

TABLE 19-2—F FACTORS FOR VARIOUS FUELS[1]

Fuel Type	F_d dscm/J	F_d dscf/10^6 Btu	F_w wscm/J	F_w wscf/10^6 Btu	F_c scm/J	F_c scf/10^6 Btu
Coal:						
Anthracite[2]	2.71×10^{-7}	10,100	2.83×10^{-7}	10,540	0.530×10^{-7}	1,970
Bituminus[2]	2.63×10^{-7}	9,780	2.86×10^{-7}	10,640	0.484×10^{-7}	1,800
Lignite	2.65×10^{-7}	9,860	3.21×10^{-7}	11,950	0.513×10^{-7}	1,910
Oil[3]	2.47×10^{-7}	9,190	2.77×10^{-7}	10,320	0.383×10^{-7}	1,420
Gas:						
Natural	2.34×10^{-7}	8,710	2.85×10^{-7}	10,610	0.287×10^{-7}	1,040
Propane	2.34×10^{-7}	8,710	2.74×10^{-7}	10,200	0.321×10^{-7}	1,190
Butane	2.34×10^{-7}	8,710	2.79×10^{-7}	10,390	0.337×10^{-7}	1,250
Wood	2.48×10^{-7}	9,240			0.492×10^{-7}	1,830
Wood Bark	2.58×10^{-7}	9,600			0.516×10^{-7}	1,920
Municipal	2.57×10^{-7}	9,570			0.488×10^{-7}	1,820
Solid Waste						

[1]Determined at standard conditions: 20 °C (68 °F) and 760 mm Hg (29.92 in Hg)

Fugitive Emissions

EQUIPMENT & COMPONENT COUNTS[1]

Equipment Type	*Count*	*Valves*	*Connectors*	*OELs*	*PRVs*[3]	*Flanges*[2]	*Pump Seals*
Wellhead(s)	13	143	468	13	0	26	0
Separator(s)	13	442	1378	78	26	52	0
Meter(s)/Piping	2	28	102	2	2	4	0
Compressor(s)	2	146	358	6	8	12	0
In-Line Heater(s)	3	42	195	6	3	6	0
Dehydrator(s)	0	0	0	0	0	0	0
Combustor(s)[4]	2	28	102	2	2	4	0
Oil Tank(s)[5]	6	204	636	6	12	24	0
Produced Water Tank(s)[5]	4	136	424	4	8	16	0
TOTAL COMPONENTS:		**1169**	**3663**	**117**	**61**	**144**	**0**

COMPONENT COUNT BY PROCESS STREAM[6]

Process Stream Gas %:	**30%**
Process Stream Oil %:	**60%**
Process Stream Water %:	**10%**

Component	*Gas*	*Heavy Oil*	*Light Oil*	*Water/Oil*
Connectors	1099	0	2198	366
Flanges	43	0	86	14
OELs	35	0	70	12
Pump Seals	0	0	0	0
Valves	351	0	701	117
Other[3]	18	0	37	6

EMISSION CALCULATIONS

	Stream Weight %:			Emissions′:			
Process Stream	*VOC*	*Benzene*	*Total HAP*	*TOC (TPY)*	*VOC (TPY)*	*Benzene (lbs/yr)*	*Total HAP (lb/yr)*
Gas	15.48%	0.03%	3.57%	0.22	0.03	0.14	15.67
Heavy Oil	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Light Oil	100.00%	0.008%	3.13%	0.38	0.38	0.06	24.06
Water/Oil	1.00%	0.000%	0.031%	0.05	0.00	0.00	0.03
		TOTAL EMISSIONS:		**0.65**	**0.42**	**0.20**	**39.75**
EQUATIONS		lb/hr			0.096	2.247E-05	0.004538

*TOC Emissions (TPY) = Component Qty. * Emission Factor (lbs/hr/comp) * Annual Operating Hrs * 1ton/2000 lbs*

*Emissions x (TPY) = TOC Emissions (TPY) * Weight Fraction of x from Gas Analysis (wt%)*

Component Type	**Equipment Service Category**[5]			
	Gas (lbs/hr/component)	**Heavy Oil** (<20 API Gravity) (lbs/hr/component)	**Light Oil** (>20 API Gravity) (lbs/hr/component)	**Water/Light Oil**[2] (lbs/hr/component)
Connectors	2.20E-05	1.65E-05	2.14E-05	2.20E-05
Flanges	1.26E-05	8.60E-07	5.29E-06	6.39E-06
Open-ended Lines	3.31E-05	1.59E-05	3.09E-05	7.72E-06
Pumps[1]	7.72E-04	0.00E+00	1.12E-03	5.29E-05
Valves[3]	5.51E-05	1.85E-05	4.19E-05	2.14E-05
Other[4]	2.65E-04	7.05E-05	2.43E-04	1.30E-04

NOTES

1. Component counts estimated using Table W-1B of 40 CFR 98 Subpart W and conservative assumptions/estimates.
2. Flanges estimated as 3% of connector values.
3. PRVs are estimated under the "Other" category.
4. Combustor component counts are estimated using Table W-1B values under "Meters/Piping"
5. Storage tank component counts are estimated using Table W-1B values under "Separators"
6. Component count values allocated into process stream service using estimated average.
7. Emission factors derived from Table 2-8, EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates," Nov. 1995.

AIR EMISSIONS CALCULATION TOOL

Instructions for Completing the Equipment Calculation Forms

1. Click the **Start Button** below to reset the form to begin data entry.

2. The ***Air Emissions Calculation Tool*** initially loads with the **Core Data Information Form.** Once all information is entered on this form, the necessary equipment calculation pages will be created based on the information entered on the Core Data Information Form. The customized ***Air Emissions Calculation Tool*** should now be saved to your computer before entering any other information on the equipment calculation pages. **Warning,** every time you click on the **Start Button b**elow, the ***Air Emissions Calculation Tool*** will reset and all data entered will be lost.

3. Green/Blue colored information boxes require users to enter the required information for the subject facility. Default values may be changed if not appropriate for the facility.

4. Yellow colored boxes represent calculated values based on user information entered and may not be changed.

5. Yellow boxes with green/blue cross-hatching represent calculated values based on user information entered, however users may input data in these boxes, if necessary.

Start

Core Data Information

Mandatory - All appropriate Data Must Be Entered For All Boxes Below. This Data Will Automatically Create All Required Equipment Forms And Populate This Data In All Emissions Calculation Forms.

Date Field	Sep 9, 2026		Permit/NOI/NPR Number	10432M1R1	
Company Name:	Tap Rock Operating, LLC		Select Application Type	NSR	
Facility Name:	High Life CTB		AI# if Known	41218	
Max. Facility Gas Production	52,000	(Mscf/d) 2,167 (Mscf/h)	Elevation (ft.)	3,510	
Max. Facility Oil Production	6,250	(BOPD) 260 (BOPH)	Sour Gas Streams at This Site?	NO	
Max. Facility Produced Water	34,500	(BWPD) 1,438 (BWPH)			

Enter The Quantity Of All Air Emissions Sources Located At The Facility
(Leave Blank For Each Equipment Type That Is Not Present)

Equipment	Quantity	Equipment	Quantity
Amine Unit(s)		Compressor Engine (s)	2
Dehydrator(s)		Enclosed Combustion Device(s) (ECD)	
Equipment Fugitives		Flare(s)	1
Flash Tower/Ultra-Low Pressure Separator(s)^	2	Generator Engine (s)	4
Gunbarrel Separator(s)/Tank(s)		Heater(s), Heater Treaters	3
Number of Paved Haul Roads Segments		Number of Unpaved Haul Road Segments	
Low Pressure Compressor(s)* & Compressor(s)*		Oil/Condensate Storage Tank(s)	6
Oil/Condensate Truck Loading		Produced Water Storage Tank(s)	4
Produced Water Truck Loading		Pumpjack Engine(s)	
Reboilers(s) (Amine Units)		Placeholder for Future Use	
Reboilers(s) (Glycol, others)		Startup, Shutdown & Maintenance and Malfunction	✓
Skim Oil or Slop Oil Tank(s)		Thermal Oxidizer(s) (TO)	
Vapor Combustion Device(s) (VCU)		Vapor Recovery Unit(s) (VRU)^	2

Click Here to Generate Required Forms & Save to Your Computer

Complete all required forms that follow, for the equipment at the subject facility, based on the selections made above. Items with an * indicate an air emissions calculation form currently not required at this time and those with ^ indicate forms under construction at this time.

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Compressor Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Compressor Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	ENG 1
Engine Manufacturer:	Caterpillar
Engine Model:	G3516J
Engine Serial #:	N6W01638
Engine Manuf. Date:	01/24/2024
Engine Type:	4SLB
Factory HP Rating	1,380
Allowable HP Rating	1,380
Engine BSFC (Btu/(Hp*Hr))	7,301
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Quantity of Like-kind Engines:	1
Engine Description	Compressor Engine
Hours/year	8,760
Fuel Type:	Field Gas

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.00982
Annual Fuel Flow Rate (MMSCF/yr)	86.0232
Maximum Engine RPM	1,400
Exhaust Temperature (°F)	902
Exhaust Velocity (ft/sec)	125.9
Exhaust Flow (ACFM)	2,636
Stack Diameter (ft)	0.67
Stack Height (ft)	25

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- (•) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	0.5	0	0	0.5	1	1.5212	6.6629	3.0423	13.3253	1.5212	6.6629
CO	2.6	76.92	0	0.6	2	7.9101	34.6462	6.0847	26.651	1.8254	7.9953
VOC*	1.07	34.58	0	0.7	0.7	3.2553	14.2582	2.1296	9.3276	2.7495	12.0428
Formaldehyde			0			0	0			0.5351	2.3437
TSP/PM10/PM2.5	0.0331	0	0	0.0331		0.1007	0.4411		0	0.1007	0.4411
[2]SO_2	0.002	0	0	0.002		0.005611	0.024576			0.005611	0.024576
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0528	NA	NA	NA	NA	0.53511	2.34378	NA	NA	NA	NA
Acetaldehyde	0.00836	NA	NA	NA	NA	0.08473	0.37112	NA	NA	NA	NA
Acrolein	0.00514	NA	NA	NA	NA	0.05209	0.22815	NA	NA	NA	NA
Benzene	0.00044	NA	NA	NA	NA	0.00446	0.01953	NA	NA	NA	NA
Ethylbenzene	0.0000397	NA	NA	NA	NA	0.0004	0.00175	NA	NA	NA	NA
n-Hexane	0.0011	NA	NA	NA	NA	0.01115	0.04884	NA	NA	NA	NA
Toluene	0.000408	NA	NA	NA	NA	0.00413	0.01809	NA	NA	NA	NA
Xylene	0.000184	NA	NA	NA	NA	0.00186	0.00815	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	0.69393	3.03941	NA	NA	0.69	3.04

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

Calculation Tool for Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Compressor Engines (100% Load) & Large Stationary Diesel (≤600hp & >600hp) & Gasoline Compressor Engines (≤600hp) Emissions

AP-42 Gas-Fired Engine Emission factors based on AP-42, Tables 3.2-1, 3.2-2 & 3.2-3 (July 2000)
https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s02.pdf
40 CFR Part 60 Subpart JJJJ Emission Factors based on §60.4233 & Table 1
http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.jjjj
AP-42 Diesel & Gasoline Fired Engine Emission factors based on AP-42, Tables 3.3-1, 3.2-2, 3.4-1, 3.4-2, 3.4-3 & 3.4-4
https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf
40 CFR Part 60 Subpart IIII Emission Factors based on §60.4233 & Table 1
http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii
EPA Tier 1-4 Nonroad Compression Ignition Emission Standards (EPA-42--B-16-022)
https://nepis.epa.gov/Exe/ZyNET.exe/P100OA05.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000019%5CP100OA05.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1

Emission factors for natural gas and field gas internal combustion engines may be based on AP-42, Tables 3.2-1, 3.2-2 or 3.2-3 or NSPS JJJJ emission standards or manufacturer specifications based on engine applicability.

NOx Sample Calculation Using AP-42 Emission Factors for a 500-HP 4-Stroke Rich Burn Engine

pph = NOx Emission Factor (EF) lb/MMBtu * Heat Value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * Allowable HP * 1/1000000 MMBtu/Btu
= 2.21 lb/MMBtu * 1020 Btu/scf/1020Btu/scf * 7500 MMBtu/hr *500 hp * 1/1000000 MMBtu/Btu
=8.29 lb/hr

tpy =NOx Emission Factor (EF) lb/MMBtu * Heat Value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * Allowable HP * 1/1000000 MMBtu/Btu * 8760 hrs/yr * 1/2000 tons/lbs
= 2.21 lb/MMBtu * 1020 Btu/scf/1020 Btu/scf * 0.5 MMBtu/hr * 1/1020 Btu/scf * 1000000/1 Btu/MMBtu * 8760 hrs/yr * 1ton/2000lbs
= 36.31 tpy

AP-42 SO_2 emissions based on 100% conversion of fuel sulfur to SO_2 and assumes sulfur content in natural gas of 2,000 grains/10^6 scf. The SO2 emission factor is converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf. For all other engines not using AP-42, The SO_2 emissions are based on grains S/scf. Fuel Heat values for Diesel = 0.137 MMBtu/gal; LPG = 0.0905 MMBtu/gal and Gasoline = 0.13 MMBtu/gal per AP-42 Appendix A, pg 5 & 6. SO2 emissions for all diesel engines not using AP-42, equals Gal Diesel/hr * diesel wt (lb)/gal * 15 ppm S * 64 lb SO2/32 lb S, where diesel weighs 7.1089 lb/gal.

NOx Sample Calculation Using NSPS JJJJ Emission Factors for a July 1, 2010 500-HP 4-Stroke Rich Burn Engine

pph = NOx Emission Factor (EF) g/hp-hr * 1/453.6 lbs/grams * Allowable HP
= 1 g/hp-hr * 1/453.6 lbs/grams * 500 hp
= 1.1 lb/hr

tpy =NOx Emission Factor (EF) g/hp-hr * 1/453.6 lbs/grams * Allowable HP * 8760 hrs/yr * 1/2000 tons/lbs
= 1 g/hp-hr * 1/453.6 lbs/grams * 500 hp * 8760 hrs/yr * 1ton/2000lbs
= 4.82 tpy

Technical Disclaimer
This document is intended to help you accurately determine stationary compressor engine emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of stationary compressor engine emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Compressor Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Compressor Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	ENG 2
Engine Manufacturer:	Caterpillar
Engine Model:	G3516J
Engine Serial #:	N6H00137
Engine Manuf. Date:	09/05/2025
Engine Type:	4SLB
Factory HP Rating	1,500
Allowable HP Rating	1,500
Engine BSFC (Btu/(Hp*Hr))	7,670
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

Quantity of Like-kind Engines:	1
Engine Description	Compressor Engine
Hours/year	8,760
Fuel Type:	Field Gas

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.011213
Annual Fuel Flow Rate (MMSCF/yr)	98.22588
Maximum Engine RPM	1,400
Exhaust Temperature (°F)	895
Exhaust Velocity (ft/sec)	201
Exhaust Flow (ACFM)	9,472
Stack Diameter (ft)	1
Stack Height (ft)	25

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- (•) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	0.3	0	0	0.3	1	0.9921	4.3454	3.3069	14.4842	0.9921	4.3454
CO	2.48	75.81	0	0.6	2	8.2011	35.9208	6.6138	28.9684	1.9841	8.6904
VOC*	1.08	53.7	0	0.5	0.7	3.5714	15.6427	2.3148	10.1388	2.3157	10.1428
Formaldehyde	0.37	53.78	0	0.171		1.2235	5.3589			0.5655	2.4769
TSP/PM10/PM2.5	0.0347	13.54	0	0.03		0.1147	0.5024		0	0.0992	0.4345
[2]SO_2	0.002	0	0	0.002		0.006407	0.028063			0.006407	0.028063
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0528	NA	NA	NA	NA	0.61104	2.67636	NA	NA	NA	NA
Acetaldehyde	0.00836	NA	NA	NA	NA	0.09675	0.42377	NA	NA	NA	NA
Acrolein	0.00514	NA	NA	NA	NA	0.05948	0.26052	NA	NA	NA	NA
Benzene	0.00044	NA	NA	NA	NA	0.00509	0.02229	NA	NA	NA	NA
Ethylbenzene	0.0000397	NA	NA	NA	NA	0.00046	0.00201	NA	NA	NA	NA
n-Hexane	0.0011	NA	NA	NA	NA	0.01273	0.05576	NA	NA	NA	NA
Toluene	0.000408	NA	NA	NA	NA	0.00472	0.02067	NA	NA	NA	NA
Xylene	0.000184	NA	NA	NA	NA	0.00213	0.00933	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	1.40486	6.15325	NA	NA	0.75	3.27

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Generator Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Generator Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	GEN 1
Engine Manufacturer:	Power Solutions International
Engine Model:	14.6L
Engine Serial #:	EEZOG501585
Engine Manuf. Date:	>7/1/2010
Engine Type:	4SRB
Factory HP Rating	390
Allowable HP Rating	390
Engine BSFC (Btu/(Hp*Hr))	8,671
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Quantity of Like-kind Engines:	1
Engine Description	Generator Engine
Hours/year	8,760
Fuel Type:	Field Gas

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.003296
Annual Fuel Flow Rate (MMSCF/yr)	28.87296
Maximum Engine RPM	1,800
Exhaust Temperature (°F)	1,382
Exhaust Velocity (ft/sec)	361.9
Exhaust Flow (ACFM)	1,895
Stack Diameter (ft)	0.33
Stack Height (ft)	15

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- (•) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	13	92.31	0	1	1	11.1772	48.9561	0.8598	3.7659	0.8598	3.7659
CO	14	85.71	0	2	2	12.037	52.7221	1.7196	7.5318	1.7196	7.5318
VOC*	0.7	0	0	0.7	0.7	0.6019	2.6363	0.6019	2.6363	0.6811	2.9832
Formaldehyde			0			0	0			0.0697	0.3053
TSP/PM10/PM2.5	0.0763	0	0	0.0763		0.0656	0.2873		0	0.0656	0.2873
[2]SO_2	0.002	0	0	0.002		0.001883	0.008248			0.001883	0.008248
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0205	NA	NA	NA	NA	0.06973	0.30542	NA	NA	NA	NA
Acetaldehyde	0.00279	NA	NA	NA	NA	0.00949	0.04157	NA	NA	NA	NA
Acrolein	0.00263	NA	NA	NA	NA	0.00895	0.0392	NA	NA	NA	NA
Benzene	0.00158	NA	NA	NA	NA	0.00537	0.02352	NA	NA	NA	NA
Ethylbenzene	0.0000248	NA	NA	NA	NA	0.00008	0.00035	NA	NA	NA	NA
n-Hexane		NA	NA	NA	NA	0	0	NA	NA	NA	NA
Toluene	0.000558	NA	NA	NA	NA	0.0019	0.00832	NA	NA	NA	NA
Xylene	0.000195	NA	NA	NA	NA	0.00066	0.00289	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	0.09618	0.42127	NA	NA	0.1	0.42

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

Calculation Tool for Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Generator Engines (100% Load) & Large Stationary Diesel (≤600hp & >600hp) & Gasoline Generator Engines (≤600hp) Emissions

AP-42 Gas-Fired Engine Emission factors based on AP-42, Tables 3.2-1, 3.2-2 & 3.2-3 (July 2000)
https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s02.pdf
40 CFR Part 60 Subpart JJJJ Emission Factors based on §60.4233 & Table 1
http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.jjjj
AP-42 Diesel & Gasoline Fired Engine Emission factors based on AP-42, Tables 3.3-1, 3.2-2, 3.4-1, 3.4-2, 3.4-3 & 3.4-4
https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf
40 CFR Part 60 Subpart IIII Emission Factors based on §60.4233 & Table 1
http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii
EPA Tier 1-4 Nonroad Compression Ignition Emission Standards (EPA-42--B-16-022)
https://nepis.epa.gov/Exe/ZyNET.exe/P100OA05.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000019%5CP100OA05.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1

Emission factors for natural gas and field gas internal combustion engines may be based on AP-42, Tables 3.2-1, 3.2-2 or 3.2-3 or NSPS JJJJ emission standards or manufacturer specifications based on engine applicability.

NOx Sample Calculation Using AP-42 Emission Factors for a 500-HP 4-Stroke Rich Burn Engine

pph = NOx Emission Factor (EF) lb/MMBtu * Heat Value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * Allowable HP * 1/1000000 MMBtu/Btu
= 2.21 lb/MMBtu * 1020 Btu/scf/1020Btu/scf * 7500 MMBtu/hr *500 hp * 1/1000000 MMBtu/Btu
=8.29 lb/hr

tpy =NOx Emission Factor (EF) lb/MMBtu * Heat Value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * Allowable HP * 1/1000000 MMBtu/Btu * 8760 hrs/yr * 1/2000 tons/lbs
= 2.21 lb/MMBtu * 1020 Btu/scf/1020 Btu/scf * 0.5 MMBtu/hr * 1/1020 Btu/scf * 1000000/1 Btu/MMBtu * 8760 hrs/yr * 1ton/2000lbs
= 36.31 tpy

AP-42 SO_2 emissions based on 100% conversion of fuel sulfur to SO_2 and assumes sulfur content in natural gas of 2,000 grains/10^6 scf. The SO2 emission factor is converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf. For all other engines not using AP-42, The SO_2 emissions are based on grains S/scf. Fuel Heat values for Diesel = 0.137 MMBtu/gal; LPG = 0.0905 MMBtu/gal and Gasoline = 0.13 MMBtu/gal per AP-42 Appendix A, pg 5 & 6. SO2 emissions for all diesel engines not using AP-42, equals Gal Diesel/hr * diesel wt (lb)/gal * 15 ppm S * 64 lb SO2/32 lb S, where diesel weighs 7.1089 lb/gal.

NOx Sample Calculation Using NSPS JJJJ Emission Factors for a July 1, 2010 500-HP 4-Stroke Rich Burn Engine

pph = NOx Emission Factor (EF) g/hp-hr * 1/453.6 lbs/grams * Allowable HP
= 1 g/hp-hr * 1/453.6 lbs/grams * 500 hp
= 1.1 lb/hr

tpy =NOx Emission Factor (EF) g/hp-hr * 1/453.6 lbs/grams * Allowable HP * 8760 hrs/yr * 1/2000 tons/lbs
= 1 g/hp-hr * 1/453.6 lbs/grams * 500 hp * 8760 hrs/yr * 1ton/2000lbs
= 4.82 tpy

Technical Disclaimer
This document is intended to help you accurately determine stationary generator engine emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of stationary generator engine emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Generator Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Generator Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	GEN 3
Engine Manufacturer:	Power Solutions International
Engine Model:	14.6L
Engine Serial #:	EEZOG401131
Engine Manuf. Date:	>7/1/2010
Engine Type:	4SRB
Factory HP Rating	390
Allowable HP Rating	390
Engine BSFC (Btu/(Hp*Hr))	8,671
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Quantity of Like-kind Engines:	1
Engine Description	Generator Engine
Hours/year	8,760
Fuel Type:	Field Gas

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.003296
Annual Fuel Flow Rate (MMSCF/yr)	28.87296
Maximum Engine RPM	1,800
Exhaust Temperature (°F)	1,382
Exhaust Velocity (ft/sec)	361.9
Exhaust Flow (ACFM)	1,895
Stack Diameter (ft)	0.33
Stack Height (ft)	15

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- (•) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	13	92.31	0	1	1	11.1772	48.9561	0.8598	3.7659	0.8598	3.7659
CO	14	85.71	0	2	2	12.037	52.7221	1.7196	7.5318	1.7196	7.5318
VOC*	0.7	0	0	0.7	0.7	0.6019	2.6363	0.6019	2.6363	0.6811	2.9832
Formaldehyde			0			0	0			0.0697	0.3053
TSP/PM10/PM2.5	0.0763	0	0	0.0763		0.0656	0.2873		0	0.0656	0.2873
[2]SO_2	0.002	0	0	0.002		0.001883	0.008248			0.001883	0.008248
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0205	NA	NA	NA	NA	0.06973	0.30542	NA	NA	NA	NA
Acetaldehyde	0.00279	NA	NA	NA	NA	0.00949	0.04157	NA	NA	NA	NA
Acrolein	0.00263	NA	NA	NA	NA	0.00895	0.0392	NA	NA	NA	NA
Benzene	0.00158	NA	NA	NA	NA	0.00537	0.02352	NA	NA	NA	NA
Ethylbenzene	0.0000248	NA	NA	NA	NA	0.00008	0.00035	NA	NA	NA	NA
n-Hexane		NA	NA	NA	NA	0	0	NA	NA	NA	NA
Toluene	0.000558	NA	NA	NA	NA	0.0019	0.00832	NA	NA	NA	NA
Xylene	0.000195	NA	NA	NA	NA	0.00066	0.00289	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	0.09618	0.42127	NA	NA	0.1	0.42

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Generator Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Generator Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	GEN 4
Engine Manufacturer:	Power Solutions International
Engine Model:	14.6L
Engine Serial #:	EEZOG400889
Engine Manuf. Date:	>7/1/2010
Engine Type:	4SRB
Factory HP Rating	390
Allowable HP Rating	390
Engine BSFC (Btu/(Hp*Hr))	8,671
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Quantity of Like-kind Engines:	1
Engine Description	Generator Engine
Hours/year	8,760
Fuel Type:	Field Gas

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.003296
Annual Fuel Flow Rate (MMSCF/yr)	28.87296
Maximum Engine RPM	1,800
Exhaust Temperature (°F)	1,382
Exhaust Velocity (ft/sec)	361.9
Exhaust Flow (ACFM)	1,895
Stack Diameter (ft)	0.33
Stack Height (ft)	15

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- (•) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	13	92.31	0	1	1	11.1772	48.9561	0.8598	3.7659	0.8598	3.7659
CO	14	85.71	0	2	2	12.037	52.7221	1.7196	7.5318	1.7196	7.5318
VOC*	0.7	0	0	0.7	0.7	0.6019	2.6363	0.6019	2.6363	0.6811	2.9832
Formaldehyde			0			0	0			0.0697	0.3053
TSP/PM10/PM2.5	0.0763	0	0	0.0763		0.0656	0.2873		0	0.0656	0.2873
[2]SO_2	0.002	0	0	0.002		0.001883	0.008248			0.001883	0.008248
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0205	NA	NA	NA	NA	0.06973	0.30542	NA	NA	NA	NA
Acetaldehyde	0.00279	NA	NA	NA	NA	0.00949	0.04157	NA	NA	NA	NA
Acrolein	0.00263	NA	NA	NA	NA	0.00895	0.0392	NA	NA	NA	NA
Benzene	0.00158	NA	NA	NA	NA	0.00537	0.02352	NA	NA	NA	NA
Ethylbenzene	0.0000248	NA	NA	NA	NA	0.00008	0.00035	NA	NA	NA	NA
n-Hexane		NA	NA	NA	NA	0	0	NA	NA	NA	NA
Toluene	0.000558	NA	NA	NA	NA	0.0019	0.00832	NA	NA	NA	NA
Xylene	0.000195	NA	NA	NA	NA	0.00066	0.00289	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	0.09618	0.42127	NA	NA	0.1	0.42

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Non-Emergency SI Rich Burn, Lean Burn & Clean Burn Natural Gas Fired Generator Engines (100% Load) & Stationary & Non-Road Diesel (≤600hp & >600hp) & Gasoline Generator Engines (≤600hp)

Enter data in green-shaded areas only! One engine per form unless like-kind engines

Emission Unit ID:	GEN 5
Engine Manufacturer:	Power Solutions International
Engine Model:	14.6L
Engine Serial #:	EEZOG501588
Engine Manuf. Date:	>7/1/2010
Engine Type:	4SRB
Factory HP Rating	390
Allowable HP Rating	390
Engine BSFC (Btu/(Hp*Hr))	8,671
Fuel LHV, (BTU/SCF)	1,026
Fuel Sulfur (grains/dscf)	0.002

Quantity of Like-kind Engines:	1
Engine Description	Generator Engine
Hours/year	8,760
Fuel Type:	Field Gas

Engine Deration

- (•) No Deration
- ( ) Stationary - Naturally Aspirated
- ( ) Stationary - Turbo Aspirated
- ( ) Portable - Naturally Aspirated
- ( ) Portable - Turbo Aspirated

No Deration.

Notes:

Hourly Fuel Flow Rate (MMSCF/hr)	0.003296
Annual Fuel Flow Rate (MMSCF/yr)	28.87296
Maximum Engine RPM	1,800
Exhaust Temperature (°F)	1,382
Exhaust Velocity (ft/sec)	361.9
Exhaust Flow (ACFM)	1,895
Stack Diameter (ft)	0.33
Stack Height (ft)	15

Select Source of Emission Factors

- ( ) AP-42 Emission Factors
- ( ) Manufacturer Specs (Enter Appropriate Emission Factors Below) or Diesel Tier 1, 2, 3 or 4
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2007-June 30, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. On or after July 1, 2010 & Engine HP≥500HP
- ( ) NSPS JJJJ; Engine Manuf. Between July 1, 2008-Dec. 31, 2010 & Engine HP 100≤HP<500
- (•) NSPS JJJJ; Engine Manuf. on or after Jan.1, 2011 & Engine HP 100≤HP<500
- ( ) NSPS JJJJ; Eng. Manuf. Betw. Jan. 1, 2008-June 30, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engine Manuf. on or after July 1, 2010 & LB Engine HP 500≤HP<1350
- ( ) NSPS JJJJ; Engines < 100HP (Enter Appropriate Emission Factors Below)
- ( ) NSPS IIII; Stationary Diesel Engines

Emission Factors, Catalyst Control Efficiency & Safety Factor						Uncontrolled Emissions		JJJJ Emissions		Controlled Emissions (includes SF)[1]	
Pollutant	Uncontrld. EF g/hp-hr	% Control Efficiency	% Safety Factor	Contrld EF g/(hp-hr)	JJJJ EF g/hp-hr	lb/hr	Tons/yr	lb/hr	Tons/yr	lb/hr	Tons/yr
NOx^	5.3	81.13	0	1	1	4.5569	19.9592	0.8598	3.7659	0.8598	3.7659
CO	5.04	60.32	0	2	2	4.3333	18.9799	1.7196	7.5318	1.7196	7.5318
VOC*	0.7	0	0	0.7	0.7	0.6019	2.6363	0.6019	2.6363	0.6811	2.9832
Formaldehyde			0			0	0			0.0697	0.3053
TSP/PM10/PM2.5	0.0763	0	0	0.0763		0.0656	0.2873		0	0.0656	0.2873
[2]SO_2	0.002	0	0	0.002		0.001883	0.008248			0.001883	0.008248
AP-42 HAPs	lb/MMBtu										
Formaldehyde	0.0205	NA	NA	NA	NA	0.06973	0.30542	NA	NA	NA	NA
Acetaldehyde	0.00279	NA	NA	NA	NA	0.00949	0.04157	NA	NA	NA	NA
Acrolein	0.00263	NA	NA	NA	NA	0.00895	0.0392	NA	NA	NA	NA
Benzene	0.00158	NA	NA	NA	NA	0.00537	0.02352	NA	NA	NA	NA
Ethylbenzene	0.0000248	NA	NA	NA	NA	0.00008	0.00035	NA	NA	NA	NA
n-Hexane		NA	NA	NA	NA	0	0	NA	NA	NA	NA
Toluene	0.000558	NA	NA	NA	NA	0.0019	0.00832	NA	NA	NA	NA
Xylene	0.000195	NA	NA	NA	NA	0.00066	0.00289	NA	NA	NA	NA
Total HAPs	NA	NA	NA	NA	NA	0.09618	0.42127	NA	NA	0.1	0.42

* Uncontrolled & Controlled VOC emissions include aldehyde emissions. VOC Emissions for JJJJ do not include aldehyde emissions. [1] For NOI's & NPR, controlled emissions cannot be less than JJJJ emissions. [2] SO2 EF (grains/scf or ppm) except for AP-42 EF in g/hp-hr for SO2 & EF Values for NOx, CO, VOC, TSP/PM10/PM2.5 in lb/hp-hr for large gasoline & diesel engines. ^NOx+NMHC Emission Factors for diesel engines assume 75% NOx and 25% VOC

Date: Sep 9, 2026
Company Name: Tap Rock Operating, LLC
Facility Name: High Life CTB

Permit Number: 10432M1R1
AI# if Known: 41218
Elevation (ft.): 3,510

Total Requested Emissions For All Regulated Engines (NSR Request)

UnitID	NO_X		CO		VOC		SO_X		TSP		PM_{10}		$PM_{2.5}$		H_2S		Total HAP	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
ENG 1	1.52	6.66	1.83	8	2.75	12.04	0.01	0.02	0.1	0.44	0.1	0.44	0.1	0.44			0.69	3.04
ENG 2	0.99	4.35	1.98	8.69	2.32	10.14	0.01	0.03	0.1	0.43	0.1	0.43	0.1	0.43			0.75	3.27
ENG 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
ENG 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
ENG 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
ENG 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
ENG 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
ENG 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
GEN 1	0.86	3.77	1.72	7.53	0.68	2.98	0	0.01	0.07	0.29	0.07	0.29	0.07	0.29			0.1	0.42
GEN 3	0.86	3.77	1.72	7.53	0.68	2.98	0	0.01	0.07	0.29	0.07	0.29	0.07	0.29			0.1	0.42
GEN 4	0.86	3.77	1.72	7.53	0.68	2.98	0	0.01	0.07	0.29	0.07	0.29	0.07	0.29			0.1	0.42
GEN 5	0.86	3.77	1.72	7.53	0.68	2.98	0	0.01	0.07	0.29	0.07	0.29	0.07	0.29			0.1	0.42
GEN 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
GEN 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
GEN 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
GEN 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
PJENG 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
Page Totals	**5.95**	**26.09**	**10.69**	**46.81**	**7.79**	**34.1**	**0.02**	**0.09**	**0.48**	**2.03**	**0.48**	**2.03**	**0.48**	**2.03**			**1.84**	**7.99**

New Mexico Environment Department Air Quality Bureau Emissions Calculation Forms

Date:	Sep 9, 2026	**Permit Number:**	10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Heaters, Heated Separators & Heater Treaters (Only for units rated <100 MMBTU/Hr)

Enter appropriate information in green boxes below changing default values as appropriate and adding additional rows for each heater unit.

Enter the Sulfur Content of Gas or use default value (grains/10^6 scf). **2,000**

SO_2 emissions based on AP-42 EF and assumes 100% conversion of fuel sulfur to SO2 and assumes sulfur content in natural gas of 2,000 grains/1000000 scf. Change default value of 2000 as needed based on gas analysis submitted with application.

Enter the Site Fuel Heat Value of Gas or use default value (Btu/scf). **1,020**

Emissions From All Heaters, Heated Separators & Heater Treaters

Add/Remove Rows	Unit ID	Heat Input	NO_x		CO		VOC		SO_2		$PM/PM_{10}/PM_{2.5}$	
		MMBtu/hr	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
+ -	HT-1	1.5	0.147	0.644	0.124	0.543	0.008	0.035	0	0	0.011	0.048
+ -	HT-2	1.5	0.147	0.644	0.124	0.543	0.008	0.035	0	0	0.011	0.048
+ -	HT-3	1.5	0.147	0.644	0.124	0.543	0.008	0.035	0	0	0.011	0.048
	Totals		0.441	1.932	0.372	1.629	0.024	0.105	0	0	0.033	0.144

Calculation Tool for Heaters, Heated Separators & Heater Treater Emissions (Uncontrolled) for Oil & Gas Production Sites (Only for units rated <100 MMBTU/Hr)

All emission factors based on AP-42, Table 1.4-1, Table 1.4-2 and Table 1.4-3 (July 1998)
https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s04.pdf

Emission factors for natural gas combustion in boilers and furnaces are presented in AP42, Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4. The Tables present emission factors on a volume basis (lb/10^6 scf). To convert to an energy basis (lb/MMBtu), divide by a heating value of 1,020 MMBtu/10^6 scf. The emission factors may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value.

NOx Sample Calculation

pph = AP 42 NOx Emission Factor (EF) * site fuel heat value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * 1/site fuel heat Value Btu/scf * 1000000/1Btu/MMBtu
= 100 lb/1000000 scf * 2000 Btu/scf/1020 Btu/scf * 0.5 MMBtu/hr * 1/2000 Btu/scf * 1000000/1Btu/MMBtu
=0.096 lb/hr

tpy = AP 42 NOx Emission Factor (EF) * site fuel heat value Btu/scf/1020 Btu/scf * Maximum Heat Input (MMBtu/hr) * 1/site fuel heat value Btu/scf * 1000000/1 Btu/MMBtu * 8760 hrs/yr * 1ton/2000 lbs
= 100 lb/1000000 scf * 2000 Btu/scf/1020 Btu/scf * 0.5 MMBtu/hr * 1/2000 Btu/scf * 1000000/1 Btu/MMBtu * 8760 hrs/yr * 1ton/2000lbs
= 0.42 tpy

SO_2 emissions based on 100% conversion of fuel sulfur to SO_2 and assumes sulfur content in natural gas of 2,000 grains/10^6 scf. The SO_2 emission factor is converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf.

Technical Disclaimer
This document is intended to help you accurately determine heaters, heated separators & heater treaters emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these combustion units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of heaters, heated separators & heater treaters emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Flash Tower/Ultra-low Pressure Separators Air Emissions Calculations Form

Under Development

Please submit all required calculations and supporting documentation for all Flash Tower/Ultra-low Pressure Separators emissions in the application.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

VRT/ULPS (Including the Low Pressure Compressor (LPC) or VRU) Process vs Control Determination

Please complete the Process vs. Control determination below for the VRT/ULPS, which addresses the three criteria referenced in the EPA Nov. 27, 1995 Process Guidance memo and enter appropriate Information in all green boxes.

1. *Is the primary purpose of the equipment to control air pollution? (Check appropriate box)*

☒ No, the primary purpose of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) is to recover flash gas vapors and route them into an available gas sales line.

☐ Yes, the primary purpose of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) is to control air pollution.

2. *Where the equipment is recovering product, how do the cost savings from the product recovery compare to the cost of the equipment? (Check appropriate box)*

☒ Yes, the benefit-cost analysis below demonstrates a positive return on investment. The benefit-cost analysis of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) compared to the product recovered is shown below:

☐ No, the benefit- cost analysis below demonstrates a negative return on investment.

VRT/ULPS/LPC/VRU-1	VRT/ULPS/LPC/VRU-1 Benefit-Cost Analysis*		
Capital Cost of VRT/ULPS ($)	$5,000.00	Oil Production (BOPD)	6,250
VRT/ULPS/LPC/VRU Rental Costs ($/mo)	$0.00	VRT/ULPS Vapor Production (Mcf/d)	49
Capital Cost of LPC/VRU ($)	$5,000.00	Heating Value of Vapors (Btu/scf)	1,558
Annual Maintenance & Service Costs ($/yr)	$5,000.00	Natural Gas Price ($/MMBtu)	$2.82
Annual Electricity or Fuel Costs ($/yr)		VRT/ULPS/LPC/VRU Life Expectancy (Yrs)	5
VRT/ULPS/LPC/VRU Lifetime Costs ($)	$35,000.00	Lifetime VRT/ULPS/LPC/VRU Profit (Revenues-Costs) ($/yr)	$357,894.10
Annual VRT/ULPS/LPC/VRU Revenue ($/yr)	$78,578.82	Payback Period (Yrs)	0.445
VRT/ULPS/LPC/VRU Lifetime Revenue ($)	$392,894.10	Lifetime Benefit-Cost Ratio	11.23

3. *Would the equipment be installed if no air quality regulations are in place? (Check appropriate box)*

☒ Yes, the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) would still be installed regardless of air quality regulations, due to the significant cost benefits of product recovery.

☐ No, the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) would not be installed if there were no air quality regulations in place.

Notes:

Footnote: All estimates based on current dollars unless specified otherwise; Tank vapor estimates based on flash calculation method noted in Tanks form based on oil throughput noted in p2 of AECT (this can be changed by user); Gas price based on EIA Natural Gas Weekly Update. * The time value of money is not taken into account.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

VRT/ULPS (Including the Low Pressure Compressor (LPC) or VRU) Process vs Control Determination

Please complete the Process vs. Control determination below for the VRT/ULPS, which addresses the three criteria referenced in the EPA Nov. 27, 1995 Process Guidance memo and enter appropriate Information in all green boxes.

1. *Is the primary purpose of the equipment to control air pollution? (Check appropriate box)*

☒ No, the primary purpose of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) is to recover flash gas vapors and route them into an available gas sales line.

☐ Yes, the primary purpose of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) is to control air pollution.

2. *Where the equipment is recovering product, how do the cost savings from the product recovery compare to the cost of the equipment? (Check appropriate box)*

☒ Yes, the benefit-cost analysis below demonstrates a positive return on investment. The benefit-cost analysis of the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) compared to the product recovered is shown below:

☐ No, the benefit- cost analysis below demonstrates a negative return on investment.

VRT/ULPS/LPC/VRU-2	VRT/ULPS/LPC/VRU-2 Benefit-Cost Analysis*		
Capital Cost of VRT/ULPS ($)	$5,000.00	Oil Production (BOPD)	6,250
VRT/ULPS/LPC/VRU Rental Costs ($/mo)	$0.00	VRT/ULPS Vapor Production (Mcf/d)	49
Capital Cost of LPC/VRU ($)	$5,000.00	Heating Value of Vapors (Btu/scf)	1,558
Annual Maintenance & Service Costs ($/yr)	$5,000.00	Natural Gas Price ($/MMBtu)	$2.82
Annual Electricity or Fuel Costs ($/yr)		VRT/ULPS/LPC/VRU Life Expectancy (Yrs)	5
VRT/ULPS/LPC/VRU Lifetime Costs ($)	$35,000.00	Lifetime VRT/ULPS/LPC/VRU Profit (Revenues-Costs) ($/yr)	$357,894.10
Annual VRT/ULPS/LPC/VRU Revenue ($/yr)	$78,578.82	Payback Period (Yrs)	0.445
VRT/ULPS/LPC/VRU Lifetime Revenue ($)	$392,894.10	Lifetime Benefit-Cost Ratio	11.23

3. *Would the equipment be installed if no air quality regulations are in place? (Check appropriate box)*

☒ Yes, the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) would still be installed regardless of air quality regulations, due to the significant cost benefits of product recovery.

☐ No, the VRT/ULPS equipment (including the low pressure compressor (LPC) or VRU) would not be installed if there were no air quality regulations in place.

Notes:

Footnote: All estimates based on current dollars unless specified otherwise; Tank vapor estimates based on flash calculation method noted in Tanks form based on oil throughput noted in p2 of AECT (this can be changed by user); Gas price based on EIA Natural Gas Weekly Update. * The time value of money is not taken into account.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Vertical Fixed Roof (VFR) Oil/Condensate VOC Flash Emissions Calculations Form

Select Tanks Flash Emission Calculation Method

GOR	E & P Tanks	ProMax
Vasquez-Beggs	HYSYS	VMGSim

ProMax Oil Tanks Emission Calculations

Please attach the ProMAX printout with all input data provided along with the calculated emissions. Enter the uncontrolled VOC emissions below. If the tank vapors are routed to a flare, enclosed combustion device, vapor combustion unit, vapor recovery unit or thermal oxidizer select the appropriate VOC destruction method below along with selected VOC destruction efficiency supported by manufacturer specifications submitted with the application.

Tanks VOC Control Method

Capture Efficiency	100	Represent Uncaptured/Uncollected VOC's at Tanks	YES
VOC Control Method[1]	VRU & Flare	Represent VRU/ULPC Downtime Emissions at Tanks	NO
VOC Destruction Efficiency[2]	98	Represent VOC Controlled Emissions at Tanks*	NO
Notes			

Total VOC Flash Emissions From Oil/Condensate Storage Tanks Calculated with ProMax

Add/Remove Rows	Tank ID	VOC Uncontrolled Emissions		VOC Emissions after Control		VOC Emissions at the Tanks	
Up To 10 Units		pph	tpy	pph*	tpy*	pph	tpy
+ -	TK-1	9.79	42.9	0.01	0.04	0	0
+ -	TK-2	9.79	42.9	0.01	0.04	0	0
+ -	TK-3	9.79	42.9	0.01	0.04	0	0
+ -	TK-4	9.79	42.9	0.01	0.04	0	0
+ -	TK-5	9.79	42.9	0.01	0.04	0	0
+ -	TK-6	9.79	42.9	0.01	0.04	0	0
	Totals	58.74	257.4	0.06	0.24	0	0

Notes 1 & 2 See next page; * Emissions only represented at tanks if "Yes" is selected to represent emissions at tanks.

Calculation Tool for Tanks Flashing & Working & Standing Emissions for Oil & Gas Production Sites

All flash emissions based on flash calculation methodology selected;

1) The appropriate ECD, flare, TO, VCU or VRU form must also be completed.
2) Manufacturer documentation required to support % control selected. If using a VRU/LPC, calculations assume VRU/ULPC with a 100% control efficiency, but with 5% downtime;
3) Information included in calculation tool must be based on representative oil and gas analysis which must be submitted with application;
4) GOR and Vasquez-Beggs sample calculations outlined below; E & P Tanks, ProMax, HYSYS & VMG Sim flash emissions require submittal of computer simulation model emissions calculations print-outs;
5) Working & Standing emissions based on AP-42 Chpt. 7, tanks 4.09d computer simulation or ProMax, or VMG computer simulation models.

Sample Calculations

GOR Methodology

VOC pph = GOR (scf/bbl) * Facility Oil Throughput (BOPD) * 1/24 (Hours/Day * 1/Universal Gas Constant 385 scf/lb-mole @ 70^{O}F, 1 atm) * Molecular Weight of Tank Vapors (lb/lb-mol)
= 40 (scf/bbl) * 1000 (BOPD)*1/24 (hrs/day) *1/385 scf/lb-mol * 50 lb/lb-mol
= 216.45 lbs/hr

VOC tpy = GOR (scf/bbl) * Facility Oil Throughput (BOPD) * 1/24 (Hours/Day * 1/Universal Gas Constant 385 scf/lb-mole @ 70^{O}F, 1 atm) * Molecular Weight of Tank Vapors (lb/lb-mol) * 8760 hr/yr * 1/2000 lbs/ton
= 40 (scf/bbl) * 1000 (BOPD)*1/24 (hrs/day) *1/385 scf/lb-mol * 50 lb/lb-mol * 8760 hr/yr * 1/2000 lbs/ton
= 948.05 tpy

Vasquez-Beggs Methodology

INPUTS			Constraints			
API Gravity		API	16	<API>	58	^{0}API
Separator Pressure (psig)		P	50	<P+Patm>	5250	psia
Separator Temp. (^{0}F)		Ti	70	<Ti>	295	^{0}F
Separator Gas Gravity at Initial Condition		SGi	0.56	<SGi>	1.18	MW/28.97
Barrels of Oil/Day (BOPD)	1,041.67	Q	None	<Q>	None	BOPD
Tank Gas MW		MW	18	<MW>	125	lb/lb-mole
VOC Fraction of Tank Gas		VOC	0.5	<VOC>	1.00	Fraction
Atmospheric Pressure (psia)		Patm	20	<Rs>	2070	scf/bbl

Constants			
	^{0}API Gravity		
^{0}APTI	<30	≥30	Given ^{0}API
C1	0.0362	0.0178	
C2	1.0937	1.187	
C3	25.724	23.931	

SGx = Dissolved gas gravity at Separator pressure = SGi [1.0+0.00005912*API*Ti*Log(Pi/114.7)]

Rs = (C1 * SGx * Pi^C2) exp ((C3 * API) / (Ti + 460)) for P + Patm

THC = Rs * Q * MW * 1/385 scf/lb-mole * 365 D/Yr * 1 ton/2000 lbs

VOC = THC * Frac. of C3+ in the Stock Tank Vapor

Technical Disclaimer
This document is intended to help you accurately determine oil/condensate storage tank flash, working and standing emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of oil/condensate storage tank flash, working and standing emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Vertical Fixed Roof (VFR) Oil/Condensate VOC Working & Standing Emissions Calculations Form

Select Tanks W & S Emission Calculation Method

AP-42 Chpt. 7 | EPA Tanks 4.09d | ProMax | E & P Tanks

ProMax Oil Tanks W & S Emission Calculations

Please attach the ProMAX printout with all input data provided along with the calculated emissions. Enter the uncontrolled VOC emissions below. If the tank vapors are routed to a flare, enclosed combustion device, vapor combustion unit, vapor recovery unit or thermal oxidizer select the appropriate VOC destruction method below along with selected VOC destruction efficiency supported by manufacturer specifications submitted with the application.

Tanks VOC Control Method

Capture Efficiency	100	Represent Uncaptured and/or Controlled VOC's at Tanks	YES
VOC Control Method	VRU & Flare	Represent VRU/ULPC Downtime Emissions at Tanks	NO
VOC Destruction Efficiency	98	Represent VOC Controlled Emissions at Tanks*	NO
Notes			

Total VOC W & S Emissions From Oil/Condensate Storage Tanks Calculated with ProMax

Add/Remove Rows Up To 10 Units	Tank ID	VOC Uncontrolled Emissions		VOC Emissions after Control		VOC Emissions at the Tanks	
		pph	tpy	pph*	tpy*	pph	tpy
+ -	TK-1	9.61	42.1	0.2	0.88	0	0
+ -	TK-2	9.61	42.1	0.2	0.88	0	0
+ -	TK-3	9.61	42.1	0.2	0.88	0	0
+ -	TK-4	9.61	42.1	0.2	0.88	0	0
+ -	TK-5	9.61	42.1	0.2	0.88	0	0
+ -	TK-6	9.61	42.1	0.2	0.88	0	0
	Totals	57.66	252.6	1.2	5.28	0	0

Notes 1 & 2 See next page; * Emissions only represented at tanks if "Yes" is selected to represent emissions at tanks.

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Startup, Shutdown & Maintenance and Malfunction

- (•) No SSM emissions are expected from routine operations.
- ( ) Request up to 10 tpy of VOC SSM emissions.
- ( ) Request site specific VOC & H2S SSM and enter information below.
- ( ) Request site specific VOC & H2S SSM plus 10 tpy VOC and enter information below.
- ( ) Request site specific combustion SSM and those emissions are included in Section 4 (attach calculations.)
- (•) Request 10 tpy VOC Malfunction emissions for GCP-O&G, GCP-6 or NSR permitting actions only.

	Blowdowns			Engine Startups		
Unit Numbers						
Quantity of Like-kind Blowdown Units or Engines	1					
Total Volume of Each Blowdown or Engine Startup Vent (acf)						
Duration of Event (Minutes)						
Maximum Blowdowns or Startups/hr	1					
Frequency of Blowdowns or Engine Startups (Events/yr)						
Total Actual Volume of Gas Vented (acf/yr)	0					
Pressure of Gas Inside Unit Before Venting (psig)						
Final Pressure (psia)	14.7					
Gas Temperature Prior to Venting (°F)						
Vented Gas Molecular Weight (lb/lb-mol						
Vented Gas VOC wt %						
Vented Total HAP wt %						
Vented Gas Benzene wt %						
Vented Gas H_2S wt %						

Startup, Shutdown and Maintenance Emissions (SSM) and Malfunction Emissions

SSM	VOC		Total HAP		Benzene		H_2S	
	PPH	TPY	PPH	TPY	PPH	TPY	PPH	TPY
SSM Blowdowns								
SSM Startups								
SSM Other (Attach Calculations)								
SSM Totals	**0**	**0**	**0**		**0**		**0**	
Malfunction Total		**10**						

Notes

Planned SSM Emissions

The venting emissions calculations herein should only be used when only gas (no liquids) is present in the unit. The calculation of the vented gas is based on the volume of the unit and assumes the unit is saturated with vapor at the pressure and temperature of the unit before venting occurs. If liquids are also present in the gas, please enter the calculated amounts in the SSM Other row only and submit separate calculations, since the calculations on this form do not account for the evaporation of liquids that may be present in the unit.

Calculations are based on the Ideal gas law: P(V) = n(R)(T)

VOC result = (((Pressure of Gas Inside the Unit Before Venting) * (Actual Volume of the Vented Unit)) / (Frequency of events) * (Molecular Weight) * VOC wt%)/(Ideal Gas Constant) * (Temperature of Gas Inside the Unit Before Venting)

Where the Ideal Gas Constant = 10.73159 (ft^3*psia)/R*lb-mol

For SSM combustion emissions, attach separate calculations.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Vertical Fixed Roof (VFR) Produced Water VOC Flash Emissions Calculations Form

Select Tanks Flash Emission Calculation Method

GWR	E & P Tanks	ProMax
Vasquez-Beggs	HYSIS	VMGSim

ProMax Produced Water Tanks Emission Calculations

Please attach the ProMAX printout with all input data provided along with the calculated emissions. Enter the uncontrolled VOC emissions below. If the tank vapors are routed to a flare, enclosed combustion device, vapor combustion unit, vapor recovery unit or thermal oxidizer select the appropriate VOC destruction method below along with selected VOC destruction efficiency supported by manufacturer specifications submitted with the application.

Tanks VOC Control Method

Select % Oil in Water	1	VOC Uncontrolled emissions entered includes this percentage.	
Capture Efficiency	100	Represent Uncaptured and/or Controlled VOC's at Tanks	YES
VOC Control Method	VRU & Flare	Represent VRU/ULPC Downtime Emissions at Tanks	NO
VOC Destruction Efficiency	98	Represent VOC Controlled Emissions at Tanks*	NO
Notes			

Total VOC Emissions From Produced Water Storage Tanks Calculated with ProMax

Add/Remove Rows Up To 10 Units	Tank ID	VOC Uncontrolled Emissions		VOC Emissions after Control		VOC Emissions at the Tanks	
		pph	tpy	pph*	tpy*	pph	tpy
+ -	PWTK- 1	1.29	5.67	0	0.01	0	0
+ -	PWTK- 2	1.29	5.67	0	0.01	0	0
+ -	PWTK- 3	1.29	5.67	0	0.01	0	0
+ -	PWTK- 4	1.29	5.67	0	0.01	0	0
	Totals	5.16	22.68	0	0.04	0	0

Notes 1 & 2 See next page; * Emissions only represented at tanks if "Yes" is selected to represent emissions at tanks.

Calculation Tool for Tanks Flashing & Working & Standing Emissions for Oil & Gas Production Sites

All flash emissions based on flash calculation methodology selected ;

1) The appropriate ECD, flare, TO, VCU or VRU form must also be completed.
2) Manufacturer documentation required to support % control selected. Assumes VRU/ULPC with a 100% control efficieny, but with 5% downtime;
3) Information included in calculation tool must be based on representative oil and gas analysis which must be submitted with application;
4) GOR and Vasquez-Beggs sample calculations outlined below; E & P Tanks, ProMax, HYSYS & VMG Sim flash emissions require submittal of computer simulation model emissions calculations print-outs;
5) Working & Standing emissions based on AP-42 Chpt. 7, tanks 4.09d computer simulation or ProMax, or VMG computer simulation models.

Sample Calculations

GWR Methodology

VOC pph = GWR (scf/bbl) * Facility Water Throughput (BOPD) * 1/24 (Hours/Day * 1/Universal Gas Constant 385 scf/lb-mole @ 70^{O}F, 1 atm) * Molecular Weight of Tank Vapors (lb/lb-mol) * Percent Oil in Water
= 40 (scf/bbl) * 1000 (BOPD)*1/24 (hrs/day) *1/385 scf/lb-mol * 50 lb/lb-mol * 1/100
= 2.16 lbs/hr

VOC tpy = GWR (scf/bbl) * Facility Water Throughput (BOPD) * 1/24 (Hours/Day * 1/Universal Gas Constant 385 scf/lb-mole @ 70^{O}F, 1 atm) * Molecular Weight of Tank Vapors (lb/lb-mol) * 8760 hr/yr * 1/2000 lbs/ton * Percent Oil in Water
= 40 (scf/bbl) * 1000 (BOPD)*1/24 (hrs/day) *1/385 scf/lb-mol * 50 lb/lb-mol * 8760 hr/yr * 1/2000 lbs/ton * 1/100
= 9.48 tpy

Vasquez-Beggs Methodology

INPUTS			Constraints			
API Gravity		API	16	<API>	58	^{0}API
Separator Pressure (psig)		P	50	<P+Patm>	5250	psia
Separator Temp. (^{0}F)		Ti	70	<Ti>	295	^{0}F
Separator Gas Gravity at Initial Condition		SGi	0.56	<SGi>	1.18	MW/28.97
Barrels of Water/Day (BOPD)	8,625	Q	None	<Q>	None	BOPD
Tank Gas MW		MW	18	<MW>	125	lb/lb-mole
VOC Fraction of Tank Gas		VOC	0.5	<VOC>	1.00	Fraction
Atmospheric Pressure (psia)		Patm	20	<Rs>	2070	scf/bbl

Constants			
	^{0}API Gravity		
^{0}APTI	<30	≥30	Given^{0}API
C1	0.0362	0.0178	
C2	1.0937	1.187	
C3	25.724	23.931	

SGx = Dissolved gas gravity at Separator pressure = SGi [1.0+0.00005912*API*Ti*Log(Pi/114.7)]

Rs = (C1 * SGx * Pi^C2) exp ((C3 * API) / (Ti + 460)) for P + Patm

THC = Rs * Q * MW * 1/385 scf/lb-mole * 365 D/Yr * 1 ton/2000 lbs

VOC = THC * Frac. of C3+ in the Stock Tank Vapor

Technical Disclaimer
This document is intended to help you accurately determine produced water storage tank flash, working and standing emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of produced water storage tank flash, working and standing emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Vertical Fixed Roof (VFR) Water Tanks VOC Working & Standing Emissions Calculations Form

Select Tanks W & S Emission Calculation Method

AP-42 Chpt. 7 | EPA Tanks 4.09d | ProMax | E & P Tanks

ProMax Produced Water Tanks W & S Emission Calculations

(Assumes W & S emissions are 1% of the emissions calculated based on oil properties and entered as uncontrolled emissions)

Please attach the ProMAX printout with all input data provided along with the calculated emissions. Enter the uncontrolled VOC emissions below. If the tank vapors are routed to a flare, enclosed combustion device, vapor combustion unit, vapor recovery unit or thermal oxidizer select the appropriate VOC destruction method below along with selected VOC destruction efficiency supported by manufacturer specifications submitted with the application.

Tanks VOC Control Method

Capture Efficiency	100	Represent Uncaptured and/or Controlled VOC's at Tanks	YES
VOC Control Method	VRU & Flare	Represent VRU/ULPC Downtime Emissions at Tanks	NO
VOC Destruction Efficiency	98	Represent VOC Controlled Emissions at Tanks*	NO

Notes

Total VOC W & S Emissions From Produced Water Storage Tanks Calculated with ProMax

Add/Remove Rows Up To 10 Units	Tank ID	VOC Uncontrolled Emissions		VOC Emissions after Control		VOC Emissions at the Tanks	
		pph	tpy	pph*	tpy*	pph	tpy
+ -	PWTK-1	3.74	16.36	0.08	0.34	0	0
+ -	PWTK-2	3.74	16.36	0.08	0.34	0	0
+ -	PWTK-3	3.74	16.36	0.08	0.34	0	0
+ -	PWTK-4	3.74	16.36	0.08	0.34	0	0
	Totals	14.96	65.44	0.32	1.36	0	0

Notes 1 & 2 See next page; * Emissions only represented at tanks if "Yes" is selected to represent emissions at tanks.

New Mexico Environment Department Air Quality Bureau Equipment Emissions Calculation Form

Date:	Sep 9, 2026	**Permit Number:**	NSR-10432M1R1
Company Name:	Tap Rock Operating, LLC	**AI# if Known:**	41218
Facility Name:	High Life CTB	**Elevation (ft.):**	3,510

Flare

Enter information in green boxes below changing default values as appropriate.

	Gas Stream 1	Gas Stream 2	Gas Stream 3		Gas Stream 1	Gas Stream 2	Gas Stream 3
Emission Unit ID	FL-1 (BDT)	FL-1 (VDT)	FL-2 (HP)	Hourly Gas Routed to Flare (MMBtu/hr)	4.095306	7.293175	2,223.00342
Hourly Gas Stream to Flare (Mscf/hr)	2.6035	4.6572	2,166.67	Annual Gas Routed to Flare (MMBtu/yr)	12,556.1579	22,360.914	292,102.2
Annual Gas Stream to Flare (MMscf/yr)	7.9823	14.279	284.7	Pilot Gas Routed to Flare (MMBtu/hr)	0.080028	0	0
Max. Heat Value of Gas (Btu/scf)	1,573	1,566	1,026	Gas MW (lb/lbmol)	42.21	41.42	21.38
Field Gas Mol Fraction (lbmol H2S/lb-mol)				Gas Pressure (psia)	14.7	14.7	14.7
Field Gas Sulfur Content (S grains/100 scf)				Gas Temperature (°F)	70	70	70
Pilot Gas to Flare (Mscf/hr)	0.078			Field Gas H2S Wt.% to Flare (%)			
Max. Heat Value Pilot Gas (Btu/scf)	1,026			Flare Control Efficiency	98	98	98
Pilot Gas Sulfur Content (S grains/100 scf)				Total VOC wt.% to Flare (%)[1]	61.06	60.01	15.48
Source of Flare Emission Factors	TCEQ Air or	TCEQ Air or	TCEQ Air or	Safety Factor Applied to Total Emissions (%)			
Use Highest NOx & CO Emission Factors From AP-42 or TCEQ	NO	NO	NO				

Total Emissions to Flare

Pollutant	NOx			CO			VOC			SO2			H2S		
Gas Streams to Flare	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Uncontrolled (pph)	0	0	0	0	0	0	136.73	234.48	16,923	0	0	0	0	0	0
Uncontrolled (tpy)	0	0	0	0	0	0	209.6	359.46	1,111.87	0	0	0	0	0	0
Field Gas (pph)	0.5652	1.0065	306.7745	1.1283	2.0093	612.4374	2.73	4.69	338.5	0	0	0	0	0	0
Field Gas (tpy)	0.8664	1.5429	20.1551	1.7296	3.0802	40.2371	4.19	7.19	22.24	0	0	0	0	0	0
Pilot Gas (pph)	0.011			0.022			0	0	0	0	0	0	0	0	0
Pilot Gas (tpy)	0.0484			0.0966			0	0	0	0	0	0	0	0	0
Subtotal Flare (pph)	0.5762	1.0065	306.7745	1.1503	2.0093	612.4374	2.73	4.69	338.5	0	0	0	0	0	0
Subtotal Flare (tpy)	0.9148	1.5429	20.1551	1.8262	3.0802	40.2371	4.19	7.19	22.24	0	0	0	0	0	0
Total Flare (pph)	308.36			615.6			345.92			0			0		
Total Flare (tpy)	22.61			45.14			33.62			0			0		

See reverse side for calculation notes.

1) Based on representative gas analysis which must be submitted with application; 2) Assumes pilot gas has a negligible amount of VOC & 0.25 grains H2S/100scf; *) Emission factors for NOx, CO & VOC based on AP-42, Table 13.5-1, (Dec. 2015) or TCEQ RG-360A/11 (February 2012); #) Assumes H_2S is converted to SO_2 at selected control efficiency; SO2 emissions based on mass balance; +) Assumes H_2S Destruction Efficiency equals flare destruction efficiency;

Calculation Tool for Flare Emissions for Oil & Gas Production Sites

All emission factors based on AP-42, Emission factors for NOx, CO & VOC, Table 13.5-1, (December 2016); https://www3.epa.gov/ttn/chief/ap42/ch13/final/C13S05_12-13-16.pdf or https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg360/rg36011/rg-360a.pdf

1) Information included in calculation tool must be based on representative gas analysis which must be submitted with application;
2) Assumes pilot gas used has a negligible amount of VOC's and 0.25 grains H2S/100 scf;
3) SO_2 calculations assumes H_2S is converted to SO_2 at selected control efficiency; SO_2 emissions based on mass balance;
4) H_2S calculations assume H_2S Destruction Efficiency equals flare destruction efficiency;

Sample Calculations

NOx pph = hourly gas routed to flare (MMBtu/hr) * NOx Emission factor (lbs/MMBtu)
= 1(MMBtu/hr) * 0.068 (lbs/MMBtu)
= 0.068 lbs/hr

NOx tpy = annual gas routed to flare (MMBtu/yr) * NOx Emission factor (lbs/MMBtu) * 1/lbs/ton)
= 1000 (MMBtu/yr) * 0.068 (lb/MMBtu) * 1/2000 (lbs/ton)
= 0.034 tpy

SO_2 pph= Hourly Gas Stream to flare (MMScf/hr) * 1000000/1 (scf/MMScf) * Field Gas mol Fraction of H_2S (mol H_2S/lb-mol)/100 * 1/Universal Gas Constant 385 scf/lb-mole @ 60^{O}F, 1 atm * Conversion Rate of H_2S to SO_2 lb-mol SO_2/lb-mol H_2S * Molecular Weight of Sulfur Dioxide (64 lb SO_2/lb-mol SO_2)
= 1 MMScf/hr * 1000000/1 (Scf/MMScf) * 0.1 mol H_2S* 1/385 scf/lb-mole * 0.95 lb-mol SO_2/lb-mol H_2S * 64 lb/lb-mol

Residual

H_2S pph= Hourly Gas Stream to flare (MMScf/hr) * 1000000/1 (scf/MMScf) * Field Gas mol Fraction of H_2S (mol H_2S/lb-mol)/100 * 1/Universal Gas Constant 385 scf/lb-mole @ 60^{O}F, 1 atm * (100-(Flare Control Efficiency))/100) * Molecular Weight of Hydrogen Sulfide (34 lb H_2S/lb-mol H_2S)
= 1 MMScf/hr * 1000000/1 (Scf/MMScf) * 0.1 mol H_2S* 1/385 scf/lb-mole * (100-95%/100) * 34 lb/lb-mol

Flare, Vapor Combustion Devices & Enclosed Combustion Devices Emission Factors				
Contaminant	Assist Type	Waste Gas Stream Heat Value (Btu/scf)	AP-42 Emission Factor (lb/MMBtu)	TCEQ Emission Factor (lb/MMBtu)
NOx	Steam	≥1000	0.068	0.0485
	Steam	<1000	0.068	0.068
	Air or Unassisted	≥1000	0.068	0.138
	Air or Unassisted	<1000	0.068	0.0641
CO	Steam	≥1000	0.31	0.3503
	Steam	<1000	0.31	0.3465
	Air or Unassisted	≥1000	0.31	0.2755
	Air or Unassisted	<1000	0.31	0.5496
VOC	Air & Steam Assist	≥300	0.66	

Technical Disclaimer

This document is intended to help you accurately determine flares, enclosed combustion devices and vapor combustion units emissions. It does not supersede or replace any state or federal law, rule, or regulation. This guidance reflects the current understanding of how these combustion units work and how they generate emissions, how they are monitored or tested, and what data are available for emissions determination, may change over time as the AQB continue scientific studies and as new information becomes available. The AQB welcome any data, information, or feedback that may improve our understanding of flares, enclosed combustion devices and vapor combustion units emissions and thereby further improve determinations within the emissions inventory. The calculation methods represented are intended as an emissions calculation aid; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data. If you have a question regarding the acceptability of a given emissions determination method, contact the Permitting Section at 505-476-4300.

New Mexico Environment Department Air Quality Bureau Emissions Calculation Forms

Date: Sep 9, 2026
Company Name: Tap Rock Operating, LLC
Facility Name: High Life CTB

Permit Number: 10432M1R1
AI# if Known: 41218
Elevation (ft.): 3,510

Total Requested Emissions For All Regulated Facility Equipment (NSR Request)

Emission Unit	NO_x		CO		VOC		SO_x		TSP		PM_{10}		$PM_{2.5}$		H_2S		Total HAP	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Engines	5.95	26.09	10.69	46.81	7.79	34.1	0.02	0.09	0.48	2.03	0.48	2.03	0.48	2.03	-	-	1.84	7.99
Heaters	0.44	1.93	0.37	1.63	0.02	0.11	0	0	0.03	0.14	0.03	0.14	0.03	0.14	-	-		
Oil Tanks Flash	-	-	-	-	0	0	-	-	-	-	-	-	-	-				
Oil Tanks W & S	-	-	-	-	0	0	-	-	-	-	-	-	-	-				
Water Tks Flash	-	-	-	-	0	0	-	-	-	-	-	-	-	-				
Water Tks W & S	-	-	-	-	0	0	-	-	-	-	-	-	-	-				
Skim or Slop Tank	-	-	-	-			-	-	-	-	-	-	-	-				
GBS	-	-	-	-			-	-	-	-	-	-	-	-				
ECD	0	0	0	0	0	0	0	0										
VCU	0	0	0	0	0	0	0	0										
TO	0	0	0	0	0	0	0	0										
Flares	308.36	22.61	615.6	45.14	345.92	33.62	0	0										
Fugitives	-	-	-	-	0	0									0	0	0	0
SSM					0	0									0		0	
Malf.	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
Unpaved Haul Rds.	-	-	-	-	-	-	-	-	0	0	0	0	0	0	-	-	-	-
Paved Haul Rds.	-	-	-	-	-	-	-	-	0	0	0	0	0	0	-	-	0	0
Oil Load	-	-	-	-			-	-	-	-	-	-	-	-				
Water Loading	-	-	-	-			-	-	-	-	-	-	-	-				
Amine Unt	-	-	-	-	0	0	-	-	-	-	-	-	-	-	0	0	0	0
Amine Reb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-		
Dehy Unit	-	-	-	-			-	-	-	-	-	-	-	-				
Dehy Reb.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-		
Totals	**314.75**	**50.63**	**626.66**	**93.58**	**353.73**	**77.83**	**0.02**	**0.09**	**0.51**	**2.17**	**0.51**	**2.17**	**0.51**	**2.17**	**0**	**0**	**1.84**	**7.99**

A red-outlined cell indicates that the facility exceeds the allowable emission limits for that pollutant for the requested permitting action and the application cannot be approved as proposed.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following:

☒ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

Global Warming Potentials (GWP):
Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO_2 over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC).** You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:
Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used to Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☒ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- ☐ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- ☐ If an older version of AP-42 is used, include a complete copy of the section.
- ☐ If an EPA document or other material is referenced, include a complete copy.
- ☐ Fuel specifications sheet.
- ☒ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

August 13, 2025

FESCO, Ltd.
1100 FESCO Avenue - Alice, Texas 78332

For: Tap Rock Operating LLC
523 Park Point Drive, Suite 200
Golden, Colorado 80401

Sample: High Life Federal Com No. 204H
First Stage Separator Hydrocarbon Liquid
Sampled @ 131 psig & 119 °F

Date Sampled: 07/25/2025 Job Number: 252754.002

CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2186-M

COMPONENT	MOL %	LIQ VOL %	WT %
Nitrogen	0.022	0.004	0.004
Carbon Dioxide	0.011	0.003	0.003
Methane	2.666	0.749	0.289
Ethane	2.628	1.164	0.534
Propane	4.456	2.034	1.327
Isobutane	1.320	0.716	0.518
n-Butane	4.625	2.415	1.815
2,2 Dimethylpropane	0.053	0.034	0.026
Isopentane	2.446	1.482	1.192
n-Pentane	3.779	2.270	1.842
2,2 Dimethylbutane	0.043	0.030	0.025
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.031	0.021	0.018
2 Methylpentane	2.045	1.406	1.190
3 Methylpentane	0.968	0.655	0.564
n-Hexane	3.151	2.146	1.834
Heptanes Plus	71.756	84.872	88.819
Totals:	100.000	100.000	100.000

Characteristics of Heptanes Plus:

Specific Gravity	0.8134	(Water=1)
°API Gravity	42.46	@ 60°F
Molecular Weight	183.3	
Vapor Volume	13.73	CF/Gal
Weight	6.78	Lbs/Gal

Characteristics of Total Sample:

Specific Gravity	0.7773	(Water=1)
°API Gravity	50.55	@ 60°F
Molecular Weight	148.1	
Vapor Volume	16.25	CF/Gal
Weight	6.48	Lbs/Gal

Base Conditions: 15.025 PSI & 60 °F

Certified: FESCO, Ltd. - Alice, Texas

Sampled By: (14) TC
Analyst: JL
Processor: JL
Cylinder ID: W-2264

_____
Conan Pierce 361-661-7015

FESCO, Ltd. Job Number: 252754.002

TANKS DATA INPUT REPORT - GPA 2186-M

COMPONENT	Mol %	LiqVol %	Wt %
Carbon Dioxide	0.011	0.003	0.003
Nitrogen	0.022	0.004	0.004
Methane	2.666	0.749	0.289
Ethane	2.628	1.164	0.534
Propane	4.456	2.034	1.327
Isobutane	1.320	0.716	0.518
n-Butane	4.678	2.449	1.842
Isopentane	2.446	1.482	1.192
n-Pentane	3.779	2.270	1.842
Other C-6's	3.087	2.112	1.797
Heptanes	8.762	5.998	5.549
Octanes	11.558	8.748	8.337
Nonanes	6.624	5.917	5.671
Decanes Plus	41.597	62.116	67.033
Benzene	0.025	0.011	0.013
Toluene	1.094	0.607	0.681
E-Benzene	0.108	0.069	0.077
Xylenes	1.391	0.892	0.998
n-Hexane	3.151	2.146	1.834
2,2,4 Trimethylpentane	0.598	0.515	0.461
Totals:	100.000	100.000	100.000

Characteristics of Total Sample:

Specific Gravity ----------	0.7773	(Water=1)
°API Gravity ----------	50.55	@ 60°F
Molecular Weight----------	148.1	
Vapor Volume ----------	16.25	CF/Gal
Weight ----------	6.48	Lbs/Gal

Characteristics of Decanes (C10) Plus:

Specific Gravity ----------	0.8388	(Water=1)
Molecular Weight----------	238.6	

Characteristics of Atmospheric Sample:

°API Gravity ----------	47.93	@ 60°F
Reid Vapor Pressure Equivalent (D-6377)----------	8.50	psi

QUALITY CONTROL CHECK			
	Sampling Conditions	Test Samples	
Cylinder Number	------	W-2264*	W-1540
Pressure, PSIG	131	123	123
Skin Temperature, °F	119	119	119

* Sample used for analysis

FESCO, Ltd. Job Number: 252754.002

TOTAL EXTENDED REPORT - GPA 2186-M

COMPONENT	Mol %	LiqVol %	Wt %
Nitrogen	0.022	0.004	0.004
Carbon Dioxide	0.011	0.003	0.003
Methane	2.666	0.749	0.289
Ethane	2.628	1.164	0.534
Propane	4.456	2.034	1.327
Isobutane	1.320	0.716	0.518
n-Butane	4.625	2.415	1.815
2,2 Dimethylpropane	0.053	0.034	0.026
Isopentane	2.446	1.482	1.192
n-Pentane	3.779	2.270	1.842
2,2 Dimethylbutane	0.043	0.030	0.025
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.031	0.021	0.018
2 Methylpentane	2.045	1.406	1.190
3 Methylpentane	0.968	0.655	0.564
n-Hexane	3.151	2.146	1.834
Methylcyclopentane	1.370	0.803	0.779
Benzene	0.025	0.011	0.013
Cyclohexane	2.065	1.164	1.174
2-Methylhexane	0.761	0.586	0.515
3-Methylhexane	0.877	0.667	0.594
2,2,4 Trimethylpentane	0.598	0.515	0.461
Other C-7's	1.283	0.938	0.859
n-Heptane	2.407	1.840	1.629
Methylcyclohexane	3.996	2.661	2.650
Toluene	1.094	0.607	0.681
Other C-8's	5.430	4.277	4.042
n-Octane	2.132	1.810	1.645
E-Benzene	0.108	0.069	0.077
M & P Xylenes	1.178	0.757	0.845
O-Xylene	0.213	0.134	0.153
Other C-9's	4.922	4.330	4.196
n-Nonane	1.702	1.587	1.475
Other C-10's	4.826	4.666	4.605
n-decane	1.182	1.202	1.136
Undecanes(11)	4.873	4.834	4.838
Dodecanes(12)	3.755	4.024	4.084
Tridecanes(13)	3.620	4.159	4.279
Tetradecanes(14)	3.003	3.696	3.853
Pentadecanes(15)	2.633	3.471	3.664
Hexadecanes(16)	2.008	2.829	3.011
Heptadecanes(17)	1.812	2.699	2.900
Octadecanes(18)	1.646	2.582	2.790
Nonadecanes(19)	1.486	2.429	2.640
Eicosanes(20)	1.192	2.024	2.213
Heneicosanes(21)	1.046	1.869	2.055
Docosanes(22)	0.930	1.732	1.915
Tricosanes(23)	0.820	1.583	1.761
Tetracosanes(24)	0.726	1.453	1.624
Pentacosanes(25)	0.658	1.366	1.533
Hexacosanes(26)	0.595	1.278	1.442
Heptacosanes(27)	0.549	1.223	1.386
Octacosanes(28)	0.487	1.123	1.277
Nonacosanes(29)	0.436	1.039	1.185
Triacontanes(30)	0.391	0.961	1.099
Hentriacontanes Plus(31+)	2.922	9.873	11.741
Total	100.000	100.000	100.000

Certificate of Analysis

Number: 6030-25050052-001A

Artesia Laboratory
200 E Main St.
Artesia, NM 88210
Phone 575-746-3481

Alex Batista
Taprock
602 Park Point Drive
Ste. 200
Golden, CO 80401

Station Name:	High Life Sales Check	Report Date:	05/08/2025
Station Number:	6060025	Sampled By:	Dustin Sharp
Sample Point:	Meter Run	Sample Of:	Gas
Formation:	Spot	Sample Type:	Spot
County:	Lea	Sample Conditions:	67 psig, @ 89.9 °F Ambient: 84 °F
Type of Sample:	Spot-Cylinder	Sample Date:	05/01/2025 02:15
Heat Trace Used:	N/A	Received Date:	05/02/2025
Sampling Method:	Fill and Purge	Login Date:	05/02/2025
Sampling Company:	SPL	Effective Date:	05/01/2025
Cylinder No:	1111-007068	Flow Rate:	222.9509 MSCFD
Instrument:	70142339 (Inficon GC-MicroFusion)	Sampling Method:	
Last Inst. Cal.:	05/05/2025 07:02:24	Heating Method:	
Analyzed:	05/08/2025 07:50:36 by CDW	Method:	GPA-2261M

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Hydrogen Sulfide	0.000	0.000	0.000		GPM TOTAL C2+	2.540
Nitrogen	1.507	1.533	2.313		GPM TOTAL C3+	1.097
Methane	88.096	89.644	77.459		GPM TOTAL iC5+	0.510
Carbon Dioxide	0.189	0.192	0.455			
Ethane	5.288	5.381	8.715	1.443		
Propane	1.382	1.406	3.339	0.388		
Iso-butane	0.160	0.163	0.510	0.053		
n-Butane	0.453	0.461	1.443	0.146		
Iso-pentane	0.133	0.135	0.525	0.049		
n-Pentane	0.177	0.180	0.699	0.065		
Hexanes Plus	0.889	0.905	4.542	0.396		
	98.274	100.000	100.000	2.540		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.6425	3.2176
Calculated Molecular Weight	18.57	93.19
Compressibility Factor	0.9973	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1121	5141
Water Sat. Gas Base BTU	1102	5052
Ideal, Gross HV - Dry at 14.73 psia	1118.0	5141.1
Ideal, Gross HV - Wet	1098.5	5051.6
Net BTU Wet Gas - real gas	996	

Comments: low pressure not enough to rerun
H2S Field Content: 0 %

Mostafa Ahmadi

Hydrocarbon Laboratory Manager

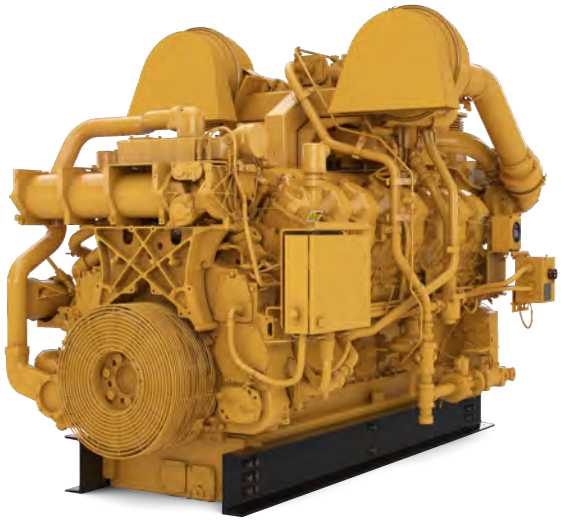
Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated. The test results apply to the sample as received.

Powered By SURECHEM

G3516J Gas Engine

1029 bkW (1380 bhp) 1400 rpm

0.5 g/bhp-hr NOx (NTE)



Shown with optional equipment

Cat® Engine Specifications

V-16, 4-Stroke-Cycle

Bore
170 mm (6.7 in)

Stroke
190 mm (7.5 in)

Displacement
69 L (4211 cu. in)

Aspiration
Turbocharged-2 Stage aftercooled

Digital Engine Management Govenor and Protection
Electronic (ADEM™ A3)

Combustion
Lean Burn

Cooling System Capacity
Total ..... 197.8 L (52.8 gal)
JW ..... 178 L (47.6 gal)
SCAC ..... 19.8 L (5.2 gal)

Lube Oil System (refill)
423 L (112 gal)

Oil Change Interval
1000 hrs

Rotation (from flywheel end)
Counterclockwise

Flywheel
SAE No.21

Flywheel Housing
SAE No.00

Flywheel Teeth
183

FEATURES AND BENEFITS

Engine Design

- Engine Design Built on G3500 LE proven reliability and durability
- Ability to burn a wide spectrum of gaseous fuels
- Robust diesel strength design prolongs life and lowers owning and operating costs
- Broad operating speed range at lower site air densitie (high altitude/ hot ambient temperatures)
- Higher power density improves fleet management
- Quality engine diagnostics
- Detonation-sensitive timing control for individual cylinders

Ultra Lean Burn Technology (ULB)

- ULB technology uses an advanced control system, a better turbo match, improved air and fuel mixing, and a more sophisticated combustion recipe to provide:
  - Lowest engine-out emissions
  - Highest fuel efficiency
  - Improved altitude and speed turndown
  - Stable load acceptance and load rejection

Emissions

- Meets U.S. EPA Spark Ignited Stationary NSPS emissions for 2010 and some non-attainment areas
- Lean air/fuel mixture provides best available emissions and fuel efficiency for engines of this bore size

Advanced Digital Engine Management

- ADEM A3 engine management system integrates speed control, air/fuel ratio control, and ignition/detonation controls into a complete engine management system. ADEM A3 has improved: user interface, display system, shutdown controls, and system diagnostics.

Full Range of Attachments

- Large variety of factory-installed engine attachments reduces packaging time

Testing

- Every engine is full-load tested to ensure proper engine performance.

Gas Engine Rating Pro

- GERP is a PC-based program designed to provide site performance capabilities for Cat® natural gas engines for the gas compression industry. GERP provides engine data for your site's altitude, ambient temperature, fuel, engine coolant heat rejection, performance data, installation drawings, spec sheets, and pump curves.

Product Support Offered Through Global Cat Dealer Network

- More than 2,200 dealer outlets
- Cat factory-trained dealer technicians service every aspect of your petroleum engine
- Cat parts and labor warranty
- Preventive maintenance agreements available for repair before-failure options
- S•O•S℠ program matches your oil and coolant samples against Caterpillar set standards to determine:
  - Internal engine component condition
  - Presence of unwanted fluids
  - Presence of combustion by-products
  - Site-specific oil change interval

Web Site

For all your petroleum power requirements, visit www.cat.com/oilandgas

BUILT FOR IT.™

CAT®

STANDARD EQUIPMENT

G3516J Gas Engine

Air Inlet System
Axial flow air cleaners
Single element canister type with service indicator

Cooling System
Two-stage charge air cooling:
First stage — JW + OC + 1st stage AC
Second stage — 2nd stage AC
Engine cooling and charge air cooling thermostats

Exhaust System
Water-cooled exhaust manifolds
Dry turbocharger housings
Water-cooled exhaust elbow

Flywheels and Housings
SAE No. 21 flywheel
SAE No. 00 flywheel housing
SAE standard rotation

Fuel System
7-40 psig gas supply
Electronic fuel metering valve
Gas pressure regulator
Gas shutoff valve
Fuel System

Mounting
Rails

Instrumentation
Remote-mounted Advisor control panel
Interconnect harness

Lubrication System
Crankcase breather - top mounted
Oil cooler
Oil filter - RH
Shallow oil pan
Oil sampling valve
Turbo oil accumulator

Power Take-Offs
Front housing, two sided
Front lower LH accessory drive

General
Paint — Cat yellow
Crankshaft vibration damper and guard

OPTIONAL EQUIPMENT

Air Inlet System
Rain shield
Round air inlet adapters

Charging system
CSA alternator
(24V,65A)

Connections
Mechanical joint assembly connections

Exhaust System
Flexible fittings
Elbows
Flanges
Mufflers

Fuel System
Fuel filter

Lubrication System
Lubricating oil
Oil bypass filter
Oil pan drain
Deep sump oil pan
Air prelube pump

Power Take-Offs
Front stub shaft

Starting System
90 psi starter
150 psi starter

General
Special paint

EU Certification
EEC DOI certification

Torsional Vibration Analysis

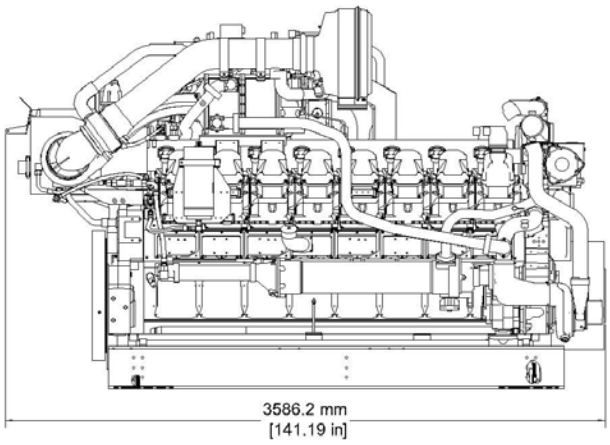
G3516J Gas Engine

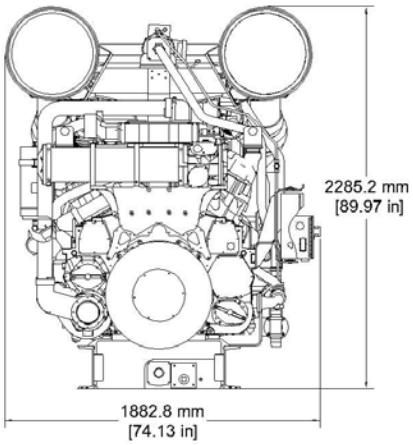
Performance Number		EM1495-01
Rating		0.5 g NOx NTE
Engine Power	bkW (bhp)	1029 (1380)
Engine Speed	rpm	1400
(100°F)	m (ft)	1405 (4610)
Speed Turndown @ Max Altitude, Rated Torque, and 38°C (100°F)	%	25
Aftercooler Temperature		
Stage 1 (JW)	°C (°F)	99 (210)
Stage 2 (SCAC)	°C (°F)	54 (130)
Emissions (NTE)*		
NOx	g/bkW-hr (g/bhp-hr)	0.67 (0.50)
CO	g/bkW-hr (g/bhp-hr)	3.26 (2.43)
CO_2	g/bkW-hr (g/bhp-hr)	631 (471)
VOC**	g/bkW-hr (g/bhp-hr)	0.64 (0.48)
Fuel Consumption @ 100 % Load* **	MJ/bkW-hr (Btu/bhp-hr)	10.33 (7301)
Heat Balance @ 100 % Load		
Heat Rejection to Jacket Water	bkW (Btu/min)	660 (37,553)
Heat Rejection to Oil Cooler	bkW (Btu/min)	79 (4472)
Heat Rejection to Aftercooler		
Stage 1 (JW)	bkW (Btu/min)	141 (8046)
Stage 2 (SCAC)	bkW (Btu/min)	89 (5067
Heat Rejection to Exhaust LHV To 25°C (77°F)	bkW (Btu/min)	903 (51,380)
Heat Rejection to Atmosphere	bkW (Btu/min)	93 (5313)
Exhaust System		
Exhaust Gas Flow Rate	m^3/min (scfm)	228.52 (8070)
Exhaust Stack Temperature	°C (°F)	444 (830)
Intake System		
Air Inlet Flow Rate	m^3/min (scfm)	88.07 (3110)
Gas Pressure	kPag (psig)	48-276 (7-40)

All technical data is based on 100% load and speed

** Volatile organic compounds as defined in U.S. EPA 40 CFR 60, subpart JJJJ *** ISO 3046/1

G3516J Gas Engine





Note: General configuration not to be used for installation

Dimensions		
Length	3586.2 mm	141.19 in
Width	1882.8 mm	74.13 in
Height	2285.2 mm	89.97 in
Weight	9008.9 Kg	19,861lbs

Rating Definitions and Conditions

Engine performance is obtained in accordance with SAE J1995, ISO3046/1, BS5514/1, and DIN6271/1 standards.

Transient response data is acquired from an engine/generator combination at normal operating temperature and in accordance with ISO3046/1 standard ambient conditions. Also in accordance with SAE J1995, BS5514/1, and DIN6271/1 standard reference conditions.

Conditions: Power for gas engines is based on fuel having an LHV of 33.74 kJ/L (905 Btu/cu ft) at 101 kPa (29.91 in Hg) and 15°C (59°F). Fuel rate is based on a cubic meter at 100 kPa (29.61 in Hg) and 15.6°C (60.1°F). Air flow is based on a cubic foot at 100 kPa (29.61 in Hg) and 25°C (77°F). Exhaust flow is based on a cubic foot at 100 kPa (29.61 in Hg) and stack temperature.

To find your nearest dealer, please visit: www.cat.com

Subject to change without notice.
LEHW0318-00

© 2016 Caterpillar All Rights Reserved. CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

BUILT FOR IT.™

CAT®

ICE CATALYST SIZING PROGRAM

rev 2.1.3

Report Date: 11/17/2025

Customer	Cadre Energy	Housing Element	APXP-OX-SQ-1500-2400-350
Sales Person	MG	Contact	Joey Belfour
Project	Unit 000032		
Engine Name	Caterpillar G3516B		

Engine Power	1380.0	BHP	ACFM	8505.0	CU. FT/MIN	Exhaust O2	9.7	%
Exhaust Mass Flow	14027.0	LBS/HR	ACFH	510300	CU. FT/HR	Exhaust CO2	6.4	%
Process Temperature	935.0	F	SCFM	3175.3	CU. FT/MIN	Exhaust H2O	11.6	%
Exhaust Pressure	14.5	PSI	SCFH	190517	CU. FT/HR	Exhaust N2	72.3	%
Exhaust Density	0.0275	LBS/FT^3	Std Temp	68.0	F	Max Pressure Drop	12.0	in wc
Molecular Weight	28.37	AMU	Std Pressure	14.6959	PSI	Propane in Fuel	6.64	%

ACS Part Name	R14.875X23.875X3.500-400				
OEM Part Name	ERZ-1524-3-400				
Type	Propane Oxidation	Layers	1		
Geometry	Rectangular	Modules/Layer	3	Cell Count	400cpsi
X	14.875in	Guard Bed	No	Depth	3.500in
Y	23.875in				

Open Area	6.612	ft^2	Part Volume	0.643	ft^3	Part Weight	47	lbs
Linear Velocity	1286	ft/min	Total Volume	1.929	ft^3	Total Weight	142	lbs
Pressure Drop	2.4	in wc	Space Velocity	98786	GHSV			

Inlet Emissions

	g/bhp-hr	lb/hr	tons/year	ppmv	ppmvd	ppmvd%O2
NOx	0.50	1.52	6.67	66.88	75.65	44.96
CO	2.59	7.88	34.54	568.98	643.64	382.54
VOC	1.31	3.99	17.47	182.79	206.77	122.89

Target Emissions

	min %DRE	g/bhp-hr	lb/hr	tons/year	ppmv	ppmvd	ppmvd%O2
NOx	0.00	0.50	1.52	6.67	66.88	75.65	44.96
CO	80.69	0.50	1.52	6.67	109.84	124.26	73.85
VOC	54.20	0.60	1.83	8.00	83.72	94.70	56.29

Emissions with Catalyst

	%DRE	g/bhp-hr	lb/hr	tons/year	ppmv	ppmvd	ppmvd%O2
NOx	0.00	≤0.50	≤1.52	≤6.67	≤66.88	≤75.65	≤44.96
CO	80.69	≤0.50	≤1.52	≤6.67	≤109.84	≤124.26	≤73.85
VOC	54.20	≤0.60	≤1.83	≤8.00	≤83.72	≤94.70	≤56.29

Safety Value: 2 VOC Molecular Weight: 44.1 O2 Reference Value: 15 Uptime (TPY): 100% (8760 hours)

G3516J

GAS ENGINE SITE SPECIFIC TECHNICAL DATA
{Scratch Project}

GAS COMPRESSION APPLICATION

ENGINE SPEED (rpm):	1400	RATING STRATEGY:	LOW NOX / HIGH POWER CAPABLE ENGINE AND KIT
COMPRESSION RATIO:	8	RATING LEVEL:	CONTINUOUS
AFTERCOOLER TYPE:	SCAC	FUEL SYSTEM:	CAT WIDE RANGE WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 1/STAGE 2 INLET (°F):	201 / 149		
JACKET WATER OUTLET (°F):	210	**SITE CONDITIONS:**	
ASPIRATION:	TA	FUEL:	Gas Analysis
COOLING SYSTEM:	JW+OC+1AC, 2AC	FUEL PRESSURE RANGE(psig): (See note 1)	7.0-40.0
CONTROL SYSTEM:	ADEM3	FUEL METHANE NUMBER:	35.8
EXHAUST MANIFOLD:	ASWC	FUEL LHV (Btu/scf):	1246
COMBUSTION:	LOW EMISSION	ALTITUDE(ft):	500
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.3	STANDARD RATED POWER:	1500 bhp@1400rpm
SET POINT TIMING:	18		

				MAX RATING	SITE RATING AT MAX INLET AIR TEMP		
RATING		**NOTES**	**LOAD**	**100%**	**100%**	**75%**	**50%**
ENGINE POWER	(WITHOUT FAN)	(2)	bhp	1500	1500	1125	750
INLET AIR TEMPERATURE			°F	90	90	90	90
ENGINE DATA							
FUEL CONSUMPTION (LHV)		(3)	Btu/bhp-hr	7670	7670	8040	8644
FUEL CONSUMPTION (HHV)		(3)	Btu/bhp-hr	8435	8435	8842	9506
AIR FLOW (@inlet air temp, 14.7 psia)	(WET)	(4)(5)	ft3/min	3587	3587	2756	1920
AIR FLOW	(WET)	(4)(5)	lb/hr	15538	15538	11938	8318
FUEL FLOW (60°F, 14.7 psia)			scfm	154	154	121	87
INLET MANIFOLD PRESSURE		(6)	psi(abs)	52.5	52.5	41.5	29.0
EXHAUST TEMPERATURE - ENGINE OUTLET		(7)	°F	895	895	902	959
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(5)(8)	ft3/min	9472	9472	7329	5328
EXHAUST GAS MASS FLOW	(WET)	(5)(8)	lb/hr	16094	16094	12375	8631
EMISSIONS DATA - EXHAUST OUT							
NOx (as NO2)		(9)(10)	g/bhp-hr	0.30	0.30	0.30	0.30
CO		(9)(10)	g/bhp-hr	2.48	2.48	2.40	2.28
NMHC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	1.64	1.64	1.61	1.60
NMNEHC (VOCs) (mol. wt. of 15.84)		(9)(10)(11)	g/bhp-hr	1.08	1.08	1.06	1.05
HCHO (Formaldehyde)		(9)(10)	g/bhp-hr	0.37	0.37	0.39	0.38
CH4 (mol. wt. of 16.04)	(NOMINAL)	(9)(12)	g/bhp-hr	1.38	1.38	1.36	1.35
CO2	(NOMINAL)	(9)(12)	g/bhp-hr	491	491	520	564
EXHAUST OXYGEN	(NOMINAL)	(9)(13)	% DRY	9.5	9.5	9.2	8.7
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)		(14)	Btu/min	38560	38560	32711	27011
HEAT REJ. TO ATMOSPHERE		(14)	Btu/min	5630	5630	4692	3754
HEAT REJ. TO LUBE OIL (OC)		(14)	Btu/min	4661	4661	3954	3265
HEAT REJ. TO A/C - STAGE 1 (1AC)		(14)(15)	Btu/min	13453	13453	10052	3773
HEAT REJ. TO A/C - STAGE 2 (2AC)		(14)(15)	Btu/min	5411	5411	4571	2823

COOLING SYSTEM SIZING CRITERIA			
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)	(15)(16)	Btu/min	62135
TOTAL AFTERCOOLER CIRCUIT (2AC)	(15)(16)	Btu/min	5681
A cooling system safety factor of 0% has been added to the cooling system sizing criteria.			

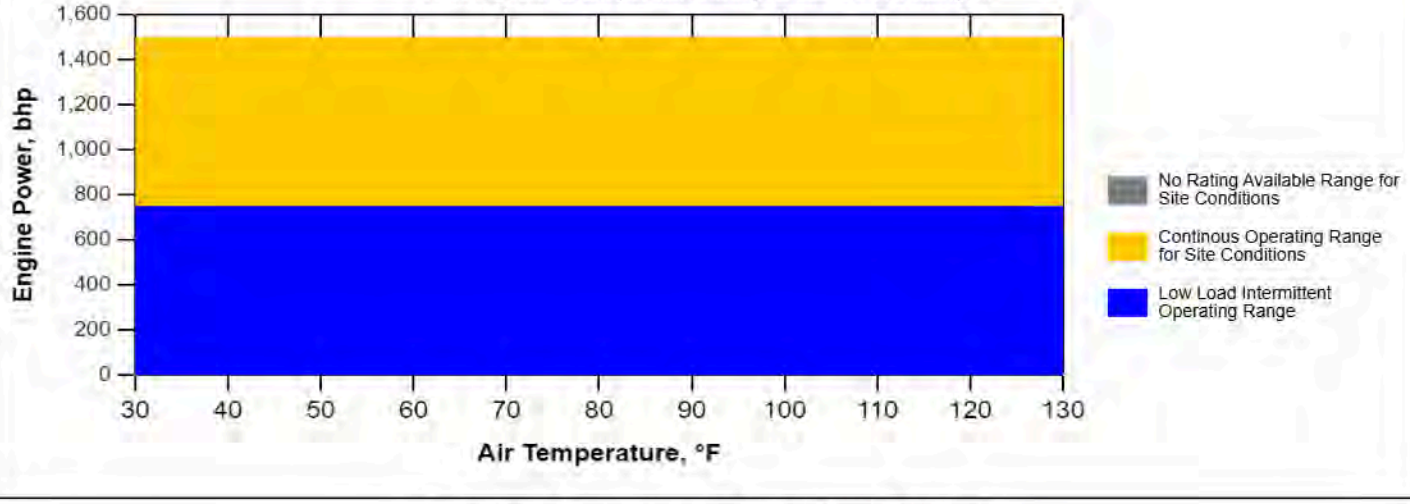
CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Maximum rating is the maximum capability at the specified aftercooler inlet temperature for the specified fuel at site altitude and reduced inlet air temperature. Refer to product O&M manual for details on additional lower load capability. No overload permitted at rating shown.

For notes information consult page three

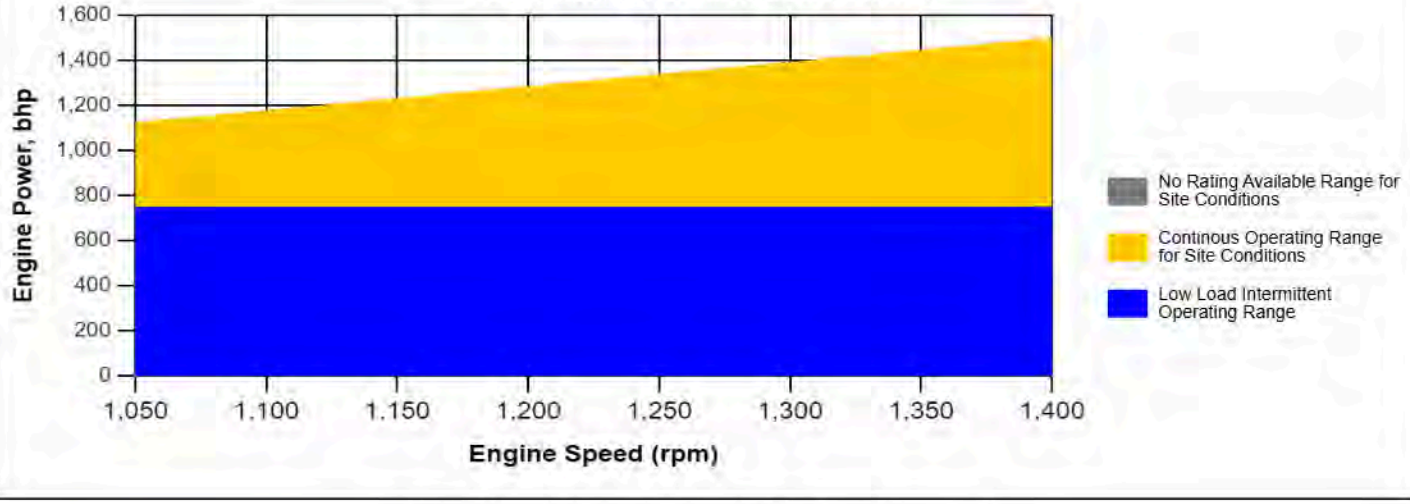
Engine Power vs. Inlet Air Temperature

Data represents temperature sweep at 500 ft and 1400 rpm



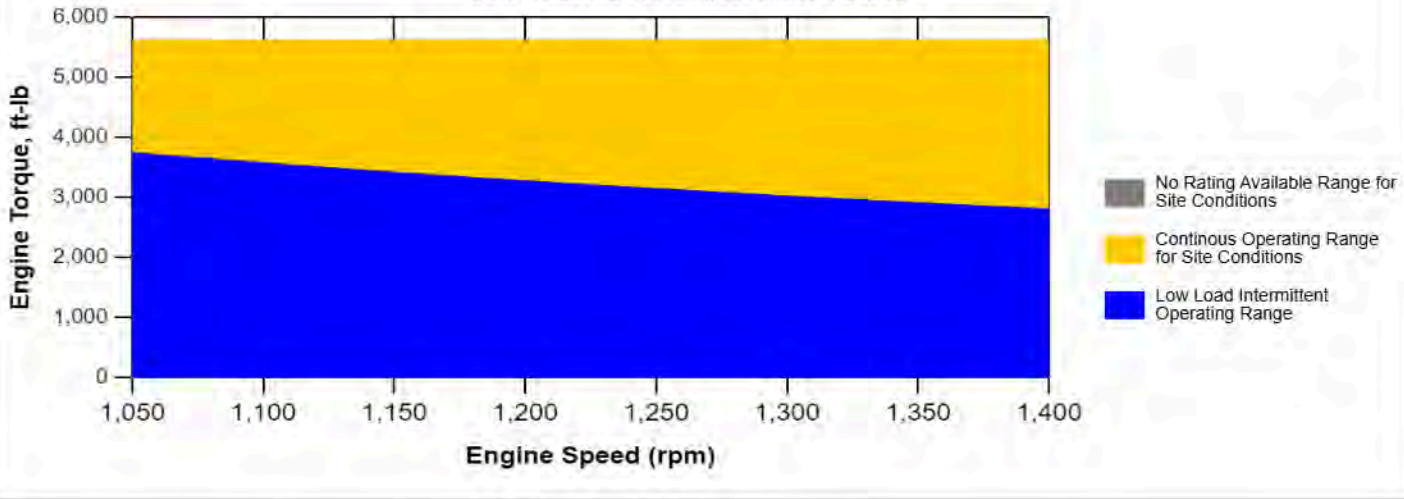
Engine Power vs. Engine Speed

Data represents speed sweep at 500 ft and 90 °F



Engine Torque vs. Engine Speed

Data represents speed sweep at 500 ft and 90 °F



Note:
At site conditions of 500 ft and 90°F inlet air temp., constant torque can be maintained down to 1240 rpm. The minimum speed for loading at these conditions is 1050 rpm.

NOTES:

1. Fuel pressure range specified is to the engine fuel pressure regulator. Additional fuel train components should be considered in pressure and flow calculations.

2. Engine rating is with two engine driven water pumps. Tolerance is ± 3% of full load.

3. Fuel consumption tolerance is ± 3.0% of full load data.

4. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of ± 5 %.

5. Inlet and Exhaust Restrictions must not exceed A&I limits based on full load flow rates from the standard technical data sheet.

6. Inlet manifold pressure is a nominal value with a tolerance of ± 5 %.

7. Exhaust temperature is a nominal value with a tolerance of (+)63°F, (-)54°F.

8. Exhaust flow value is on a "wet" basis. Flow is a nominal value with a tolerance of ± 6 %.

9. Emissions data is at engine exhaust flange prior to any after treatment.

10. NOx, CO, NMHC, NMNEHC, and HCHO emission values listed are higher than nominal levels to allow for instrumentation, measurement, and engine-to-engine variations. They indicate the maximum values expected under steady state conditions. Fuel methane number cannot vary more than ± 3. NMHC, and NMNEHC do not include aldehydes. An oxidation catalyst may be required to meet Federal, State or local CO or HC requirements

11. VOCs - Volatile organic compounds as defined in US EPA 40 CFR 60, subpart JJJJ

12. CO2 tolerance is ± 3.0%. CH4 tolerance is ± 26.0%. Fuel methane number cannot vary more than ± 3.

13. Exhaust Oxygen level is the result of adjusting the engine to operate at the specified NOx level. Tolerance is ± 0.5.

14. Heat rejection values are nominal. Tolerances, based on treated water, are ± 10% for jacket water circuit, ± 50% for radiation, ± 20% for lube oil circuit, and ± 5% for aftercooler circuit.

15. Aftercooler heat rejection includes an aftercooler heat rejection factor for the site elevation and inlet air temperature specified. Aftercooler heat rejection values at part load are for reference only. Do not use part load data for heat exchanger sizing.

16. Cooling system sizing criteria are maximum circuit heat rejection for the site, with applied tolerances.

Constituent	Abbrev	Mole %	Norm
Water Vapor	H2O	0.0000	0.0000
Methane	CH4	73.6780	73.6780
Ethane	C2H6	12.6220	12.6220
Propane	C3H8	6.6430	6.6430
Isobutane	iso-C4H10	0.9430	0.9430
Norbutane	nor-C4H10	2.4150	2.4150
Isopentane	iso-C5H12	0.5980	0.5980
Norpentane	nor-C5H12	0.7250	0.7250
Hexane	C6H14	1.4000	1.4000
Heptane	C7H16	0.0000	0.0000
Nitrogen	N2	0.9310	0.9310
Carbon Dioxide	CO2	0.0450	0.0450
Hydrogen Sulfide	H2S	0.0000	0.0000
Carbon Monoxide	CO	0.0000	0.0000
Hydrogen	H2	0.0000	0.0000
Oxygen	O2	0.0000	0.0000
Helium	HE	0.0000	0.0000
Neopentane	neo-C5H12	0.0000	0.0000
Octane	C8H18	0.0000	0.0000
Nonane	C9H20	0.0000	0.0000
Ethylene	C2H4	0.0000	0.0000
Propylene	C3H6	0.0000	0.0000
TOTAL (Volume %)		100.0000	100.0000

Fuel Makeup:	Gas Analysis
Unit of Measure:	English

Calculated Fuel Properties:

Caterpillar Methane Number:	35.8
Lower Heating Value (Btu/scf):	1246
Higher Heating Value (Btu/scf):	1370
WOBBE Index (BTU/scfm):	1400
THC: Free Inert Ratio:	101.46
Total % Inerts (% N2,CO2,He):	0.98%
RPC (%) (To 905 Btu/scf Fuel):	100%
Compressibility Factor:	0.996
Stoich A/F Ratio (Vol/Vol):	12.88
Stoich A/F Ratio (Mass/Mass):	16.27
Specific Gravity (Relative to Air):	0.792
Fuel Specific Heat Ratio (K):	1.273

CONDITIONS AND DEFINITIONS

Caterpillar Methane Number represents the knock resistance of a gaseous fuel. It should be used with the Fuel Usage Guide for the engine and rating to determine the rating for the fuel specified. A Fuel Usage Guide for each rating is included on page 2 of its standard technical data sheet.

RPC always applies to naturally aspirated (NA) engines, and turbocharged (TA or LE) engines only when they are derated for altitude and ambient site conditions.

Project specific technical data sheets take the Caterpillar Methane Number and RPC into account when generating a site rating.

Fuel properties for Btu/scf calculations are at 60F and 14.696 psia.

Caterpillar shall have no liability in law or equity, for damages, consequently or otherwise, arising from use of program and related material or any part thereof.

FUEL LIQUIDS

Field gases, well head gases, and associated gases typically contain liquid water and heavy hydrocarbons entrained in the gas. To prevent detonation and severe damage to the engine, hydrocarbon liquids must not be allowed to enter the engine fuel system. To remove liquids, a liquid separator and coalescing filter are recommended, with an automatic drain and collection tank to prevent contamination of the ground in accordance with local codes and standards.

To avoid water condensation in the engine or fuel lines, limit the relative humidity of water in the fuel to 80% at the minimum fuel operating temperature.

Equipment Specification

To	From
Craig Collins Cadre Energy Solutions, LLC 915 N Guadalupe St Carlsbad, New Mexico 88220-5119 craig.collins@cadre-energy.com	Austin Propes MIRATECH (Houston) 6545 N Eldridge Pkwy Houston, TX 77041 281 810 4706 (Phone) apropes@miratechcorp.com

Proposal Information

Proposal Number:	AP-25-011274	Date:	**12/23/2025**
Project Reference:	Cadre G3516J		

Engine Information

Engine Make:	Caterpillar	Power Output:	1,500 bhp
Engine Model:	G3516J	Exhaust Flow Rate:	9,472 acfm (cfm)
EPA Engine Family:		Exhaust Temperature:	895 ° F
Rated Speed:	1400 RPM	Fuel Consumption:	
Fuel Description:	Natural Gas	O_2:	9.5%
Hours Of Operation:	8760 Hours per year	H_2O:	17%
Load:	100%		
Propane:	6.643%		

Emission Data (100% Load)

Emission	Raw Engine Emissions						Target Outlet Emissions						Calculated Reduction
	g/bhp-hr	*tons/yr*	*ppmvd @ 15% O_2*	*ppmvd*	*g/kW-hr*	*lb/MW-hr*	*g/bhp-hr*	*tons/yr*	*ppmvd @ 15% O_2*	*ppmvd*	*g/kW-hr*	*lb/MW-hr*	
NO_x*	*0.3*	4.35	23	45	0.402	0.89	*0.3*	4.35	23	45	0.402	0.89	
CO	*2.48*	35.92	318	614	3.326	7.33	*0.6*	8.69	77	148	0.805	1.77	75.8%
NMNEHC**	*1.08*	15.64	241	467	1.448	3.19	0.5	7.24	112	216	0.671	1.48	53.7%

System Specifications

Catalyst (Replacement Catalyst)

Element Model Number:	APXP-OX-SQ-1500-2400-350
Number of Catalyst Elements per Engine:	3
Design Exhaust Flow Rate:	9,472 acfm
Design Exhaust Temperature:	895f
Dimensions:	15 in x 24 in
Exhaust Temperature Limits***:	550f – 1250f (catalyst inlet); 1350f (catalyst outlet)
System Pressure Loss:	3.0 inWC (Clean)

* MW referenced as NO_2

** MW referenced as CH_4. Propane in the exhaust shall not exceed 15% by volume of the NMHC compounds in the exhaust, excluding aldehydes. The 15% (vol.) shall be established on a wet basis, reported on a methane molecular weight basis. The measurement of exhaust NMHC composition shall be based upon EPA method 320 (FTIR), and shall exclude formaldehyde.

*** General catalyst temperature operating range. Performance is based on the Design Exhaust Temperature.

PSI ENERGY

14.6L

	Rev:	F	14.6L			
	Units		14.6L			
	Std	Metric	1500		1800	
General Engine Data						
Type	N/A		V-type 4 cycle			
Number of cylinders	N/A		8			
Aspiration	N/A		Turbo Charge Air Cooled			
Bore	in	mm	5.04	128	5.04	128
Stroke	in	mm	5.59	142	5.59	142
Displacement	in^3	L	892	14.6	892	14.6
Compression Ratio	N/A		10.5			
Mean Piston Speed	ft/min	m/s	1398	7.1	1677	8.52
Gross Standby Power Rating[1,2,3] Per ISO 3046 at the Flywheel						
NG	Hp	kW	369	275	459	342
LP	Hp	kW	229	171	319	238
MEP (@ rated Load on NG)	psi	bar	218	15.0	226	15.6
MEP (@ rated Load on LP)	psi	bar	136	9.4	157	10.9
Gross Prime Power Rating[1,2,3] Per ISO 3046 at the Flywheel						
NG	Hp	kW	332	248	390	291
LP	Hp	kW	206	154	271	202
MEP (@ rated Load on NG)	psi	bar	196	13.5	192	13.3
MEP (@ rated Load on LP)	psi	bar	122	8.4	134	9.2
RPM Range (Min-Max)	RPM		1500-1800			
Rotation Viewed from Flywheel	N/A		Counter Clockwise			
Firing Order	N/A		1-5-7-2-6-3-4-8-1			
Dry Weight						
Fan to Flywheel	lb	kg	3150	1429	3150	1429
Rad to Flywheel	lb	kg	4450	2018	4450	2018
Wet Weight						
Fan to Flywheel	lb	kg	3291	1475	3291	1475
Rad to Flywheel	lb	kg	4757	2155	4757	2155
CG						
Distance from FW housing	in	mm	18	449	18	449
Distance above center of crankshaft	in	mm	6	159	6	159
Engine Mounting						
Maximum Allowable Bending Moment at Rear of Block	lb ft	N m	4425	6000	4425	6000
Moment of Inertia About Roll Axis	lb ft^2	kg m^2				
Flywheel housing	N/A		SAE No.1			
Flywheel	N/A		No. 14			
Number of Flywheel Teeth	N/A		160			
Exhaust System						
Type			Water Cooled Manifold			
Maximum allowable Back pressure	in HG	kPa	3	10.2	3	10.2
Standard Catalyst Back pressure	in HG	kPa	1.5	5.1	1.5	5.1
Exhaust Outlet Pipe Size						
Maximum Turbine Inlet Temperature	F	C	1382	750	1382	750
Exhaust Flow at Rated Power	lb/hr	kg/hr	2302	1044	2782	1301
Exhaust Flow at Rated Power @1350F	cfm	m^3/min	1727.3	48.9	1895	53.6
Air Induction System						
Maximum allowable Intake Air Restriction with Air Cleaner						
Clean	inH2O	kPa	5	1.24	5	1.24
Dirty	inH2O	kPa	15	3.74	15	3.74
Combustion Air required (entire engine)	lb/hr	kg/hr	2172	985	2625	1227
Combustion Air required (entire engine)	cfm	m^3/min	490	14	687	19

PSI ENERGY

14.6L

	Rev:	F				
	Units		14.6L			
	Std	Metric	1500		1800	
Electrical System						
Minimum Recommended Battery Capacity	AH		200			
Cold Cranking Current						
Engine only	CCA		1000			
Engine with Drive train	CCA		1000			
Maximum Allowable Resistance of Starting Circuit	Ohms		0.002			
Starting Motor Power	HP	kW	9.4	7	9.4	7
Battery Charging Alternator						
Voltage	Volts		24			
Current	Amps		45			
Coil primary Resistance	Ohms		0.59Ω ± 10%			
Spark Plug p/n			IFR7F-4D			
Spark plug gap	inches	mm	.015" (-0/+.008") .38mm (-0/+.2mm)			
Cooling System						
Coolant Capacity						
Engine only	gal	L	9.5	43.2	9.5	43.2
Engine with Radiator	gal	L	28	127	28	127
Engine Coolant Flow	gal/min	L/min	151	570	180	680
Water Pump Speed	RPM		2547		3056	
Heat rejected to Cooling water at rated Load	btu/min	kcal/sec	14233	59.8	16189	68
Maximum Intake Air Temperature (IAT)	F	C	155	68	155	68
ECU IAT Warning	F	C	140	60	140	60
ECU IAT Shutdown	F	C	155	69	155	69
Maximum Coolant Friction Head External to the engine	psi	bar	5.8	0.4	5.8	0.4
Maximum Air Restriction Across a Radiator	inH2O	mmH2O	0.5	12.8	0.5	12.8
Standard Thermostat Range						
Cracking Temperature	F	C	160	71	160	71
Full Open Temperature	F	C	185	85	185	85
Maximum Output Pressure of Engine Water Pump						
Maximum Allowable Pressure Cap	psi	bar	14.7	1	14.7	1
Ambient Clearance Open Genset (water) (Air-to-Boil)						
Specified	F	C	142	61	142	61
Acutal	F	C			147	64
Ambient Clearance (Oil)						
Specified	F	C	142	61	142	61
Acutal	F	C			150	66
CAC Rise over Ambient (Charge)						
Specified	F	C	15	9	15	9
Acutal	F	C			13	8
Maximum Allowable Top Tank Temperature	F	C	230	110	230	110
ECU Warning	F	C	220	104	220	104
ECU Shutdown	F	C	230	110	230	110
Fan Power	HP	kW	13	9.7	22	16.4
Fan Diameter, including blades	in	mm	45	1143	45	1143
Fan Speed	RPM		1200		1440	
Cooling Fan Air Flow @ 1" Static H2O Pressure and 125F @ radiator	CFM	m^3/min	25,714	728	30,000	849
Charge Air Cooler						
Compressor Outlet Temperature	F	C	272	133	285	163
Compressor Flow Rate per CAC	lb/hr	kg/hr	1151	522	1391	650
Heat Rejection per CAC	btu/min	kW	TBD		2669	46.9

PSI ENERGY

14.6L

	Rev:	F				
	Units		14.6L			
	Std	Metric	1500		1800	
Lubrication System						
Oil Specification			SAE 15W-40 Low Ash Gas engine oil (.25-.5% by wt), API CD/CF or higher			
Oil Pressure						
Idle						
Min	Psi	Bar	13	0.9	13	0.9
Max	Psi	Bar	43.5	3	43.5	3
Rated Speed						
Min	Psi	Bar	43.5	3	43.5	3
Max	Psi	Bar	94.5	6.5	94.5	6.5
Maximum Allowable Oil Temperature	F	C	250	121	250	121
Engine Oil Capacity						
Min	Qts	L	26.5	25	26.5	25
Max	Qts	L	32.75	31	32.75	31
Oil Filter Capacity	Qts	L	7.5	7.1	7.5	7.1
ECU Oil Pressure Warning[5]	psi		30			
ECU Oil Pressure Shut Down[5]	psi		25			
Fuel System						
Fuel Consumption[6]						
NG	Ft^3/hr	kg/hr	2918	59	3648	74
LP	Ft^3/hr	kg/hr	782	42	1087	58
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	1.0	6.9
Maximum Running pressure to Electronic Pressure Regulator (EPR)	inH2O	kPa	11.0	2.7	11.0	2.7
Minimum Running pressure to EPR	inH2O	kPa	7.0	1.7	7.0	1.7
Minimum Gas Supply Pipe Size			2 x 1-1/4" NPT			
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	1.0	6.9
Maximum Running Pressure to EPR	inH2O	kPa	11.0	2.7	11.0	2.7
Minimum Running Pressure to EPR	inH2O	kPa	7.0	1.7	7.0	1.7
Minimum LPG Supply Pipe Size[4]			2 x 1-1/4" NPT			

[1]Standby and overload ratings based on ISO3046.

[2] All ratings are gross flywheel horsepower corrected to 77°F at an altitude of 328feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] The preceeding pipe sizes are only suggestions and piping sizes may vary with temperature, pressure, distance from supply and application of local codes. Gas must be available at adequate volume and pressure for engine at the EPR.

[5] >1400RPM

[6] See PSI Energy Technical Spec. 56300002 - Fuel Specification. Gas properties for fuel consumption data: NG: Density =0.717 kg/m3, LHV = 927 BTU/scf; Propane: Density = 1.882 kg/m3, LHV = 2316 BTU/scf

Emission Guarantee

Date: 6/12/2026

Catalytic Converter (Table 1A)		
Application	Power Generation	
Engine Model	Doosan 14.6L	
Engine Mechanical Power	390 HP	
Fuel	Natural Gas (PQNG)	
Exhaust Flowrate	1422 lb/hr x 2 exhausts = 2,843 lbs/hr	
Exhaust Temperature	1000 deg. F	
Catalyst Model	DC10	
Complete Assembly (1 per exhaust)	C3905-LQ-010Y-0103-02	
Catalyst Part Number (2 per exhaust)	CB000-LQ-010Y-0103-01	
Number of Elements	2	
Catalyst Code	0Y/300 cpsi	
Space Velocity (h^{-1})	82288 h-1	
Housing Material	304 Stainless steel	
Inlet Connection	3.5 inches	
Outlet Connection	3.5 inches	
Dimensions	Per drawing	
Back-pressure (Catalyst Only)	8.5 in. WC	
Back-pressure (Catalyst+ Housing)	12.0 in. WC	
Pre-Catalyst Emissions g/bhp-h **Assumed	NOx	13.00
	CO	14.00
	NMNEHC	0.05
Post-Catalyst	NOx	1.0 g/bhp-hr
	CO	2.0 g/bhp-hr
	NMNEHC	0.7 g/bhp-hr
	CH2O	80% Conversion
Limited Warranty	(doc. X0000-0000-K2) one year or 4,000 hours of operation	
Guarantee By:	Jim Stanley	

Global Leader in Emission Control Solutions
DCL America Inc. 27603 Commerce Oaks Drive, Oak Ridge North, TX 77385
Toll free: 1-877-965-8989 Fax: 281-605-5858 Email: info@dcl-inc.com www.dcl-inc.com

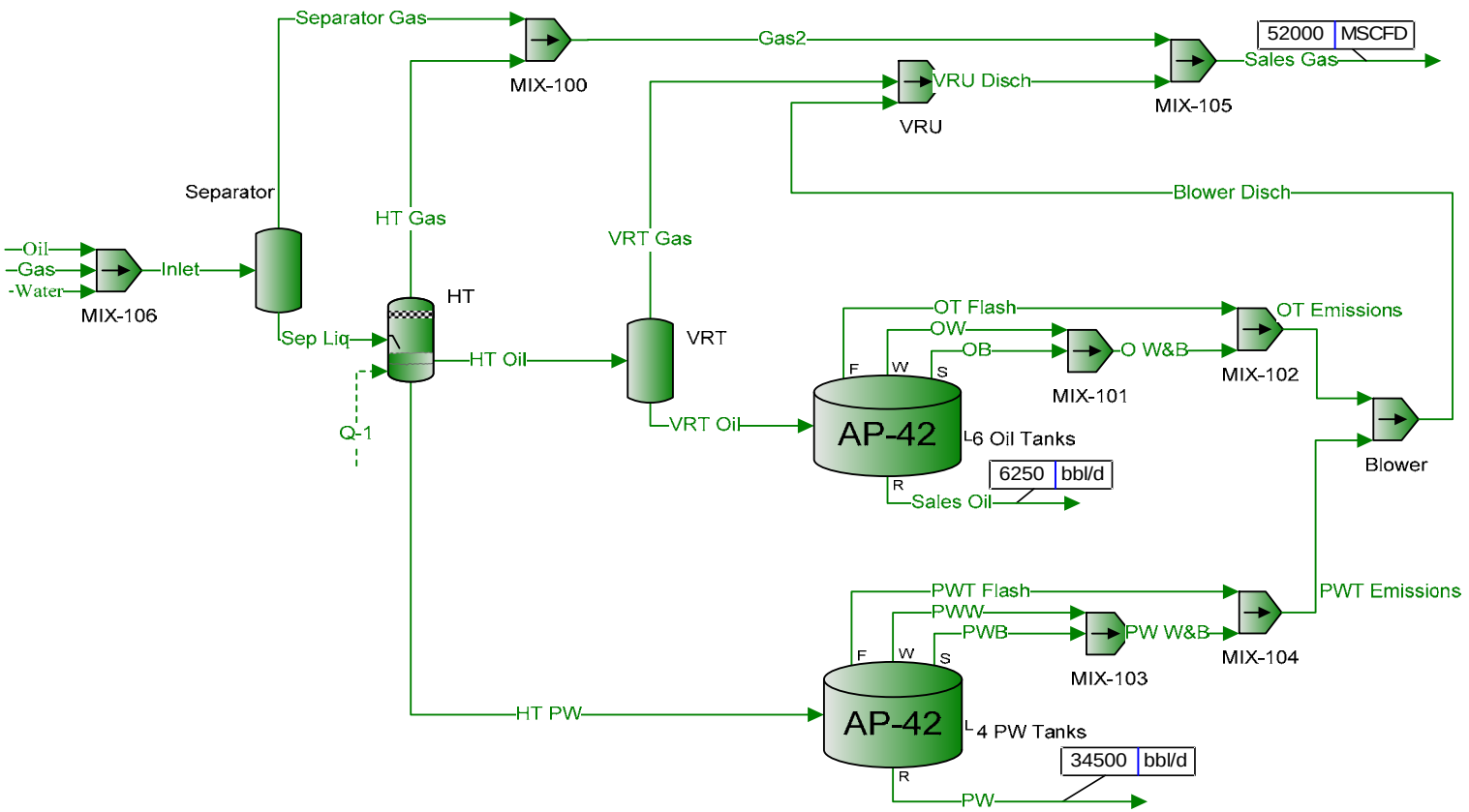
Confidential

Flare Design Report

Date - 5/9/25
Customer - TapRock
Job Location - Upslope
Flare Equipment - AF-668 NC 7.5 HP with TBone
Notes - 0

Total Flare Gas Flow Rate (MMscfd) -	39.00
HP Flare Gas Flow Rate (MMscfd) -	37.00
Heating Value of the HP Flare Gas (Btu/Ft3) -	1350
Model of Tbone Tip -	Tbone 25
LP Flare Gas Flow Rate (MMscfd) -	2.00
Heating Value of the LP Flare Gas (Btu/Ft3) -	1500
Calculated LP Gas Exit Velocity (Ft/Sec) -	54
Allowed LP Gas Air Exit Velocity (Ft/Sec) -	159
Minimum Flare Height (Feet) -	68
Actual Flare Height (Feet) -	75
ΔP LP Gas Across the Flare Tip (Oz/in2) -	2.56
HP Gas Pressure at the Tbone Tip (Lbs/in2) -	34
Wind Speed (mph) -	20
HP Flare Gas Temperature F°-	80
LP Flare Gas Temperature F°-	80
Maximum Ground Radiation (Btu/Hr/Ft^2) -	1500
Maximum Radiation from base of Flare (Feet) -	30

This flare system will comply 40 CFR 63.11, 60.18 & 0000b
and therefore carries a destruction efficiency of 98% or greater.


Separator Gas
MIX-100
Gas2
VRU Disch
VRU
MIX-105
52000
MSCFD
Sales Gas
Blower Disch
Separator
HT Gas
VRT Gas
Oil
Gas
Water
MIX-106
Inlet
HT
Sep Liq
HT Oil
VRT
VRT Oil
Q-1
OT Flash
OW
OB
O W&B
MIX-101
MIX-102
OT Emissions
F
W
S
AP-42
6 Oil Tanks
6250
bbl/d
R
Sales Oil
Blower
PWT Flash
PWW
PWB
PW W&B
MIX-103
MIX-104
PWT Emissions
HT PW
AP-42
4 PW Tanks
34500
bbl/d
PW

Process Streams		Blower Disch	Gas	Gas2	HT Gas	HT Oil
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	Blower	--	MIX-100	HT	HT
	To Block:	VRU	MIX-106	MIX-105	MIX-100	VRT
Mole Fraction		%	%	%	%	%
Carbon Dioxide		1.59956	0.192*	0.185739	0.367336	0.00982354
Nitrogen		0.0562573	1.533*	1.49560	0.381609	0.00143404
Methane		39.4867	89.644*	87.4836	69.2245	1.17473
Ethane		18.7618	5.381*	5.43256	9.77979	0.615861
Propane		9.94616	1.406*	1.70869	4.68822	0.869024
Isobutane		1.61988	0.163*	0.253739	0.829377	0.331773
n-Butane		5.26799	0.461*	0.764974	2.63652	1.44468
Isopentane		1.81373	0.135*	0.260847	0.978141	1.23018
n-Pentane		2.41960	0.18*	0.354297	1.36648	2.17693
i-Hexane		3.75518	0.905*	0.579371	2.33020	7.69809
Heptane		1.00033	0*	0.169580	0.728542	8.28628
Octane		0.493705	0*	0.0933316	0.416661	12.6510
Nonane		0.0926261	0*	0.0206239	0.0957482	7.68410
Decanes+		0.000340314	0*	6.93560E-05	0.000404870	49.9623
Water		12.2327	0*	1.03292	5.49109	0.402552
Benzene		0.0174237	0*	0.000965931	0.00396039	0.0163822
Toluene		0.376943	0*	0.0199199	0.0860010	1.03600
Ethylbenzene		0.0137451	0*	0.000826308	0.00372273	0.118332
m-Xylene		0.190409	0*	0.00972915	0.0437030	1.53777
n-Hexane		0.783851	0*	0.120555	0.497226	2.19365
2,2,4-Trimethylpentane		0.0710795	0*	0.0120543	0.0507527	0.559192
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
Carbon Dioxide		0.109740	10.6587*	10.5820	0.106354	0.0424132
Nitrogen		0.00385960	85.1031*	85.2079	0.110486	0.00619146
Methane		2.70904	4976.51*	4984.15	20.0424	5.07189
Ethane		1.28717	298.721*	309.506	2.83152	2.65898
Propane		0.682369	78.0528*	97.3482	1.35737	3.75202
Isobutane		0.111134	9.04880*	14.4561	0.240127	1.43243
n-Butane		0.361417	25.5920*	43.5824	0.763345	6.23742
Isopentane		0.124433	7.49440*	14.8610	0.283199	5.31131
n-Pentane		0.166000	9.99254*	20.1851	0.395632	9.39891
i-Hexane		0.257629	50.2403*	33.0081	0.674655	33.2366
Heptane		0.0686287	0*	9.66135	0.210933	35.7761
Octane		0.0338712	0*	5.31732	0.120635	54.6206
Nonane		0.00635473	0*	1.17499	0.0277217	33.1762
Decanes+		2.33477E-05	0*	0.00395137	0.000117221	215.713
Water		0.839240	0*	58.8478	1.58982	1.73802
Benzene		0.00119537	0*	0.0550313	0.00114664	0.0707303
Toluene		0.0258607	0*	1.13488	0.0248997	4.47295
Ethylbenzene		0.000942997	0*	0.0470767	0.00107783	0.510901
m-Xylene		0.0130633	0*	0.554292	0.0126532	6.63935
n-Hexane		0.0537771	0*	6.86828	0.143961	9.47110
2,2,4-Trimethylpentane		0.00487650	0*	0.686764	0.0146943	2.41432
Mass Fraction		%	%	%	%	%
Carbon Dioxide		2.15943	0.456676*	0.428094	0.645770	0.00257289
Nitrogen		0.0483432	2.32096*	2.19417	0.427024	0.000239074
Methane		19.4318	77.7236*	73.4999	44.3608	0.112154
Ethane		17.3055	8.74466*	8.55487	11.7467	0.110207
Propane		13.4537	3.35074*	3.94592	8.25793	0.228052
Isobutane		2.88813	0.512024*	0.772359	1.92558	0.114760
n-Butane		9.39242	1.44812*	2.32851	6.12127	0.499713
Isopentane		4.01413	0.526409*	0.985606	2.81902	0.528207
n-Pentane		5.35506	0.701879*	1.33871	3.93821	0.934716
i-Hexane		9.92668	4.21495*	2.61474	8.02128	3.94796
Heptane		3.07474	0*	0.889896	2.91608	4.94131
Octane		1.72994	0*	0.558332	1.90119	8.60012
Nonane		0.364417	0*	0.138527	0.490539	5.86508
Decanes+		0.00249081	0*	0.000866650	0.00385882	70.9446
Water		6.76011	0*	0.974532	3.95155	0.0431588
Benzene		0.0417492	0*	0.00395141	0.0123573	0.00761545
Toluene		1.06539	0*	0.0961207	0.316528	0.568078

Process Streams		Blower Disch	Gas	Gas2	HT Gas	HT Oil
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	Blower	--	MIX-100	HT	HT
	To Block:	VRU	MIX-106	MIX-105	MIX-100	VRT
Ethylbenzene		0.0447629	0*	0.00459423	0.0157874	0.0747638
m-Xylene		0.620097	0*	0.0540935	0.185336	0.971584
n-Hexane		2.07208	0*	0.544071	1.71161	1.12501
2,2,4-Trimethylpentane		0.249063	0*	0.0721119	0.231581	0.380139
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h
Carbon Dioxide		4.82960	469.084*	465.708	4.68058	1.86659
Nitrogen		0.108121	2384.03*	2386.96	3.09509	0.173444
Methane		43.4596	79835.4*	79957.9	321.529	81.3657
Ethane		38.7041	8982.26*	9306.54	85.1410	79.9531
Propane		30.0895	3441.79*	4292.63	59.8539	165.448
Isobutane		6.45936	525.936*	840.222	13.9567	83.2560
n-Butane		21.0063	1487.46*	2533.10	44.3673	362.533
Isopentane		8.97769	540.712*	1072.21	20.4324	383.205
n-Pentane		11.9767	720.949*	1456.33	28.5444	678.120
i-Hexane		22.2012	4329.47*	2844.49	58.1387	2864.18
Heptane		6.87672	0*	968.086	21.1359	3584.83
Octane		3.86906	0*	607.389	13.7799	6239.23
Nonane		0.815027	0*	150.699	3.55545	4255.01
Decanes+		0.00557076	0*	0.942797	0.0279689	51469.0
Water		15.1191	0*	1060.16	28.6411	31.3109
Benzene		0.0933729	0*	4.29860	0.0895662	5.52487
Toluene		2.38276	0*	104.566	2.29421	412.130
Ethylbenzene		0.100113	0*	4.99790	0.114428	54.2398
m-Xylene		1.38686	0*	58.8465	1.34333	704.867
n-Hexane		4.63426	0*	591.876	12.4059	816.176
2,2,4-Trimethylpentane		0.557036	0*	78.4480	1.67851	275.784
Property	**Units**					
Temperature	°F	91.7259	89.9*	107.370	135*	135
Pressure	psig	-1.43595	67*	32	32*	32
Mole Fraction Vapor	%	92.9471	100	100	100	0
Mole Fraction Light Liquid	%	0.000800577	0	0	0	100
Mole Fraction Heavy Liquid	%	7.05210	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100
Molecular Weight	lb/lbmol	32.5994	18.5029	19.0946	25.0341	168.033
Mass Density	lb/ft^3	0.0792028	0.259941	0.147663	0.185384	47.4780
Molar Flow	lbmol/h	6.86063	5551.41	5697.23	28.9527	431.751
Mass Flow	lb/h	223.652	102717	108786	724.806	72548.2
Vapor Volumetric Flow	ft^3/h	2823.79	395155	736721	3909.75	1528.04
Liquid Volumetric Flow	gpm	352.057	49266.0	91851.0	487.449	190.509
Std Vapor Volumetric Flow	MMSCFD	0.0624840	50.5601*	51.8882	0.263690	3.93222
Std Liquid Volumetric Flow	sgpm	0.954593	627.383	647.057	3.62868	183.780
Compressibility		0.922328	0.986002	0.992297	0.988094	0.0258965
Specific Gravity			0.638857	0.659287	0.864362	0.761247
API Gravity						46.7427
Enthalpy	Btu/h	-354590	-1.82152E+08	-1.91676E+08	-1.16213E+06	-5.89512E+07
Mass Enthalpy	Btu/lb	-1585.45	-1773.33	-1761.94	-1603.37	-812.579
Mass Cp	Btu/(lb*°F)	0.453501	0.511831	0.509621	0.489861	0.507932
Ideal Gas CpCv Ratio		1.16466	1.27105	1.25933	1.19558	1.02985
Dynamic Viscosity	cP		0.0112682	0.0114870	0.0112979	0.863471
Kinematic Viscosity	cSt		2.70618	4.85640	3.80455	1.13536
Thermal Conductivity	Btu/(h*ft*°F)		0.0191846	0.0195920	0.0186477	0.0678800
Surface Tension	lbf/ft					0.00164912?
Net Ideal Gas Heating Value	Btu/ft^3	1573.18	1005.10	1024.79	1288.43	8304.68
Net Liquid Heating Value	Btu/lb	18127.1	20583.6	20320.1	19409.1	18599.9
Gross Ideal Gas Heating Value	Btu/ft^3	1721.77	1111.93	1133.15	1416.59	8878.11
Gross Liquid Heating Value	Btu/lb	19857.3	22774.7	22473.9	21352.1	19894.9

Process Streams		HT PW	Inlet	O W&B	OB	Oil	OT Emissions
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	HT	MIX-106	MIX-101	6 Oil Tanks	--	MIX-102
	To Block:	4 PW Tanks	Separator	MIX-102	MIX-101	MIX-106	Blower
Mole Fraction		%	%	%	%	%	%
Carbon Dioxide		0.000326896	0.0314508	0.441529	0.441529	0.0109999*	0.389687
Nitrogen		1.10126E-05	0.250113	0.00186931	0.00186931	0.0219998*	0.0165728
Methane		0.00398760	14.6467	19.9010	19.9010	2.66597*	33.7810
Ethane		0.000662217	0.916749	33.2994	33.2994	2.62797*	23.3453
Propane		0.000217518	0.296908	17.4206	17.4206	4.45596*	13.1664
Isobutane		1.99726E-05	0.0466494	2.76807	2.76807	1.31999*	2.23582
n-Butane		0.000113427	0.146314	8.52663	8.52663	4.67795*	6.98416
Isopentane		2.39009E-05	0.0592256	3.04406	3.04406	2.44598*	2.49427
n-Pentane		2.10175E-05	0.0868467	4.10796	4.10796	3.77896*	3.39180
i-Hexane		1.55165E-05	0.194441	6.33168	6.33168	3.08697*	5.36523
Heptane		4.07607E-06	0.133363	1.61354	1.61354	8.76191*	1.42956
Octane		1.20688E-06	0.175919	0.756527	0.756527	11.5579*	0.710314
Nonane		1.42339E-07	0.100821	0.123470	0.123470	6.62393*	0.133763
Decanes+		3.88602E-08	0.633130	0.000216893	0.000216893	41.5966*	0.000264545
Water		99.9943	82.1845	0.0282023	0.0282023	0*	5.11797
Benzene		1.39038E-05	0.000380514	0.00637634	0.00637634	0.0249998*	0.00725402
Toluene		0.000234437	0.0166513	0.128022	0.128022	1.09399*	0.144419
Ethylbenzene		7.50208E-06	0.00164382	0.00518527	0.00518527	0.107999*	0.00576393
m-Xylene		7.12097E-05	0.0211718	0.0593018	0.0593018	1.39099*	0.0667019
n-Hexane		4.61040E-06	0.0479600	1.32080	1.32080	3.15097*	1.11181
2,2,4-Trimethylpentane		2.46440E-07	0.00910189	0.115471	0.115471	0.597994*	0.101835
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
Carbon Dioxide		0.0913428	10.7158	0.00878975	0.000209867	0.0570445*	0.0183972
Nitrogen		0.00307720	85.2172	3.72134E-05	8.88518E-07	0.114089*	0.000782403
Methane		1.11423	4990.33	0.396180	0.00945931	13.8255*	1.59480
Ethane		0.185040	312.350	0.662909	0.0158278	13.6285*	1.10213
Propane		0.0607800	101.161	0.346801	0.00828033	23.1082*	0.621589
Isobutane		0.00558085	15.8941	0.0551054	0.00131571	6.84534*	0.105553
n-Butane		0.0316943	49.8515	0.169744	0.00405286	24.2595*	0.329723
Isopentane		0.00667849	20.1790	0.0605996	0.00144689	12.6846*	0.117755
n-Pentane		0.00587281	29.5899	0.0817793	0.00195259	19.5974*	0.160127
i-Hexane		0.00433569	66.2490	0.126048	0.00300956	16.0088*	0.253293
Heptane		0.00113896	45.4386	0.0321215	0.000766944	45.4386*	0.0674897
Octane		0.000337232	59.9382	0.0150606	0.000359590	59.9382*	0.0335340
Nonane		3.97731E-05	34.3512	0.00245798	5.86874E-05	34.3512*	0.00631496
Decanes+		1.08585E-05	215.717	4.31781E-06	1.03093E-07	215.717*	1.24892E-05
Water		27940.9	28001.5	0.000561437	1.34051E-05	0*	0.241620
Benzene		0.00388508	0.129647	0.000126937	3.03079E-06	0.129647*	0.000342463
Toluene		0.0655075	5.67334	0.00254860	6.08511E-05	5.67334*	0.00681802
Ethylbenzene		0.00209627	0.560074	0.000103226	2.46465E-06	0.560074*	0.000272116
m-Xylene		0.0198978	7.21354	0.00118055	2.81872E-05	7.21354*	0.00314900
n-Hexane		0.00128826	16.3407	0.0262938	0.000627798	16.3407*	0.0524888
2,2,4-Trimethylpentane		6.88615E-05	3.10115	0.00229875	5.48856E-05	3.10115*	0.00480764
Mass Fraction		%	%	%	%	%	%
Carbon Dioxide		0.000798552	0.0688721	0.458619	0.458619	0.00323649*	0.460053
Nitrogen		1.71239E-05	0.348632	0.00123593	0.00123593	0.00412025*	0.0124539
Methane		0.00355083	11.6916	7.53515	7.53515	0.285934*	14.5375
Ethane		0.00110527	1.37162	23.6321	23.6321	0.528299*	18.8306
Propane		0.000532400	0.651453	18.1303	18.1303	1.31364*	15.5743
Isobutane		6.44354E-05	0.134913	3.79721	3.79721	0.512921*	3.48597
n-Butane		0.000365937	0.423150	11.6967	11.6967	1.81776*	10.8893
Isopentane		9.57171E-05	0.212620	5.18355	5.18355	1.17983*	4.82744
n-Pentane		8.41700E-05	0.311779	6.99522	6.99522	1.82281*	6.56454
i-Hexane		7.42205E-05	0.833752	12.8780	12.8780	1.77850*	12.4027
Heptane		2.26707E-05	0.664929	3.81594	3.81594	5.86968*	3.84259
Octane		7.65218E-06	0.999892	2.03960	2.03960	8.82657*	2.17656
Nonane		1.01332E-06	0.643414	0.373750	0.373750	5.67976*	0.460209
Decanes+		5.14662E-07	7.51672	0.00122141	0.00122141	66.3540*	0.00169323
Water		99.9915	73.6709	0.0119914	0.0119914	0*	2.47334
Benzene		6.02836E-05	0.00147895	0.0117553	0.0117553	0.0130554*	0.0151999
Toluene		0.00119899	0.0763403	0.278401	0.278401	0.673896*	0.356951

Process Streams		HT PW	Inlet	O W&B	OB	Oil	OT Emissions
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	HT	MIX-106	MIX-101	6 Oil Tanks	--	MIX-102
	To Block:	4 PW Tanks	Separator	MIX-102	MIX-101	MIX-106	Blower
Ethylbenzene		4.42089E-05	0.00868362	0.0129927	0.0129927	0.0766549*	0.0164152
m-Xylene		0.000419631	0.111842	0.148592	0.148592	0.987286*	0.189961
n-Hexane		2.20531E-05	0.205649	2.68636	2.68636	1.81537*	2.57016
2,2,4-Trimethylpentane		1.56255E-06	0.0517335	0.311311	0.311311	0.456678*	0.312045
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Carbon Dioxide		4.01995	471.595	0.386832	0.00923613	2.51050*	0.809650
Nitrogen		0.0862028	2387.22	0.00104247	2.48904E-05	3.19602*	0.0219178
Methane		17.8750	80057.2	6.35570	0.151751	221.795*	25.5846
Ethane		5.56397	9392.06	19.9330	0.475927	409.795*	33.1401
Propane		2.68013	4460.76	15.2924	0.365126	1018.97*	27.4093
Isobutane		0.324371	923.803	3.20284	0.0764721	397.866*	6.13499
n-Butane		1.84214	2897.48	9.86589	0.235561	1410.01*	19.1642
Isopentane		0.481845	1455.89	4.37219	0.104392	915.181*	8.49585
n-Pentane		0.423716	2134.88	5.90028	0.140877	1413.93*	11.5530
i-Hexane		0.373630	5709.03	10.8622	0.259350	1379.56*	21.8276
Heptane		0.114126	4553.03	3.21864	0.0768492	4553.03*	6.76260
Octane		0.0385215	6846.66	1.72034	0.0410755	6846.66*	3.83054
Nonane		0.00510111	4405.71	0.315248	0.00752696	4405.71*	0.809925
Decanes+		0.00259084	51470.0	0.00103023	2.45980E-05	51470.0*	0.00297993
Water		503363	504454	0.0101145	0.000241496	0*	4.35285
Benzene		0.303471	10.1269	0.00991528	0.000236740	10.1269*	0.0267504
Toluene		6.03576	522.732	0.234824	0.00560672	522.732*	0.628201
Ethylbenzene		0.222550	59.4602	0.0109590	0.000261660	59.4602*	0.0288892
m-Xylene		2.11244	765.826	0.125333	0.00299249	765.826*	0.334314
n-Hexane		0.111016	1408.16	2.26588	0.0541007	1408.16*	4.52324
2,2,4-Trimethylpentane		0.00786595	354.240	0.262582	0.00626950	354.240*	0.549170
Property	**Units**						
Temperature	°F	135	111.614	106.969	106.969	119*	106.942
Pressure	psig	32	67	-1.43595	-1.43595	131*	-1.43595
Mole Fraction Vapor	%	0	16.8890	100	100	0	100
Mole Fraction Light Liquid	%	100	1.20231	0	0	100	0
Mole Fraction Heavy Liquid	%	0	81.9087	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100
Molecular Weight	lb/lbmol	18.0158	20.0972	42.3696	42.3696	149.576	37.2782
Mass Density	lb/ft^3	61.4359	1.57207	0.0934680	0.0934680	47.0088	0.0820206
Molar Flow	lbmol/h	27942.5	34071.5	1.99075	0.0475318	518.592	4.72101
Mass Flow	lb/h	503405	684740	84.3473	2.01390	77568.7	175.991
Vapor Volumetric Flow	ft^3/h	8193.99	435566	902.419	21.5464	1650.09	2145.69
Liquid Volumetric Flow	gpm	1021.59	54304.3	112.509	2.68631	205.725	267.515
Std Vapor Volumetric Flow	MMSCFD	254.489	310.310	0.0181310	0.000432901	4.72314	0.0429971
Std Liquid Volumetric Flow	sgpm	1006.46	1837.30	0.349825	0.00835252	201.475*	0.743022
Compressibility		0.00214571	0.170352	0.988474	0.988474	0.0746508	0.991121
Specific Gravity		0.985044		1.46291	1.46291	0.753724	1.28712
API Gravity		10.0027				49.7805	
Enthalpy	Btu/h	-3.40504E+09	-3.66685E+09	-90038.3	-2149.78	-6.45838E+07	-219010
Mass Enthalpy	Btu/lb	-6764.02	-5355.10	-1067.47	-1067.47	-832.601	-1244.44
Mass Cp	Btu/(lb*°F)	0.978348	0.851551	0.430183	0.430183	0.503754	0.438357
Ideal Gas CpCv Ratio		1.32672	1.28094	1.12301	1.12301	1.03436	1.13908
Dynamic Viscosity	cP	0.495893		0.00902333	0.00902333	0.742296	0.00951040
Kinematic Viscosity	cSt	0.503901		6.02675	6.02675	0.985773	7.23860
Thermal Conductivity	Btu/(h*ft*°F)	0.372546		0.0126852	0.0126852	0.0677592	0.0137938
Surface Tension	lbf/ft	0.00455307				0.00155833?	
Net Ideal Gas Heating Value	Btu/ft^3	0.0732710	276.655	2214.16	2214.16	7416.85	1908.72
Net Liquid Heating Value	Btu/lb	-1058.13	4421.04	19686.3	19686.3	18661.9	19274.1
Gross Ideal Gas Heating Value	Btu/ft^3	50.3871	343.305	2407.85	2407.85	7935.70	2081.30
Gross Liquid Heating Value	Btu/lb	1.67724	5679.59	21421.6	21421.6	19978.3	21031.4

Process Streams		OT Flash	OW	PW	PW W&B	PWB
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	6 Oil Tanks	6 Oil Tanks	4 PW Tanks	MIX-103	4 PW Tanks
	To Block:	MIX-102	MIX-101	--	MIX-104	MIX-103
Mole Fraction		%	%	%	%	%
Carbon Dioxide		0.351887	0.441529	0	6.82685	6.82685
Nitrogen		0.0272938	0.00186931	0	0.0592028	0.0592028
Methane		43.9015	19.9010	0	35.2071	35.2071
Ethane		16.0874	33.2994	0	7.18624	7.18624
Propane		10.0645	17.4206	0	1.93473	1.93473
Isobutane		1.84774	2.76807	0	0.136227	0.136227
n-Butane		5.85947	8.52663	0	0.958208	0.958208
Isopentane		2.09339	3.04406	0	0.156670	0.156670
n-Pentane		2.86962	4.10796	0	0.0706677	0.0706677
i-Hexane		4.66055	6.33168	0	0.0229250	0.0229250
Heptane		1.29542	1.61354	0	0.00712895	0.00712895
Octane		0.676619	0.756527	0	0.000966626	0.000966626
Nonane		0.141268	0.123470	0	0.000105339	0.000105339
Decanes+		0.000299291	0.000216893	0	0.000743980	0.000743980
Water		8.82915	0.0282023	99.9998	45.1008	45.1008
Benzene		0.00789397	0.00637634	1.08523E-05	0.0648883	0.0648883
Toluene		0.156374	0.128022	0.000166300	1.44927	1.44927
Ethylbenzene		0.00618586	0.00518527	5.10153E-06	0.0509288	0.0509288
m-Xylene		0.0720976	0.0593018	3.57315E-05	0.754851	0.754851
n-Hexane		0.959435	1.32080	0	0.0109238	0.0109238
2,2,4-Trimethylpentane		0.0918922	0.115471	0	0.000591696	0.000591696
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
Carbon Dioxide		0.00960741	0.00857988	0	0.0845756	0.000463451
Nitrogen		0.000745190	3.63248E-05	0	0.000733444	4.01907E-06
Methane		1.19862	0.386720	0	0.436170	0.00239009
Ethane		0.439226	0.647081	0	0.0890280	0.000487849
Propane		0.274788	0.338521	0	0.0239688	0.000131342
Isobutane		0.0504480	0.0537897	0	0.00168767	9.24797E-06
n-Butane		0.159979	0.165691	0	0.0118709	6.50494E-05
Isopentane		0.0571550	0.0591527	0	0.00194093	1.06358E-05
n-Pentane		0.0783479	0.0798267	0	0.000875480	4.79738E-06
i-Hexane		0.127245	0.123038	0	0.000284011	1.55630E-06
Heptane		0.0353682	0.0313546	0	8.83183E-05	4.83959E-07
Octane		0.0184734	0.0147010	0	1.19752E-05	6.56208E-08
Nonane		0.00385698	0.00239929	0	1.30501E-06	7.15107E-09
Decanes+		8.17140E-06	4.21471E-06	0	9.21694E-06	5.05062E-08
Water		0.241058	0.000548032	27940.3	0.558739	0.00306173
Benzene		0.000215526	0.000123906	0.00303217	0.000803881	4.40504E-06
Toluene		0.00426942	0.00248774	0.0464648	0.0179545	9.83857E-05
Ethylbenzene		0.000168890	0.000100761	0.00142538	0.000630941	3.45738E-06
m-Xylene		0.00196845	0.00115236	0.00998349	0.00935160	5.12442E-05
n-Hexane		0.0261950	0.0256660	0	0.000135332	7.41579E-07
2,2,4-Trimethylpentane		0.00250889	0.00224386	0	7.33033E-06	4.01682E-08
Mass Fraction		%	%	%	%	%
Carbon Dioxide		0.461372	0.458619	0	13.1258	13.1258
Nitrogen		0.0227788	0.00123593	0	0.0724548	0.0724548
Methane		20.9823	7.53515	0	24.6752	24.6752
Ethane		14.4114	23.6321	0	9.44018	9.44018
Propane		13.2218	18.1303	0	3.72714	3.72714
Isobutane		3.19952	3.79721	0	0.345911	0.345911
n-Butane		10.1462	11.6967	0	2.43310	2.43310
Isopentane		4.49968	5.18355	0	0.493826	0.493826
n-Pentane		6.16815	6.99522	0	0.222746	0.222746
i-Hexane		11.9653	12.8780	0	0.0863083	0.0863083
Heptane		3.86712	3.81594	0	0.0312076	0.0312076
Octane		2.30261	2.03960	0	0.00482383	0.00482383
Nonane		0.539785	0.373750	0	0.000590230	0.000590230
Decanes+		0.00212748	0.00122141	0	0.00775516	0.00775516
Water		4.73873	0.0119914	99.9989	35.4964	35.4964
Benzene		0.0183702	0.0117553	4.70537E-05	0.221433	0.221433
Toluene		0.429248	0.278401	0.000850528	5.83376	5.83376

Process Streams		OT Flash	OW	PW	PW W&B	PWB
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	6 Oil Tanks	6 Oil Tanks	4 PW Tanks	MIX-103	4 PW Tanks
	To Block:	MIX-102	MIX-101	--	MIX-104	MIX-103
Ethylbenzene		0.0195652	0.0129927	3.00633E-05	0.236213	0.236213
m-Xylene		0.228036	0.148592	0.000210565	3.50108	3.50108
n-Hexane		2.46321	2.68636	0	0.0411260	0.0411260
2,2,4-Trimethylpentane		0.312720	0.311311	0	0.00295279	0.00295279
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h
Carbon Dioxide		0.422817	0.377596	0	3.72213	0.0203962
Nitrogen		0.0208753	0.00101758	0	0.0205463	0.000112588
Methane		19.2289	6.20395	0	6.99724	0.0383429
Ethane		13.2071	19.4571	0	2.67699	0.0146691
Propane		12.1169	14.9273	0	1.05692	0.00579162
Isobutane		2.93215	3.12637	0	0.0980913	0.000537513
n-Butane		9.29831	9.63033	0	0.689965	0.00378081
Isopentane		4.12366	4.26779	0	0.140036	0.000767358
n-Pentane		5.65271	5.75940	0	0.0631648	0.000346125
i-Hexane		10.9654	10.6029	0	0.0244748	0.000134115
Heptane		3.54396	3.14179	0	0.00884966	4.84937E-05
Octane		2.11019	1.67927	0	0.00136791	7.49577E-06
Nonane		0.494677	0.307721	0	0.000167374	9.17161E-07
Decanes+		0.00194970	0.00100563	0	0.00219916	1.20508E-05
Water		4.34273	0.00987296	503352	10.0658	0.0551580
Benzene		0.0168351	0.00967854	0.236848	0.0627926	0.000344086
Toluene		0.393378	0.229217	4.28120	1.65430	0.00906510
Ethylbenzene		0.0179302	0.0106973	0.151326	0.0669839	0.000367053
m-Xylene		0.208980	0.122341	1.05990	0.992813	0.00544034
n-Hexane		2.25737	2.21177	0	0.0116622	6.39058E-05
2,2,4-Trimethylpentane		0.286587	0.256313	0	0.000837333	4.58835E-06
Property	**Units**					
Temperature	°F	106.969	106.969	83.5989	83.5989	83.5989
Pressure	psig	-1.43595	-1.43595	-1.43595	-1.43595	-1.43595
Mole Fraction Vapor	%	100	100	0	56.8242	56.8242
Mole Fraction Light Liquid	%	0	0	100	0.526251	0.526251
Mole Fraction Heavy Liquid	%	0	0	0	42.6495	42.6495
Phase Mole Fraction	%	100	100	100	100	100
Molecular Weight	lb/lbmol	33.5659	42.3696	18.0154	22.8897	22.8897
Mass Density	lb/ft^3	0.0737250	0.0934680	62.1441	0.0919370	0.0919370
Molar Flow	lbmol/h	2.73026	1.94322	27940.3	1.23887	0.00678865
Mass Flow	lb/h	91.6434	82.3334	503358	28.3574	0.155390
Vapor Volumetric Flow	ft^3/h	1243.04	880.873	8099.85	308.444	1.69018
Liquid Volumetric Flow	gpm	154.977	109.823	1009.85	38.4553	0.210724
Std Vapor Volumetric Flow	MMSCFD	0.0248661	0.0176981	254.470	0.0112831	6.18284E-05
Std Liquid Volumetric Flow	sgpm	0.393198	0.341472	1006.25	0.104991	0.000575320
Compressibility		0.992788	0.988474	0.000659341	0.566260	0.566260
Specific Gravity		1.15894	1.46291	0.996398		
API Gravity				9.99830		
Enthalpy	Btu/h	-128971	-87888.5	-3.43024E+09	-101164	-554.353
Mass Enthalpy	Btu/lb	-1407.32	-1067.47	-6814.72	-3567.48	-3567.48
Mass Cp	Btu/(lb*°F)	0.445969	0.430183	0.977647	0.595400	0.595400
Ideal Gas CpCv Ratio		1.15370	1.12301	1.32877	1.26576	1.26576
Dynamic Viscosity	cP	0.00990759	0.00902333	0.843159		
Kinematic Viscosity	cSt	8.38943	6.02675	0.847010		
Thermal Conductivity	Btu/(h*ft*°F)	0.0147089	0.0126852	0.353234		
Surface Tension	lbf/ft			0.00493085		
Net Ideal Gas Heating Value	Btu/ft^3	1686.01	2214.16	0.00950194	628.511	628.511
Net Liquid Heating Value	Btu/lb	18894.8	19686.3	-1059.55	9990.37	9990.37
Gross Ideal Gas Heating Value	Btu/ft^3	1843.20	2407.85	50.3198	709.989	709.989
Gross Liquid Heating Value	Btu/lb	20672.2	21421.6	0.207690	11341.3	11341.3

Process Streams		PWT Emissions	PWT Flash	PWW	Sales Gas	Sales Oil
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	MIX-104	4 PW Tanks	4 PW Tanks	MIX-105	6 Oil Tanks
	To Block:	Blower	MIX-104	MIX-103	--	--
Mole Fraction		%	%	%	%	%
Carbon Dioxide		4.26912	0.751283	6.82685	0.187604	0.00106036
Nitrogen		0.143820	0.260200	0.0592028	1.49255	2.00658E-05
Methane		52.0762	75.2775	35.2071	87.3941	0.133432
Ethane		8.64826	10.6591	7.18624	5.45579	0.201945
Propane		2.84069	4.08671	1.93473	1.72411	0.645823
Isobutane		0.260834	0.432214	0.136227	0.256475	0.296645
n-Butane		1.48131	2.20076	0.958208	0.773957	1.34301
Isopentane		0.312135	0.525956	0.156670	0.264085	1.20988
n-Pentane		0.274479	0.554796	0.0706677	0.358713	2.16053
i-Hexane		0.202639	0.449811	0.0229250	0.586518	7.77048
Heptane		0.0532317	0.116640	0.00712895	0.171626	8.45305
Octane		0.0157613	0.0361095	0.000966626	0.0944117	12.9377
Nonane		0.00185889	0.00427067	0.000105339	0.0208479	7.86514
Decanes+		0.000507497	0.000182243	0.000743980	7.02442E-05	51.1630
Water		27.9311	4.31650	45.1008	1.05261	0.257204
Benzene		0.0398628	0.00544333	0.0648883	0.000991412	0.0166050
Toluene		0.890001	0.120803	1.44927	0.0204733	1.05734
Ethylbenzene		0.0313552	0.00443407	0.0509288	0.000847220	0.121028
m-Xylene		0.463366	0.0624657	0.754851	0.0100094	1.57300
n-Hexane		0.0602098	0.127996	0.0109238	0.122065	2.22271
2,2,4-Trimethylpentane		0.00321840	0.00683110	0.000591696	0.0121980	0.570351
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
Carbon Dioxide		0.0913428	0.00676720	0.0841122	10.7113	0.00447068
Nitrogen		0.00307720	0.00234375	0.000729425	85.2171	8.46011E-05
Methane		1.11423	0.678063	0.433780	4989.77	0.562575
Ethane		0.185040	0.0960118	0.0885402	311.498	0.851437
Propane		0.0607800	0.0368111	0.0238375	98.4381	2.72291
Isobutane		0.00558085	0.00389317	0.00167842	14.6434	1.25071
n-Butane		0.0316943	0.0198234	0.0118059	44.1891	5.66236
Isopentane		0.00667849	0.00473756	0.00193030	15.0780	5.10108
n-Pentane		0.00587281	0.00499733	0.000870682	20.4807	9.10918
i-Hexane		0.00433569	0.00405168	0.000282455	33.4873	32.7618
Heptane		0.00113896	0.00105064	8.78343E-05	9.79900	35.6396
Octane		0.000337232	0.000325256	1.19096E-05	5.39044	54.5478
Nonane		3.97731E-05	3.84681E-05	1.29786E-06	1.19031	33.1609
Decanes+		1.08585E-05	1.64156E-06	9.16643E-06	0.00401059	215.712
Water		0.597620	0.0388809	0.555677	60.0990	1.08442
Benzene		0.000852912	4.90308E-05	0.000799476	0.0566047	0.0700098
Toluene		0.0190426	0.00108813	0.0178561	1.16893	4.45795
Ethylbenzene		0.000670881	3.99399E-05	0.000627484	0.0483721	0.510276
m-Xylene		0.00991427	0.000562661	0.00930036	0.571487	6.63207
n-Hexane		0.00128826	0.00115293	0.000134590	6.96932	9.37135
2,2,4-Trimethylpentane		6.88615E-05	6.15312E-05	7.29017E-06	0.696445	2.40470
Mass Fraction		%	%	%	%	%
Carbon Dioxide		8.43439	1.54279	13.1258	0.431775	0.000272489
Nitrogen		0.180865	0.340117	0.0724548	2.18657	3.28224E-06
Methane		37.5042	56.3497	24.6752	73.3198	0.0124992
Ethane		11.6739	14.9553	9.44018	8.57917	0.0354569
Propane		5.62326	8.40863	3.72714	3.97584	0.166287
Isobutane		0.680573	1.17219	0.345911	0.779570	0.100676
n-Butane		3.86506	5.96858	2.43310	2.35249	0.455794
Isopentane		1.01097	1.77065	0.493826	0.996418	0.509706
n-Pentane		0.889012	1.86775	0.222746	1.35346	0.910201
i-Hexane		0.783925	1.80871	0.0863083	2.64322	3.91002
Heptane		0.239450	0.545355	0.0312076	0.899348	4.94581
Octane		0.0808231	0.192465	0.00482383	0.563987	8.62941
Nonane		0.0107028	0.0255580	0.000590230	0.139831	5.89019
Decanes+		0.00543592	0.00202898	0.00775516	0.000876495	71.2812
Water		22.5891	3.62851	35.4964	0.991695	0.0270562
Benzene		0.139783	0.0198398	0.221433	0.00404986	0.00757364
Toluene		3.68130	0.519365	5.83376	0.0986501	0.568859

Process Streams		PWT Emissions	PWT Flash	PWW	Sales Gas	Sales Oil
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	MIX-104	4 PW Tanks	4 PW Tanks	MIX-105	6 Oil Tanks
	To Block:	Blower	MIX-104	MIX-103	--	--
Ethylbenzene		0.149437	0.0219654	0.236213	0.00470377	0.0750267
m-Xylene		2.20838	0.309441	3.50108	0.0555722	0.975123
n-Hexane		0.232927	0.514678	0.0411260	0.550102	1.11844
2,2,4-Trimethylpentane		0.0165038	0.0364100	0.00295279	0.0728670	0.380422
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h
Carbon Dioxide		4.01995	0.297821	3.70174	471.398	0.196753
Nitrogen		0.0862028	0.0656565	0.0204337	2387.22	0.00236996
Methane		17.8750	10.8778	6.95890	80048.2	9.02509
Ethane		5.56397	2.88698	2.66232	9366.46	25.6019
Propane		2.68013	1.62321	1.05113	4340.69	120.068
Isobutane		0.324371	0.226280	0.0975537	851.109	72.6938
n-Butane		1.84214	1.15218	0.686184	2568.37	329.109
Isopentane		0.481845	0.341809	0.139269	1087.86	368.036
n-Pentane		0.423716	0.360552	0.0628187	1477.66	657.216
i-Hexane		0.373630	0.349155	0.0243406	2885.78	2823.26
Heptane		0.114126	0.105276	0.00880117	981.879	3571.15
Octane		0.0385215	0.0371536	0.00136042	615.742	6230.92
Nonane		0.00510111	0.00493373	0.000166457	152.663	4253.05
Decanes+		0.00259084	0.000391676	0.00218711	0.956928	51469.0
Water		10.7663	0.700451	10.0107	1082.70	19.5361
Benzene		0.0666225	0.00382989	0.0624486	4.42150	5.46859
Toluene		1.75456	0.100259	1.64524	107.703	410.748
Ethylbenzene		0.0712241	0.00424022	0.0666168	5.13542	54.1735
m-Xylene		1.05255	0.0597349	0.987373	60.6719	704.094
n-Hexane		0.111016	0.0993540	0.0115983	600.583	807.579
2,2,4-Trimethylpentane		0.00786595	0.00702862	0.000832745	79.5538	274.686
Property	**Units**					
Temperature	°F	81.9148	83.5989	83.5989	104.932	106.969
Pressure	psig	-1.43595	-1.43595	-1.43595	-1.43595	-1.43595
Mole Fraction Vapor	%	75.1388	100	56.8242	100	0
Mole Fraction Light Liquid	%	0.00114184	0	0.526251	0	99.9805
Mole Fraction Heavy Liquid	%	24.8600	0	42.6495	0	0.0194754
Phase Mole Fraction	%	100	100	100	100	100
Molecular Weight	lb/lbmol	22.2757	21.4311	22.8897	19.1219	171.258
Mass Density	lb/ft^3	0.0678764	0.0489056	0.0919370	0.0419412	48.3125
Molar Flow	lbmol/h	2.13962	0.900751	1.23208	5709.51	421.618
Mass Flow	lb/h	47.6615	19.3041	28.2020	109177	72205.6
Vapor Volumetric Flow	ft^3/h	702.180	394.722	306.753	2.60309E+06	1494.55
Liquid Volumetric Flow	gpm	87.5446	49.2120	38.2446	324541	186.334
Std Vapor Volumetric Flow	MMSCFD	0.0194868	0.00820370	0.0112213	52.0000	3.83994
Std Liquid Volumetric Flow	sgpm	0.211571	0.106580	0.104415	648.756	182.292
Compressibility		0.748730	0.996669	0.566260	0.997764	0.00772976
Specific Gravity			0.739961		0.660230	0.774628
API Gravity						46.5389
Enthalpy	Btu/h	-135580	-34415.6	-100610	-1.92272E+08	-5.94638E+07
Mass Enthalpy	Btu/lb	-2844.65	-1782.81	-3567.48	-1761.11	-823.535
Mass Cp	Btu/(lb*°F)	0.546278	0.477311	0.595400	0.505159	0.490819
Ideal Gas CpCv Ratio		1.25554	1.24186	1.26576	1.25963	1.03060
Dynamic Viscosity	cP		0.0107760		0.0114069	1.12815
Kinematic Viscosity	cSt		13.7556		16.9787	1.45776
Thermal Conductivity	Btu/(h*ft*°F)		0.0173769		0.0193716	0.0696515
Surface Tension	lbf/ft					0.00170669
Net Ideal Gas Heating Value	Btu/ft^3	832.805	1113.78	628.511	1025.95	8462.89
Net Liquid Heating Value	Btu/lb	13891.6	19622.4	9990.37	20313.6	18597.2
Gross Ideal Gas Heating Value	Btu/ft^3	928.481	1228.99	709.989	1134.40	9046.28
Gross Liquid Heating Value	Btu/lb	15521.7	21662.7	11341.3	22466.1	19889.9

Process Streams		Sep Liq	Separator Gas	VRT Gas	VRT Oil	VRU Disch
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	Separator	Separator	VRT	VRT	VRU
	To Block:	HT	MIX-100	VRU	6 Oil Tanks	MIX-105
Mole Fraction		%	%	%	%	%
Carbon Dioxide		0.000845363	0.184812	0.361161	0.00536377	1.05346
Nitrogen		0.000421625	1.50129	0.0983857	0.000203360	0.0748348
Methane		0.0923436	87.5769	53.8546	0.506024	45.8226
Ethane		0.0199821	5.41036	13.0346	0.458220	16.2362
Propane		0.0182028	1.69347	7.53024	0.784469	8.88080
Isobutane		0.00590828	0.250799	1.40749	0.318118	1.52622
n-Butane		0.0247594	0.755415	4.53337	1.40547	4.94404
Isopentane		0.0197203	0.257183	1.70890	1.22410	1.76750
n-Pentane		0.0345046	0.349127	2.39474	2.17416	2.40864
i-Hexane		0.119408	0.570428	4.09364	7.74385	3.90443
Heptane		0.126705	0.166725	1.27540	8.37527	1.12162
Octane		0.192730	0.0916800	0.725345	12.8023	0.595852
Nonane		0.116902	0.0202402	0.165628	7.77953	0.124818
Decanes+		0.759467	6.76422E-05	0.000662906	50.5965	0.000482569
Water		98.3841	1.01015	7.61266	0.311029	10.1954
Benzene		0.000266738	0.000950636	0.00698506	0.0165015	0.0128205
Toluene		0.0160664	0.0195824	0.151194	1.04723	0.277394
Ethylbenzene		0.00180992	0.000811513	0.00651180	0.119752	0.0105554
m-Xylene		0.0234900	0.00955562	0.0763375	1.55632	0.140107
n-Hexane		0.0338566	0.118631	0.873379	2.21041	0.823330
2,2,4-Trimethylpentane		0.00855214	0.0118567	0.0887765	0.565163	0.0788834
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
Carbon Dioxide		0.240110	10.4756	0.0195454	0.0228678	0.129285
Nitrogen		0.119755	85.0974	0.00532446	0.000867004	0.00918406
Methane		26.2285	4964.10	2.91451	2.15738	5.62355
Ethane		5.67554	306.674	0.705411	1.95357	1.99259
Propane		5.17017	95.9909	0.407523	3.34450	1.08989
Isobutane		1.67814	14.2160	0.0761707	1.35626	0.187305
n-Butane		7.03246	42.8190	0.245338	5.99208	0.606755
Isopentane		5.60119	14.5778	0.0924829	5.21883	0.216916
n-Pentane		9.80041	19.7895	0.129599	9.26931	0.295599
i-Hexane		33.9156	32.3334	0.221541	33.0151	0.479170
Heptane		35.9881	9.45042	0.0690222	35.7071	0.137651
Octane		54.7416	5.19668	0.0392544	54.5813	0.0731256
Nonane		33.2039	1.14727	0.00896351	33.1672	0.0153182
Decanes+		215.713	0.00383415	3.58753E-05	215.713	5.92230E-05
Water		27944.2	57.2579	0.411984	1.32604	1.25122
Benzene		0.0757620	0.0538847	0.000378019	0.0703522	0.00157339
Toluene		4.56336	1.10998	0.00818237	4.46477	0.0340430
Ethylbenzene		0.514075	0.0459988	0.000352407	0.510548	0.00129540
m-Xylene		6.67190	0.541639	0.00413125	6.63522	0.0171945
n-Hexane		9.61635	6.72431	0.0472657	9.42384	0.101043
2,2,4-Trimethylpentane		2.42908	0.672069	0.00480443	2.40951	0.00968093
Mass Fraction		%	%	%	%	%
Carbon Dioxide		0.00183241	0.426634	0.516288	0.00139041	1.45794
Nitrogen		0.000581735	2.20603	0.0895246	3.35551E-05	0.0659242
Methane		0.0729644	73.6954	28.0633	0.0478156	23.1167
Ethane		0.0295933	8.53346	12.7310	0.0811560	15.3526
Propane		0.0395336	3.91700	10.7857	0.203750	12.3147
Isobutane		0.0169136	0.764624	2.65724	0.108907	2.78956
n-Butane		0.0708787	2.30307	8.55870	0.481162	9.03649
Isopentane		0.0700771	0.973309	4.00490	0.520204	4.01019
n-Pentane		0.122614	1.32127	5.61219	0.923949	5.46483
i-Hexane		0.506814	2.57848	11.4588	3.93067	10.5808
Heptane		0.625320	0.876305	4.15113	4.94313	3.53427
Octane		1.08432	0.549325	2.69131	8.61372	2.14037
Nonane		0.738466	0.136166	0.690008	5.87699	0.503417
Decanes+		8.92509	0.000846580	0.00513769	71.1079	0.00362081
Water		87.2970	0.954564	4.45474	0.0330042	5.77591
Benzene		0.00102621	0.00389503	0.0177228	0.00759218	0.0314919
Toluene		0.0729107	0.0946423	0.452503	0.568344	0.803736

Process Streams		Sep Liq	Separator Gas	VRT Gas	VRT Oil	VRU Disch
Composition	**Status:**	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	**From Block:**	Separator	Separator	VRT	VRT	VRU
	To Block:	HT	MIX-100	VRU	6 Oil Tanks	MIX-105
Ethylbenzene		0.00946399	0.00451915	0.0224557	0.0748842	0.0352396
m-Xylene		0.122828	0.0532133	0.263247	0.973214	0.467752
n-Hexane		0.143701	0.536240	2.44473	1.12197	2.23117
2,2,4-Trimethylpentane		0.0481152	0.0710423	0.329395	0.380255	0.283358
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h
Carbon Dioxide		10.5671	461.028	0.860183	1.00640	5.68979
Nitrogen		3.35474	2383.87	0.149156	0.0242877	0.257277
Methane		420.770	79636.4	46.7560	34.6097	90.2156
Ethane		170.658	9221.40	21.2110	58.7420	59.9151
Propane		227.982	4232.78	17.9700	147.478	48.0595
Isobutane		97.5371	826.265	4.42721	78.8288	10.8866
n-Butane		408.742	2488.74	14.2596	348.273	35.2659
Isopentane		404.119	1051.77	6.67253	376.532	15.6502
n-Pentane		707.088	1427.79	9.35043	668.769	21.3271
i-Hexane		2922.69	2786.35	19.0914	2845.08	41.2926
Heptane		3606.08	946.950	6.91616	3577.92	13.7929
Octane		6253.05	593.609	4.48397	6234.75	8.35303
Nonane		4258.57	147.143	1.14962	4253.86	1.96464
Decanes+		51469.0	0.914828	0.00855986	51469.0	0.0141306
Water		503423	1031.52	7.42200	23.8889	22.5411
Benzene		5.91791	4.20903	0.0295278	5.49534	0.122901
Toluene		420.460	102.272	0.753911	411.377	3.13667
Ethylbenzene		54.5767	4.88347	0.0374133	54.2024	0.137527
m-Xylene		708.322	57.5031	0.438594	704.428	1.82546
n-Hexane		828.693	579.470	4.07314	812.103	8.70740
2,2,4-Trimethylpentane		277.470	76.7695	0.548802	275.235	1.10584
Property	**Units**					
Temperature	°F	113.794	113.794	134.514	134.514	100.150
Pressure	psig	131	131*	11*	11	-1.43595
Mole Fraction Vapor	%	0	100	100	0	96.7867
Mole Fraction Light Liquid	%	1.60108	0	0	100	0.000692771
Mole Fraction Heavy Liquid	%	98.3989	0	0	0	3.21260
Phase Mole Fraction	%	100	100	100	100	100
Molecular Weight	lb/lbmol	20.3033	19.0643	30.7861	169.775	31.7998
Mass Density	lb/ft^3	59.5579	0.461836	0.125330	47.5275	0.0730139
Molar Flow	lbmol/h	28403.2	5668.28	5.41182	426.339	12.2725
Mass Flow	lb/h	576678	108062	166.609	72381.6	390.261
Vapor Volumetric Flow	ft^3/h	9682.65	233983	1329.36	1522.94	5345.03
Liquid Volumetric Flow	gpm	1207.19	29171.9	165.739	189.873	666.393
Std Vapor Volumetric Flow	MMSCFD	258.685	51.6245	0.0492888	3.88293	0.111773
Std Liquid Volumetric Flow	sgpm	1193.87	643.428	0.745072	183.035	1.69967
Compressibility		0.00807059	0.977260	0.989875	0.0143949	0.961281
Specific Gravity		0.954932	0.658240	1.06297	0.762040	
API Gravity		14.7642			46.6433	
Enthalpy	Btu/h	-3.47634E+09	-1.90514E+08	-241513	-5.87096E+07	-596103
Mass Enthalpy	Btu/lb	-6028.21	-1763.01	-1449.58	-811.113	-1527.45
Mass Cp	Btu/(lb*°F)	0.916060	0.522213	0.469208	0.507374	0.452373
Ideal Gas CpCv Ratio		1.28566	1.25805	1.16063	1.02956	1.16502
Dynamic Viscosity	cP	0.655475	0.0117126	0.0106532	0.886130	
Kinematic Viscosity	cSt	0.687062	1.58324	5.30644	1.16394	
Thermal Conductivity	Btu/(h*ft*°F)	0.318260	0.0201977	0.0167615	0.0679537	
Surface Tension	lbf/ft	0.00422557?			0.00166467?	
Net Ideal Gas Heating Value	Btu/ft^3	127.623	1023.44	1557.99	8390.32	1566.48
Net Liquid Heating Value	Btu/lb	1440.64	20326.2	19051.7	18598.8	18521.8
Gross Ideal Gas Heating Value	Btu/ft^3	185.968	1131.71	1705.79	8969.15	1714.72
Gross Liquid Heating Value	Btu/lb	2531.15	22481.5	20873.8	19892.6	20291.3

Process Streams		Water
Composition	**Status:**	**Solved**
Phase: **Total**	**From Block:**	**--**
	To Block:	**MIX-106**
Mole Fraction		**%**
Carbon Dioxide		0*
Nitrogen		0*
Methane		0*
Ethane		0*
Propane		0*
Isobutane		0*
n-Butane		0*
Isopentane		0*
n-Pentane		0*
i-Hexane		0*
Heptane		0*
Octane		0*
Nonane		0*
Decanes+		0*
Water		100*
Benzene		0*
Toluene		0*
Ethylbenzene		0*
m-Xylene		0*
n-Hexane		0*
2,2,4-Trimethylpentane		0*
Molar Flow		**lbmol/h**
Carbon Dioxide		0*
Nitrogen		0*
Methane		0*
Ethane		0*
Propane		0*
Isobutane		0*
n-Butane		0*
Isopentane		0*
n-Pentane		0*
i-Hexane		0*
Heptane		0*
Octane		0*
Nonane		0*
Decanes+		0*
Water		28001.5*
Benzene		0*
Toluene		0*
Ethylbenzene		0*
m-Xylene		0*
n-Hexane		0*
2,2,4-Trimethylpentane		0*
Mass Fraction		**%**
Carbon Dioxide		0*
Nitrogen		0*
Methane		0*
Ethane		0*
Propane		0*
Isobutane		0*
n-Butane		0*
Isopentane		0*
n-Pentane		0*
i-Hexane		0*
Heptane		0*
Octane		0*
Nonane		0*
Decanes+		0*
Water		100*
Benzene		0*
Toluene		0*

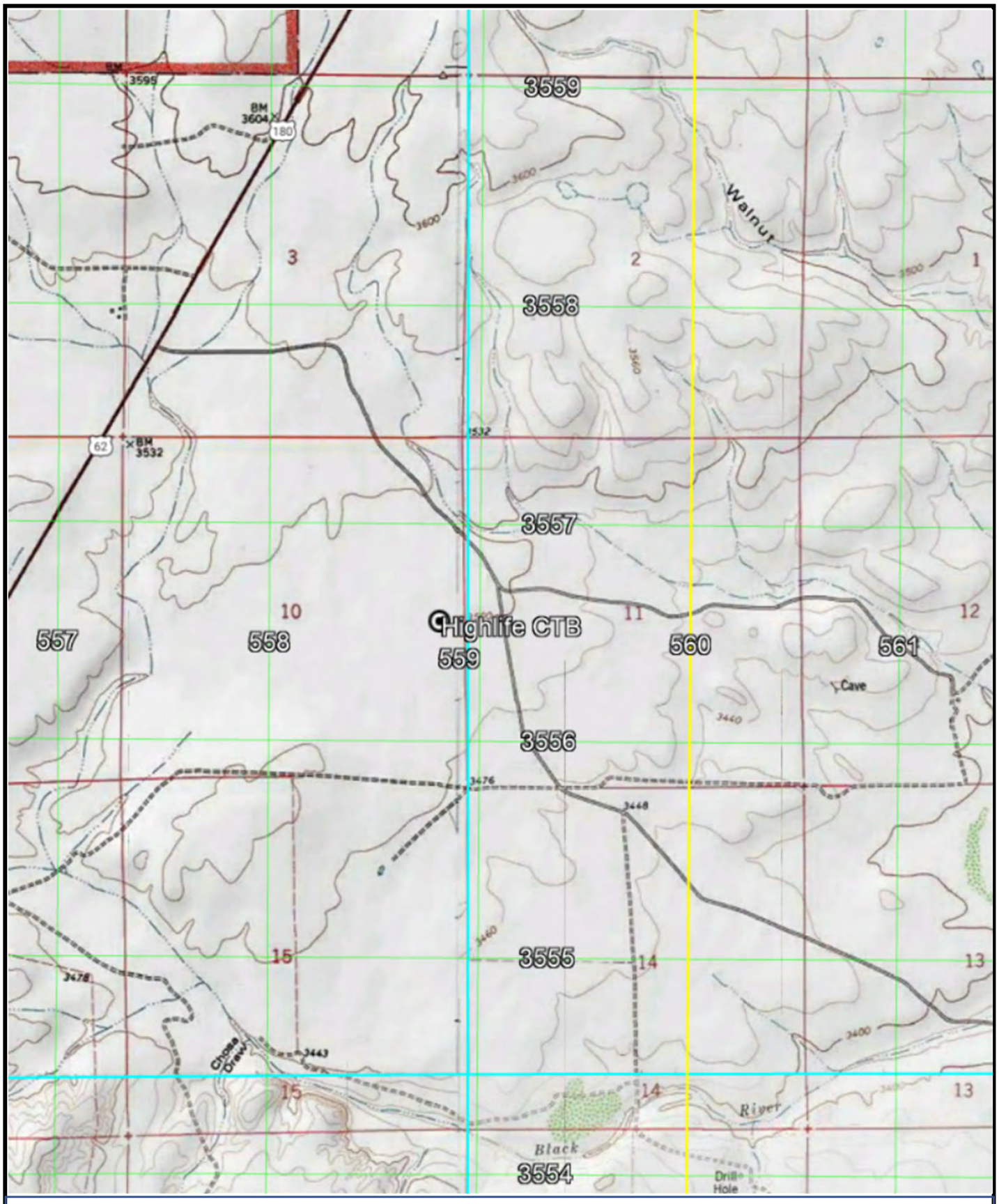
Process Streams		Water
Composition	**Status:**	**Solved**
Phase: **Total**	**From Block:**	**--**
	To Block:	**MIX-106**
Ethylbenzene		0*
m-Xylene		0*
n-Hexane		0*
2,2,4-Trimethylpentane		0*
Mass Flow		**lb/h**
Carbon Dioxide		0*
Nitrogen		0*
Methane		0*
Ethane		0*
Propane		0*
Isobutane		0*
n-Butane		0*
Isopentane		0*
n-Pentane		0*
i-Hexane		0*
Heptane		0*
Octane		0*
Nonane		0*
Decanes+		0*
Water		504454*
Benzene		0*
Toluene		0*
Ethylbenzene		0*
m-Xylene		0*
n-Hexane		0*
2,2,4-Trimethylpentane		0*
Property	**Units**	
Temperature	°F	119*
Pressure	psig	131*
Mole Fraction Vapor	%	0
Mole Fraction Light Liquid	%	100
Mole Fraction Heavy Liquid	%	0
Phase Mole Fraction	%	100
Molecular Weight	lb/lbmol	18.0153
Mass Density	lb/ft^3	61.6969
Molar Flow	lbmol/h	28001.5
Mass Flow	lb/h	504454
Vapor Volumetric Flow	ft^3/h	8176.33
Liquid Volumetric Flow	gpm	1019.39
Std Vapor Volumetric Flow	MMSCFD	255.027
Std Liquid Volumetric Flow	sgpm	1008.44*
Compressibility		0.00685064
Specific Gravity		0.989227
API Gravity		9.98236
Enthalpy	Btu/h	-3.42012E+09
Mass Enthalpy	Btu/lb	-6779.84
Mass Cp	Btu/(lb*°F)	0.977067
Ideal Gas CpCv Ratio		1.32741
Dynamic Viscosity	cP	0.577275
Kinematic Viscosity	cSt	0.584116
Thermal Conductivity	Btu/(h*ft*°F)	0.367250
Surface Tension	lbf/ft	0.00467017
Net Ideal Gas Heating Value	Btu/ft^3	0
Net Liquid Heating Value	Btu/lb	-1059.76
Gross Ideal Gas Heating Value	Btu/ft^3	50.3100
Gross Liquid Heating Value	Btu/lb	0

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	



0 1,000 2,000 4,000 6,000 8,000 Feet

N W E S

CDH Consulting, LLC	Topographic Map September 2026	Tap Rock Operating, LLC High Life Upslope Fed Com CTB

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☒ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**
This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

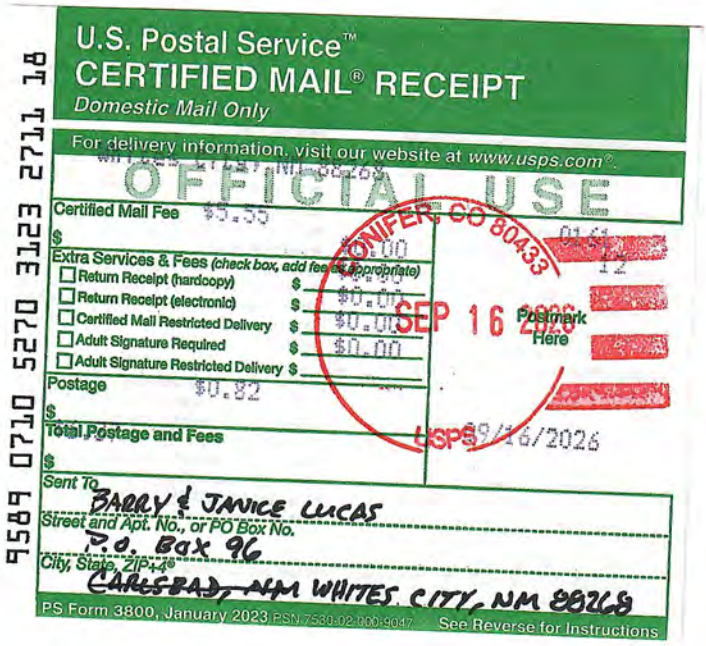
Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☒ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
2. ☒ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
3. ☒ A copy of the property tax record (20.2.72.203.B NMAC).
4. ☒ A sample of the letters sent to the owners of record.
5. ☒ A sample of the letters sent to counties, municipalities, and Indian tribes.
6. ☒ A sample of the public notice posted and a verification of the local postings.
7. ☒ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. ☒ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
9. ☒ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
10. ☒ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
11. ☒ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee $5.55
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $0.00
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

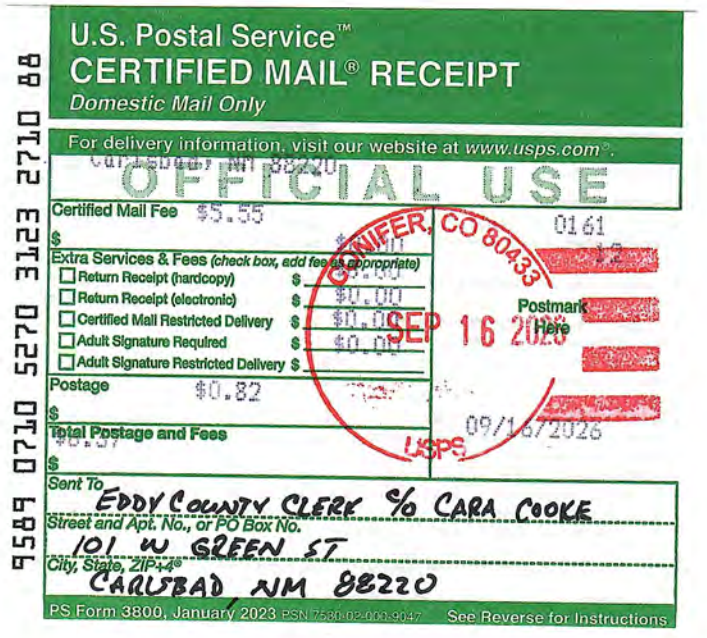
Postage $0.82
Total Postage and Fees $6.37

Sent To: BARRY & JANICE LUCAS
Street and Apt. No., or PO Box No.: P.O. Box 96
City, State, ZIP+4®: CARLSBAD, NM WHITES CITY, NM 88268

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

JONIFER, CO 80433 SEP 16 2026 Postmark Here USPS 09/16/2026

9589 0710 5270 3123 2711 18



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee $5.55
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $0.00
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

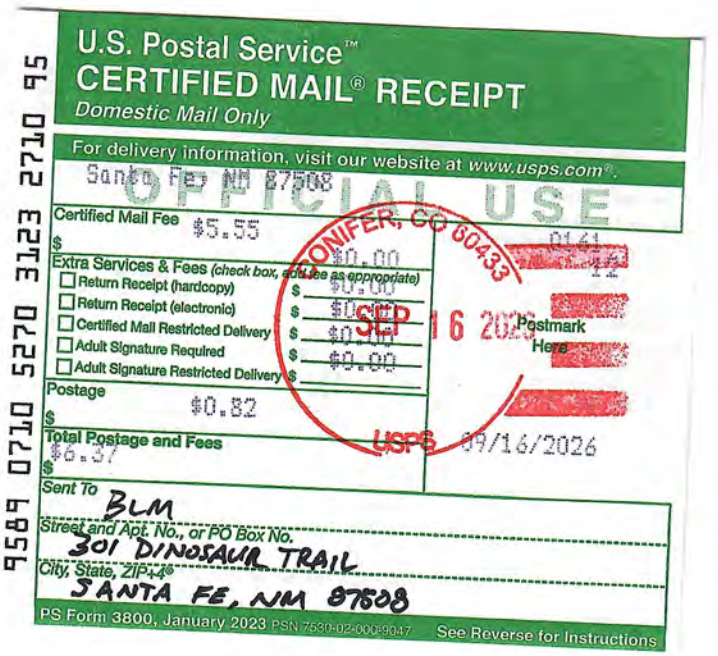
Postage $0.82
Total Postage and Fees $6.37

Sent To: EDDY COUNTY CLERK % CARA COOKE
Street and Apt. No., or PO Box No.: 101 W GREEN ST
City, State, ZIP+4®: CARLSBAD, NM 88220

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

JONIFER, CO 80433 SEP 16 2026 Postmark Here USPS 09/16/2026

9589 0710 5270 3123 2710 88



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee $5.55
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $0.00
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

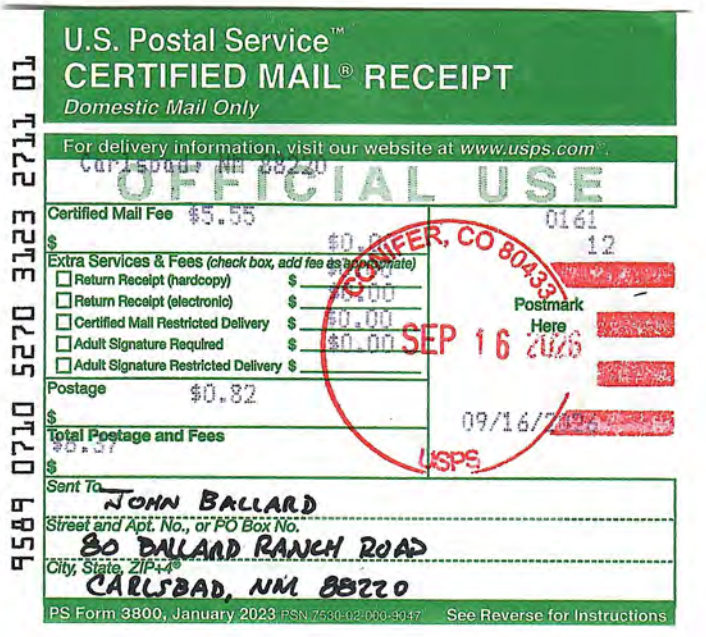
Postage $0.82
Total Postage and Fees $6.37

Sent To: BLM
Street and Apt. No., or PO Box No.: 301 DINOSAUR TRAIL
City, State, ZIP+4®: SANTA FE, NM 87508

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

JONIFER, CO 80433 SEP 16 2026 Postmark Here USPS 09/16/2026

9589 0710 5270 3123 2710 95



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee $5.55
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $0.00
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.82
Total Postage and Fees $6.37

Sent To: JOHN BALLARD
Street and Apt. No., or PO Box No.: 80 BALLARD RANCH ROAD
City, State, ZIP+4®: CARLSBAD, NM 88220

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

JONIFER, CO 80433 SEP 16 2026 Postmark Here USPS

9589 0710 5270 3123 2711 01

General Posting of Notices – Certification

I, **Bill Ramsey**, the undersigned, certify that on September 21, 2026, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in **Carlsbad & Whites City** of **Eddy** County, State of New Mexico on the following dates:

1. Facility entrance September 21, 2026
2. US Post Office September 21, 2026
   23 Carlsbad Cavern Hwy
   Whites City, NM 88268
3. Carlsbad Municipal Building September 21, 2026
   101 N Halagueno St.
   Carlsbad, NM 88220
4. Carlsbad Public Library September 21, 2026
   101 S Halagueno St.
   Carlsbad, NM 88220

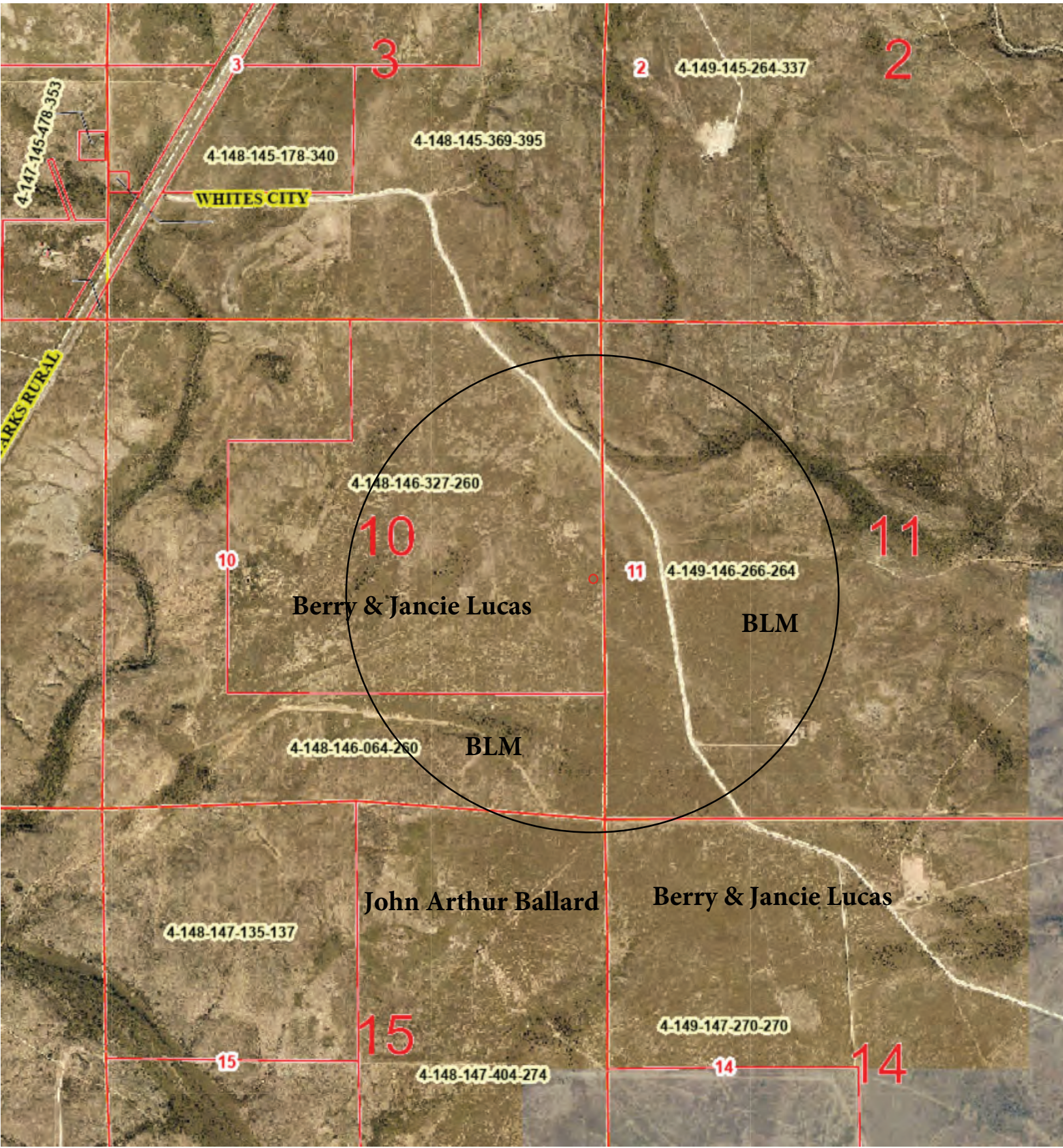
Signed this 24 day of September, 2026.

Signature

9/24/2026
Date

Bill Ramsey
Printed Name

Sr. Environmental and Regulatory Specialist
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}


3
3
2
4-149-145-264-337
2
4-147-145-478-353
4-148-145-178-340
4-148-145-369-395
WHITES CITY
ARKS RURAL
4-148-146-327-260
10
10
11
4-149-146-266-264
11
Berry & Jancie Lucas
BLM
4-148-146-064-260
BLM
John Arthur Ballard
Berry & Jancie Lucas
4-148-147-135-137
15
4-149-147-270-270
15
4-148-147-404-274
14
14

Property Record Card

Eddy Assessor

LUCAS, BERRY & JANICE (JT)

PO BOX 96
WHITE CITY, NM 88268-0096

Account: R037505

Tax Area: CO_NR - CARLSBAD-OUT (Nonresidential)

Acres: 320.000

Parcel: 4-148-146-327-260

Situs Address:
1212 NATIONAL PARKS HIGHWAY RURAL
CARLSBAD, 88220

Value Summary

Value By:	Market	Override
Land (1)	$720	N/A
Total	**$720**	**$720**

Legal Description

Quarter: NE S: 10 T: 25S R: 25E Quarter: NW S: 10 T: 25S R: 25E Quarter: SW S: 10 T: 25S R: 25E Quarter: SE S: 10 T: 25S R: 25E NESW, NE, N2SE, SENW

Public Remarks

Entry Date	Model	Remark
12/23/2008		BOOK D 762 PG 917
07/15/2024		AG APPLICATION ON FILE - LIVESTOCK ACCT # P075610

Land Occurrence 1

Property Code	0400 - AGRICULTURAL LAND	Land Code	121_2_25 - Grazing Land B - 2.25
Description	AGRICULTURAL LAND	Measure	A - Acres

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
0400	AGRICULTURAL LAND	$720	$240	NA	NA
Total		**$720**	**$240**	**NA**	**NA**

Property Record Card

Eddy Assessor

LUCAS, BERRY & JANICE (JT)

PO BOX 96
WHITE CITY, NM 88268-0096

Account: R091854

Tax Area: CO_NR - CARLSBAD-OUT (Nonresidential)

Acres: 480.000

Parcel: 4-149-147-270-270

Situs Address:
E OF 1212 NATIONAL PARKS HIGHWAY RURAL
CARLSBAD, 88220

Value Summary

Value By:	Market	Override
Land (1)	$1,080	N/A
Total	**$1,080**	**$1,080**

Legal Description

Quarter: NE S: 14 T: 25S R: 25E Quarter: NW S: 14 T: 25S R: 25E Quarter: SE S: 14 T: 25S R: 25E NW, E2

Public Remarks

Entry Date	Model	Remark
12/23/2008		BOOK D 762 PG 917
07/15/2024		AG APPLICATION ON FILE - LIVESTOCK ACCT # P075610

Land Occurrence 1

Property Code	0400 - AGRICULTURAL LAND	Land Code	121_2_25 - Grazing Land B - 2.25
Description	AGRICULTURAL LAND	Measure	A - Acres

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
0400	AGRICULTURAL LAND	$1,080	$360	NA	NA
Total		**$1,080**	**$360**	**NA**	**NA**

Property Record Card

Eddy Assessor

BUREAU OF LAND MANAGEMENT

UNITED STATES OF AMERICA

Account: R091826

Tax Area: CO_NR - CARLSBAD-OUT (Nonresidential)

Acres: 640.000

Parcel: 4-149-146-266-264

Situs Address:
WHITES CITY ROAD
CARLSBAD, 88220

Value Summary

Value By:	Market	Override
Land (1)	$1,440	N/A
Total	**$1,440**	**$1,440**

Legal Description

Quarter: NE S: 11 T: 25S R: 25E Quarter: NW S: 11 T: 25S R: 25E Quarter: SW S: 11 T: 25S R: 25E Quarter: SE S: 11 T: 25S R: 25E ALL EXEMPT

Public Remarks

Entry Date	Model	Remark

Land Occurrence 1

Property Code	9400 - EXEMPT AGRICULTURAL LAND	Land Code	138_2_25 - Grazing B Federal - 2.25
Description	AGRICULTURAL LAND	Measure	A - Acres

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
9400	EXEMPT AGRICULTURAL LAND	$1,440	$480	NA	NA
Total		**$1,440**	**$480**	**NA**	**NA**

Property Record Card

Eddy Assessor

BUREAU OF LAND MANAGEMENT

UNITED STATES OF AMERICA

Account: R075070

Tax Area: CO_NR - CARLSBAD-OUT (Nonresidential)

Acres: 320.000

Parcel: 4-148-146-064-260

Situs Address:
E OF R1375 NATIONAL PARKS HIGHWAY RURAL
CARLSBAD, 88220

Value Summary

Value By:	Market	Override
Land (1)	$720	N/A
Total	**$720**	**$720**

Legal Description

Quarter: NW S: 10 T: 25S R: 25E Quarter: SW S: 10 T: 25S R: 25E Quarter: SE S: 10 T: 25S R: 25E W2W2, NENW, S2SE, SESW EXEMPT

Public Remarks

Entry Date	Model	Remark

Land Occurrence 1

Property Code	9400 - EXEMPT AGRICULTURAL LAND	Land Code	138_2_25 - Grazing B Federal - 2.25
Description	AGRICULTURAL LAND	Measure	A - Acres

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
9400	EXEMPT AGRICULTURAL LAND	$720	$240	NA	NA
Total		**$720**	**$240**	**NA**	**NA**

Property Record Card

Eddy Assessor

BALLARD, JOHN ARTHUR
80 BALLARD RANCH RD
CARLSBAD, NM 88220

Account: R091858
Tax Area: CO_NR - CARLSBAD-OUT (Nonresidential)
Acres: 320.000

Parcel: 4-148-147-404-274
Situs Address:
E OF 1212 NATIONAL PARKS HIGHWAY
CARLSBAD, 88220

Value Summary

Value By:	Market	Override
Land (1)	$720	N/A
Total	**$720**	**$720**

Legal Description

Quarter: NE S: 15 T: 25S R: 25E Quarter: SE S: 15 T: 25S R: 25E E2

Public Remarks

Entry Date	Model	Remark
		BOOK 115 PG 1195

Land Occurrence 1

Property Code	0400 - AGRICULTURAL LAND	Land Code	121_2_25 - Grazing Land B - 2.25
Description	AGRICULTURAL LAND	Measure	A - Acres

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
0400	AGRICULTURAL LAND	$720	$240	NA	NA
Total		**$720**	**$240**	**NA**	**NA**

September 16, 2026

John Arthur Ballard
80 Ballard Ranch Road
Carlsbad, NM 88220

CERTIFIED MAIL – 9589 0710 5270 3123 2711 01

Subject: Air Permit Application Notice

Dear Mr. Ballard,

On behalf of Tap Rock Operating, LLC (Tap Rock), CDH Consulting, LLC (CDH) is providing this notice of air permit application. Comments can be submitted via methods provided in the attached Notice.

Please do not hesitate to contact me at (303) 594-7951 or cmartinez@cdhconsult.com if you have any questions or require additional information.

Sincerely,

CDH CONSULTING, LLC

Chris Martinez
Senior Air Quality Engineer

Attachment – Air Permit Notice



NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_X)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

September 16, 2026

Berry and Janice Lucas
P.O. Box 96,
Whites City, NM 88268

CERTIFIED MAIL – 9589 0710 5270 3123 2711 18

Subject: Air Permit Application Notice

Dear Berry & Janice,

On behalf of Tap Rock Operating, LLC (Tap Rock), CDH Consulting, LLC (CDH) is providing this notice of air permit application. Comments can be submitted via methods provided in the attached Notice.

Please do not hesitate to contact me at (303) 594-7951 or cmartinez@cdhconsult.com if you have any questions or require additional information.

Sincerely,

CDH CONSULTING, LLC

Chris Martinez
Senior Air Quality Engineer

Attachment – Air Permit Notice



NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_X)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

September 16, 2026

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508

CERTIFIED MAIL – 9589 0710 5270 3123 2710 95

Subject: Air Permit Application Notice

To Whom it May Concern,

On behalf of Tap Rock Operating, LLC (Tap Rock), CDH Consulting, LLC (CDH) is providing this notice of air permit application. Comments can be submitted via methods provided in the attached Notice.

Please do not hesitate to contact me at (303) 594-7951 or cmartinez@cdhconsult.com if you have any questions or require additional information.

Sincerely,

CDH CONSULTING, LLC

Chris Martinez
Senior Air Quality Engineer

Attachment – Air Permit Notice



NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_X)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

September 16, 2026

Eddy County Clerk
c/o Cara Cooke
101 W Green Street
Carlsbad, NM 88220

CERTIFIED MAIL – 9589 0710 5270 3123 2710 88

Subject: Air Permit Application Notice

Dear Eddy County Clerk,

On behalf of Tap Rock Operating, LLC (Tap Rock), CDH Consulting, LLC (CDH) is providing this notice of air permit application. Comments can be submitted via methods provided in the attached Notice.

Please do not hesitate to contact me at (303) 594-7951 or cmartinez@cdhconsult.com if you have any questions or require additional information.

Sincerely,

CDH CONSULTING, LLC

Chris Martinez
Senior Air Quality Engineer

Attachment – Air Permit Notice


U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
For delivery information, visit our website at www.usps.com
OFFICIAL USE
Certified Mail Fee $5.55
Extra Services & Fees (check box, add fee as appropriate)
Return Receipt (hardcopy) $
Return Receipt (electronic) $ $0.00
Certified Mail Restricted Delivery $ $0.00
Adult Signature Required $ $0.00
Adult Signature Restricted Delivery $
Postage $0.82
Total Postage and Fees
Sent To EDDY COUNTY CLERK % CARA COOKE
Street and Apt. No., or PO Box No. 101 W GREEN ST
City, State, ZIP+4® CARLSBAD NM 88220
PS Form 3800, January 2023 See Reverse for Instructions
JENNIFER, CO 80433
SEP 16 2026
USPS
09/17/2026
01 61
Postmark Here
9589 0710 5270 3123 2710 88

NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_X)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

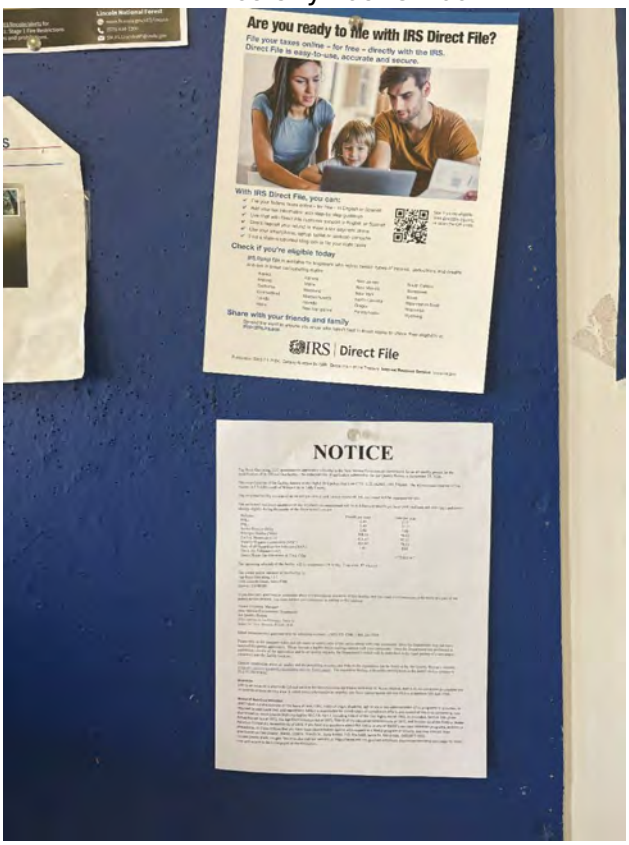
Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

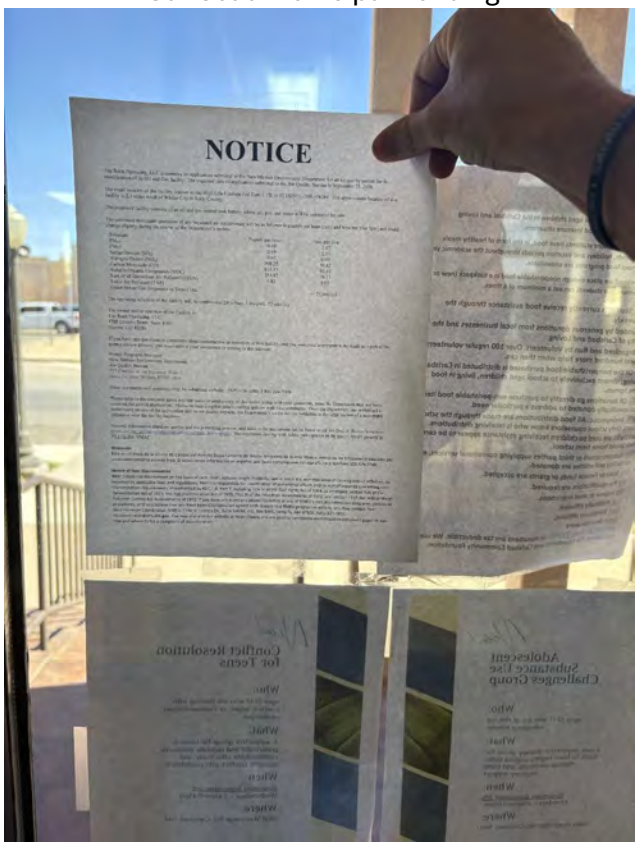
Facility Entrance



Whites City Post Office



Carlsbad Municipal Building



Carlsbad Public Library



Public Service Announcement (September 2026)

Tap Rock Operating, LLC is applying for an air permit with the New Mexico Environmental Department's Air Quality Bureau. The permit is for the modification of the High Life Upslope central tank battery located approximately 2.3 miles south of Whites City, in Eddy County. Notices required by the Bureau have been posted at the following locations.

The Carlsbad Municipal Building,

The Carlsbad Public Library, and

The U.S. Post Office in Whites City.

Comments may be directed to the New Mexico Environmental Department via telephone at (505) 476-4300 or (800) 224-7009.

Submittal of Public Service Announcement – Certification

I, **Bill Ramsey**, the undersigned, certify that on September 15, 2026, a public service announcement was submitted to KATK 92.1 FM that serves the Carlsbad and Whites City area of Eddy County, New Mexico, in which the source is or is proposed to be located and that KATK 92.1 FM responded that it would air the announcement.

Signed this 24 day of September, 2026.

Signature

9/24/2026
Date

Bill Ramsey
Printed Name

Sr. Environmental and Regulatory Specialist
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Affidavit of Publication

129070

State of New Mexico

County of Eddy:

Adrian Hedden

being duly sworn, sayes that he is the **Publisher**

of the Carlsbad Current Argus, a weekly newspaper of general circulation, published in English at Carlsbad, said county and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said Carlsbad Current Argus, a weekly newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	September 23, 2026
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	
Eighth Publication	

Subscribed and sworn before me this

23rd day of September 2026

STATE OF NEW MEXICO
NOTARY PUBLIC
Latisha Romine
Commission Number 1076338
Commission Expires 5-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_x)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca

Eighth Publication

Subscribed and sworn before me this

23rd day of September 2026

STATE OF NEW MEXICO
NOTARY PUBLIC
Latisha Romine
Commission Number 1076338
Commission Expires 5-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.
129070-Published in Carlsbad Current Argus Sept. 23, 2026.

Affidavit of Publication

State of New Mexico

County of Eddy:

Adrian Hedden

being duly sworn, sayes that he is the **Publisher**

of the Carlsbad Current Argus, a weekly newspaper of general circulation, published in English at Carlsbad, said county and state, and that the hereto attached

Display Ad

was published in a regular and entire issue of the said Carlsbad Current Argus, a weekly newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	September 23, 2026
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	
Eighth Publication	

Subscribed and sworn before me this

23rd day of September 2026

STATE OF NEW MEXICO
NOTARY PUBLIC
Latisha Romine
Commission Number 1076338
Commission Expires 5-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

NOTICE OF AIR QUALITY PERMIT APPLICATION

Tap Rock Operating, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Oil and Gas facility. The expected date of application submittal to the Air Quality Bureau is September 25, 2026.

The exact location of the facility, known as the High Life Upslope Fed Com CTB, is 32.142922, -104.376364. The approximate location of this facility is 2.3 miles south of Whites City in Eddy County.

The proposed facility consists of an oil and gas central tank battery where oil, gas, and water will be separated for sale.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
PM_{10}	0.49	2.17
$PM_{2.5}$	0.49	2.17
Sulfur Dioxide (SO_2)	0.02	0.09
Nitrogen Oxides (NO_x)	308.35	50.62
Carbon Monoxide (CO)	615.57	93.57
Volatile Organic Compounds (VOC)	353.82	78.31
Sum of all Hazardous Air Pollutant (HAPs)	1.83	8.01
Toxic Air Pollutant (TAP)	-	-
Green House Gas Emissions as Total CO_2e	-	< 75,000 mT

The operating schedule of the facility will be continuous (24 hr/day, 7 days/wk, 52 wks/yr)

The owner and/or operator of the Facility is:
Tap Rock Operating, LLC
1700 Lincoln Street, Suite 4700
Denver, CO 80203

If you have any questions or comments about construction or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Eighth Publication

Subscribed and sworn before me this

23rd day of September 2026

STATE OF NEW MEXICO
NOTARY PUBLIC
Latisha Romine
Commission Number 1076338
Commission Expires 5-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

tion or operation of this facility, and you want your comments to be made as a part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1,
Santa Fe, New Mexico, 87505-1816

Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009

Please refer to the company name and site name or send a copy of this notice along with your comments, since the Department may not have received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section -home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7748.

Notice of Non-Discrimination
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

Section 10

Written Description of the Routine Operations of the Facility

---

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

Facility Routine Operations:

Well fluids are routed to individual initial separators where gas and liquids are separated. Liquids from the initial separators flow to heater treaters (HT 1-3). Oil from the heater treaters enters the vapor recovery towers (VRTs). Gas from the heater treaters joins the gas from the initial separators and is sent to the sales pipeline. Gas is sent to flare during short pipeline downtime periods (FL-2 (HP)). Prior to the sales point, a side stream of gas is removed and sent to gas lift compressors (ENG 1-2). The compressors direct the gas down hole to assist in bringing fluids to the surface. The compressor engines are gas fired and controlled with catalytic converters. Water from the heater treaters flows to atmospheric storage tanks (PWTK 1-4). Vapors from the water storage tanks are captured by the tank blower and routed to the VRU and then to the sales pipeline. When the blower is down for maintenance, the vapors are controlled by the low-pressure flare (FL-1 (BDT)). When enough water has accumulated in the tanks it is piped off-site for disposal. A small amount of truck loading is included for operational flexibility (PWLOAD-1, HR-1). Gas from the VRTs is routed to a Vapor Recovery Unit (VRU) and to the sales line. The oil from the VRTs is routed to the atmospheric oil storage tanks (TK 1-6). Vapors from the oil storage tanks are captured by the tank blower and routed to the VRU and then to the sales pipeline. When the blower is down for maintenance, the vapors are controlled by the flare (FL-1 (BDT)). When enough oil has accumulated in the tanks it is piped off-site for sale via LACT. A small amount of truck loading is included for operational flexibility (OILLOAD-1, HR-1). During periods of VRU downtime, the vapor stream is controlled by the flare (FL-1(VDT)). The facility utilizes four electrical generators (GEN-1, GEN 2-5) to provide power to the site.

Section 11

Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe)**:**

High Life Upslope Fed Com CTB – no other facilities within 1 mile.

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☒ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☒ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☒ **Yes** ☐ **No**

C. Make a determination:

☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☒ **a minor PSD source before and after this modification (if so, delete C and D below).**
- ☐ **a major PSD source before this modification. This modification will make this a PSD minor source.**
- ☐ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
- ☐ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
- ☐ **a new PSD Major Source after this modification.**

B. **This facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions** for this modification are **not significant. The "project" emissions listed below only result from changes described in this permit application, thus no emissions from other apply to this facility. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:**

a. **NOx: 50.62 TPY**
b. **CO: 93.57 TPY**
c. **VOC: 78.31 TPY**
d. **SOx: 0.09 TPY**
e. **PM: -- TPY**
f. **PM10: 2.17 TPY**
g. **PM2.5: 2.17 TPY**
h. **Fluorides: -- TPY**
i. **Lead: -- TPY**
j. **Sulfur compounds (listed in Table 2): -- TPY**
k. **GHG: <75,000 TPY**

Section 13

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:
For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply**. **For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:
See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:
If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example,** if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:
For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:
All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

State Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	20.2.3 NMAC states maximum allowable concentrations of various regulated air pollutants in the atmosphere. This application includes a demonstration for meeting the NAAQS requirements.
20.2.7 NMAC	Excess Emissions	Yes	Facility	20.2.7 NMAC states procedures and requirements for notifying the NMED of excess emissions during malfunction, startup, or scheduled maintenance activities.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	Facility is not located in an area requiring a mitigation plan per 40 CFR Part 51.930
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does have gas-fired heaters, but they are < 1,000,000 MMBTU per unit.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No	N/A	This facility does not have any oil burning equipment.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	This facility is not a natural gas processing plant.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	**These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.**
20.2.38 NMAC	Hydrocarbon Storage Facility	Yes	TK 1-6	This facility's total hydrocarbon storage capacity is greater than 65,000 gallons. The facility also lies within AQCR 155. Subparts 112 and 113 apply.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This facility is not a sulfur recovery plant.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	All New ENG 1-2, FUG-1, GEN-1, 3-5 are not applicable since <500 hp	This regulation establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for oil and gas production, processing, compression, and transmission sources. 20.2.50 NMAC subparts below: Include the construction status of applicable units as "New", "Existing", "Relocation of Existing", or "Reconstructed" as defined by this Part in your justification: Check the box for the subparts that are applicable: ☒ 113 – Engines and Turbines ☒ 114 – Compressor Seals ☐ 115 – Control Devices and Closed Vent Systems ☒ 116 – Equipment Leaks and Fugitive Emissions ☐ 117 – Natural Gas Well Liquid Unloading ☐ 118 – Glycol Dehydrators ☐ 119 – Heaters ☐ 120 – Hydrocarbon Liquid Transfers ☐ 121 – Pig Launching and Receiving ☐ 122 – Pneumatic Controllers and Pumps ☐ 123 – Storage Vessels ☐ 124 – Well Workovers ☐ 125 – Small Business Facilities ☐ 126 – Produced Water Management Unit ☒ 127 – Flowback Vessels and Preproduction Operations

State Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	HT 1-3, ENG 1-2, GEN-1, GEN 3-5, FL-LP, FL-HP	These units are stationary combustion equipment and are therefore subject to the requirements of 20.2.61.109 NMAC.
20.2.70 NMAC	Operating Permits	No	N/A	This facility is a minor source that does not have the potential to emit (PTE) 100 tpy or more of any regulated air pollutant. This facility is not a major source of HAPs.
20.2.71 NMAC	Operating Permit Fees	No	N/A	This facility is not subject to 20.2.70 NMAC because it is a minor source facility.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility has a potential emission rate (PER) greater than 10 pph or 25 tpy for some regulated air contaminants.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The facility is subject to Emissions Inventory Reporting because it is permitted under 20.2.72 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	The facility is not a PSD major source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation applies if you are submitting an application pursuant to 20.2.72 NMAC.
20.2.77 NMAC	New Source Performance	Yes	FUG-1, ENG 1-2, GEN-1, GEN 3-5	This is a stationary source which is subject to the requirements of 40 CFR Part 60. FUG-1: Subject to Subpart OOOOb ENG 1-2, GEN 1-6: Subject to Subpart JJJJ
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This facility does not emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	The is a minor source facility located in an attainment area.
20.2.80 NMAC	Stack Heights	Yes	HT 1-3, ENG 1-2, GEN-1, GEN 3-5, FL-LP, FL-HP	Stacks do not exceed GEP height and will be evaluated in the NSR permit.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	ENG 1-2, GEN-1, GEN 3-5	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. ENG 1-2, GEN-1, GEN 3-5: Subject to Subpart ZZZZ

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	The facility and units within the facility emit criteria pollutants that are subject to the NAAQS. The facility is subject to 20.2.72 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	FUG-1, ENG 1-2, GEN-1, GEN 3-5	Applies if any other Subpart in 40 CFR 60 applies. FUG-1: Subject to Subpart OOOOb ENG 1-2, GEN-1, GEN 3-5: Subject to Subpart JJJJ
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No	N/A	This facility does not have any electric utility steam generating units.
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No	N/A	This facility does not have any electric utility steam generating units.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	This facility does not have any electric utility steam generating units.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for **Storage Vessels for Petroleum Liquids** for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** to July 23, 1984	No	N/A	The facility was not constructed during the applicable timeframe.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984	No	N/A	Does not apply to vessels with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No	N/A	The facility does not have any gas turbines.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No	N/A	The facility is not a gas plant.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	No	N/A	The facility is not a gas processing plant.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	Facility commenced construction after September 18th, 2015, and therefore this subpart does not apply.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 and before December 6, 2022,	No	N/A	Facility commenced construction after December 6th, 2022, and therefore this subpart does not apply.
NSPS 40 CFR Part 60 Subpart OOOOb	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced **After** December 6, 2022	Yes	FUG-1	This subpart applies to the fugitive emissions at this facility due to the construction of the facility occurring after December 6, 2022.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	No applicable units at this facility.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	ENG 1-2, GEN-1, GEN 3-5	Due to the engine size and date of manufacture, these units are subject to this subpart.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	No applicable units at this facility.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	No applicable units at this facility.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	Facility is not a MSW landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	No subparts of 40 CFR 61 apply.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No	N/A	The facility does not process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, or incinerate or dry wastewater treatment plant sludge.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No	N/A	No applicable units at this facility.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	ENG 1-2, GEN-1, GEN 3-5	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63.760 Subpart HH	**Oil and Natural Gas Production Facilities**	No	N/A	The facility is not subject to this subpart as there are no glycol dehydrators.
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	N/A	This subpart does not apply because the facility is not a major source or HAPs nor a natural gas transmission and storage facilities.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	Facility is not a major source of HAPs.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	No applicable units at this facility.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	ENG 1-2, GEN-1, GEN 3-5	These units are applicable to the subpart and will demonstrate compliance by complying with 40 CFR 60 Subpart JJJJ.
40 CFR 64	**Compliance Assurance Monitoring**	No	N/A	Facility is not a TV major source.
40 CFR 68	**Chemical Accident Prevention**	No	N/A	The facility does not have more than the threshold quantity of any of the regulated substances as determined under §68.115.
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	No	N/A	The facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No	N/A	The facility does not generate commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No	N/A	The facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No	N/A	The facility does not generate commercial electric power or electric power for sale.
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	The facility does not use refrigerants.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☒ **NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☐ **Title V** (20.2.70 NMAC)**, NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: www.env.nm.gov/air-quality/permitting-section-procedures-and-guidance/. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

This facility does not have any alternative operating scenarios.

Section 16

Air Dispersion Modeling

1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. **Note:** Neither modeling nor a modeling waiver is required for VOC emissions.	X
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

☐ See attached, approved modeling **waiver for all** pollutants from the facility.

☐ See attached, approved modeling **waiver for some** pollutants from the facility.

☒ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.

☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.

☐ No modeling is required.

Universal Application 4

Air Dispersion Modeling Report

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

16-A: Identification

1	Name of facility:	High Life Upslope Fed Com CTB
2	Name of company:	Tap Rock Operating, LLC
3	Current Permit number:	10432M1R4
4	Name of applicant's modeler:	Chris Martinez – CDH Consulting, LLC
5	Phone number of modeler:	(303) 594-7951
6	E-mail of modeler:	cmartinez@cdhconsult.com

16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes☐	No☒
2	Why is the modeling being done?	Other (describe below)	
3	Describe the permit changes relevant to the modeling.		
	Significant modification to NSR facility. Increased emissions/sources, removed sources		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes☐	No☒

7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	
8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2	03/16/1988	
	SO2	03/16/1988	
	PM10	02/20/1979	
	PM2.5	11/13/2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	Carlsbad Caverns NP: 2.4 km Guadalupe Mountains NP: 38.0 km		
10	Is the facility located in a non-attainment area? If so describe below	Yes☐	No☒
11	Describe any special modeling requirements, such as streamline permit requirements.		
	None		

16-C: Modeling History of Facility

Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers).

	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
1	CO	May 2025	9/19/2025	NSR# 10432, AI# 41218
	NO_2	May 2025	9/19/2025	NSR# 10432, AI# 41218
	SO_2	None		
	H_2S	None		
	PM2.5	May 2025	9/19/2025	NSR# 10432, AI# 41218
	PM10	May 2025	9/19/2025	NSR# 10432, AI# 41218
	Lead	None		
	Ozone (PSD only)	None		
	NM Toxic Air Pollutants (20.2.72.402 NMAC)	None		

16-D: Modeling performed for this application

For each pollutant, indicate the modeling performed and submitted with this application.
Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.

	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
1	CO	☒	☐	☐	☐	☐
	NO_2	☒	☒	☐	☐	☐
	SO_2	☐	☐	☐	☐	☒
	H_2S	☐	☐	☐	☐	☒
	PM2.5	☒	☒	☐	☐	☐
	PM10	☒	☒	☐	☐	☐
	Lead	☐	☐	☐	☐	☒
	Ozone	☐	☐	☐	☐	☒
	State air toxic(s) (20.2.72.402 NMAC)	☐	☐	☐	☐	☒

16-E: New Mexico toxic air pollutants modeling

1 List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. NA

2 List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.

Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor
NA					

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes☐	No☒
	AERMOD Version 24142 was used since Lakes Environmental has not updated their software to date.		

16-G: Surrounding source modeling

1	Date of surrounding source retrieval	September 16, 2026

2 — If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.

AQB Source ID	Description of Corrections
1767E1	Coordinates moved to facility location in surrounding source file

16-H: Building and structure downwash

1	How many buildings are present at the facility?	1 – tank farm modeled as building	
2	How many above ground storage tanks are present at the facility?	10 – modeled as building	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes☒	No☐
4	Building comments	Tank farm was modeled as a solid building.	

16-I: Receptors and modeled property boundary

1 — "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility.

Describe the fence or other physical barrier at the facility that defines the restricted area.

2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes☐	No☒
3	Are restricted area boundary coordinates included in the modeling files?	Yes☒	No☐

4 — Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.

Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments
RISK	Square	50 m	0 m	500 m	
RISK	Square	100 m	500 m	1,000 m	

	RISK	Square	250 m	1,000 m	2,500 m	
	RISK	Square	500 m	2,500 m	5,000 m	
	RISK	Square	1,000 m	5,000 m	10,000 m	
5	Describe receptor spacing along the fence line.					
	50 m spacing					
6	Describe the PSD Class I area receptors.					
	Receptors on 500 m spacing on area boundary (Eastern portion) as well as 1,000 m grid inside Class I area for increment analysis.					

16-J: Sensitive areas

1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes☐	No☒
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes☐	No☒

16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).											
	Flare SSM emissions modeled as intermittent sources. Limited to < 300 hr/yr. Hourly rate = annual total/8760 hrs											
2	Which scenario produces the highest concentrations? Why?											
	NA											
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)						Yes☐		No☒			
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources:											
5	Hour of Day	Factor	Hour of Day	Factor								
	1		13									
	2		14									
	3		15									

	4		16									
	5		17									
	6		18									
	7		19									
	8		20									
	9		21									
	10		22									
	11		23									
	12		24									
	If hourly, variable emission rates were used that were not described above, describe them below.											

6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes☐	No☒

16-L: NO_2 Modeling

1	Which types of NO_2 modeling were used? Check all that apply.	
	☒	ARM2
	☐	100% NO_X to NO_2 conversion
	☐	PVMRM
	☐	OLM
	☐	Other:
2	Describe the NO_2 modeling.	
	Modeled facility for SIL impacts. Exceeded SIL for NAAQS and Class I area. Initial resulted with added background resulted in levels below the NAAQS. Refined model for Class I increment used with surrounding sources and receptors within the Class I area. Results below Class I increment.	

3	Were default NO_2/NO_X ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes☒	No☐

4	Describe the design value used for each averaging period modeled.
	1-hour: 98th percentile as calculated by AERMOD Annual: Highest Annual Average of Three Years

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.	
	☐	PM2.5
	☐	PM10

	☒	None		
2	Describe the particle size distributions used. Include the source of information.			
3	Does the facility emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2? Sources that emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2 are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.		Yes☒	No☐
4	Was secondary PM modeled for PM2.5?		Yes☐	No☒
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.			
	NO_X (ton/yr)	SO_2 (ton/yr)	$[PM2.5]_{annual}$	$[PM2.5]_{24\text{-hour}}$
	50.62	0.09	0.00038 ug/m3	0.00834 ug/m3

16-N: Setback Distances

1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.
	NA
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.
	NA

16-O: PSD Increment and Source IDs

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.		Yes☐	No☒
	Unit Number in UA-2	Unit Number in Modeling Files		
	FL-2 HP SSM	FL-HP		
	FL-1 LP-SSM	FL-LP		
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.		Yes☐	No☒
	Flare SSM emissions modeled as intermittent sources. Annual total/8760 hrs			

3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?	Yes☐	No☒

4	Which units consume increment for which pollutants?				
	Unit ID	NO_2	SO_2	PM10	PM2.5
	FL-HP	X	-	-	-
	FL-LP	X	-	-	-
	ENG-1	X	-	X	X
	ENG-2	X	-	X	X
	GEN-1	X	-	X	X
	GEN-3	X	-	X	X
	GEN-4	X	-	X	X
	GEN-5	X	-	X	X
	HT-1	X	-	X	X
	HT-2	X	-	X	X
	HT-3	X	-	X	X

5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).	

6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☒	No☐
	Not yet installed/construction.		

16-P: Flare Modeling

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	FL-HP	19.12	155,607,382	11.0882
	FL-LP	32.6	802,886	0.7634

16-Q: Volume and Related Sources

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines? If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☐	No☒
	NA		

2	Describe the determination of sigma-Y and sigma-Z for fugitive sources.
	NA
3	Describe how the volume sources are related to unit numbers. Or say they are the same.

	NA
4	Describe any open pits.
	NA
5	Describe emission units included in each open pit.
	NA

16-R: Background Concentrations

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.	Yes☒	No☐
	CO: N/A		
	NO_2: Outside Carlsbad (350151005)		
	PM2.5: Hobbs-Jefferson (350450019)		
	PM10: Hobbs-Jefferson (350250008)		
	SO_2: Choose an item.		
	Other:		
	Comments:		
2	Were background concentrations refined to monthly or hourly values? If so describe below.	Yes☐	No☒

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Carlsbad	Yes☒	No☐
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		
	NA		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes☒	No☐

2	What was the source of the terrain data?
	WebGIS – NED 1/3 (USA 10m)

16-U: Modeling Files

Describe the modeling files: AERMOD input/output, BPIPPRIME input/output.

File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
High_Life_NOx_SIL	NO2	SIA
High_Life_NO2_CL1	NO2	Class I Increment
CO_SIL	CO	SIA
PM10_SIL	PM10	SIA
PM10_NAAQS	PM10	Cumulative NAAQS and Class II Increment
PM25_SIL	PM2.5	SIA
PM25_NAAQS	PM2.5	Cumulative NAAQS and Class II Increment

16-V: PSD New or Major Modification Applications - Not Applicable

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes☐	No☐
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes☐	No☐
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes☐	No☐

16-W: Modeling Results

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes☐	No☒
2	Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.		

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
NO_2 1-hr NAAQS	116.69	-	-	58.6	175.29	188.03	93%	558,830	3,556,606	1,068.4
NO_2 annual Class I Increment	0.32	2.16	-	-	2.16	2.5	86%	558,109	3,559,023	1,098.0
NO_2 annual Class II Increment	9.80	-	-	9.7	19.50	25	78%	558,875	3,556,606	1,068.2
CO 8-hr SIL	264.89	-	-	-	264.89	500	53%	558,830	3,556,606	1,068.4
CO 1-hr SIL	337.97	-	-	-	337.97	2,000	17%	558,830	3,556,606	1,068.4
PM_{10} 24-hr NAAQS	5.01	5.09	-	100.7	105.79	150	71%	558,875	3,556,606	1,068.2
PM_{10} annual Class I	0.03	-	-	-	0.03	0.2	15%	558,115	3,559,068	1,099.0
PM_{10} 24-hr Class I	0.16	-	-	-	0.16	0.3	53%	558,115	3,559,068	1,099.0
PM_{10} annual Class II	0.87	1.42	-	-	1.42	17	8%	558,875	3,556,606	1,068.2
PM_{10} 24-hr Class II	5.01	5.09	-	-	5.09	30	17%	558,875	3,556,606	1,068.2

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
$PM_{2.5}$ annual NAAQS	0.87	1.10	-	6.6	7.70	9	86%	558,875	3,556,606	1068.2
$PM_{2.5}$ 24-hr NAAQS	3.88	3.95	-	18.7	22.65	35	65%	558,875	3,556,606	1,068.1
$PM_{2.5}$ Annual Class I	0.03	-	-	-	0.03	0.05	60%	558,115	3,559,068	1,099.0
$PM_{2.5}$ 24-hr Class I	0.12	-	-	-	0.12	0.27	44%	558,115	3,559,068	1,099.0
$PM_{2.5}$ Annual Class II	1.10	1.10	-	-	1.10	4.0	27%	558,875	3,556,606	1,068.2
$PM_{2.5}$ 24-hr Class II	3.95	3.95	-	-	3.95	9.0	44%	558,875	3,556,606	1,068.2

16-X: Summary/conclusions	
1	A statement that modeling requirements have been satisfied and that the permit can be issued.
	Modeling requirements have been met, and all concentrations are below applicable standards.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

Compliance Test History Table

Unit No.	Test Description	Test Date
ENG-1	NSPS JJJJ Test, NSR Quarterly	8/29/2025
ENG-1	NSPS JJJJ Test, NSR Quarterly	12/23/2025
ENG-1	NSPS JJJJ Test, NSR Quarterly	6/15/2026
ENG-2	NSPS JJJJ Test, NSR Quarterly	6/17/2026
GEN-1	NSPS JJJJ Test, NSR Quarterly	6/16/2026
GEN-3	NSPS JJJJ Test, NSR Quarterly	6/15/2026
GEN-4	NSPS JJJJ Test, NSR Quarterly	6/17/2026
GEN-5	NSPS JJJJ Test, NSR Quarterly	6/18/2026

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

Section 22: Certification

Company Name: **Tap Rock Operating, LLC**

I, **Bill Ramsey**, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 24 day of September, 2026, upon my oath or affirmation, before a notary of the State of Colorado.

*Signature

9/24/2026
Date

Bill Ramsey
Printed Name

Sr. Environmental and Regulatory Specialist
Title

Scribed and sworn before me on this 24th day of September, 2026.

My authorization as a notary of the State of Colorado expires on the 6th day of March, 2028.

Notary's Signature

9/24/26
Date

Cassandra K. Albrecht-Roosa
Notary's Printed Name

CASSANDRA ALBRECHT-ROOSA
Notary Public
State of Colorado
Notary ID # 20244009457
My Commission Expires 03-06-2028

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.