



March 3, 2020

UPS Tracking #1Z5V32103595763310

Attn: Ms. Kirby Olson
Major Source Program Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

Re: **NSR Permit Application**
Maverick Compressor Station NSR Permit No. 7474-M2
Tiger Compressor Station NSR Permit No. 7623-M1
Spartan Compressor Station NSR Permit No. 7681-M1
XTO Energy Inc.

Dear Ms. Olson,

XTO Energy Inc. is submitting the NSR Permit applications for the Maverick, Tiger, & Spartan Compressor Station. The electronic files will be provided via email or secure file transfer. Also included is a check for the filling fee.

If you have any questions concerning this application, please call me at 832-624-4426 or at Raymond.Tole@ExxonMobil.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Tole Jr.' with a stylized flourish at the end.

Raymond P. Tole Jr. P.E.
Environmental Engineer
XTO Energy Inc.

TIGER COMPRESSOR STATION
Eddy County, NM
NSR Permit Modification Application



PREPARED BY:
RAYMOND P TOLE JR
ENVIRONMENTAL ENGINEER
XTO ENERGY INC.
2/10/2021

TIGER COMPRESSOR STATION
NSR Permit Modification Application

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Tab 1

UA1 Form - Company and Facility Information

<p>Mail Application To:</p> <p>New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505</p> <p>Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb</p>		<p>For Department use only:</p> <p>AIRS No.:</p>
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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. See Section 1-I for submittal instructions for other permits.

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: a 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.: **XX** 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.

This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.

This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to https://www.env.nm.gov/aqb/sbap/small_business_criteria.html).

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.219.B.1.d 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 (see 1 st 3 to 5 #s of permit IDEA ID No.): 38215	Updating Permit/NOI #: 7623-M1
1	Facility Name: Tiger Compressor Station	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): See 1-D.4.		
2	Plant Operator Company Name: XTO Energy Inc.	Phone/Fax: (832) 624-4426	
a	Plant Operator Address: 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389		
b	Plant Operator's New Mexico Corporate ID or Tax ID: 1522747		

3	Plant Operator Company Name: XTO Energy Inc.	Phone/Fax: (832) 624-4426
a	Plant Owner(s) Mailing Address(s): 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389	
4	Bill To (Company): XTO Energy Inc.	Phone/Fax: (832) 624-4426
a	Mailing Address: 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389	E-mail: raymond.tole@exxonmobil.com
5	<input checked="" type="checkbox"/> Preparer: TJ Tole <input type="checkbox"/> Consultant:	Phone/Fax: (865) 850-2007
a	Mailing Address: 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389	E-mail: raymond.tole@exxonmobil.com
6	Plant Operator Contact: T.J. Tole	Phone/Fax: (832) 624-4426
a	Mailing Address: 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389	E-mail: raymond.tole@exxonmobil.com
7	Air Permit Contact: T.J. Tole	Title: Environmental Engineer
a	E-mail: raymond.tole@exxonmobil.com	Phone/Fax: (832) 624-2768
b	Mailing Address: 22777 Springwoods Village Parkway, W4.6B.374, Spring, TX 77389	
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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 7623-M1
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: 22.5 barrels; 8.8 MMscf	Daily: 539.0 barrels; 210.1 MMscf	Annually: 196,750 barrels; 76.7 Bscf
b	Proposed	Hourly: 76.5 barrels; 10 MMscf	Daily: 1,836 barrels; 240 MMscf	Annually: 670,115 barrels; 87.6 Bscf
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: 22.5 barrels; 8.8 MMscf	Daily: 539.0 barrels; 210.1 MMscf	Annually: 196,750 barrels; 76.7 Bscf
b	Proposed	Hourly: 76.5 barrels; 10 MMscf	Daily: 1,836 barrels; 240 MMscf	Annually: 670,115 barrels; 87.6 Bscf

Section 1-D: Facility Location Information

1	Section: 20	Range: 30E	Township: 25S	County: Eddy	Elevation (ft): 3200
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 603167			UTM N (in meters, to nearest 10 meters): 3554076	
b	AND Latitude (deg., min., sec.): 32° 07' 06"			Longitude (deg., min., sec.): -103° 54' 23"	
3	Name and zip code of nearest New Mexico town: Malaga - 88263				
4	Detailed Driving Instructions from nearest NM town: Drive S on US 285 for 12.5 mi. to L on Whitehorn Rd. Go 4.2 mi. to L on Pipeline Rd. Go 7.0 mi. to R on Rock Dove Rd. Go 0.5 mi. to site on R.				
5	The facility is 12 miles SE of Malaga				
6	Status of land at facility (check one): <input type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input checked="" type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
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: 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/aqb/modeling/classIareas.html)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas - 13				
9	Name nearest Class I area: Carlsbad Caverns				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 44.44				
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 miles				
12	Method(s) used to delineate the Restricted Area: None "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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> No <input type="checkbox"/> 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	($\frac{\text{hours}}{\text{year}}$): 8760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:	AM PM	End:	<input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: Already started			
4	Month and year of anticipated construction completion: Completed July 2020			
5	Month and year of anticipated startup of new or modified facility: Completed July 2020			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify:	
a	If yes, NOV date or description of issue:	NOV Tracking No:

b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input checked="" type="checkbox"/> Major (<input checked="" type="checkbox"/> ≥10 tpy of any single HAP OR <input checked="" type="checkbox"/> ≥25 tpy of any combination of HAPS) OR <input type="checkbox"/> Minor (<input type="checkbox"/> <10 tpy of any single HAP AND <input type="checkbox"/> <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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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-toe 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 T.J. Tole

Email raymond.tole@exxonmobil.com

Phone number (832) 624-4426

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.

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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

Tab 2
UA2 Form - Application Tables

Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. Equipment exemptions under 2.72.202 NMAC do not apply to 20.2.73 NMAC. Identify process equipment that is used to reroute emissions back into the process or sales pipeline in Table 2-A, such as a VRU, VRT, ULPS, Flashing Vessel, or Blowcase.

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ² (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
ENG1	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00851	5000	5000	1/1/2019	ENG1	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							1/1/2019	CAT1				
ENG2	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00824	5000	5000	12/1/2019	ENG2	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							12/1/2019	CAT2				
ENG3	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00811	5000	5000	1/1/2019	ENG3	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							1/1/2019	CAT3				
ENG4	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00800	5000	5000	2/1/2019	ENG4	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							2/1/2019	CAT4				
ENG5	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00820	5000	5000	1/1/2019	ENG5	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							1/1/2019	CAT5				
ENG6	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00825	5000	5000	11/1/2018	ENG6	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							11/1/2018	CAT6				
ENG7	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	5000	5000	TBD	ENG7	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							TBD	CAT7				
ENG8	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	5000	5000	TBD	ENG8	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							TBD	CAT8				
ENG9	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	5000	5000	TBD	ENG9	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							TBD	CAT9				
ENG11	Natural Gas Compressor Engine	Caterpillar	3516J TA	N6W01024	1380	1380	11/1/2018	ENG11	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							11/1/2018	CAT11				
ENG12	Natural Gas Compressor Engine	Caterpillar	3516J TA	N6W01034	1380	1380	10/1/2018	ENG12	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							10/1/2018	CAT12				
ENG10	Natural Gas Compressor Engine	Caterpillar	G3606TA	TBD	1775	1775	TBD	ENG10	20200254	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SLB	N/A
							TBD	CAT10				
ENG13	Natural Gas Compressor Engine	Caterpillar	G3306TA	TBD	203	203	TBD	ENG13	20200254	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	4SRB	N/A
							TBD	CAT13				
HTR1	Fuel Line Heater	Wenco EC	SB2012H	1118-939	0.75 MMBtu/hr	0.75 MMBtu/hr	2019	N/A	31000228	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							2019	HTR1				
RB1	Glycol Regenerator Reboiler	Flameco	1808 03C	235	2.0 MMBtu/hr	2.0 MMBtu/hr	2018	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							2018	RB1				
RB2	Glycol Regenerator Reboiler	Flameco	1808 34D	321	2.0 MMBtu/hr	2.0 MMBtu/hr	2019	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							2019	RB2				
RB3	Glycol Regenerator Reboiler	TBD	TBD	TBD	2.0 MMBtu/hr	2.0 MMBtu/hr	TBD	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							TBD	RB3				
HTR2	Fuel Line Heater	TBD	TBD	TBD	0.75 MMBtu/hr	0.75 MMBtu/hr	TBD	N/A	31000228	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							N/A	HTR2				
HTR3	Fuel Line Heater	TBD	TBD	TBD	1.5 MMBtu/hr	1.5 MMBtu/hr	TBD	N/A	31000228	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> To Be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced	N/A	N/A
							N/A	HTR3				

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
FL1	Flare 1	Tornado	Guyed Dual Air Assist	14275	70 MMscf/d	70 MMscf/d	2019	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1				
FL2	Flare 2	Tornado	Guy Dual Air Assist	14277B	70 MMscf/d	70 MMscf/d	2019	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL2				
FL3	Flare 3	Tornado	TBD	TBD	70 MMscf/d	70 MMscf/d	TBD	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	FL3				
SKT1	Skim Tank	Palmer	N/A	ST1828297	1000 bbl	1000 bbl	2019	FL1-FL3	40400315	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
SKT2	Skim Tank (Backup)	Palmer	N/A	TBD	1000 bbl	1000 bbl	TBD	FL1-FL3	40400315	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	FL1-FL3				
OT1	Condensate Tank	Palmer	N/A	ST1828300	500 bbl	500 bbl	2019	FL1-FL3	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
OT2	Condensate Tank	Palmer	N/A	ST1828301	500 bbl	500 bbl	2019	FL1-FL3	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
OT3	Condensate Tank	Palmer	N/A	ST1828302	500 bbl	500 bbl	2019	FL1-FL3	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
OT4	Condensate Tank	Palmer	N/A	ST1828303	500 bbl	500 bbl	2019	FL1-FL3	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
WT1	Produced Water Tank	Palmer	N/A	ST1828298	500 bbl	500 bbl	2019	FL1-FL3	40400315	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
WT2	Produced Water Tank	Palmer	N/A	ST1828299	500 bbl	500 bbl	2019	FL1-FL3	40400315	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
VRU1	Low Pressure Separator VRU #1	TBD	N/A	N/A	125 HP	125 HP	2019	FL1-FL2	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
VRU2	Low Pressure Separator VRU Backup	TBD	N/A	N/A	125 HP	125 HP	2019	FL1-FL2	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
DEHY1	TEG Dehydrator with Condenser	Jatco	N/A	18335	80 MMscfd	80 MMscfd	2019	COND1	31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
DEHY2	TEG Dehydrator with Condenser	Jatco	N/A	18335	80 MMscfd	80 MMscfd	TBD	COND2	31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	FL1-FL3				
DEHY3	TEG Dehydrator with Condenser	TBD	N/A	TBD	80 MMscfd	80 MMscfd	TBD	COND3	31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	FL1-FL3				
LPS	Low Pressure Separator	Palmer	N/A	17135-101	N/A	N/A	2019	FL1-FL3	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2019	FL1-FL3				
LOAD	Condensate Truck Loading	N/A	N/A	N/A	1829 bbl/d	1829 bbl/d	N/A	N/A	40400250	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
LOAD2	Water Truck Loading	N/A	N/A	N/A	521 bbl/d	521 bbl/d	N/A	N/A	40400250	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
FUG	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
SSM	SSM Activities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
Malfunction	Malfunction Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				

¹ Unit numbers must correspond to unit numbers in the previous NOI unless a complete cross reference table of all units in both NOIs 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 Activities¹ (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 20.2.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 <http://www.env.nm.gov/aqb/forms/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.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
ROAD	Haul Road Emissions	N/A	N/A	N/A	20.2.72.202.B.5	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	N/A	20.2.72.202.B.5	N/A	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> 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. 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. Flares, Enclosed Combustion Devices, Catalytic Converters and Air Fuel Ratio (AFR) Controllers shall be reported on Table 2-C. For each AFR, note whether the AFR are aftermarket or integral to the engine.

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
FL1	Flare 1	2020	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3	98	Engineering Est.
FL2	Flare 2	2020	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3	98	Engineering Est.
FL3	Flare 3	TBD	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3	98	Engineering Est.
VRU1	Low Pressure Separator VRU #1	2019	VOC, HAPs	LPS	98	Engineering Est.
VRU2	Low Pressure Separator VRU Backup	2019	VOC, HAPs	LPS	98	Engineering Est.
COND1-COND3	BTEX Condenser	2019	VOC, HAP	DEHY1-DEHY3	98	Engineering Est.
CAT1-CAT6, CAT11-12	Engine Catalysts	2019	CO, VOC, HAP	ENG1-6, ENG11-12	CO-87, VOC-65, HAP-74	Engineering Est.
CAT7-CAT9	Engine Catalysts	TBD	CO, VOC, HAP	ENG7-9	CO-90, VOC-48, HAP-90	Engineering Est.

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)

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.	NO _x		CO		VOC		SO _x		PM ¹		PM ₁₀ ¹		PM _{2.5} ¹		H ₂ S		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
ENG1	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG2	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG3	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG4	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG5	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG6	4.13	18.11	38.25	167.53	11.23	49.17	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG7	4.13	18.11	29.21	127.94	3.84	16.80	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG8	4.13	18.11	29.21	127.94	3.84	16.80	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG9	4.13	18.11	29.21	127.94	3.84	16.80	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG11	1.90	8.33	7.91	34.65	4.35	19.06	0.14	0.61	0.11	0.48	0.11	0.48	0.11	0.48	-	-	-	-
ENG12	1.90	8.33	7.91	34.65	4.35	19.06	0.14	0.61	0.11	0.48	0.11	0.48	0.11	0.48	-	-	-	-
HTR1	0.10	0.44	0.08	0.37	0.01	0.02	0.01	0.05	0.01	0.03	0.01	0.03	0.01	0.03	-	-	-	-
RB1	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
RB2	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
RB3	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
FL1-FL3 Pilot	1.42	6.20	2.83	12.39	1.93	8.47	0.02	0.07	0.07	0.31	0.07	0.31	0.07	0.31	-	-	-	-
FL1-FL3 Norm	Emissions are not routed to flare in uncontrolled scenario.																	
FL1-FL3 SSM	Emissions are not routed to flare in uncontrolled scenario.																	
SKT1	-	-	-	-	8.50	29.24	-	-	-	-	-	-	-	-	-	-	-	-
SKT2	-	-	-	-	8.50	29.24	-	-	-	-	-	-	-	-	-	-	-	-
OT1	-	-	-	-	145.98	288.18	-	-	-	-	-	-	-	-	-	-	-	-
OT2	-	-	-	-	145.98	288.18	-	-	-	-	-	-	-	-	-	-	-	-
OT3	-	-	-	-	145.98	288.18	-	-	-	-	-	-	-	-	-	-	-	-
OT4	-	-	-	-	145.98	288.18	-	-	-	-	-	-	-	-	-	-	-	-
WT1	-	-	-	-	0.15	0.66	-	-	-	-	-	-	-	-	-	-	-	-
WT2	-	-	-	-	0.15	0.66	-	-	-	-	-	-	-	-	-	-	-	-
DEHY1	-	-	-	-	62.15	121.36	-	-	-	-	-	-	-	-	-	-	-	-
DEHY2	-	-	-	-	62.15	121.36	-	-	-	-	-	-	-	-	-	-	-	-
DEHY3	-	-	-	-	62.15	121.36	-	-	-	-	-	-	-	-	-	-	-	-
LPS	-	-	-	-	703.82	356.63	-	-	-	-	-	-	-	-	-	-	-	-
LOAD	-	-	-	-	63.77	10.07	-	-	-	-	-	-	-	-	-	-	-	-
LOAD2	-	-	-	-	0.46	0.09	-	-	-	-	-	-	-	-	-	-	-	-
FUG	-	-	-	-	5.06	22.16	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-
ROAD	-	-	-	-	-	-	-	-	0.15	0.03	0.15	0.03	0.15	0.03	-	-	-	-
MALFUNCTION	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-
Totals	43.33	189.78	336.54	1474.05	1650.33	2357.78	4.70	20.56	-	-	3.75	16.42	3.75	16.42	-	-	-	-

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-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₋₁).

Unit No.	NO _x		CO		VOC		SO _x		PM ¹		PM ₁₀ ¹		PM _{2.5} ¹		H ₂ S		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
ENG1	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG2	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG3	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG4	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG5	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG6	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG7	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG8	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG9	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.38	1.65	0.38	1.65	-	-	-	-
ENG11	1.90	8.33	1.03	4.50	1.43	6.25	0.14	0.61	0.11	0.48	0.11	0.48	0.11	0.48	-	-	-	-
ENG12	1.90	8.33	1.03	4.50	1.43	6.25	0.14	0.61	0.11	0.48	0.11	0.48	0.11	0.48	-	-	-	-
HTR1	0.10	0.44	0.08	0.37	0.01	0.02	0.01	0.05	0.01	0.03	0.01	0.03	0.01	0.03	-	-	-	-
RB1	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
RB2	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
RB3	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.02	0.09	0.02	0.09	-	-	-	-
FL1-FL3 Pilot	1.42	6.20	2.83	12.39	1.93	8.47	0.02	0.07	0.07	0.31	0.07	0.31	0.07	0.31	-	-	-	-
FL1-FL3 Norm	2.40	9.53	4.79	19.02	16.03	32.62	0.26	1.08	0.05	0.22	0.05	0.22	0.05	0.22	-	-	-	-
SKT1	Emissions Represented at FL1-FL3																	
SKT2	Emissions Represented at FL1-FL3																	
OT1	Emissions Represented at FL1-FL3																	
OT2	Emissions Represented at FL1-FL3																	
OT3	Emissions Represented at FL1-FL3																	
OT4	Emissions Represented at FL1-FL3																	
WT1	Emissions Represented at FL1-FL3																	
WT2	Emissions Represented at FL1-FL3																	
DEHY1	Emissions Represented at FL1-FL3																	
DEHY2	Emissions Represented at FL1-FL3																	
DEHY3	Emissions Represented at FL1-FL3																	
LPS	Emissions Represented at FL1-FL3																	
LOAD	-	-	-	-	63.77	10.07	-	-	-	-	-	-	-	-	-	-	-	-
LOAD2	-	-	-	-	0.46	0.09	-	-	-	-	-	-	-	-	-	-	-	-
FUG	-	-	-	-	5.06	22.16	-	-	-	-	-	-	-	-	-	-	-	-
ROAD	-	-	-	-	-	-	-	-	0.60	0.11	0.15	0.03	0.15	0.03	-	-	-	-
MALFUNCTION	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-
Totals	45.73	199.31	49.04	212.81	119.71	225.59	4.95	21.64	4.40	16.74	3.95	16.66	3.95	16.66	-	-	-	-

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 scheduled 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 explanation of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine or 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.	NO _x		CO		VOC		SO _x		PM ¹		PM ₁₀ ¹		PM _{2.5} ¹		H ₂ S		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	
SSM	-	-	-	-	-	10.00													
FL1-FL3 SSM	478.29	14.33	954.85	28.61	858.80	29.54	5.08	0.19	22.32	0.65	22.32	0.65	22.32	0.65	-	-	-	-	
DEHY1 SSM	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	
DEHY2 SSM	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	
DEHY3 SSM	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	
Totals	478.85	14.42	955.97	28.78	914.73	43.28	5.32	0.22	22.34	0.65	22.34	0.65	22.34	0.65					

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	NO _x		CO		VOC		SO _x		PM		PM ₁₀		PM _{2.5}		<input type="checkbox"/> H ₂ S or <input type="checkbox"/> 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
Totals:		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

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.

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)			
ENG1	ENG1	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG2	ENG2	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG3	ENG3	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG4	ENG4	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG5	ENG5	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG6	ENG6	V	No	32	722	523.58	Unknown	Unknown	83.04	2.83
ENG7	ENG7	V	No	32	809	520.70	Unknown	Unknown	82.59	2.83
ENG8	ENG8	V	No	32	809	520.70	Unknown	Unknown	82.59	2.83
ENG9	ENG9	V	No	32	809	520.70	Unknown	Unknown	82.59	2.83
ENG11	ENG11	V	No	20	848	120.53	Unknown	Unknown	153.47	1.00
ENG12	ENG12	V	No	20	848	120.53	Unknown	Unknown	153.47	1.00
HTR1	HTR1	V	No	15	1000	5.75	Unknown	Unknown	7.32	1.00
RB1	RB1	V	No	15	1000	15.32	Unknown	Unknown	8.67	1.50
RB2	RB2	V	No	15	1000	15.32	Unknown	Unknown	8.67	1.50
RB3	RB3	V	No	15	1000	15.32	Unknown	Unknown	8.67	1.50
FL1	FL1	V	No	145	1832	4673.14	Unknown	Unknown	65.60	2.21
FL2	FL2	V	No	145	1832	4673.14	Unknown	Unknown	65.60	2.21
FL3	FL3	V	No	145	1832	4673.14	Unknown	Unknown	65.60	2.21

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		n-Hexane		Benzene		Acetaldehyde		Provide Pollutant Name Here		Provide Pollutant Name Here		Provide Pollutant Name Here		Provide Pollutant Name Here	
				<input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> TAP	<input type="checkbox"/> HAP or <input type="checkbox"/> 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
ENG1	ENG1	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG2	ENG2	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG3	ENG3	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG4	ENG4	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG5	ENG5	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG6	ENG6	0.63	2.74	0.5	2.3	-	-	-	-	0.1	0.5								
ENG7	ENG7	0.32	1.39	0.2	0.7	-	-	-	-	0.2	0.7								
ENG8	ENG8	0.32	1.39	0.2	0.7	-	-	-	-	0.2	0.7								
ENG9	ENG9	0.32	1.39	0.2	0.7	-	-	-	-	0.2	0.7								
ENG11	ENG11	0.31	1.35	0.3	1.2	-	-	-	-	0.0	0.1								
ENG12	ENG12	0.31	1.35	0.3	1.2	-	-	-	-	0.0	0.1								
HTR1	HTR1	1.9E-03	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
RB1	RB1	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
RB1	RB2	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
RB1	RB3	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
FL1-FL3 Pilot	FL1-FL3 Pilot	0.03	0.13	-	-	0.027	0.116	0.001	0.005	-	-								
FL1-FL3 Norm	FL1-FL3 Norm	1.65	2.12	-	-	0.65	1.28	0.42	0.43	-	-								
FL1-FL3 SSM	FL1-FL3 SSM	32.17	1.16	-	-	28.72	1.01	1.18	0.05	-	-								
FL1-FL3	DEHY1	0.38	0.30	-	-	0.08	0.09	0.13	0.12	-	-								
FL1-FL3	DEHY2	0.38	0.30	-	-	0.08	0.09	0.13	0.12	-	-								
FL1-FL3	DEHY3	0.38	0.30	-	-	0.08	0.09	0.13	0.12	-	-								
RB1	DEHY1 SSM	5.65	0.15	-	-	1.21	0.05	1.89	0.06	-	-								
RB2	DEHY2 SSM	5.65	0.15	-	-	1.21	0.05	1.89	0.06	-	-								
RB3	DEHY3 SSM	5.65	0.15	-	-	1.21	0.05	1.89	0.06	-	-								

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		n-Hexane <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Benzene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Acetaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> 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	
		FL1-FL3	SKT1	Emissions Represented at FL1-FL3																
FL1-FL3	SKT2	Emissions Represented at FL1-FL3																		
FL1-FL3	OT1	Emissions Represented at FL1-FL3																		
FL1-FL3	OT2	Emissions Represented at FL1-FL3																		
FL1-FL3	OT3	Emissions Represented at FL1-FL3																		
FL1-FL3	OT4	Emissions Represented at FL1-FL3																		
FL1-FL3	WT1	Emissions Represented at FL1-FL3																		
FL1-FL3	WT2	Emissions Represented at FL1-FL3																		
FL1-FL3	LPS	Emissions Represented at FL1-FL3																		
LOAD	LOAD	2.8	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LOAD2	LOAD2	1.5E-04	2.9E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FUG	FUG	0.40	1.76	-	-	0.11	0.48	0.04	0.18	-	-	-	-	-	-	-	-	-	-	
SSM	SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ROAD	ROAD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Totals:		60.5	30.4	4.1	18.0	33.4	3.4	7.7	1.2	1.2	5.3	-	-	-	-	-	-	-	-	

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 (btu/scf)	Hourly Usage (scf)	Annual Usage (mmscf)	% Sulfur	% Ash
ENG1	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG2	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG3	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG4	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG5	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG6	Natural Gas	Field Gas	1018	36744.9	321.89	Negligible	0
ENG7	Natural Gas	Residue Gas	1018	36838.2	322.70	Negligible	0
ENG8	Natural Gas	Residue Gas	1018	36838.2	322.70	Negligible	0
ENG9	Natural Gas	Residue Gas	1018	36838.2	322.70	Negligible	0
ENG11	Natural Gas	Field Gas	1018	10793.6	94.55	Negligible	0
ENG12	Natural Gas	Field Gas	1018	10793.6	94.55	Negligible	0
HTR1	Natural Gas	Field Gas	1018	669.8	5.87	Negligible	0
RB1	Natural Gas	Field Gas	1018	1786.1	15.65	Negligible	0
RB2	Natural Gas	Field Gas	1018	1786.1	15.65	Negligible	0
RB3	Natural Gas	Field Gas	1018	1786.1	15.65	Negligible	0
FL1	Natural Gas	Field Gas	1018	3055.6	26.77	Negligible	0
FL2	Natural Gas	Field Gas	1018	3055.6	26.77	Negligible	0
FL3	Natural Gas	Field Gas	1018	3055.6	26.77	Negligible	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	Material Name	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)
SKT1	40400315	Produced Water	Produced Water	8.2	51	76.86	11.27	86.16	12.88
SKT2	40400315	Produced Water	Produced Water	8.2	51	76.86	11.27	86.16	12.88
OT1	40400311	Condensate	Condensate	6.6	55	75.38	11.15	84.56	12.77
OT2	40400311	Condensate	Condensate	6.6	55	75.38	11.15	84.56	12.77
OT3	40400311	Condensate	Condensate	6.6	55	75.38	11.15	84.56	12.77
OT4	40400311	Condensate	Condensate	6.6	55	75.38	11.15	84.56	12.77
WT1	40400315	Produced Water	Produced Water	8.2	44	76.09	12.52	85.27	13.97
WT2	40400315	Produced Water	Produced Water	8.2	44	76.09	12.52	85.27	13.97

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 = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type <small>(refer to Table 2-LR below)</small>	Roof Type <small>(refer to Table 2-LR below)</small>	Capacity		Diameter (M)	Vapor Space (M)	Color <small>(from Table VI-C)</small>		Paint Condition <small>(from Table VI-C)</small>	Annual Throughput <small>(gal/yr)</small>	Turn-overs <small>(per year)</small>
					(bbl)	(M ³)			Roof	Shell			
SKT1	Sep-20	Produced Water	N/A	FX	1000 bbl	159	4.75	9.1	Tan	Tan	Good	4,138,130	99
SKT2	TBD	Produced Water	N/A	FX	1000 bbl	159	4.75	9.1	Tan	Tan	Good	4,138,130	99
OT1	Sep-20	Condensate	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	7,008,036	334
OT2	Sep-20	Condensate	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	7,008,036	334
OT3	Sep-20	Condensate	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	7,008,036	334
OT4	Sep-20	Condensate	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	7,008,036	334
WT1	Sep-20	Produced Water	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	3,994,638	190
WT2	Sep-20	Produced Water	N/A	FX	500 bbl	79.5	3.66	4.9	Tan	Tan	Good	3,994,638	190

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
	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type		
FX: Fixed Roof					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 M³ = 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)
Mixed Hydrocarbons	Oil (BOPD)	Liquid	1829	Mixed Hydrocarbons	Oil (BOPD)	Liquid	1829
	Produced Water (BWPD)	Liquid	521		Produced Water (BWPD)	Liquid	521
	Natural Gas (MMSCFD)	Gas	240		Natural Gas (MMSCFD)	Gas	240

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								

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.

Unit No.		CO ₂ ton/yr	N ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²									Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
	GWP_s¹	1	298	25	22,800	footnote 3										
ENG1	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.249	10.765362	9.0313437												23822.0
ENG2	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.25	10.77	9.03												23822.0
ENG3	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.249	10.765362	9.0313437												5000000.0
ENG4	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.25	10.77	9.03												23822.0
ENG5	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.249	10.765362	9.0313437												23822.0
ENG6	mass GHG	23802.25	0.04	0.36											23802.6	
	CO ₂ e	23802.25	10.77	9.03												23822.0
ENG7	mass GHG	21581.35	0.04	0.36											21581.7	
	CO ₂ e	21581.349	10.765362	9.0313437												21601.1
ENG8	mass GHG	21581.35	0.04	0.36											21581.7	
	CO ₂ e	21581.35	10.77	9.03												21601.1
ENG9	mass GHG	21581.35	0.04	0.36											21581.7	
	CO ₂ e	21581.349	10.765362	9.0313437												21601.1
ENG11	mass GHG	7062.46	0.01	0.11											7062.6	
	CO ₂ e	7062.46	3.16	2.65												7068.3
ENG12	mass GHG	7062.46	0.01	0.11											7062.6	
	CO ₂ e	7062.4603	3.1622793	2.6529189												7068.3
HTR1	mass GHG	566.97	0.00	0.39											567.4	
	CO ₂ e	566.97	0.22	9.74												576.9
RB1	mass GHG	1511.91	0.00	1.04											1513.0	
	CO ₂ e	1511.9112	0.5755123	25.966893												1538.5
RB2	mass GHG	1511.91	0.00	1.04											1513.0	
	CO ₂ e	1511.91	0.58	25.97												1538.5
RB3	mass GHG	1511.91	0.00	1.04											1513.0	
	CO ₂ e	1511.9112	0.5755123	25.966893												1538.5
FL1	mass GHG	11471.87	0.01	20.52											11492.4	
	CO ₂ e	11471.87	4.38	512.91												11989.2
FL2	mass GHG	11471.87	0.01	20.52											11492.4	
	CO ₂ e	11471.872	4.3819336	512.91057												11989.2
FL3	mass GHG	11471.87	0.01	20.52											11492.4	
	CO ₂ e	11471.87	4.38	512.91												11989.2
Total	mass GHG	261,201	0	69											261,270	
	CO ₂ e	261,201	118	1,713												263,032

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 CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

⁶ For Heaters/Boilers, CO₂, CH₄, N₂O emissions calculated according to §98.233(z)(1) and (2).

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.

XTO Energy Inc. is planning modification of the Tiger Compressor Station in Eddy County, NM. The facility is a typical compressor station with natural gas engines, dehydration, storage tanks, and flares. Site construction is planned under NSR Permit 7623-M1. This is a New Source Review permit application being submitted in accordance with 20.2.72 NMAC.

Routine SSM combustion emissions are included with the regular emissions of the facility. SSM emissions from equipment maintenance are routed to either the low pressure or high pressure flare header (FL1 – FL3). SSM-related VOC emissions (tank landings/cleanings) are included at a rate of 10 tons per year per NMAQB guidance. Detailed calculations are included in the application.

The facility is proposing the following modifications:

- 1) Remove HTR2 and HTR3;
- 2) Remove ENG10 and ENG13;
- 3) Increase glycol circulation rate for DEHY1-3;
- 4) Decrease glycol regenerator reboiler (RB1-RB3) unit heat input from 3 MMBtu/hr to 2.0 MMBtu/hr;
- 5) Increase Dehy SSM from 200 hrs to 300 hrs
- 6) Add SSM for dehy flash tank vapors to be combusted in FL1 – FL3
- 7) Increase flare purge gas rates;
- 8) Update FL1-FL3 heights to 145';
- 9) Update tank throughputs;
- 10) Decrease condensate truck loading;
- 11) Add inlet gas flaring;
- 12) Increasing steady state flaring associated with increased tank throughput and glycol circulation rate; update sources that vent to flare.
- 13) Change sources that vent to VC1, only combusts vapors from DEHY1-3 still vent and pilot gas.
- 14) Update ENG1-9 and ENG11-12 VOC/formaldehyde/CO control efficiencies and update emissions factors from Caterpillar Gas Engine Rating Pro (GERP) analysis.
- 15) Update nomenclature of Gb1a and GB2a to SKT1 and SKT2.
- 16) Update facility location coordinates
- 17) Update low pressure separator pressure from 2 psig to 15 psig.
- 18) Added VOC malfunction emissions.

Cross reference table of all units in both permits

Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits

Previous Unit Number	Previous Source Description	New Unit Number	New Source Description	Notes
ENG1	Natural Gas Engine	ENG1	Natural Gas Compressor Engine	Updated Caterpillar Gas Engine Rating Pro (GERP) analysis with new fuel gas analysis, which resulted in changes to VOC/CO/formaldehyde emission factors. Updated catalyst control efficiencies with updated fuel gas specifications.
ENG2	Natural Gas Engine	ENG2	Natural Gas Compressor Engine	
ENG3	Natural Gas Engine	ENG3	Natural Gas Compressor Engine	
ENG4	Natural Gas Engine	ENG4	Natural Gas Compressor Engine	
ENG5	Natural Gas Engine	ENG5	Natural Gas Compressor Engine	
ENG6	Natural Gas Engine	ENG6	Natural Gas Compressor Engine	
ENG7	Natural Gas Engine	ENG7	Natural Gas Compressor Engine	
ENG8	Natural Gas Engine	ENG8	Natural Gas Compressor Engine	
ENG9	Natural Gas Engine	ENG9	Natural Gas Compressor Engine	
ENG10	Natural Gas Engine			
ENG11	Natural Gas Engine	ENG11	Natural Gas Compressor Engine	Same as ENG1-9.
ENG12	Natural Gas Engine	ENG12	Natural Gas Compressor Engine	
ENG13	Natural Gas Engine			Removed
HTR1	Hot Oil Heater 1	HTR1	Fuel Line Heater	
HTR2	Hot Oil Heater 2			Removed
HTR3	Hot Oil Heater 3			Removed
RB1	Glycol Regenerator Reboiler	RB1	Glycol Regenerator Reboiler	
RB2	Glycol Regenerator Reboiler	RB2	Glycol Regenerator Reboiler	
RB3	Glycol Regenerator Reboiler	RB3	Glycol Regenerator Reboiler	
FL1	Flare 1	FL1	Flare 1	Changed combustion sources
FL2	Flare 2	FL2	Flare 2	Changed combustion sources
FL3	Flare 3	FL3	Flare 3	Changed combustion sources
GB1a	Gun Barrel Separator (Primary)	SKT1	Skim Tank	Renamed
GB1b	Gun Barrel Separator (Backup)	SKT2	Skim Tank (Backup)	Renamed
OT1	Condensate Tank	OT1	Condensate Tank	
OT2	Condensate Tank	OT2	Condensate Tank	
OT3	Condensate Tank	OT3	Condensate Tank	
OT4	Condensate Tank	OT4	Condensate Tank	
WT1	Produced Water Tank	WT1	Produced Water Tank	
WT2	Produced Water Tank	WT2	Produced Water Tank	
		VRU1	Low Pressure Separator VRU #1	Added control efficiency
		VRU2	Low Pressure Separator VRU Backup	Added control efficiency
DEHY1	TEG Dehydrator with Condenser	DEHY1	TEG Dehydrator with Condenser	
DEHY2	TEG Dehydrator with Condenser	DEHY2	TEG Dehydrator with Condenser	
DEHY3	TEG Dehydrator with Condenser	DEHY3	TEG Dehydrator with Condenser	
LPS	Low Pressure Separator	LPS	Low Pressure Separator	
LOAD	Truck Loading	LOAD	Condensate Truck Loading	
		LOAD2	Water Truck Loading	Added
FUG	Fugitives	FUG	Fugitive Emissions	
SSM	SSM Activities	SSM	SSM Activities	
ROAD	HAUL ROAD EMISSIONS	ROAD	HAUL ROAD EMISSIONS	
		MALFUNCTION	HAUL ROAD EMISSIONS	Added

Section 4

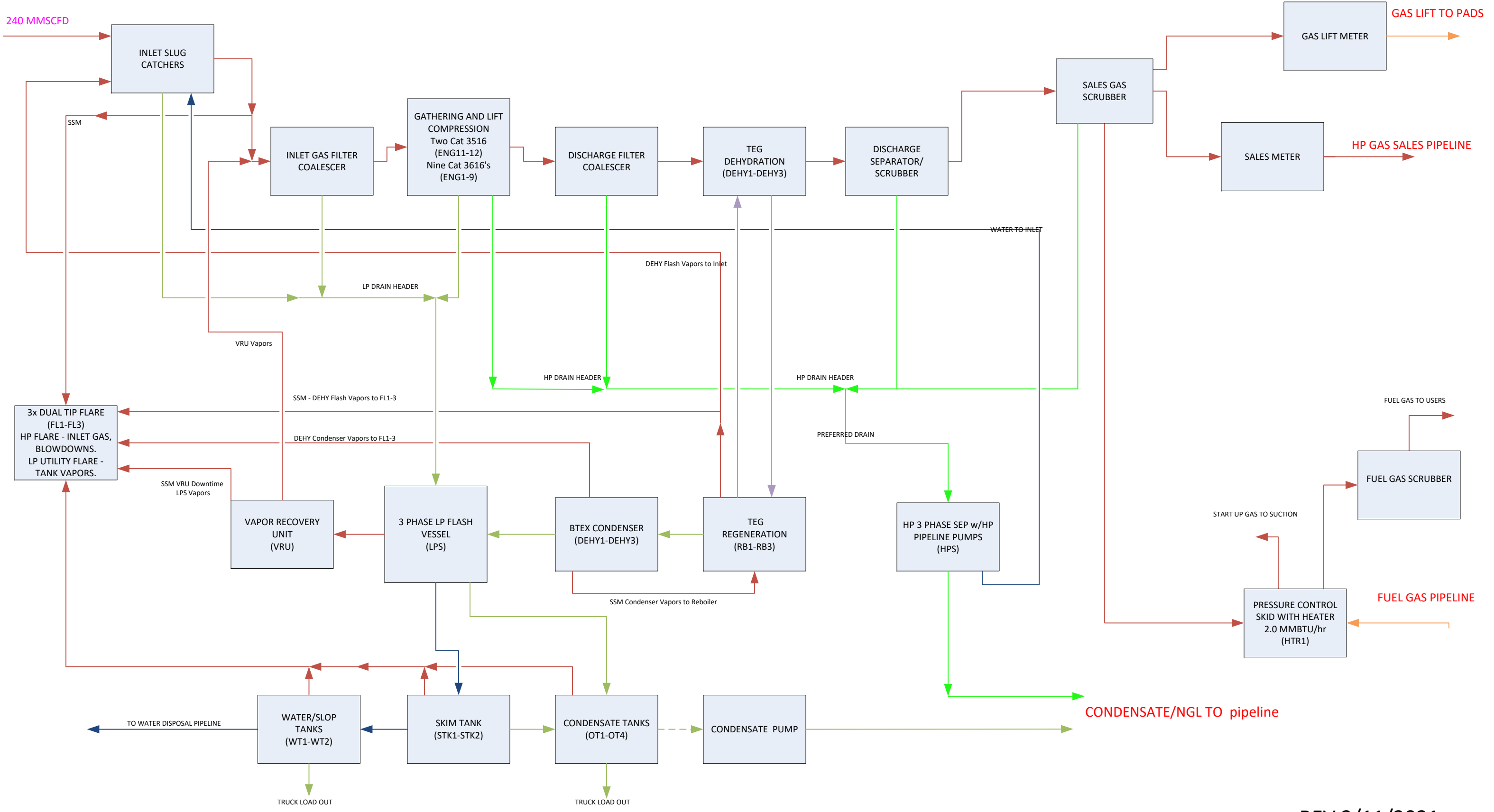
Process Flow Sheet

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.

A process flow diagram is presented on the following page.

TIGER COMPRESSOR STATION

Permitted compressor dump configuration
 Cat 3616 - 1st through 3rd stage scrubber dumps to LPS
 Cat 3616 - 4th stage and discharge scrubber dumps to HPS
 Cat 3516 - 1st and 2nd stage scrubber dumps to LPS
 Cat 3516 - 3rd and discharge scrubber dumps to HPS

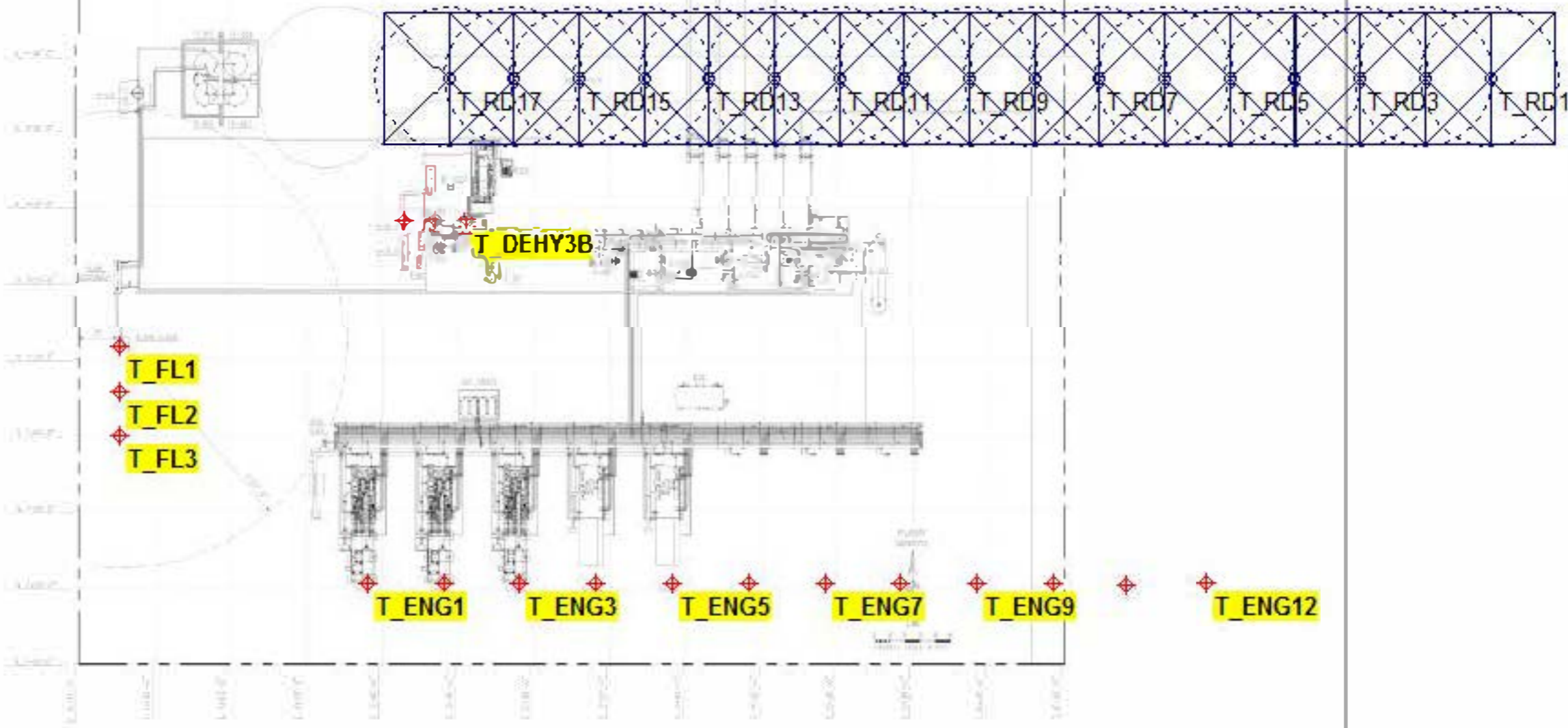


Section 5

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.

A proposed plot plan is presented on the following page.



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 rationale 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.

Caterpillar 3616TA (ENG-1 to ENG-9) and 3516TA (ENG-11 to ENG-12)

Emission factors for nitrogen oxides (NO_x), carbon monoxide (CO), formaldehyde, and volatile organic compounds (VOC) are based on manufacturer's data. Emissions of particulate matter (PM/PM₁₀ and PM_{2.5}) were calculated using AP-42 Table 3.2-3 factors. PM₁₀ and PM_{2.5} emissions are set equal to PM emissions. SO₂ emissions are based on the units' fuel consumption and a sulfur content of 5 grains per 100 standard cubic feet (5 gr/100 scf). Hazardous Air Pollutants (HAPs) except for formaldehyde were calculated using AP-42 factors.

Line Heater (HTR1) and Glycol Regenerator Heaters (RB1 to RB3)

Emission of NO_x, CO, VOC, HAP, and PM/PM₁₀/PM_{2.5} are based on AP-42 Table 3.2-3 emission factors. PM₁₀ and PM_{2.5} emissions are set equal to PM emissions. SO₂ emissions were based on the unit's fuel consumption and a maximum sulfur content of 5 grains per 100 standard cubic feet (5 gr/100 scf).

SSM/Emergency Flares (FL1 – FL3)

The facility will use two (2) dual-tip flares. NO_x and CO emissions are based on factors from the Texas Commission on Environmental Quality (TCEQ) publication RG-360A/09. VOC emissions were calculated using a material balance and the manufacturer's guaranteed destruction efficiency (98%). Since gas can be routed to any or all of the flares, they are illustrated as one combine emission point. The flares have a control efficiency of 98%, with manufacturer documentation provided in Section 7 of the application. SSM activities routed to the flares could include process vessel purging and maintenance blowdowns for process equipment, high pressure gas flaring, and low pressure separator gas during VRU downtime. Tank vapors and 2% of the low pressure separator gas not collected by the VRU are continuously routed to the low pressure side of the flare.

Triethylene Glycol Dehydrators (DEHY1-DEHY3)

Emissions from the dehydrators are calculated using BR&E ProMax simulation software. Flash tank vapors are routed back to mixing with the inlet gas. For up to 438 hours, flash vapors are routed to the flares (FL1 - FL3). Each dehydrator is equipped with a condenser. Condensed liquids are routed to the skim tank and any remaining gas is burned at the flares (FL1 - FL3). The emissions being released at FL1-FL3 from the dehydration process are represented as a separate emission point (DEHY1-DEHY3). For up to 300 hours in a year, flash and condenser vapors can be routed to the reboiler (RB1 - RB3) during SSM. Emissions are represented as (DEHY1 SSM - DEHY3 SSM).

Storage Tanks (SKT1-SKT2, OT1-OT4, WT1-WT2)

Flashing, working and breathing emissions from the skim tank, oil tanks, and water tanks were calculated using BR&E ProMax simulation software. Emissions from the tanks are controlled using FL1-FL3. The simulation reports are included in Section 7.

Truck Loading (LOAD)

Uncontrolled emissions from oil loading of trucks were calculated using Equation 1 of AP-42 Section 5.2. Maximum condensate loading rates are calculated using 1836 BOPD and 80,000 BOPY. Relevant portions of AP-42 Section 5.2 are included in Section 7. Oil truck loading will be uncontrolled.

Water Truck Loading (LOAD2)

Uncontrolled emissions from water loading of trucks were calculated using Equation 1 of AP-42 Section 5.2. Maximum loading rates are calculated using 521 BWPD for 365 days of the year. Relevant portions of AP-42 Section 5.2 are included in Section 7. Oil truck loading will be uncontrolled.

Piping Component Fugitive Emissions (FUG)

Facility fugitive emissions were calculated using TCEQ's "Air Permit Technical Guidance for Chemical Sources – Fugitive Guidance" document, and conservatively assumed component counts. Reduction efficiencies were obtained from EPA's Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). Relevant portions of the TCEQ document are included in Section 7.

Startup, Shutdown, and Maintenance (SSM)

SSM emissions not routed to the flare system were assumed equal to the flat 10 tpy of VOC per State guidance. Specific SSM emissions include small equipment blowdowns, tank emptying and refilling, tank roof landing, and miscellaneous activities. Other SSM emissions are routed to the flare and calculated in accordance with the flare methodology above.

Haul Road Fugitive Emissions

Fugitive haul road emissions were calculated using Equations 1a and 2 of AP-42 Section 13.2.2. Relevant portions of AP-42 Section 13.2.2 are included in Section 7.

Malfunction Emissions (MALFUNCTION)

Malfunction emissions not routed to the flare system were assumed equal to the flat 10 tpy of VOC per State guidance. Specific malfunction emissions include any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator.

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
FACILITY EMISSIONS SUMMARY

EMISSIONS SUMMARY TABLE

EMISSION SOURCE DESCRIPTION	FACILITY IDENTIFICATION NUMBER	STACK NUMBER	NOx		CO		VOC (INCLUDES HAPs)		SO ₂		PM _{10 & 2.5}		HAPs		CO _{2e}
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY
Caterpillar G3616 Natural Gas Compressor Engine	ENG1	ENG1	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG2	ENG2	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG3	ENG3	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG4	ENG4	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG5	ENG5	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG6	ENG6	4.13	18.11	4.97	21.78	3.93	17.21	0.48	2.09	0.38	1.65	0.63	2.74	23822
Caterpillar G3616 Natural Gas Compressor Engine	ENG7	ENG7	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.32	1.39	21601
Caterpillar G3616 Natural Gas Compressor Engine	ENG8	ENG8	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.32	1.39	21601
Caterpillar G3616 Natural Gas Compressor Engine	ENG9	ENG9	4.13	18.11	2.92	12.79	2.00	8.74	0.48	2.10	0.38	1.65	0.32	1.39	21601
Caterpillar 3516f TA Natural Gas Compressor Engine	ENG11	ENG11	1.90	8.33	1.03	4.50	1.43	6.25	0.14	0.61	0.11	0.48	0.31	1.35	7068
Caterpillar 3516f TA Natural Gas Compressor Engine	ENG12	ENG12	1.90	8.33	1.03	4.50	1.43	6.25	0.14	0.61	0.11	0.48	0.31	1.35	7068
Fuel Line Heater (2.0 MMBtu/hr)	HTR1	HTR1	0.10	0.44	0.08	0.37	0.01	0.02	0.01	0.05	0.01	0.03	0.002	0.01	577
Glycol Regenerator Reboiler (2.0 MMBtu/hr)	RB1	RB1	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.005	0.02	1538
Glycol Regenerator Reboiler (2.0 MMBtu/hr)	RB2	RB1	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.005	0.02	1538
Glycol Regenerator Reboiler (2.0 MMBtu/hr)	RB3	RB1	0.27	1.18	0.23	0.99	0.01	0.06	0.03	0.13	0.02	0.09	0.005	0.02	1538
Total Flare Pilot/Purge Emissions	FL1-FL3 Pilot	FL1-FL3 Pilot	1.42	6.20	2.83	12.39	1.93	8.47	0.02	0.07	0.07	0.31	0.03	0.13	8118
Total Flare Normal Operations	FL1-FL3 Norm	FL1-FL3 Norm	2.40	9.53	4.79	19.02	16.03	32.62	0.26	1.08	0.05	0.22	1.65	2.12	9686
Total Flare SSM	FL1-FL3 SSM	FL1-FL3 SSM	478.29	14.33	954.85	28.61	858.80	29.54	5.08	0.19	22.32	0.65	32.17	1.16	19528
TEG Dehydrator with Condenser	DEHY1	FL1-FL3	Emissions Represented at FL1-FL3												
TEG Dehydrator with Condenser	DEHY2	FL1-FL3	Emissions Represented at FL1-FL3												
TEG Dehydrator with Condenser	DEHY3	FL1-FL3	Emissions Represented at FL1-FL3												
TEG Dehydrator with Condenser SSM	DEHY1 SSM	RB1	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	5.65	0.15	12
TEG Dehydrator with Condenser SSM	DEHY2 SSM	RB2	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	5.65	0.15	12
TEG Dehydrator with Condenser SSM	DEHY3 SSM	RB3	0.19	0.03	0.37	0.06	18.64	1.25	0.08	0.01	0.00	0.00	5.65	0.15	12
Skim Tank	SKT1	FL1-FL3	Emissions Represented at FL1-FL3												
Skim Tank (Backup)	SKT2	FL1-FL3	Emissions Represented at FL1-FL3												
Condensate Tank	OT1	FL1-FL3	Emissions Represented at FL1-FL3												

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
FACILITY EMISSIONS SUMMARY

EMISSIONS SUMMARY TABLE

EMISSION SOURCE DESCRIPTION	FACILITY IDENTIFICATION NUMBER	STACK NUMBER	NOx		CO		VOC (INCLUDES HAPs)		SO ₂		PM _{10 & 2.5}		HAPs		CO _{2e}
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY
Condensate Tank	OT2	FL1-FL3	Emissions Represented at FL1-FL3												
Condensate Tank	OT3	FL1-FL3	Emissions Represented at FL1-FL3												
Condensate Tank	OT4	FL1-FL3	Emissions Represented at FL1-FL3												
Produced Water Tank	WT1	FL1-FL3	Emissions Represented at FL1-FL3												
Produced Water Tank	WT2	FL1-FL3	Emissions Represented at FL1-FL3												
Low Pressure Separator	LPS	FL1-FL3	Emissions Represented at FL1-FL3												
Condensate Truck Loading	LOAD	N/A	-	-	-	-	63.77	10.07	-	-	-	-	2.85	0.45	-
Water Truck Loading	LOAD2	N/A	-	-	-	-	0.46	0.09	-	-	-	-	0.00	0.00	-
Fugitive Emissions	FUG	N/A	-	-	-	-	5.06	22.16	-	-	-	-	0.40	1.76	-
SSM Activities	SSM	N/A	-	-	-	-	-	10.00	-	-	-	-	-	-	-
ROAD EMISSIONS	ROAD	ROAD	-	-	-	-	-	-	-	-	0.15	0.03	-	-	-
Malfunction Emissions	MALFUNCTION	MALFUNCTION	-	-	-	-	-	10.00	-	-	-	-	-	-	-
TOTAL FACILITY WIDE EMISSIONS			NOx		CO		VOC (INCLUDES HAPs)		SO ₂		PM _{10 & 2.5}		HAPs		CO _{2e}
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY
			524.58	213.73	1005.01	241.59	1034.44	268.87	10.27	21.86	26.29	17.31	59.38	29.47	264,432

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
Methodology for Burner Calculations

Burner Emission Calculations

AP 42 Emission Factors: Tables 1.4-1, 1.4-2, & 1.4-3

$$\text{Emission Rate}_x (\text{lb/hr}) = \text{Burner Rating (MMBTU/hr)} * \text{EF}_x (\text{lb/MMSCF}) / 1020 (\text{Btu/scf}) * \text{Heating Value of Fuel Gas (BTU/SCF)} / 1020 (\text{Btu/scf}) + 25\%$$

$$\text{Annual Emission Rate}_x (\text{TPY}) = \text{Emission Rate (lb/hr)} * 8760 (\text{hour/year}) / 2000 (\text{lb/ton})$$

Mass Balance - SO₂ & H₂S Calculations

$$\text{H}_2\text{S Mass Flow Rate (lb/hr)} = P * V / 10.73 / T * \text{MW}_{\text{GAS}} * \text{H}_2\text{S}_{\text{WEIGHT \%}} * (1 - \text{DRE})$$

P = Pressure (psia), V = Fuel Consumed in a hour (ft³/hr), 10.73 = Ideal Gas Constant, T = Temperature (°R)

$$\text{Uncontrolled H}_2\text{S Mass Flow Rate (lb/hr)} = P * V / 10.73 / T * \text{MW}_{\text{GAS}} * \text{H}_2\text{S}_{\text{WEIGHT \%}}$$

$$\text{SO}_2 \text{ Emission Rate (lb/hr)} = \text{Uncontrolled H}_2\text{S Mass Rate (lb/hr)} * \text{SO}_2 \text{ Conversion Efficiency} * (\text{MW of SO}_2 (\text{lb/lb-mol}) / \text{MW of H}_2\text{S (lb/lb-mol)})$$

$$\text{Annual Emission Rate (TPY)} = \text{Emission Rate (lb/hr)} * 8760 (\text{hour/year}) / 2000 (\text{lb/ton})$$

MW_{GAS} = Molecular Weight of the Gas, H₂S_{WEIGHT%} = Weight Percent of the H₂S in the Fuel Gas, DRE = Burner Combustion Efficiency of H₂S

XTO ENERGY INC.
TIGER COMPRESSOR STATION
Methodology for Engine Calculations

Engine Emission Calculations

Manufacturer's Data or NSPS Subpart JJJJ Limit Calculations

$$\text{Emission Rate}_x \text{ (lb/hr)} = \text{Emission Factor}_x \text{ (g/hp-hr)} * \text{Rated hp} / 453.6 \text{ (g/lb)}$$

$$\text{Annual Emission Rate}_x \text{ (TPY)} = \text{Emission Rate (lb/hr)} * 8760 \text{ (hour/year)} / 2000 \text{ (lb/ton)}$$

AP 42 Emission Factors

$$\text{Emission Rate}_x \text{ (lb/hr)} = \text{Fuel Consumption (MMBTU/hp-hr)} * \text{EF}_x \text{ (lb/MMBTU)} * \text{Rated hp}$$

$$\text{Annual Emission Rate}_x \text{ (TPY)} = \text{Emission Rate}_x \text{ (lb/hr)} * 8760 \text{ (hour/year)} / 2000 \text{ (lb/ton)}$$

XTO ENERGY INC.
TIGER COMPRESSOR STATION
Methodology for Flare Calculations

Flare Calculations

VOC Flare Calculations - Uses the Ideal Gas Law for Mixtures

The mass flow rate of VOCs to the flare were modeled using Promax. The mass rate was then reduced by the destruction efficiency of the flare (98%).

NOx & CO Calculations - TCEQ Emission Factors Used

$$\text{NOx (lb/day)} = \text{Heating Value (BTU/ft}^3) * \text{EF (lb/MMBTU)} * \text{V (ft}^3/\text{Day)} / 10^6 \text{ (BTU/MMBTU)}$$

$$\text{CO (lb/day)} = \text{Heating Value (BTU/ft}^3) * \text{EF (lb/MMBTU)} * \text{V (ft}^3/\text{Day)} / 10^6 \text{ (BTU/MMBTU)}$$

COEF = 0.5496 or 0.2755, NOxEF = 0.138, EF = Emission Factor, V = Volume of Gas in a Day

SO₂ & H₂S Calculations - Mass Balance

$$\text{H}_2\text{S Mass Flow Rate (lb/hr)} = \text{P} * \text{V} / 10.73 / \text{T} * \text{MW}_{\text{GAS}} * \text{H}_2\text{S}_{\text{WEIGHT \%}} * (1 - \text{DRE})$$

P = Pressure (psia), V = Fuel Consumed in a hour (ft³/hr), 10.73 = Ideal Gas Constant, T = Temperature (°R)

$$\text{Uncontrolled H}_2\text{S Mass Flow Rate (lb/hr)} = \text{P} * \text{V} / 10.73 / \text{T} * \text{MW}_{\text{GAS}} * \text{H}_2\text{S}_{\text{WEIGHT \%}}$$

$$\text{SO}_2 \text{ Emission Rate (lb/hr)} = \text{Uncontrolled H}_2\text{S Mass Rate (lb/hr)} * \text{SO}_2 \text{ Conversion Efficiency} * (\text{MW of SO}_2 \text{ (lb/lb-mol)} / \text{MW of H}_2\text{S (lb/lb-mol)})$$

$$\text{Annual Emission Rate (TPY)} = \text{Emission Rate (lb/hr)} * 8760 \text{ (hour/year)} / 2000 \text{ (lb/ton)}$$

MW_{GAS} = Molecular Weight of the Gas, H₂S_{WEIGHT%} = Weight Percent of the H₂S in Gas Stream, DRE = Flare Destruction Efficiency of H₂S

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
COMPRESSOR ENGINES

Uncontrolled Emissions Calculations

Source ID	Unit Description	Gas Type	Annual Hours	Rated HP	MMBtu/hp-hr ¹ (HHV)	Manufacturer's Data g/hp-hr ²				AP-42 Factors lb/MMBtu ^{3,4}			lb/hr ^{5,6}						tpy ^{5,6}							
						NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde	NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde	NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde
						ENG1	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11
ENG2	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11	167.53	49.17	8.69	2.09	1.65	1.37
ENG3	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11	167.53	49.17	8.69	2.09	1.65	1.37
ENG4	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11	167.53	49.17	8.69	2.09	1.65	1.37
ENG5	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11	167.53	49.17	8.69	2.09	1.65	1.37
ENG6	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	0.30	3.47	0.99	0.18	0.01276	0.01006	0.00836	4.13	38.25	11.23	1.98	0.48	0.38	0.31	18.11	167.53	49.17	8.69	2.09	1.65	1.37
ENG7	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	0.30	2.65	0.25	0.14	0.01276	0.01006	0.00836	4.13	29.21	3.84	1.54	0.48	0.38	0.31	18.11	127.94	16.80	6.76	2.10	1.65	1.37
ENG8	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	0.30	2.65	0.25	0.14	0.01276	0.01006	0.00836	4.13	29.21	3.84	1.54	0.48	0.38	0.31	18.11	127.94	16.80	6.76	2.10	1.65	1.37
ENG9	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	0.30	2.65	0.25	0.14	0.01276	0.01006	0.00836	4.13	29.21	3.84	1.54	0.48	0.38	0.31	18.11	127.94	16.80	6.76	2.10	1.65	1.37
ENG11	Caterpillar 3516J TA Natural Gas Compressor Engine	Field Gas	8760	1380	0.007962	0.50	2.60	1.05	0.35	0.01276	0.01006	0.00836	1.90	7.91	4.35	1.06	0.14	0.11	0.09	8.33	34.65	19.06	4.66	0.61	0.48	0.40
ENG12	Caterpillar 3516J TA Natural Gas Compressor Engine	Field Gas	8760	1380	0.007962	0.50	2.60	1.05	0.35	0.01276	0.01006	0.00836	1.90	7.91	4.35	1.06	0.14	0.11	0.09	8.33	34.65	19.06	4.66	0.61	0.48	0.40

¹HHV is based on the Fuel Consumption Rate @ 75% Load from the Gas Engine Rating Pro Report

²The VOC emission factor (g/hp-hr) includes HCHO. Emission factors based on Gas Engine Rating Pro Report @ 100% Load.

³SO₂ Emissions were calculated using 5 grains H₂S per 100 scf fuel gas.

⁴PM Emission Factor = 7.71E-05 lb/MMBTU + 7.71E-05 lb/MMBTU + 9.91E-03 lb/MMBTU = 0.01006 lb/MMBTU

⁵ 25% safety factor was added to NOx on all engines. 25% safety factor was added to VOC on 3516. VOC lb/hr rates include acetaldehyde emissions.

⁶25% safety factor was added to VOC pollutants for compressor engines running on residue gas.

Total Emissions Per Pollutant (TPY)	NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde
		179.60	1488.32	383.53	81.75	20.06	15.81

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
COMPRESSOR ENGINES

Controlled Emissions Calculations

Source ID	Unit Description	Gas Type	Annual Hours	Rated HP	MMbtu/hp-hr ¹ (HHV)	Control Efficiency (%)			Manufacturer's Data (w/ control) g/hp-hr ²				AP-42 Factors lb/MMBtu ^{3,4}			lb/hr ^{5,6}						tpy ^{5,6}							
						CO	VOC	HCOH	NOx	CO	VOC ²	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde	NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde	NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde
ENG1	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG2	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG3	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG4	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG5	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG6	Caterpillar G3616 Natural Gas Compressor Engine	Field Gas	8760	5000	0.007481	87.0	65.0	74.0	0.30	0.45	0.35	0.05	0.0128	0.01006	0.00836	4.13	4.97	3.93	0.52	0.48	0.38	0.11	18.11	21.78	17.21	2.26	2.09	1.65	0.48
ENG7	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	90.0	48.0	90.0	0.30	0.27	0.13	0.01	0.0128	0.01006	0.00836	4.13	2.92	2.00	0.15	0.48	0.38	0.16	18.11	12.79	8.74	0.68	2.10	1.65	0.71
ENG8	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	90.0	48.0	90.0	0.30	0.27	0.13	0.01	0.0128	0.01006	0.00836	4.13	2.92	2.00	0.15	0.48	0.38	0.16	18.11	12.79	8.74	0.68	2.10	1.65	0.71
ENG9	Caterpillar G3616 Natural Gas Compressor Engine	Residue Gas	8760	5000	0.0075	90.0	48.0	90.0	0.30	0.27	0.13	0.01	0.0128	0.01006	0.00836	4.13	2.92	2.00	0.15	0.48	0.38	0.16	18.11	12.79	8.74	0.68	2.10	1.65	0.71
ENG11	Caterpillar 3516j TA Natural Gas Compressor Engine	Field Gas	8760	1380	0.007962	87.0	65.0	74.0	0.50	0.34	0.37	0.09	0.0128	0.01006	0.00836	1.90	1.03	1.43	0.28	0.14	0.11	0.03	8.33	4.50	6.25	1.21	0.61	0.48	0.14
ENG12	Caterpillar 3516j TA Natural Gas Compressor Engine	Field Gas	8760	1380	0.007962	87.0	65.0	74.0	0.50	0.34	0.37	0.09	0.0128	0.01006	0.00836	1.90	1.03	1.43	0.28	0.14	0.11	0.03	8.33	4.50	6.25	1.21	0.61	0.48	0.14

¹HHV is conservatively based on the Fuel Consumption Rate @ 75% Load from the Gas Engine Rating Pro Report

²The VOC emission factor (g/hp-hr) includes HCHO. Emission factors based on Gas Engine Rating Pro Report.

³SO₂ Emissions were calculated using 5 grains H₂S per 100 scf fuel gas.

⁴PM Emission Factor = 7.71E-05 lb/MMBTU + 7.71E-05 lb/MMBTU + 9.91E-03 lb/MMBTU = 0.01006 lb/MMBTU

⁵25% safety factor was added to NOx on all engines. 25% safety factor was added to VOC on 3516. VOC lb/hr rates include acetaldehyde emissions.

⁶25% safety factor was added to VOC pollutants for compressor engines running on residue gas.

Total Emissions Per Pollutant (TPY)							
NOx	CO	VOC	HCHO	SO ₂	PM _{10 & 2.5}	Acetaldehyde	
179.60	178.07	141.97	18.01	20.06	15.81	5.30	

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
HEATERS - BURNER CALCULATIONS & EXHAUST STACK FLOW & FUEL CONSUMPTION RATES

CRITERIA & REGULATED POLLUTANTS EMISSIONS

Source ID	Promax Fuel Gas Stream	Fuel Gas HHV (BTU/SCF)	Operating Hours	Burner Rating (MMBTU/Hr)	AP-42 Factors ¹					lb/hr ²					tpy ²				
					lb/MMBtu														
					NOx	CO	VOC	SO ₂	PM _{10 & 2.5}	NOx	CO	VOC	SO ₂	PM _{10 & 2.5}	NOx	CO	VOC	SO ₂	PM _{10 & 2.5}
HTR1	3. Fuel Gas	1,120	8,760	0.75	0.10	0.08	0.01	0.01	0.01	0.10	0.08	0.01	0.01	0.01	0.44	0.37	0.02	0.05	0.03
RB1	3. Fuel Gas	1,120	8,760	2.00	0.10	0.08	0.01	0.01	0.01	0.27	0.23	0.01	0.03	0.02	1.18	0.99	0.06	0.13	0.09
RB2	3. Fuel Gas	1,120	8,760	2.00	0.10	0.08	0.01	0.01	0.01	0.27	0.23	0.01	0.03	0.02	1.18	0.99	0.06	0.13	0.09
RB3	3. Fuel Gas	1,120	8,760	2.00	0.10	0.08	0.01	0.01	0.01	0.27	0.23	0.01	0.03	0.02	1.18	0.99	0.06	0.13	0.09

¹Source: Emission factors from AP-42, Chapter 1, Tables 1.4-1, 1.4-2 and 1.4-3, converted from lb/MMscf to lb/MMbtu by dividing by 1,020 Btu/scf (per AP-42, Chapter 1 guidance).
SO2 Emissions were calculated using 5 grains H2S per 100 scf fuel gas.

²Burners - 25% Safety Factor

Total (tpy)	NOx	CO	VOC	SO ₂	PM _{10 & 2.5}
	3.98	3.34	0.22	0.44	0.30

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
HEATERS - BURNER CALCULATIONS & EXHAUST STACK FLOW & FUEL CONSUMPTION RATES

HAZARDOUS AIR POLLUTANTS (HAP) EMISSIONS

Source ID	Promax Stream	Fuel Gas (BTU/SCF)	Operating Hours	Burner Rating (MMBTU/Hr)	AP-42 Factors ¹ lb/MMBtu					lb/hr ²					tpy ²				
					Benzene	Toluene	N-Hexane	HCHO	Dichloro benzene	Benzene	Toluene	N-Hexane	HCHO	Dichloro benzene	Benzene	Toluene	N-Hexane	HCHO	Dichloro benzene
					HTR1	3. Fuel Gas	1,120	8760	0.75	2.1E-06	3.3E-06	1.8E-03	7.4E-05	1.2E-06	<0.001	<0.001	0.00	<0.001	<0.001
RB1	3. Fuel Gas	1,120	8760	2.00	2.1E-06	3.3E-06	1.8E-03	7.4E-05	1.2E-06	<0.001	<0.001	0.00	<0.001	<0.001	<0.001	<0.001	0.02	<0.001	<0.001
RB2	3. Fuel Gas	1,120	8760	2.00	2.1E-06	3.3E-06	1.8E-03	7.4E-05	1.2E-06	<0.001	<0.001	0.00	<0.001	<0.001	<0.001	<0.001	0.02	<0.001	<0.001
RB3	3. Fuel Gas	1,120	8760	2.00	2.1E-06	3.3E-06	1.8E-03	7.4E-05	1.2E-06	<0.001	<0.001	0.00	<0.001	<0.001	<0.001	<0.001	0.02	<0.001	<0.001

¹Source: Emission factors from AP-42, Chapter 1, Tables 1.4-1, 1.4-2 and 1.4-3, converted from lb/MMscf to lb/MMbtu by dividing by 1,020 Btu/scf (per AP-42, Chapter 1 guidance). SO2 Emissions were calculated using 5 grains H2S per 100 scf fuel gas.

²Burners - 25% Safety Factor

Total Individual HAPS (tpy)	Benzene	Toluene	N-Hexane	HCHO	Dichloro benzene
	0.00	0.00	0.07	0.00	0.00

Total Combined HAPS (tpy)	0.07
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XTO ENERGY, INC.
TIGER COMPRESSOR STATION
HEATERS - BURNER CALCULATIONS & EXHAUST STACK FLOW & FUEL CONSUMPTION RATES

Exhaust Stack and Fuel Consumption Data

Source	HTR1	RB1	RB2	RB3		
Burner Rating (btu/hr)	750000	2000000	2000000	2000000		
Gross Heating Value (btu/scf)	1119.8	1119.8	1119.8	1119.8		
3" eclipse air mixer: (Air/Gas Ratio) ¹	5/1	5/1	5/1	5/1		
Stack Temperature (°F)	1000	1000	1000	1000		
Stack Diameter (ft)	1	1.5	1.5	1.5		
Stack Height (ft)	15	15	15	15		
Fuel Consumption (scf/hr)	670	1786	1786	1786		
Fuel Consumption (scf/day)	16075	42866	42866	42866		
Fuel Consumption (mmscf/year)	6	16	16	16		
Air Injection Rate (scf/hr)	6698	17861	17861	17861		
Total exhaust flow rate @ STP (scf/hr)	7368	19647	19647	19647		
Total exhaust flow rate @ STP (scf/sec)	2	5	5	5		
Total exhaust flow rate @ 1000 °F (acf/hr)	20686	55163	55163	55163		
Total exhaust flow rate @ 1000 °F (acf/sec)	5.75	15	15	15		
Exhaust Stack Exit Velocity @ STP (ft/sec)	2.61	3	3	3		
Exhaust Stack Exit Velocity @ 1000 °F (ft/sec)	7.32	9	9	9		
Total CH4 (ton/yr) ²	0.39	1.04	1.04	1.04		
Total N2O (ton/yr) ²	0.001	0.002	0.002	0.002		
Total CO2 (ton/yr) ²	567	1512	1512	1512		
Total CO2e (ton/yr) ²	576.92	1538	1538	1538		

Promax Stream Name	3. Fuel Gas
Component	Mass Frac
Triethylene Glycol	0.00
Water	0.00
Hydrogen Sulfide	0.00
Carbon Dioxide	0.00
Nitrogen	0.01
Methane	0.63
Ethane	0.17
Propane	0.10
Isobutane	0.02
n-Butane	0.04
Isopentane	0.01
n-Pentane	0.01
i-C6	0.01
i-C7	0.00
Octane	0.00
Nonane	0.00
Benzene	0.00
Toluene	0.00
Ethylbenzene	0.00
o-Xylene	0.00
n-Hexane	0.00
2,2,4-Trimethylpentane	0.00
Decanes Plus	0.00
Decanes Plus Sat	0.00

¹ Air/Gas Ratio is based on the Manufacturer's Data of XTO's typical burner installations

² GHG emissions source is 40 CFR § 98.233 (n), 40 CFR § 98.233(v) for CH4 and CO2 mass emissions, 40 CFR § 98.233(z) for N2O mass emissions,

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
STORAGE TANK EMISSIONS SUMMARY

VOC EMISSIONS SUMMARY

Unit Number	Source Description	Material Type (Oil/Produced Water)	Number of Tanks in Category	Controlled by Unit #	Control Efficiency (%)	Promax Stream Liquid Material	Material Throughput (bbls/day)	Uncontrolled Working & Breathing Losses				Uncontrolled Flash Losses				Uncontrolled Total Emissions		Controlled Total Emissions	
								Promax Stream (Hrly)	Promax Stream (Annual)	Lb/hr	TPY	Promax Stream (Hrly)	Promax Stream (Annual)	Lb/hr	TPY	Lb/hr	TPY	Lb/hr	TPY
SKT1	Skim Tank	Produced Water	2	FL1-FL3	98	14. Skim Tank Inlet	269.94	8. Skim Tank W&B	8. Skim Tank W&B	5.01	21.96	26. Skim Flashing Losses Hrly	6. Skim Tank Flash Gas	3.49	7.28	8.50	29.24	0.17	0.58
SKT2	Skim Tank (Backup)	Produced Water	2	FL1-FL3	98	14. Skim Tank Inlet	269.94	8. Skim Tank W&B	8. Skim Tank W&B	5.01	21.96	26. Skim Flashing Losses Hrly	6. Skim Tank Flash Gas	3.49	7.28	8.50	29.24	0.17	0.58
OT1	Condensate Tank	Condensate	4	FL1-FL3	98	11. Condensate Sales Liquid	457.15	10. Condensate Tank W&B	10. Condensate Tank W&B	9.48	41.53	22. Condensate Flash Losses Hrly	7. Condensate Tank Flash Gas	136.50	246.65	145.98	288.18	2.92	5.76
OT2	Condensate Tank	Condensate	4	FL1-FL3	98	11. Condensate Sales Liquid	457.15	10. Condensate Tank W&B	10. Condensate Tank W&B	9.48	41.53	22. Condensate Flash Losses Hrly	7. Condensate Tank Flash Gas	136.50	246.65	145.98	288.18	2.92	5.76
OT3	Condensate Tank	Condensate	4	FL1-FL3	98	11. Condensate Sales Liquid	457.15	10. Condensate Tank W&B	10. Condensate Tank W&B	9.48	41.53	22. Condensate Flash Losses Hrly	7. Condensate Tank Flash Gas	136.50	246.65	145.98	288.18	2.92	5.76
OT4	Condensate Tank	Condensate	4	FL1-FL3	98	11. Condensate Sales Liquid	457.15	10. Condensate Tank W&B	10. Condensate Tank W&B	9.48	41.53	22. Condensate Flash Losses Hrly	7. Condensate Tank Flash Gas	136.50	246.65	145.98	288.18	2.92	5.76
WT1	Produced Water Tank	Produced Water	2	FL1-FL3	98	12. Produced Water Liquid	260.58	9. Water Tank W&B	9. Water Tank W&B	0.13	0.55	27. WT Flashing Losses Hrly	5. Water Tank Flash Gas	0.02	0.11	0.15	0.66	0.00	0.01
WT2	Produced Water Tank	Produced Water	2	FL1-FL3	98	12. Produced Water Liquid	260.58	9. Water Tank W&B	9. Water Tank W&B	0.13	0.55	27. WT Flashing Losses Hrly	5. Water Tank Flash Gas	0.02	0.11	0.15	0.66	0.00	0.01
Storage Tank Emissions										48.21	211.15			553.03	1001.38	601.24	1212.53	12.02	24.25

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
OIL TRUCK LOADING LOSSES - UNCONTROLLED

Truck Loading Losses Calculations

Promax Stream Production	11. Condensate Sales Liquid	
Promax Stream Emissions	28. Condensate Loading Emissions	
Controlled/Uncontrolled	UNCONTROLLED	
Operating Schedule^c	41	Day / Year
Condensate Production	1829	bbls / Day

Promax Report Results

LL= 12.46 * SPM/T * (1-EFF/100)

Saturation Factor (S) =	0.6
Average True Vapor Pressure of liquid loaded (P) ^a =	11.15
Max True Vapor Pressure of liquid loaded (P) ^a =	12.77
Average Temperature of bulk liquid loaded in Rankin (T) ^a =	535.05
Max Temperature of bulk liquid loaded in Rankin (T) ^a =	544.23
Molecular Weight (M) ^a =	49.62
Control Efficiency * Collection Efficiency (EFF)=	0
Hydrocarbon Content (%wt) ^a =	99.92
VOC Content (wt%) ^a =	83.00
HAP Content (wt%) ^a =	3.71
Average Uncontrolled LL (lb Total HC / bbl Throughput) ^b =	0.3246
Average Uncontrolled LL (lb VOC / bbl Throughput) ^b =	0.2696
Max Uncontrolled LL (lb Total HC / bbl Throughput) ^b =	0.3656
Max Uncontrolled LL (lb VOC / bbl Throughput) ^b =	0.3036
Estimated Throughput (bbls/Year) =	74700
Truck Loading Rate (bbls/hour) =	210
Estimated # of Loads (Approximately 1 hr/Load) =	356

Total Hydrocarbon Emissions	lb/hr	TPY
	76.77	12.12
Total VOC Emissions	lb/hr	TPY
	63.77	10.07
Total HAP Emissions	lb/hr	TPY
	2.85	0.45

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
OIL TRUCK LOADING LOSSES - UNCONTROLLED

Component	Total Speciated Vapors Emitted During Loading		
	Mass Percentage ^d	lb/hr ^d	ton / yr
Triethylene Glycol	0.00	0.00	0.00
Water	0.00	0.00	0.00
Hydrogen Sulfide	0.00	0.00	0.00
Carbon Dioxide	0.08	0.06	0.01
Nitrogen	0.00	0.00	0.00
Methane	0.52	0.40	0.06
Ethane	16.40	12.60	1.99
Propane	28.15	21.63	3.42
Isobutane	7.96	6.11	0.97
n-Butane	17.56	13.49	2.13
Isopentane	5.98	4.59	0.73
n-Pentane	6.87	5.28	0.83
i-C6	6.92	5.31	0.84
i-C7	4.77	3.66	0.58
Octane	0.92	0.71	0.11
Nonane	0.16	0.12	0.02
Benzene	0.14	0.11	0.02
Toluene	0.22	0.17	0.03
Ethylbenzene	0.01	0.01	0.00
o-Xylene	0.07	0.05	0.01
n-Hexane	3.27	2.51	0.40
2,2,4-Trimethylpentane	0.00	0.00	0.00
Decanes Plus	0.01	0.01	0.00
Decanes Plus Sat	0.00	0.00	0.00
Total HC	99.92	76.77	12.12
Total VOC	83.00	63.77	10.07
Total HAP	3.71	2.85	0.45
Heating Value (Btu/scf)	2583.24	2583.24	2583.24
Molecular Weight (lb/lbmol)	49.62	49.62	49.62
SO2 Emissions (lb/hr)	N/A	N/A	N/A
Operating Hours (hr/yr)	N/A	N/A	980
Mass Flow	N/A	76.77 lb/hr	12.12 ton/yr
Volumetric Flow (scf/hr)	N/A	587.13	92.73
Heat Release (MMBtu/hr)	N/A	1.52	0.24

Footnotes:

^a Values were obtained from Promax.

^b Loading emissions include total hydrocarbons as calculated using AP-42, Section 5.2.

^c Condensate tanks are only trucked out when transfer to pipeline is unavailable.

^d The component speciation was obtained from Promax Stream " and multiplied by the total hydrocarbon emissions. (VOC = 0.00 lb/hr * 0.00 wt% VOC = 0.01 lb/hr)

^e Loading emissions are uncontrolled.

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
WATER TRUCK LOADING LOSSES - UNCONTROLLED

Truck Loading Losses Calculations

Promax Stream Production	12. Produced Water Liquid	
Promax Stream Emissions	24. Water Truck Loading	
Controlled/Uncontrolled	UNCONTROLLED	
Operating Schedule	365	Day / Year
Condensate Production	521	bbls / Day

Promax Report Results

LL= 12.46 * SPM/T * (1-EFF/100)

Saturation Factor (S) =	0.6
Average True Vapor Pressure of liquid loaded (P) ^a =	0.66
Max True Vapor Pressure of liquid loaded (P) ^a =	0.88
Average Temperature of bulk liquid loaded in Rankin (T) ^a =	1007.34
Max Temperature of bulk liquid loaded in Rankin (T) ^a =	556.85
Molecular Weight (M) ^a =	18.15
Control Efficiency * Collection Efficiency (EFF)=	0
Hydrocarbon Content (%wt) ^a =	1.41
VOC Content (wt%) ^a =	0.34
HAP Content (wt%) ^a =	0.01
Average Uncontrolled LL (lb Total HC / bbl Throughput) ^b =	0.0038
Average Uncontrolled LL (lb VOC / bbl Throughput) ^b =	0.0009
Max Uncontrolled LL (lb Total HC / bbl Throughput) ^b =	0.0090
Max Uncontrolled LL (lb VOC / bbl Throughput) ^b =	0.0022
Estimated Throughput (bbls/Year) =	190221
Truck Loading Rate (bbls/hour) =	210
Estimated # of Loads (Approximately 1 hr/Load) =	906

Total Hydrocarbon Emissions	lb/hr	TPY
	1.89	0.36
Total VOC Emissions	lb/hr	TPY
	0.46	0.09
Total HAP Emissions	lb/hr	TPY
	0.00	0.00

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
WATER TRUCK LOADING LOSSES - UNCONTROLLED

Component	Total Speciated Vapors Emitted During Loading		
	Mass Percentage ^d	lb/hr ^d	ton/yr
Triethylene Glycol	0.00	0.00	0.00
Water	98.18	1.86	0.35
Hydrogen Sulfide	0.01	0.00	0.00
Carbon Dioxide	0.41	0.01	0.00
Nitrogen	0.00	0.00	0.00
Methane	0.22	0.30	0.06
Ethane	0.84	1.13	0.21
Propane	0.26	0.35	0.07
Isobutane	0.02	0.03	0.00
n-Butane	0.04	0.06	0.01
Isopentane	0.00	0.01	0.00
n-Pentane	0.00	0.00	0.00
i-C6	0.00	0.00	0.00
i-C7	0.00	0.00	0.00
Octane	0.00	0.00	0.00
Nonane	0.00	0.00	0.00
Benzene	0.01	0.01	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
o-Xylene	0.00	0.00	0.00
n-Hexane	0.00	0.00	0.00
2,2,4-Trimethylpentane	0.00	0.00	0.00
Decanes Plus	0.00	0.00	0.00
Decanes Plus Sat	0.00	0.00	0.00
Total HC	1.41	1.89	0.36
Total VOC	0.34	0.46	0.09
Total HAP	0.01	0.01	0.00
Heating Value (Btu/scf)	13.78	13.78	13.78
Molecular Weight (lb/lbmol)	18.15	18.15	18.15
SO2 Emissions (lb/hr)	N/A	N/A	N/A
Operating Hours (hr/yr)	N/A	N/A	8760
Mass Flow	N/A	1.89 lb/hr	0.36 ton/yr
Volumetric Flow (scf/hr)	N/A	39.57	7.47
Heat Release (MMBtu/hr)	N/A	0.00	0.00

Footnotes:

^a Values were obtained from Promax.

^b Loading emissions include total hydrocarbons as calculated using AP-42, Section 5.2.

^d The component speciation was obtained from Promax Stream " and multiplied by the total hydrocarbon emissions. (VOC = 0.00 lb/hr * 0.00 wt% VOC = 0.00 lb/hr)

^e Loading emissions are uncontrolled.

XTO ENERGY INC.
TIGER COMPRESSOR STATION
FLARE 1-3 EMISSION SUMMARY

Flare Emissions Summary Table

Stream Source	Stream Source	NOx		CO		Total VOC (Includes Total HAPs)		SO ₂		PM ₁₀ & 2.5		Total HAPs		CO ₂ e	n-Hexane		Benzene	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	TPY	lb/hr	TPY	lb/hr	TPY
FL1-FL3 Pilot	FL1 Pilot/Purge	0.47	2.07	0.94	4.13	0.64	2.82	0.01	0.02	0.02	0.10	0.01	0.04	2705.91	0.01	0.04	0.00	0.00
	FL2 Pilot / Purge	0.47	2.07	0.94	4.13	0.64	2.82	0.01	0.02	0.02	0.10	0.01	0.04	2705.91	0.01	0.04	0.00	0.00
	FL3 Pilot / Purge	0.47	2.07	0.94	4.13	0.64	2.82	0.01	0.02	0.02	0.10	0.01	0.04	2705.91	0.01	0.04	0.00	0.00
FL1-FL3 Norm	PW Tank Vapors (WT1-2)	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.01	8.44	0.00	0.00	0.00	0.00
	Skim Tank Vapors (SKT1-2)	0.05	0.21	0.10	0.42	0.34	1.17	0.00	0.01	0.00	0.00	0.02	0.07	238.46	0.02	0.05	0.00	0.00
	Oil Tank Vapors (OT1-4)	1.73	6.62	3.45	13.21	11.68	23.05	0.01	0.06	0.03	0.15	0.48	1.10	7743.67	0.38	0.92	0.04	0.06
	Low Pressure Separator Vapors Normal Operation	0.06	0.25	0.12	0.49	0.28	1.09	0.00	0.00	0.00	0.01	0.01	0.05	331.03	0.01	0.04	0.00	0.00
	Dehy 1-3 Condenser Vapors	0.56	2.45	1.12	4.89	3.73	7.28	0.24	1.01	0.01	0.05	1.13	0.90	1363.99	0.24	0.27	0.38	0.36
FL1-FL3 SSM	Low Pressure Separator Vapors VRU Downtime	3.11	1.36	6.21	2.72	13.80	6.04	0.06	0.02	0.10	0.04	0.61	0.27	1839.06	0.50	0.22	0.03	0.02
	HP Flare Blowdowns	0.16	0.08	0.32	0.16	0.33	0.16	0.00	0.00	0.01	0.00	0.02	0.01	112.11	0.01	0.01	0.00	0.00
	Flash Tank Vapors	1.47	0.32	2.93	0.64	4.78	1.05	0.14	0.03	0.05	0.01	0.25	0.05	450.15	0.19	0.04	0.03	0.01
	HP Flare Inlet Gas Flaring	473.55	12.57	945.39	25.09	839.90	22.29	4.89	0.13	22.17	0.59	31.29	0.83	17126.84	28.01	0.74	1.12	0.03
Total	Total Emissions	482.11	30.06	962.47	60.02	876.76	70.63	5.35	1.33	22.44	1.17	33.85	3.41	37331.48	29.39	2.41	1.60	0.48
FL1-FL3 Pilot	Total Flare Pilot/Purge Emissions	1.42	6.20	2.83	12.39	1.93	8.47	0.02	0.07	0.07	0.31	0.03	0.13	8117.72	0.03	0.12	0.00	0.00
FL1-FL3 Norm	Total Flare Normal Operations	2.40	9.53	4.79	19.02	16.03	32.62	0.26	1.08	0.05	0.22	1.65	2.12	9685.59	0.65	1.28	0.42	0.43
FL1-FL3 SSM	Total Flare SSM	478.29	14.33	954.85	28.61	858.80	29.54	5.08	0.19	22.32	0.65	32.17	1.16	19528.17	28.72	1.01	1.18	0.05
Total	Total Emissions	482.11	30.06	962.47	60.02	876.76	70.63	5.35	1.33	22.44	1.17	33.85	3.41	37331.48	29.39	2.41	1.60	0.48
FL1-FL3 HP	High Pressure Gas Flaring (No Pilot)	473.71	12.65	945.71	25.25	840.22	22.45	4.89	0.13	22.17	0.59	31.31	0.84	17238.95	28.03	0.75	1.12	0.03
FL1-FL3 LP	Low Pressure Gas Flaring (No Pilot)	5.51	10.89	11.00	21.74	29.83	38.66	0.31	1.10	0.15	0.26	2.26	2.39	11524.65	1.16	1.50	0.45	0.44

XTO ENERGY INC.
TIGER COMPRESSOR STATION
DEHYDRATOR 1-3 VAPORS ROUTED TO LOW PRESSURE FLARE - NORMAL OPERATIONS

VOC/HAP Emissions for Dehydration Units (DEHY1 - DEHY3) - Routed to FL1 - FL3

Uncontrolled Maximum Hourly Emission Rates and Composition to Combustion Device(s) ^a								Criteria Pollutant Emissions Combustion Device(s) ^b			
Stream	DEHY1-3 Still Column Emissions		Total Vapors to Combustion Device(s) (Uncontrolled)		Destruction Efficiency (%)	Total Combustion Device(s) Exhaust (controlled)		Component	Emission Rate (lb/hr)	Emission Factor	Emission Factor Units
	Promax Stream Name	25. DEHY1-3 Max Hourly	13. BTEX Cond Vapors to Combustion	(lb/hr)		(ton/yr)	(lb/hr)				
Component	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(%)	(lb/hr)	(ton/yr)				
Triethylene Glycol	0.00	1.20E-07	0.00	0.00	98%	0.00	0.00	NO _x	0.56	0.138	lb/MMBtu
Water	10.18	5.65	10.18	5.65	0%	10.18	5.65	CO	1.12	0.2755	lb/MMBtu
Hydrogen Sulfide	0.13	0.54	0.13	0.54	98%	0.00	0.01	SO ₂	0.24	--	--
Carbon Dioxide	2.44	10.57	2.44	10.57	0%	2.44	10.57	PM ₁₀	0.01	7.60	lb/MMscf
Nitrogen	0.01	0.04	0.01	0.04	0%	0.01	0.04	PM _{2.5}	0.01	7.60	lb/MMscf
Methane	8.05	35.16	8.05	35.16	98%	0.16	0.70	N ₂ O	0.00	0.0022	lb/MMBtu
Ethane	16.08	68.89	16.08	68.89	98%	0.32	1.38	H ₂ S	0.00	--	--
Propane	25.68	104.22	25.68	104.22	98%	0.51	2.08				
Isobutane	6.04	21.88	6.04	21.88	98%	0.12	0.44				
n-Butane	22.16	73.38	22.16	73.38	98%	0.44	1.47				
Isopentane	12.68	31.36	12.68	31.36	98%	0.25	0.63				
n-Pentane	19.50	42.40	19.50	42.40	98%	0.39	0.85				
i-C6	23.31	32.03	23.31	32.03	98%	0.47	0.64				
i-C7	18.73	13.33	18.73	13.33	98%	0.37	0.27				
Octane	1.75	0.65	1.75	0.65	98%	0.04	0.01				
Nonane	0.09	0.02	0.09	0.02	98%	0.00	0.00				
Benzene	18.85	17.98	18.85	17.98	98%	0.38	0.36				
Toluene	22.73	12.42	22.73	12.42	98%	0.45	0.25				
Ethylbenzene	0.21	0.08	0.21	0.08	98%	0.00	0.00				
o-Xylene	2.57	0.94	2.57	0.94	98%	0.05	0.02				
n-Hexane	12.13	13.38	12.13	13.38	98%	0.24	0.27				
2,2,4-Trimethylpentane	0.00	--	0.00	0.00	98%	0.00	0.00				
Decanes Plus	0.00	1.61E-04	0.00	0.00	98%	0.00	0.00				
Decanes Plus Sat	0.00	--	0.00	0.00	98%	0.00	0.00				
Total	223.33	978.17	223.33	484.92	--	16.84	25.63				
Total VOC	186.44	364.08	186.44	364.08	--	3.73	7.28				
Total HAP	56.50	44.80	56.50	44.80	--	1.13	0.90				
Heating Value (Btu/scf)	2,482.22	2,192.12	2,482.22	2,192.12							
Molecular Weight (lb/lbmol)	51.90	43.61	--	--							
Operating Hours (hr/yr)	8,760	8,760	--	--							
Mass Flow	223.33 lb/hr	978.17 ton/yr	223.33 lb/hr	978.17 ton/yr							
Volumetric Flow	1,633 scf/hr	14 MMscf/yr	1,633 scf/hr	14 MMscf/yr							
Heat Release (MMBtu/hr)	4.05 MMBtu/hr	35,507.09 MMBtu/yr	4.05 MMBtu/hr	35,507.09 MMBtu/yr							

Combustion Emissions from Combustion Device(s)				
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Total NO _x	0.56	2.45	0.56	2.45
Total CO	1.12	4.89	1.12	4.89
Total SO ₂	0.24	1.01	0.24	1.01
Total PM ₁₀	0.012	0.05	0.01	0.05
Total PM _{2.5}	0.01	0.05	0.01	0.05
Total VOC (slip)	3.73	7.28	3.73	7.28
Total HAP (slip)	1.13	0.90	1.13	0.90
Total n-Hexane (slip)	0.24	0.27	0.24	0.27
Total Benzene (slip)	0.38	0.36	0.38	0.36
Total CH ₄	0.05	0.22	0.05	0.22
Total N ₂ O	0.002	0.00	0.00	0.00
Total CO ₂	743.99	1357.38	743.99	1,357.38
Total CO_{2e}	745.82	1363.99	745.82	1,363.99

Large Glycol Unit - MACT HH Check		
# of Units	3	Limit
Flow per Dehy	70,809	85,000 SCF/Day
Benzene Emissions	0.19	1 ton/yr

Footnotes:

^a Uncontrolled stream properties determined via ProMax.

^b Flare CO and NO_x emission factors from TCEQ Air Permit Technical Guidance for Chemical Sources. PM and PM_{2.5} emission factors from AP-42, Table 1.4-1 and 1.4-2, July 1998. SO₂ emissions assume 100% conversion of H₂S to SO₂.

^c Flash tank emissions are routed back to inlet slug catcher.

XTO ENERGY INC.
TIGER COMPRESSOR STATION
DEHYDRATOR 1-3 VAPORS ROUTED TO REBOILER - SSM

VOC/HAP SSM Emissions for Dehydration Units (DEHY1 - DEHY3) - Routed to RB1 - RB3

Uncontrolled Maximum Hourly Emission Rates and Composition to Combustion Device(s) ^a								
Stream	DEHY1-3 Still Column Emissions		Total Vapors to Combustion Device(s) (Uncontrolled)		Destruction Efficiency (%)	Total Combustion Device(s) Exhaust (controlled) ^d		
	Promax Stream Name	25. DEHY1-3 Max Hourly (lb/hr)	13. BTEX Cond Vapors to Combustion (ton/yr)	(lb/hr)		(ton/yr)	(lb/hr)	(ton/yr)
Component		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(%)	(lb/hr)	(ton/yr)
Triethylene Glycol		0.00	4.12E-09	0.00	0.00	70%	0.00	0.00
Water		10.18	0.19	10.18	0.19	0%	10.18	0.19
Hydrogen Sulfide		0.13	0.02	0.13	0.02	70%	0.04	0.01
Carbon Dioxide		2.44	0.36	2.44	0.36	0%	2.44	0.36
Nitrogen		0.01	1.43E-03	0.01	0.00	0%	0.01	0.00
Methane		8.05	1.20	8.05	1.20	70%	2.41	0.36
Ethane		16.08	2.36	16.08	2.36	70%	4.82	0.71
Propane		25.68	3.57	25.68	3.57	70%	7.71	1.07
Isobutane		6.04	0.75	6.04	0.75	70%	1.81	0.22
n-Butane		22.16	2.51	22.16	2.51	70%	6.65	0.75
Isopentane		12.68	1.07	12.68	1.07	70%	3.81	0.32
n-Pentane		19.50	1.45	19.50	1.45	70%	5.85	0.44
i-C6		23.31	1.10	23.31	1.10	70%	6.99	0.33
i-C7		18.73	0.46	18.73	0.46	70%	5.62	0.14
Octane		1.75	0.02	1.75	0.02	70%	0.53	0.01
Nonane		0.09	8.05E-04	0.09	0.00	70%	0.03	0.00
Benzene		18.85	0.62	18.85	0.62	70%	5.66	0.18
Toluene		22.73	0.43	22.73	0.43	70%	6.82	0.13
Ethylbenzene		0.21	2.70E-03	0.21	0.00	70%	0.06	0.00
o-Xylene		2.57	0.03	2.57	0.03	70%	0.77	0.01
n-Hexane		12.13	0.46	12.13	0.46	70%	3.64	0.14
2,2,4-Trimethylpentane		0.00	--	0.00	0.00	70%	0.00	0.00
Decanes Plus		0.00	5.51E-06	0.00	0.00	70%	0.00	0.00
Decanes Plus Sat		0.00	--	0.00	0.00	70%	0.00	0.00
Total		223.33	33.50	223.33	16.61	--	75.84	5.37
Total VOC		186.44	12.47	186.44	12.47	--	55.93	3.74
Total HAP		56.50	1.53	56.50	1.53	--	16.95	0.46
Heating Value (Btu/scf)		2,482.22	2,192.12	2,482.22	2,192.12			
Molecular Weight (lb/lbmol)		51.90	43.61	--	--			
Operating Hours (hr/yr)		300	300	--	--			
Mass Flow		223.33 lb/hr	33.50 ton/yr	223.33 lb/hr	33.50 ton/yr			
Volumetric Flow		1,633 scf/hr	0 MMscf/yr	1,633 scf/hr	0 MMscf/yr			
Heat Release (MMBtu/hr)		4.05 MMBtu/hr	1,216.00 MMBtu/yr	4.05 MMBtu/hr	1,216.00 MMBtu/yr			

Criteria Pollutant Emissions Combustion Device(s) ^b			
Component	Emission Rate (lb/hr)	Emission Factor	Emission Factor Units
NO _x	0.56	0.138	lb/MMBtu
CO	1.12	0.2755	lb/MMBtu
SO ₂	0.24	--	--
PM ₁₀	0.01	7.60	lb/MMscf
PM _{2.5}	0.01	7.60	lb/MMscf
N ₂ O	0.00	0.0022	lb/MMBtu
H ₂ S	0.04	--	--

Combustion Device Destruction Efficiency C4+	70%
Combustion Device Efficiency C3	70%

H2S molecular weight	34.08
SO2 molecular weight	64.06
Molar Volume (scf/lbmol)	379.484
Reboiler Operating Hours	300

Combustion Emissions from Combustion Device(s)				
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Total NO _x	0.56	0.08	0.56	0.08
Total CO	1.12	0.17	1.12	0.17
Total SO ₂	0.24	0.03	0.24	0.03
Total PM ₁₀	0.012	0.00	0.01	0.00
Total PM _{2.5}	0.01	0.00	0.01	0.00
Total VOC (slip)	55.93	3.74	55.93	3.74
Total HAP (slip)	16.95	0.46	16.95	0.46
Total n-Hexane (slip)	3.64	0.14	3.64	0.14
Total Benzene (slip)	5.66	0.18	5.66	0.18
Total CH ₄	0.75	0.11	0.75	0.11
Total N ₂ O	0.002	0.00	0.00	0.00
Total CO ₂	532.01	33.29	532.01	33.29
Total CO _{2e}	551.28	36.13	551.28	36.13

Footnotes:
^a Uncontrolled stream properties determined via ProMax.
^b Flare CO and NO_x emission factors from ICEQ Air Permit Technical Guidance for Chemical Sources. PM and PM_{2.5} emission factors from AP-42, Table 1.4-1 and 1.4-2, July 1998. SO₂ emissions assume 100% conversion of H₂S to SO₂.
^c Flash tank emissions are routed back to inlet slug catcher.
^d Condenser Vapors are shown as routed to reboiler during SSM activities.

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
ROAD EMISSIONS

Total Suspended Particle Emissions	
$E = k(sL/2)^a(W/3)^b$	
a	0.7
b	0.45
k	4.9
Silt %	4.8
Vehicle Weight (tons)	28
E (lbs/VMT)	7.05
Rain Days	70
E-Annual (lbs/VMT)	5.70
Truckloads per year	356
Driving Distance Per Load (ft)	1000
Annual Distance (miles)	67
Control Efficiency - 15 MPH Limit	0.44
Emissions (lbs/hr)	0.60
Emissions (tpy)	0.11

PM₁₀ Emissions	
$E = k(sL/2)^a(W/3)^b$	
a	0.9
b	0.45
k	1.5
Silt %	4.8
Vehicle Weight (tons)	28
E (lbs/VMT)	1.80
Rain Days	70
E-Annual (lbs/VMT)	1.45
Truckloads per day	356
Driving Distance Per Load (ft)	1000
Annual Distance (miles)	67
Control Efficiency - 15 MPH Limit	0.44
Emissions (lbs/hr)	0.15
Emissions (tpy)	0.03

PM_{2.5} Emissions	
$E = k(sL/2)^a(W/3)^b$	
a	0.9
b	0.45
k	0.15
Silt %	4.8
Vehicle Weight (tons)	28
E (lbs/VMT)	0.18
Rain Days	70
E-Annual (lbs/VMT)	0.15
Truckloads per day	356
Driving Distance Per Load (ft)	1000
Annual Distance (miles)	67
Control Efficiency - 15 MPH Limit	0.44
Emissions (lbs/hr)	0.02
Emissions (tpy)	0.00

Emissions (lbs/hr) = Driving Distance (ft) / 5280 * E (lbs/VMT)
Emissions (tpy) = Annual Distance * E / 2000

References:

EPA. "Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources," Section 13.2.2 AP-42, Office of Air Quality Planning and Standards, Research Triangle Park, NC. 5th edition (11/2006).

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
FUGITIVE EMISSIONS

FUGITIVE EMISSIONS CALCULATIONS

Operating Hours:	8760 hours/year
Emission Factor Source:	Standard EFs - EPA-453/R-95-017 Table 2-4
Control Efficiency Source:	None
Emission Buffer (%):	0

Service	Component Type	Count	Emission Factor (lb/hr-source) ^a		Control (%) ^b	Pollutant	Mass Fraction ^c	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (tpy)	Controlled Emissions (lb/hr)	Controlled Emissions (tpy)
			Table 2-4	Table 2-8							
Gas	Valves	720	9.92E-03	5.51E-05	0.0%	VOC	0.319	2.8393	12.4361	2.8393	12.4361
	Pump Seals	0	5.29E-03	7.72E-04	0.0%	H2S	0.000	0.0001	0.0004	0.0001	0.0004
	Connectors	1440	4.41E-04	2.20E-05	0.0%	Benzene	0.001	0.0069	0.0304	0.0069	0.0304
	Flanges	720	8.60E-04	1.26E-05	0.0%	Toluene	0.001	0.0102	0.0449	0.0102	0.0449
	Open-Ended Lines	72	4.41E-03	3.31E-05	0.0%	E-Benzene	0.000	0.0004	0.0020	0.0004	0.0020
	Other	10	1.94E-02	2.65E-04	0.0%	Xylenes	0.001	0.0053	0.0230	0.0053	0.0230
	Relief Valves	0	1.94E-02	2.65E-04	0.0%	n-Hexane	0.011	0.0951	0.4167	0.0951	0.4167
						2,2,4 Trimethylpentane	0.000	0.0000	0.0000	0.0000	0.0000
Heavy Oil	Valves	0	1.85E-05	1.85E-05	0.0%	VOC	0.978	0.0000	0.0000	0.0000	0.0000
	Pump Seals	0	0.00E+00	0.00E+00	0.0%	H2S	0.000	0.0000	0.0000	0.0000	0.0000
	Connectors	0	1.65E-05	1.65E-05	0.0%	Benzene	0.015	0.0000	0.0000	0.0000	0.0000
	Flanges	0	8.60E-06	8.60E-07	0.0%	Toluene	0.005	0.0000	0.0000	0.0000	0.0000
	Open-Ended Lines	0	3.09E-04	1.59E-05	0.0%	E-Benzene	0.012	0.0000	0.0000	0.0000	0.0000
	Other	0	3.09E-04	7.05E-05	0.0%	Xylenes	0.001	0.0000	0.0000	0.0000	0.0000
	Relief Valves	0	3.09E-04	7.05E-05	0.0%	n-Hexane	0.007	0.0000	0.0000	0.0000	0.0000
						2,2,4 Trimethylpentane	0.085	0.0000	0.0000	0.0000	0.0000
Light Oil	Valves	236	5.51E-03	4.19E-05	0.0%	VOC	0.978	1.9625	8.5958	1.9625	8.5958
	Pump Seals	15	2.87E-02	1.12E-03	0.0%	H2S	0.000	0.0000	0.0000	0.0000	0.0000
	Connectors	472	4.63E-04	2.14E-05	0.0%	Benzene	0.015	0.0303	0.1327	0.0303	0.1327
	Flanges	236	2.43E-04	5.29E-06	0.0%	Toluene	0.005	0.0100	0.0438	0.0100	0.0438
	Open-Ended Lines	0	2.87E-03	3.09E-05	0.0%	E-Benzene	0.012	0.0242	0.1058	0.0242	0.1058
	Other	0	1.65E-02	2.43E-04	0.0%	Xylenes	0.001	0.0026	0.0112	0.0026	0.0112
	Relief Valves	0	1.65E-02	2.43E-04	0.0%	n-Hexane	0.007	0.0135	0.0593	0.0135	0.0593
						2,2,4 Trimethylpentane	0.085	0.1713	0.7502	0.1713	0.7502
Water/Oil	Valves	153	2.16E-04	2.14E-05	0.0%	VOC	0.978	0.2573	1.1272	0.2573	1.1272
	Pump Seals	10	5.29E-05	5.29E-05	0.0%	H2S	0.000	0.0000	0.0000	0.0000	0.0000
	Connectors	306	2.43E-04	2.20E-05	0.0%	Benzene	0.015	0.0040	0.0174	0.0040	0.0174
	Flanges	153	6.39E-06	6.39E-06	0.0%	Toluene	0.005	0.0013	0.0057	0.0013	0.0057
	Open-Ended Lines	0	5.51E-04	7.72E-06	0.0%	E-Benzene	0.012	0.0032	0.0139	0.0032	0.0139
	Other	5	3.09E-02	1.30E-04	0.0%	Xylenes	0.001	0.0003	0.0015	0.0003	0.0015
	Relief Valves	0	3.09E-02	1.30E-04	0.0%	n-Hexane	0.007	0.0018	0.0078	0.0018	0.0078
						2,2,4 Trimethylpentane	0.085	0.0225	0.0984	0.0225	0.0984

Fugitive Emission Summary

Pollutant	Uncontrolled Emissions		Controlled Emissions	
	(lb/hr)	(tpy)	(lb/hr)	(tpy)
VOC	5.06	22.16	5.06	22.16
HAPs	0.40	1.76	0.40	1.76
H2S	0.00	0.00	0.00	0.00
Benzene	0.04	0.18	0.04	0.18
Toluene	0.02	0.09	0.02	0.09
E-Benzene	0.03	0.12	0.03	0.12
Xylenes	0.01	0.04	0.01	0.04
n-Hexane	0.11	0.48	0.11	0.48
2,2,4 Trimethylpentane	0.19	0.85	0.19	0.85

Footnotes:

^a Factors are taken from EPA Document EPA-453/R-095-017, November 1995, Table 2-4

^b Control efficiencies are taken from EPA Document EPA-453/R-095-017, November 1995, Table 5-2

^c Gas/Vapor based inlet gas. Heavy Oil, Light Oil, and Water/Oil fugitives were based on liquid analysis of inlet separator hydrocarbon liquid.

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
FACILITY INLET GAS ANALYSIS - PROMAX

Gas Composition

Component	Mole %	Weight %
TEG	0.000	0.0000
Water	0.000	0.0000
Hydrogen Sulfide	0.001	0.0010
Carbon Dioxide	0.151	0.2740
Nitrogen	0.641	0.9060
Methane	77.048	51.4490
Ethane	11.244	15.4990
Propane	5.100	11.9380
Isobutane	0.895	2.5270
n-Butane	1.860	6.2590
Isopentane	0.549	2.2310
n-Pentane	0.654	2.6240
Other C-6's	0.612	2.3740
Heptanes	0.525	1.7020
Octanes	0.208	0.5990
Nonanes	0.086	0.2130
Benzene	0.016	0.0780
Toluene	0.039	0.1150
E-Benzene	0.002	0.0050
Xylenes	0.027	0.0590
n-Hexane	0.309	1.0680
2,2,4 Trimethylpentane	0.000	0.0000
Decanes Plus	0.034	0.0800
Decanes Plus Satellite	0.000	0.0000
Total	100.001	100.0010

MOLECULAR WEIGHT	22.48
SATURATED BTU	1351
NMHC (WT%)	47.371
VOCs (WT%)	31.87
HAPs (WT%)	1.33
H2S (MOL%)	0.00

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
FACILITY INLET FLUID ANALYSIS - PROMAX

Fluid Composition

Component	Mole %	Weight %
TEG	0.0000	0.0000
Water	0.0000	0.0000
Hydrogen Sulfide	0.0000	0.0000
Carbon Dioxide	0.0129	0.0075
Nitrogen	0.0167	0.0062
Methane	2.8473	0.6026
Ethane	3.9579	1.5701
Propane	8.4770	4.9315
Isobutane	3.2673	2.5054
n-Butane	12.1250	9.3186
Isopentane	8.1300	7.7386
n-Pentane	12.6670	12.0571
Other C-6's	7.9339	9.0203
Heptanes	17.1885	20.9987
Octanes	10.5388	14.6036
Nonanes	1.6426	2.7426
Benzene	0.7463	1.5099
Toluene	0.4833	0.4981
E-Benzene	0.9907	1.2043
Xylenes	0.0912	0.1277
n-Hexane	0.4815	0.6744
2,2,4 Trimethylpentane	7.5090	8.5370
Decanes Plus	0.8930	1.3457
Decanes Plus Satellite	0.0000	0.0000
Total	100.000	100.0000

MOLECULAR WEIGHT	75.80
SATURATED BTU	
NMHC (WT%)	99.38
VOCs (WT%)	97.81
HAPs (WT%)	12.55
H2S (MOL%)	0.000

XTO ENERGY, INC.

TIGER COMPRESSOR STATION

HPF FLARE BLOWDOWN GAS ROUTED TO FLARE (EXAMPLE CALCULATION)

Greenhouse Gas Emissions Sample Calculation

1) $E_{s,CH_4} = V_a * X_{CH_4} * [(1-\eta) * Z_L + Z_U]$ = 10,452.68 SCF/Yr
 $V_a = 951,570.00$
 $X_{CH_4} = 0.54923328$
 $N = 0.98$
 $Z_L = 1.00$
 $Z_U = 0.00$

2) $E_{s,CO_2} (uncombusted) = V_a * X_{CO_2}$ = 2,809.89 SCF/Yr
 $V_a = 951,570.00$
 $X_{CO_2} = 0.0030$

3) $E_{s,CO_2} (combusted) = \sum (\eta * V_a * Y_j * R_j * Z_L)$
 $N = 0.98$
 $V_a = 951,570.00$ $R_j =$ $E_{a,CO_2} =$
 $Y_j =$ Methane 0.5492 1 512,181.23
Ethane 0.1502 2 280,195.87
Propane 0.0999 3 279,562.05
Butane 0.0712 4 265,408.58
Pentane + 0.1067 5 497,387.03
 $Z_L = 1.00$ **1,834,734.76** SCF/Yr

4) $Mass_{s,i} = E_{s,i} * \rho_i * 10^3$
 $E_{s,i} (CH_4) = 10,452.68$
 $E_{s,i} (CO_2) = 1,837,544.65$
 $p_i (CH_4) = 0.0192$ kg/ft3 = 0.20 metric tons
 $p_i (CO_2) = 0.0526$ kg/ft3 = 96.65 metric tons

5) $CO_2e = CO_2 + (CH_4 * GWP)$ short tons CO_2e
 $CO_2 = 96.65$ = 106.54 106.54
 $CH_4 = 0.20$ = 0.22 5.53
 CH_4 GWP = 25 = 112.07

Source	Annual Volume
17. HPF Blowdowns	951,570.00
Total	951,570.00

Footnotes:

*Source is 40 CFR § 98.233 (n), 40 CFR § 98.233(v) for CH4 and CO2 mass emissions, 40 CFR § 98.233(z) for N2O mass emissions,

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 (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e 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 CO₂e 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 CO₂e 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 CO₂ 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)

XTO ENERGY, INC.
TIGER COMPRESSOR STATION
COMPRESSOR ENGINES

Greenhouse Gas Emissions Calculations

Source ID	Unit Description	Annual Hours	Rated HP	MMbtu/hp-hr ¹ (HHV)	Engine Data		40 CFR 98 Factors ²		lb/hr					tpy						
					g/hp-hr	lb/MMBtu	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O	CH ₄ as CO ₂ e	N ₂ O as CO ₂ e	CO ₂	CH ₄	N ₂ O	CH ₄ as CO ₂ e	N ₂ O as CO ₂ e	Total CO ₂ e
					ENG1	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04
ENG2	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04	9.03	10.77	23822.05		
ENG3	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04	9.03	10.77	23822.05		
ENG4	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04	9.03	10.77	23822.05		
ENG5	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04	9.03	10.77	23822.05		
ENG6	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.007481	493	0.002205	0.000221	5434.30	0.0825	0.0082	2.06	2.46	23802.25	0.36	0.04	9.03	10.77	23822.05		
ENG7	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.0075	447	0.002205	0.000221	4927.25	0.0827	0.0083	2.07	2.46	21581.35	0.36	0.04	9.03	10.77	21601.15		
ENG8	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.0075	447	0.002205	0.000221	4927.25	0.0827	0.0083	2.07	2.46	21581.35	0.36	0.04	9.03	10.77	21601.15		
ENG9	Caterpillar G3616 Natural Gas Compressor Engine	8760	5000	0.0075	447	0.002205	0.000221	4927.25	0.0827	0.0083	2.07	2.46	21581.35	0.36	0.04	9.05	10.79	21601.20		
ENG11	Caterpillar 3516J TA Natural Gas Compressor Engine	8760	1380	0.007962	530	0.002205	0.000221	1612.43	0.0242	0.0024	0.61	0.72	7062.46	0.11	0.01	2.65	3.16	7068.28		
ENG12	Caterpillar 3516J TA Natural Gas Compressor Engine	8760	1380	0.007962	530	0.002205	0.000221	1612.43	0.0242	0.0024	0.61	0.72	7062.46	0.11	0.01	2.65	3.16	7068.28		

¹HHV is based on the Fuel Consumption Rate @ 75% Load from the Gas Engine Rating Pro Report
²Warming potential for CH₄ is 25. N₂O is 298.

Total Emissions (TPY)	Total CO ₂ e
	221872.31

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

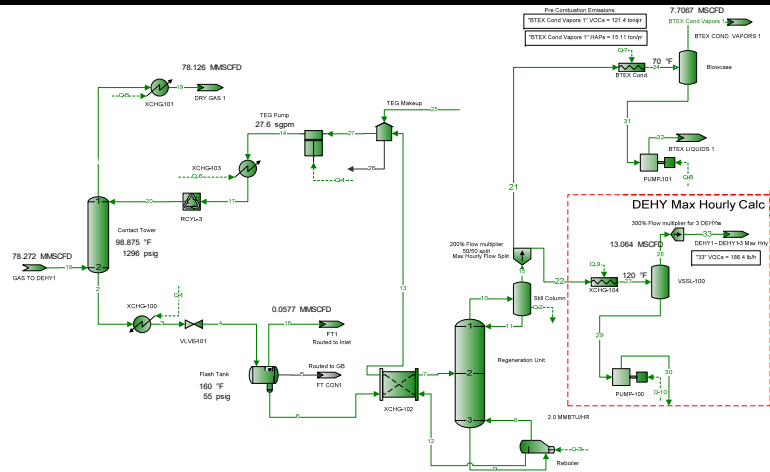
- If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect 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.
-

The Tiger Compressor Station gas inlet composition was from a gas sample of the inlet to the Maverick Compressor Station, which is identical in operation to the Tiger CS.

All supporting documentation is provided in this section.

Dehy 1 Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	



* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections

	BTEX Cond Vapors 1	1	2	3	4
From Block	Blowcase	Contact Tower	Contact Tower	XCHG-100	VLVE-101
To Block	BTEX COND. VAPORS 1	XCHG-101	XCHG-100	VLVE-101	Flash Tank

Stream Composition

	BTEX Cond Vapors 1	1	2	3	4
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	9.20204E-09	0.93257	15444.7	15444.7	15444.7
Water	0.42969	6.21175	273.944	273.944	273.944
Hydrogen Sulfide	0.0407566	2.90086	0.067818	0.067818	0.067818
Carbon Dioxide	0.803996	575.791	3.08524	3.08524	3.08524
Nitrogen	0.0031683	1561.41	0.262169	0.262169	0.262169
Methane	2.67493	107418	61.4294	61.4294	61.4294
Ethane	5.24242	29235.4	40.7741	40.7741	40.7741
Propane	7.93186	19200.7	38.9087	38.9087	38.9087
Isobutane	1.66532	4344.91	7.98804	7.98804	7.98804
n-Butane	5.58491	8882.75	23.1923	23.1923	23.1923
Isopentane	2.3873	3074.05	10.044	10.044	10.044
n-Pentane	3.22858	3554.02	14.5599	14.5599	14.5599
i-C6	2.43875	3390.46	17.0156	17.0156	17.0156
i-C7	1.01515	2312.79	16.1581	16.1581	16.1581
Octane	0.0495419	333.837	3.42391	3.42391	3.42391
Nonane	0.00179078	28.9504	0.378279	0.378279	0.378279
Benzene	1.36858	62.1872	11.4427	11.4427	11.4427
Toluene	0.944752	96.8924	25.406	25.406	25.406
Ethylbenzene	0.00600242	2.2264	0.553163	0.553163	0.553163
o-Xylene	0.0715393	21.2128	7.63699	7.63699	7.63699
n-Hexane	1.01894	1563.1	8.94571	8.94571	8.94571
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.22293E-05	0.218073	0.0231528	0.0231528	0.0231528
Decanes Plus Sat	0	0	0	0	0

	BTEX Cond Vapors 1	1	2	3	4
Mole Fraction	%	%	%	%	%
Triethylene Glycol	7.24152E-09	7.23936E-05	81.5761	81.5761	81.5761
Water	2.81872	0.0040196	12.0614	12.0614	12.0614
Hydrogen Sulfide	0.141327	0.000992263	0.00157838	0.00157838	0.00157838
Carbon Dioxide	2.15896	0.152521	0.0556057	0.0556057	0.0556057
Nitrogen	0.0133659	0.649775	0.00742322	0.00742322	0.00742322
Methane	19.7051	78.058	3.03726	3.03726	3.03726
Ethane	20.6039	11.3345	1.07558	1.07558	1.07558
Propane	21.2577	5.07612	0.699886	0.699886	0.699886
Isobutane	3.38605	0.871463	0.109012	0.109012	0.109012
n-Butane	11.3556	1.78162	0.316504	0.316504	0.316504
Isopentane	3.91035	0.496698	0.110422	0.110422	0.110422
n-Pentane	5.28835	0.574251	0.160068	0.160068	0.160068
i-C6	3.34442	0.458654	0.156617	0.156617	0.156617
i-C7	1.19727	0.269073	0.127906	0.127906	0.127906
Octane	0.0512549	0.0340699	0.0237752	0.0237752	0.0237752
Nonane	0.00165008	0.00263142	0.00233945	0.00233945	0.00233945
Benzene	2.07057	0.009281	0.116195	0.116195	0.116195
Toluene	1.21175	0.0122591	0.218712	0.218712	0.218712
Ethylbenzene	0.00668163	0.000244474	0.00413283	0.00413283	0.00413283
o-Xylene	0.0796343	0.00232931	0.0570581	0.0570581	0.0570581
n-Hexane	1.39734	0.211453	0.0823395	0.0823395	0.0823395
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	9.42132E-06	1.65725E-05	0.000119717	0.000119717	0.000119717

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report						
All Streams						
Tabulated by Total Phase						
Client Name:	DELAWARE DIVISION				Job:	
Location:	Tiger Compressor Station					
Flowsheet:	Dehy 1					
Mole Fraction						
	BTEX Cond Vapors 1 %	1 %	2 %	3 %	4 %	
Decanes Plus Sat	0	0	0	0	0	
Mass Fraction						
	BTEX Cond Vapors 1 %	1 %	2 %	3 %	4 %	
Triethylene Glycol	2.49324E-08	0.000502275	96.4694	96.4694	96.4694	
Water	1.16422	0.0033456	1.71109	1.71109	1.71109	
Hydrogen Sulfide	0.110428	0.00156238	0.0004236	0.0004236	0.0004236	
Carbon Dioxide	2.17838	0.310117	0.0192708	0.0192708	0.0192708	
Nitrogen	0.00858431	0.840966	0.00163755	0.00163755	0.00163755	
Methane	7.24756	57.8546	0.383696	0.383696	0.383696	
Ethane	14.204	15.746	0.254681	0.254681	0.254681	
Propane	21.4909	10.3413	0.243029	0.243029	0.243029	
Isobutane	4.5121	2.34013	0.0498944	0.0498944	0.0498944	
n-Butane	15.132	4.78418	0.144862	0.144862	0.144862	
Isopentane	6.46825	1.65566	0.0627363	0.0627363	0.0627363	
n-Pentane	8.74765	1.91417	0.0909431	0.0909431	0.0909431	
i-C6	6.60764	1.82607	0.106282	0.106282	0.106282	
i-C7	2.75049	1.24565	0.100926	0.100926	0.100926	
Octane	0.134231	0.179802	0.0213862	0.0213862	0.0213862	
Nonane	0.00485201	0.0155925	0.00236278	0.00236278	0.00236278	
Benzene	3.70809	0.0334936	0.0714728	0.0714728	0.0714728	
Toluene	2.55975	0.0521855	0.158689	0.158689	0.158689	
Ethylbenzene	0.0162632	0.00119912	0.00345513	0.00345513	0.00345513	
o-Xylene	0.193831	0.0114251	0.0477017	0.0477017	0.0477017	
n-Hexane	2.76076	0.841873	0.0558761	0.0558761	0.0558761	
2,2,4-Trimethylpentane	0	0	0	0	0	
Decanes Plus	3.31344E-05	0.000117453	0.000144616	0.000144616	0.000144616	
Decanes Plus Sat	0	0	0	0	0	
Stream Properties						
Property	Units	BTEX Cond Vapors 1	1	2	3	4
Temperature	°F	70	99.1049	99.5967	155 *	159.869
Pressure	psig	0	1291	1296	1286	60 *
Molecular Weight	lb/lbmol	43.6172	21.6446	126.989	126.989	126.989
Mass Flow	lb/h	36.908	185669	16009.9	16009.9	16009.9
Std Vapor Volumetric Flow	MMSCFD	0.00770669	78.1257	1.14823	1.14823	1.14823
Std Liquid Volumetric Flow	sgpm	0.143368	1051.28	29.1058	29.1058	29.1058
API Gravity				-3.26351	-3.26171	
Net Ideal Gas Heating Value	Btu/ft ³	2192.37	1176.52	3195.37	3195.37	3195.37
Remarks						

	Process Streams Report All Streams Tabulated by Total Phase	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections					
	5	6	7	8	9
From Block	Flash Tank	Flash Tank	XCHG-102	Reboiler	Regeneration Unit
To Block	FT CON1	XCHG-102	Regeneration Unit	Regeneration Unit	Reboiler

Stream Composition					
Mass Flow	5 lb/h	6 lb/h	7 lb/h	8 lb/h	9 lb/h
Triethylene Glycol		15444.6	15444.6	233.995	15678.3
Water		273.197	273.197	312.068	441.453
Hydrogen Sulfide		0.0432578	0.0432578	0.000259688	0.000268317
Carbon Dioxide		0.818158	0.818158	0.000345317	0.000348987
Nitrogen		0.00317134	0.00317134	1.25995E-08	1.26196E-08
Methane		2.6857	2.6857	6.94807E-05	6.9722E-05
Ethane		5.38761	5.38761	0.000794182	0.000799986
Propane		8.69455	8.69455	0.00319258	0.00322687
Isobutane		2.08624	2.08624	0.00110503	0.00111931
n-Butane		7.77539	7.77539	0.0066395	0.00674229
Isopentane		4.7283	4.7283	0.00917775	0.00938358
n-Pentane		7.4862	7.4862	0.0182334	0.0186783
i-C6		10.3187	10.3187	0.0415582	0.042796
i-C7		11.8787	11.8787	0.098463	0.102473
Octane		2.92382	2.92382	0.066686	0.0707755
Nonane		0.344309	0.344309	0.0151579	0.0164052
Benzene		11.0191	11.0191	1.81778	2.07655
Toluene		24.8602	24.8602	7.58102	8.99931
Ethylbenzene		0.544865	0.544865	0.240674	0.295555
o-Xylene		7.55442	7.55442	4.59899	5.88198
n-Hexane		5.84802	5.84802	0.0293535	0.0303129
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.0228772	0.0228772	0.0135052	0.0172833
Decanes Plus Sat		0	0	0	0

Mole Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol		85.8945	85.8945	8.18585	80.874
Water		12.6652	12.6652	91.0032	18.9821
Hydrogen Sulfide		0.00106007	0.00106007	4.00303E-05	6.0987E-06
Carbon Dioxide		0.0155264	0.0155264	4.12212E-05	6.14275E-06
Nitrogen		9.45489E-05	9.45489E-05	2.36284E-09	3.48963E-10
Methane		0.139819	0.139819	2.27532E-05	3.36666E-06
Ethane		0.149643	0.149643	0.000138755	2.06093E-05
Propane		0.164676	0.164676	0.00038036	5.66874E-05
Isobutane		0.0299779	0.0299779	9.98807E-05	1.4918E-05
n-Butane		0.111727	0.111727	0.000600125	8.98599E-05
Isopentane		0.0547337	0.0547337	0.000668275	0.000100749
n-Pentane		0.0866586	0.0866586	0.00132766	0.000200543
i-C6		0.100005	0.100005	0.00253351	0.000384698
i-C7		0.0990088	0.0990088	0.00516233	0.000792198
Octane		0.0213775	0.0213775	0.00306696	0.000479964
Nonane		0.00224209	0.00224209	0.000620888	9.90849E-05
Benzene		0.117817	0.117817	0.122256	0.0205933
Toluene		0.225343	0.225343	0.43225	0.0756604
Ethylbenzene		0.00428634	0.00428634	0.0119096	0.00215654
o-Xylene		0.0594291	0.0594291	0.227578	0.0429183
n-Hexane		0.0566768	0.0566768	0.00178947	0.000272486
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.000124554	0.000124554	0.000462513	8.72774E-05
Decanes Plus Sat		0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Mass Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol		97.548	97.548	41.7397	97.1555
Water		1.7255	1.7255	55.6662	2.7356
Hydrogen Sulfide		0.000273215	0.000273215	4.63226E-05	1.66271E-06
Carbon Dioxide		0.00516746	0.00516746	6.15971E-05	2.1626E-06
Nitrogen		2.00301E-05	2.00301E-05	2.24747E-09	7.82009E-11
Methane		0.0169628	0.0169628	1.23938E-05	4.32053E-07
Ethane		0.034028	0.034028	0.000141665	4.95735E-06
Propane		0.0549146	0.0549146	0.000569487	1.99963E-05
Isobutane		0.0131766	0.0131766	0.000197114	6.93617E-06
n-Butane		0.0491092	0.0491092	0.00118434	4.17806E-05
Isopentane		0.0298638	0.0298638	0.00163711	5.81482E-05
n-Pentane		0.0472827	0.0472827	0.00325244	0.000115746
i-C6		0.0651729	0.0651729	0.00741308	0.000265198
i-C7		0.0750259	0.0750259	0.0175637	0.000635004
Octane		0.0184668	0.0184668	0.0118953	0.000438582
Nonane		0.00217465	0.00217465	0.00270384	0.00010166
Benzene		0.0695964	0.0695964	0.324252	0.0128679
Toluene		0.157016	0.157016	1.35229	0.0557669
Ethylbenzene		0.00344136	0.00344136	0.0429311	0.0018315
o-Xylene		0.0477136	0.0477136	0.820361	0.0364495
n-Hexane		0.036936	0.036936	0.00523603	0.000187843
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.000144492	0.000144492	0.00240904	0.000107101
Decanes Plus Sat		0	0	0	0

Stream Properties

Property	Units	5	6	7	8	9
Temperature	°F		159.859	290 *	395 *	312.033
Pressure	psig	55	55	35 *	0.5	0.5
Molecular Weight	lb/lbmol		132.233	132.233	29.4514	125.007
Mass Flow	lb/h	0	15832.9	15832.9	560.606	16137.4
Std Vapor Volumetric Flow	MMSCFD	0	1.0905	1.0905	0.173363	1.17572
Std Liquid Volumetric Flow	sgpm	0	28.2295	28.2295	1.07129	28.6691
API Gravity			-5.72619			-6.14115
Net Ideal Gas Heating Value	Btu/ft^3		3286.42	3286.42	344.236	3056.11

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections

	10	11	12	13	14
From Block	Regeneration Unit	Still Column	Reboiler	XCHG-102	TEG Pump
To Block	Still Column	Regeneration Unit	XCHG-102	TEG Makeup	XCHG-103

Stream Composition

Mass Flow	10 lb/h	11 lb/h	12 lb/h	13 lb/h	14 lb/h
Triethylene Glycol	9.26449	8.96652	15444.3	15444.3	15445.6
Water	146.095	2.2837	129.385	129.385	129.386
Hydrogen Sulfide	0.0432546	5.40165E-06	8.6293E-06	8.6293E-06	8.6293E-06
Carbon Dioxide	0.818179	2.46467E-05	3.66946E-06	3.66946E-06	3.66946E-06
Nitrogen	0.00317135	5.14741E-09	2.01048E-11	2.01048E-11	0
Methane	2.68572	1.24735E-05	2.41306E-07	2.41306E-07	0
Ethane	5.38766	6.24831E-05	5.80388E-06	5.80388E-06	5.80388E-06
Propane	8.69468	0.000161952	3.42919E-05	3.42919E-05	3.42919E-05
Isobutane	2.08626	4.23025E-05	1.42824E-05	1.42824E-05	1.42824E-05
n-Butane	7.77552	0.000235837	0.000102796	0.000102796	0.000102796
Isopentane	4.7283	0.000204065	0.000205838	0.000205838	0.000205838
n-Pentane	7.48612	0.00036441	0.000444904	0.000444904	0.000444904
i-C6	10.3182	0.000695848	0.00123777	0.00123777	0.00123777
i-C7	11.8758	0.00103851	0.00401	0.00401	0.00401
Octane	2.9202	0.000465597	0.00408959	0.00408959	0.00408959
Nonane	0.343131	7.00614E-05	0.00124729	0.00124729	0.00124729
Benzene	10.7705	0.0101554	0.25877	0.25877	0.25877
Toluene	23.4767	0.0348045	1.41829	1.41829	1.41829
Ethylbenzene	0.490939	0.000954414	0.0548807	0.0548807	0.0548807
o-Xylene	6.28807	0.0166322	1.28299	1.28299	1.28299
n-Hexane	5.84748	0.000418319	0.0009594	0.0009594	0.0009594
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0191437	4.45788E-05	0.0037781	0.0037781	0.0037781
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	0.625369	31.8963	93.4457	93.4457	93.4462
Water	82.2055	67.7183	6.52568	6.52568	6.52523
Hydrogen Sulfide	0.0128655	8.46689E-05	2.30063E-07	2.30063E-07	2.30046E-07
Carbon Dioxide	0.188455	0.000299172	7.57595E-08	7.57595E-08	7.57538E-08
Nitrogen	0.00114758	9.81592E-08	6.52101E-13	6.52101E-13	0
Methane	1.69705	0.000415361	1.36672E-08	1.36672E-08	0
Ethane	1.8163	0.00111007	1.7538E-07	1.7538E-07	1.75367E-07
Propane	1.99878	0.001962	7.06607E-07	7.06607E-07	7.06555E-07
Isobutane	0.36386	0.000388806	2.23276E-07	2.23276E-07	2.23259E-07
n-Butane	1.35611	0.00216759	1.607E-06	1.607E-06	1.60688E-06
Isopentane	0.664328	0.00151094	2.59226E-06	2.59226E-06	2.59207E-06
n-Pentane	1.0518	0.00269817	5.60298E-06	5.60298E-06	5.60257E-06
i-C6	1.21375	0.00431359	1.30508E-05	1.30508E-05	1.30498E-05
i-C7	1.20141	0.00553661	3.63622E-05	3.63622E-05	3.63595E-05
Octane	0.259146	0.00217743	3.25302E-05	3.25302E-05	3.25278E-05
Nonane	0.0271202	0.000291818	8.83636E-06	8.83636E-06	8.8357E-06
Benzene	1.39774	0.0694525	0.00301009	0.00301009	0.00300986
Toluene	2.58287	0.201792	0.0139864	0.0139864	0.0139854
Ethylbenzene	0.0468762	0.00480246	0.0004697	0.0004697	0.000469665
o-Xylene	0.600403	0.0836908	0.0109805	0.0109805	0.0109797
n-Hexane	0.687848	0.00259318	1.01158E-05	1.01158E-05	1.0115E-05
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00126505	0.000155243	2.23784E-05	2.23784E-05	2.23767E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Mass Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	3.46442	79.2333	99.1499	99.1499	99.15
Water	54.6316	20.1801	0.83063	0.83063	0.830569
Hydrogen Sulfide	0.0161749	4.77321E-05	5.53986E-08	5.53986E-08	5.53942E-08
Carbon Dioxide	0.305954	0.000217793	2.35572E-08	2.35572E-08	2.35554E-08
Nitrogen	0.00118591	4.54854E-08	1.29069E-13	1.29069E-13	0
Methane	1.00431	0.000110223	1.54914E-09	1.54914E-09	0
Ethane	2.01469	0.000552136	3.72598E-08	3.72598E-08	3.72569E-08
Propane	3.25134	0.0014311	2.20148E-07	2.20148E-07	2.20131E-07
Isobutane	0.78015	0.000373809	9.16906E-08	9.16906E-08	9.16834E-08
n-Butane	2.90762	0.00208399	6.59933E-07	6.59933E-07	6.59881E-07
Isopentane	1.76813	0.00180323	1.32144E-06	1.32144E-06	1.32134E-06
n-Pentane	2.7994	0.00322014	2.85621E-06	2.85621E-06	2.85598E-06
i-C6	3.85845	0.00614891	7.94623E-06	7.94623E-06	7.9456E-06
i-C7	4.4409	0.00917689	2.57435E-05	2.57435E-05	2.57414E-05
Octane	1.092	0.00411428	2.62544E-05	2.62544E-05	2.62523E-05
Nonane	0.128313	0.000619102	8.00735E-06	8.00735E-06	8.00672E-06
Benzene	4.02758	0.0897388	0.00166126	0.00166126	0.00166113
Toluene	8.77902	0.307553	0.00910518	0.00910518	0.00910446
Ethylbenzene	0.183585	0.00843375	0.000352325	0.000352325	0.000352297
o-Xylene	2.3514	0.146972	0.00823655	0.00823655	0.00823589
n-Hexane	2.18664	0.00369651	6.15918E-06	6.15918E-06	6.15869E-06
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0071587	0.000393924	2.42547E-05	2.42547E-05	2.42528E-05
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	10	11	12	13	14
Temperature	°F	290.442	215 *	395	269.963	271.045
Pressure	psig	0	0	0.5	0.5 *	1315 *
Molecular Weight	lb/lbmol	27.108	60.4539	141.533	141.533	141.534
Mass Flow	lb/h	267.418	11.3166	15576.8	15576.8	15578
Std Vapor Volumetric Flow	MMSCFD	0.0898458	0.00170489	1.00236	1.00236	1.00243
Std Liquid Volumetric Flow	sgpm	0.652304	0.020588	27.5978	27.5978	27.6
API Gravity			-4.52535	-6.73842	-6.73842	-6.92214
Net Ideal Gas Heating Value	Btu/ft^3	583.912	1219.36	3525.14	3525.14	3525.16

Remarks

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections					
	15	16	17	18	19
From Block	Still Column	Flash Tank	XCHG-103	GAS TO DEHY1	XCHG-101
To Block	Max Hourly Flow Split	FT1	RCYL-3	Contact Tower	DRY GAS 1

Stream Composition					
Mass Flow	15 lb/h	16 lb/h	17 lb/h	18 lb/h	19 lb/h
Triethylene Glycol	0.297975	0.015948	15445.6	2.77891E-19	0.93257
Water	143.811	0.747111	129.386	150.778	6.21175
Hydrogen Sulfide	0.0432492	0.0245601	8.6293E-06	2.96867	2.90086
Carbon Dioxide	0.818154	2.26708	3.66946E-06	578.877	575.791
Nitrogen	0.00317134	0.258998	0	1561.68	1561.41
Methane	2.6857	58.7437	0	107480	107418
Ethane	5.3876	35.3865	5.80388E-06	29276.2	29235.4
Propane	8.69451	30.2141	3.42919E-05	19239.6	19200.7
Isobutane	2.08622	5.9018	1.42824E-05	4352.89	4344.91
n-Butane	7.77528	15.417	0.000102796	8905.94	8882.75
Isopentane	4.72809	5.31572	0.000205838	3084.09	3074.05
n-Pentane	7.48575	7.0737	0.000444904	3568.58	3554.02
i-C6	10.3175	6.69683	0.00123777	3407.47	3390.46
i-C7	11.8747	4.27938	0.00401	2328.94	2312.79
Octane	2.91973	0.500085	0.00408959	337.257	333.837
Nonane	0.343061	0.0339702	0.00124729	29.3275	28.9504
Benzene	10.7603	0.423628	0.25877	73.3721	62.1872
Toluene	23.4419	0.545785	1.41829	120.884	96.8924
Ethylbenzene	0.489984	0.00829747	0.0548807	2.72475	2.2264
o-Xylene	6.27144	0.0825667	1.28299	27.5649	21.2128
n-Hexane	5.84706	3.09769	0.0009594	1572.04	1563.1
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0190991	0.000275627	0.0037781	0.237463	0.218073
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	15 %	16 %	17 %	18 %	19 %
Triethylene Glycol	0.0205029	0.00167541	93.4462	2.1532E-23	7.23936E-05
Water	82.4857	0.654263	6.52523	0.0973865	0.0040196
Hydrogen Sulfide	0.0131128	0.0113692	2.30046E-07	0.00101357	0.000992263
Carbon Dioxide	0.192095	0.812698	7.57538E-08	0.153053	0.152521
Nitrogen	0.00116978	0.145861	0	0.648673	0.649775
Methane	1.72987	57.7694	0	77.9572	78.058
Ethane	1.85141	18.5663	1.75367E-07	11.3291	11.3345
Propane	2.0374	10.8099	7.06555E-07	5.07693	5.07612
Isobutane	0.37089	1.60196	2.23259E-07	0.871439	0.871463
n-Butane	1.3823	4.1847	1.60688E-06	1.78295	1.78162
Isopentane	0.677148	1.16236	2.59207E-06	0.497393	0.496698
n-Pentane	1.0721	1.54677	5.60257E-06	0.575529	0.574251
i-C6	1.23714	1.22601	1.30498E-05	0.460097	0.458654
i-C7	1.22455	0.673771	3.63595E-05	0.270448	0.269073
Octane	0.264117	0.0690681	3.25278E-05	0.0343548	0.0340699
Nonane	0.0276391	0.0041786	8.8357E-06	0.00266073	0.00263142
Benzene	1.42343	0.0855609	0.00300986	0.0109299	0.009281
Toluene	2.62893	0.0934521	0.0139854	0.0152662	0.0122591
Ethylbenzene	0.0476901	0.00123303	0.000469665	0.000298639	0.000244474
o-Xylene	0.610397	0.0122696	0.0109797	0.00302118	0.00232931
n-Hexane	0.701103	0.567104	1.0115E-05	0.212267	0.211453
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00128651	2.83469E-05	2.23767E-05	1.80124E-05	1.65725E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report						
All Streams						
Tabulated by Total Phase						
Client Name:	DELAWARE DIVISION			Job:		
Location:	Tiger Compressor Station					
Flowsheet:	Dehy 1					
Mass Fraction	15 %	16 %	17 %	18 %	19 %	
Triethylene Glycol	0.11635	0.00900839	99.15	1.49323E-22	0.000502275	
Water	56.1539	0.422014	0.830569	0.0810196	0.0033456	
Hydrogen Sulfide	0.0168875	0.0138731	5.53942E-08	0.00159519	0.00156238	
Carbon Dioxide	0.319464	1.28059	2.35554E-08	0.311055	0.310117	
Nitrogen	0.00123831	0.146298	0	0.839155	0.840966	
Methane	1.04869	33.182	0	57.7534	57.8546	
Ethane	2.1037	19.9885	3.72569E-08	15.7314	15.746	
Propane	3.39494	17.0668	2.20131E-07	10.3383	10.3413	
Isobutane	0.814606	3.3337	9.16834E-08	2.33899	2.34013	
n-Butane	3.03601	8.70843	6.59881E-07	4.78554	4.78418	
Isopentane	1.84618	3.00264	1.32134E-06	1.65721	1.65566	
n-Pentane	2.92296	3.99566	2.85598E-06	1.91755	1.91417	
i-C6	4.02867	3.78278	7.9456E-06	1.83098	1.82607	
i-C7	4.63672	2.41725	2.57414E-05	1.25144	1.24565	
Octane	1.14007	0.282479	2.62523E-05	0.181222	0.179802	
Nonane	0.133955	0.0191884	8.00672E-06	0.0157589	0.0155925	
Benzene	4.20158	0.239291	0.00166113	0.039426	0.0334936	
Toluene	9.15336	0.308293	0.00910446	0.0649562	0.0521855	
Ethylbenzene	0.191324	0.00468692	0.000352297	0.00146412	0.00119912	
o-Xylene	2.44881	0.0466387	0.00823589	0.0148118	0.0114251	
n-Hexane	2.2831	1.74976	6.15869E-06	0.844726	0.841873	
2,2,4-Trimethylpentane	0	0	0	0	0	
Decanes Plus	0.00745762	0.000155691	2.42528E-05	0.000127599	0.000117453	
Decanes Plus Sat	0	0	0	0	0	
Stream Properties						
Property	Units	15	16	17	18	19
Temperature	°F	215	159.859	95 *	98.8747	90 *
Pressure	psig	0	55	1305	1296	1286
Molecular Weight	lb/lbmol	26.463	27.9297	141.534	21.6546	21.6446
Mass Flow	lb/h	256.102	177.035	15578	186101	185669
Std Vapor Volumetric Flow	MMSCFD	0.0881409	0.0577294	1.00243	78.2715	78.1257
Std Liquid Volumetric Flow	sgpm	0.631716	0.876291	27.6	1052.78	1051.28
API Gravity				-6.92075		
Net Ideal Gas Heating Value	Btu/ft^3	571.62	1475.61	3525.16	1176.06	1176.52
Remarks						

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections

	20	21	22	23	24
From Block	RCYL-3	Max Hourly Flow Split	Max Hourly Flow Split	XCHG-104	BTEX Cond.
To Block	Contact Tower	BTEX Cond.	XCHG-104	VSSL-100	Blowcase

Stream Composition

Mass Flow	20 lb/h	21 lb/h	22 lb/h	23 lb/h	24 lb/h
Triethylene Glycol	15445.6	0.297975	0.297975	0.297975	0.297975
Water	129.377	143.811	143.811	143.811	143.811
Hydrogen Sulfide	8.58987E-06	0.0432492	0.0432492	0.0432492	0.0432492
Carbon Dioxide	3.65285E-06	0.818154	0.818154	0.818154	0.818154
Nitrogen	0	0.00317134	0.00317134	0.00317134	0.00317134
Methane	0	2.6857	2.6857	2.6857	2.6857
Ethane	5.77466E-06	5.3876	5.3876	5.3876	5.3876
Propane	3.41181E-05	8.69451	8.69451	8.69451	8.69451
Isobutane	1.42107E-05	2.08622	2.08622	2.08622	2.08622
n-Butane	0.000102293	7.77528	7.77528	7.77528	7.77528
Isopentane	0.000204776	4.72809	4.72809	4.72809	4.72809
n-Pentane	0.00044263	7.48575	7.48575	7.48575	7.48575
i-C6	0.00123123	10.3175	10.3175	10.3175	10.3175
i-C7	0.0039894	11.8747	11.8747	11.8747	11.8747
Octane	0.00406908	2.91973	2.91973	2.91973	2.91973
Nonane	0.0012412	0.343061	0.343061	0.343061	0.343061
Benzene	0.257822	10.7603	10.7603	10.7603	10.7603
Toluene	1.41413	23.4419	23.4419	23.4419	23.4419
Ethylbenzene	0.0548116	0.489984	0.489984	0.489984	0.489984
o-Xylene	1.28489	6.27144	6.27144	6.27144	6.27144
n-Hexane	0.000954316	5.84706	5.84706	5.84706	5.84706
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00376275	0.0190991	0.0190991	0.0190991	0.0190991
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	20 %	21 %	22 %	23 %	24 %
Triethylene Glycol	93.4467	0.0205029	0.0205029	0.0205029	0.0205029
Water	6.5248	82.4857	82.4857	82.4857	82.4857
Hydrogen Sulfide	2.28995E-07	0.0131128	0.0131128	0.0131128	0.0131128
Carbon Dioxide	7.54113E-08	0.192095	0.192095	0.192095	0.192095
Nitrogen	0	0.00116978	0.00116978	0.00116978	0.00116978
Methane	0	1.72987	1.72987	1.72987	1.72987
Ethane	1.74485E-07	1.85141	1.85141	1.85141	1.85141
Propane	7.02977E-07	2.0374	2.0374	2.0374	2.0374
Isobutane	2.22139E-07	0.37089	0.37089	0.37089	0.37089
n-Butane	1.59903E-06	1.3823	1.3823	1.3823	1.3823
Isopentane	2.57871E-06	0.677148	0.677148	0.677148	0.677148
n-Pentane	5.57395E-06	1.0721	1.0721	1.0721	1.0721
i-C6	1.29809E-05	1.23714	1.23714	1.23714	1.23714
i-C7	3.61728E-05	1.22455	1.22455	1.22455	1.22455
Octane	3.23648E-05	0.264117	0.264117	0.264117	0.264117
Nonane	8.79259E-06	0.0276391	0.0276391	0.0276391	0.0276391
Benzene	0.00299884	1.42343	1.42343	1.42343	1.42343
Toluene	0.0139444	2.62893	2.62893	2.62893	2.62893
Ethylbenzene	0.000469075	0.0476901	0.0476901	0.0476901	0.0476901
o-Xylene	0.010996	0.610397	0.610397	0.610397	0.610397
n-Hexane	1.00614E-05	0.701103	0.701103	0.701103	0.701103
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.2286E-05	0.00128651	0.00128651	0.00128651	0.00128651
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Mass Fraction	20 %	21 %	22 %	23 %	24 %
Triethylene Glycol	99.1501	0.11635	0.11635	0.11635	0.11635
Water	0.830511	56.1539	56.1539	56.1539	56.1539
Hydrogen Sulfide	5.5141E-08	0.0168875	0.0168875	0.0168875	0.0168875
Carbon Dioxide	2.34488E-08	0.319464	0.319464	0.319464	0.319464
Nitrogen	0	0.00123831	0.00123831	0.00123831	0.00123831
Methane	0	1.04869	1.04869	1.04869	1.04869
Ethane	3.70693E-08	2.1037	2.1037	2.1037	2.1037
Propane	2.19015E-07	3.39494	3.39494	3.39494	3.39494
Isobutane	9.12229E-08	0.814606	0.814606	0.814606	0.814606
n-Butane	6.56652E-07	3.03601	3.03601	3.03601	3.03601
Isopentane	1.31452E-06	1.84618	1.84618	1.84618	1.84618
n-Pentane	2.84138E-06	2.92296	2.92296	2.92296	2.92296
i-C6	7.90363E-06	4.02867	4.02867	4.02867	4.02867
i-C7	2.56092E-05	4.63672	4.63672	4.63672	4.63672
Octane	2.61207E-05	1.14007	1.14007	1.14007	1.14007
Nonane	7.96763E-06	0.133955	0.133955	0.133955	0.133955
Benzene	0.00165504	4.20158	4.20158	4.20158	4.20158
Toluene	0.00907776	9.15336	9.15336	9.15336	9.15336
Ethylbenzene	0.000351853	0.191324	0.191324	0.191324	0.191324
o-Xylene	0.00824809	2.44881	2.44881	2.44881	2.44881
n-Hexane	6.12605E-06	2.2831	2.2831	2.2831	2.2831
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.41543E-05	0.00745762	0.00745762	0.00745762	0.00745762
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	20	21	22	23	24
Temperature	°F	95	215	215	120 *	70 *
Pressure	psig	1305	0	0	0	0
Molecular Weight	lb/lbmol	141.535	26.463	26.463	26.463	26.463
Mass Flow	lb/h	15578	256.102	256.102	256.102	256.102
Std Vapor Volumetric Flow	MMSCFD	1.00243	0.0881409	0.0881409	0.0881409	0.0881409
Std Liquid Volumetric Flow	sgpm	27.6	0.631716	0.631716	0.631716	0.631716
API Gravity		-6.92078				
Net Ideal Gas Heating Value	Btu/ft ³	3525.17	571.62	571.62	571.62	571.62

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections

	25	26	27	28	29
From Block	--	TEG Makeup	TEG Makeup	VSSL-100	VSSL-100
To Block	TEG Makeup	--	TEG Pump	300% Flow multiplier for 3 DEHY's	PUMP-100

Stream Composition

Mass Flow	25 lb/h	26 lb/h	27 lb/h	28 lb/h	29 lb/h
Triethylene Glycol	1.23191 *	0	15445.6	7.60739E-07	0.297975
Water	0.000742634 *	0	129.386	3.39202	140.419
Hydrogen Sulfide	0 *	0	8.6293E-06	0.042647	0.000602141
Carbon Dioxide	0 *	0	3.66946E-06	0.814624	0.00352978
Nitrogen	0 *	0	0	0.00317046	8.78919E-07
Methane	0 *	0	0	2.68298	0.00272063
Ethane	0 *	0	5.80388E-06	5.35877	0.02883
Propane	0 *	0	3.42919E-05	8.56156	0.132954
Isobutane	0 *	0	1.42824E-05	2.01385	0.0723675
n-Butane	0 *	0	0.000102796	7.38676	0.388519
Isopentane	0 *	0	0.000205838	4.22807	0.500023
n-Pentane	0 *	0	0.000444904	6.49945	0.986303
i-C6	0 *	0	0.00123777	7.76939	2.54811
i-C7	0 *	0	0.00401	6.24258	5.63216
Octane	0 *	0	0.00408959	0.58475	2.33498
Nonane	0 *	0	0.00124729	0.02876	0.314301
Benzene	0 *	0	0.25877	6.28417	4.47616
Toluene	0 *	0	1.41829	7.57616	15.8658
Ethylbenzene	0 *	0	0.0548807	0.0710045	0.41898
o-Xylene	0 *	0	1.28299	0.857162	5.41427
n-Hexane	0 *	0	0.0009594	4.04422	1.80285
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	0	0.0037781	0.000255575	0.0188435
Decanes Plus Sat	0 *	0	0	0	0

Mole Fraction	25 %	26 %	27 %	28 %	29 %
Triethylene Glycol	99.5 *	93.4457	93.4462	3.53173E-07	0.0240704
Water	0.5 *	6.52568	6.52523	13.1269	94.5542
Hydrogen Sulfide	0 *	2.30063E-07	2.30046E-07	0.0872411	0.00021433
Carbon Dioxide	0 *	7.57595E-08	7.57538E-08	1.29049	0.000972964
Nitrogen	0 *	6.52101E-13	0	0.00789042	3.80609E-07
Methane	0 *	1.36672E-08	0	11.6598	0.00205729
Ethane	0 *	1.7538E-07	1.75367E-07	12.4248	0.0116311
Propane	0 *	7.06607E-07	7.06555E-07	13.5363	0.0365764
Isobutane	0 *	2.23276E-07	2.23259E-07	2.41562	0.0151042
n-Butane	0 *	1.607E-06	1.60688E-06	8.86044	0.0810897
Isopentane	0 *	2.59226E-06	2.59207E-06	4.0856	0.0840731
n-Pentane	0 *	5.60298E-06	5.60257E-06	6.28045	0.165835
i-C6	0 *	1.30508E-05	1.30498E-05	6.28561	0.358699
i-C7	0 *	3.63622E-05	3.63595E-05	4.34341	0.681859
Octane	0 *	3.25302E-05	3.25278E-05	0.356894	0.247973
Nonane	0 *	8.83636E-06	8.8357E-06	0.0156335	0.0297281
Benzene	0 *	0.00301009	0.00300986	5.60886	0.69516
Toluene	0 *	0.0139864	0.0139854	5.7326	2.08889
Ethylbenzene	0 *	0.0004697	0.000469665	0.0466281	0.0478748
o-Xylene	0 *	0.0109805	0.0109797	0.562892	0.618663
n-Hexane	0 *	1.01158E-05	1.0115E-05	3.27186	0.253788
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	2.23784E-05	2.23767E-05	0.000116154	0.00149016
Decanes Plus Sat	0 *	0	0	0	0

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Mass Fraction	25 %	26 %	27 %	28 %	29 %
Triethylene Glycol	99.9398 *	99.1499	99.15	1.02192E-06	0.164029
Water	0.0602469 *	0.83063	0.830569	4.55658	77.298
Hydrogen Sulfide	0 *	5.53986E-08	5.53942E-08	0.0572887	0.000331467
Carbon Dioxide	0 *	2.35572E-08	2.35554E-08	1.0943	0.00194308
Nitrogen	0 *	1.29069E-13	0	0.00425895	4.83828E-07
Methane	0 *	1.54914E-09	0	3.60411	0.00149766
Ethane	0 *	3.72598E-08	3.72569E-08	7.19855	0.0158703
Propane	0 *	2.20148E-07	2.20131E-07	11.5009	0.0731885
Isobutane	0 *	9.16906E-08	9.16834E-08	2.70525	0.0398369
n-Butane	0 *	6.59933E-07	6.59881E-07	9.9228	0.213872
Isopentane	0 *	1.32144E-06	1.32134E-06	5.67965	0.275253
n-Pentane	0 *	2.85621E-06	2.85598E-06	8.73085	0.54294
i-C6	0 *	7.94623E-06	7.9456E-06	10.4368	1.40268
i-C7	0 *	2.57435E-05	2.57414E-05	8.38578	3.1004
Octane	0 *	2.62544E-05	2.62523E-05	0.785507	1.28536
Nonane	0 *	8.00735E-06	8.00672E-06	0.0386339	0.173017
Benzene	0 *	0.00166126	0.00166113	8.44166	2.46404
Toluene	0 *	0.00910518	0.00910446	10.1772	8.73379
Ethylbenzene	0 *	0.000352325	0.000352297	0.0953818	0.23064
o-Xylene	0 *	0.00823655	0.00823589	1.15144	2.98045
n-Hexane	0 *	6.15918E-06	6.15869E-06	5.43268	0.992432
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	2.42547E-05	2.42528E-05	0.000343319	0.010373
Decanes Plus Sat	0 *	0	0	0	0

Stream Properties

Property	Units	25	26	27	28	29
Temperature	°F	85 *		269.949	120	120
Pressure	psig	0.5 *	0.5	0.5	0	0
Molecular Weight	lb/lbmol	149.512	141.533	141.534	51.8995	22.0371
Mass Flow	lb/h	1.23265	0	15578	74.4424	181.659
Std Vapor Volumetric Flow	MMSCFD	7.50877E-05	0	1.00243	0.0130636	0.0750774
Std Liquid Volumetric Flow	sgpm	0.00218163	0	27.6 *	0.246595	0.385121
API Gravity		-7.10455		-6.73845		18.3734
Net Ideal Gas Heating Value	Btu/ft^3	3752.16	3525.14	3525.16	2482.22	239.174

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Connections

	30	31	32	33
From Block	PUMP-100	Blowcase	PUMP-101	300% Flow multiplier for 3 DEHY's
To Block	--	PUMP-101	BTEX LIQUIDS 1	DEHY1 - DEHY1-3 Max Hrly

Stream Composition

Mass Flow	30 lb/h	31 lb/h	32 lb/h	33 lb/h
Triethylene Glycol	0.297975	0.297975	0.297975	2.28222E-06
Water	140.419	143.382	143.382	10.1761
Hydrogen Sulfide	0.000602141	0.00249253	0.00249253	0.127941
Carbon Dioxide	0.00352978	0.0141582	0.0141582	2.44387
Nitrogen	8.78919E-07	3.04565E-06	3.04565E-06	0.00951139
Methane	0.00272063	0.0107758	0.0107758	8.04895
Ethane	0.02883	0.145185	0.145185	16.0763
Propane	0.132954	0.762658	0.762658	25.6847
Isobutane	0.0723675	0.420897	0.420897	6.04156
n-Butane	0.388519	2.19037	2.19037	22.1603
Isopentane	0.500023	2.34079	2.34079	12.6842
n-Pentane	0.986303	4.25717	4.25717	19.4983
i-C6	2.54811	7.87875	7.87875	23.3082
i-C7	5.63216	10.8596	10.8596	18.7277
Octane	2.33498	2.87019	2.87019	1.75425
Nonane	0.314301	0.341271	0.341271	0.0862799
Benzene	4.47616	9.39175	9.39175	18.8525
Toluene	15.8658	22.4972	22.4972	22.7285
Ethylbenzene	0.41898	0.483982	0.483982	0.213013
o-Xylene	5.41427	6.1999	6.1999	2.57149
n-Hexane	1.80285	4.82812	4.82812	12.1327
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.0188435	0.0190869	0.0190869	0.000766724
Decanes Plus Sat	0	0	0	0

Mole Fraction	30 %	31 %	32 %	33 %
Triethylene Glycol	0.0240704	0.0224674	0.0224674	3.53173E-07
Water	94.5542	90.1189	90.1189	13.1269
Hydrogen Sulfide	0.00021433	0.000828121	0.000828121	0.0872411
Carbon Dioxide	0.000972964	0.00364273	0.00364273	1.29049
Nitrogen	3.80609E-07	1.23106E-06	1.23106E-06	0.00789042
Methane	0.00205729	0.00760577	0.00760577	11.6598
Ethane	0.0116311	0.0546719	0.0546719	12.4248
Propane	0.0365764	0.195838	0.195838	13.5363
Isobutane	0.0151042	0.081997	0.081997	2.41562
n-Butane	0.0810897	0.426717	0.426717	8.86044
Isopentane	0.0840731	0.367365	0.367365	4.0856
n-Pentane	0.165835	0.668122	0.668122	6.28045
i-C6	0.358699	1.03523	1.03523	6.28561
i-C7	0.681859	1.22716	1.22716	4.34341
Octane	0.247973	0.284512	0.284512	0.356894
Nonane	0.0297281	0.0301292	0.0301292	0.0156335
Benzene	0.69516	1.36142	1.36142	5.60886
Toluene	2.08889	2.76472	2.76472	5.7326
Ethylbenzene	0.0478748	0.0516192	0.0516192	0.0466281
o-Xylene	0.618663	0.661252	0.661252	0.562892
n-Hexane	0.253788	0.634394	0.634394	3.27186
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.00149016	0.00140888	0.00140888	0.000116154

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 1	

Mole Fraction	30 %	31 %	32 %	33 %
Decanes Plus Sat	0	0	0	0

Mass Fraction	30 %	31 %	32 %	33 %
Triethylene Glycol	0.164029	0.135941	0.135941	1.02192E-06
Water	77.298	65.4131	65.4131	4.55658
Hydrogen Sulfide	0.000331467	0.00113714	0.00113714	0.0572887
Carbon Dioxide	0.00194308	0.00645923	0.00645923	1.0943
Nitrogen	4.83828E-07	1.38948E-06	1.38948E-06	0.00425895
Methane	0.00149766	0.00491612	0.00491612	3.60411
Ethane	0.0158703	0.0662357	0.0662357	7.19855
Propane	0.0731885	0.347938	0.347938	11.5009
Isobutane	0.0398369	0.192021	0.192021	2.70525
n-Butane	0.213872	0.999286	0.999286	9.9228
Isopentane	0.275253	1.06791	1.06791	5.67965
n-Pentane	0.54294	1.94219	1.94219	8.73085
i-C6	1.40268	3.59442	3.59442	10.4368
i-C7	3.1004	4.95433	4.95433	8.38578
Octane	1.28536	1.30943	1.30943	0.785507
Nonane	0.173017	0.155694	0.155694	0.0386339
Benzene	2.46404	4.28468	4.28468	8.44166
Toluene	8.73379	10.2636	10.2636	10.1772
Ethylbenzene	0.23064	0.220801	0.220801	0.0953818
o-Xylene	2.98045	2.8285	2.8285	1.15144
n-Hexane	0.992432	2.20267	2.20267	5.43268
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.010373	0.00870776	0.00870776	0.000343319
Decanes Plus Sat	0	0	0	0

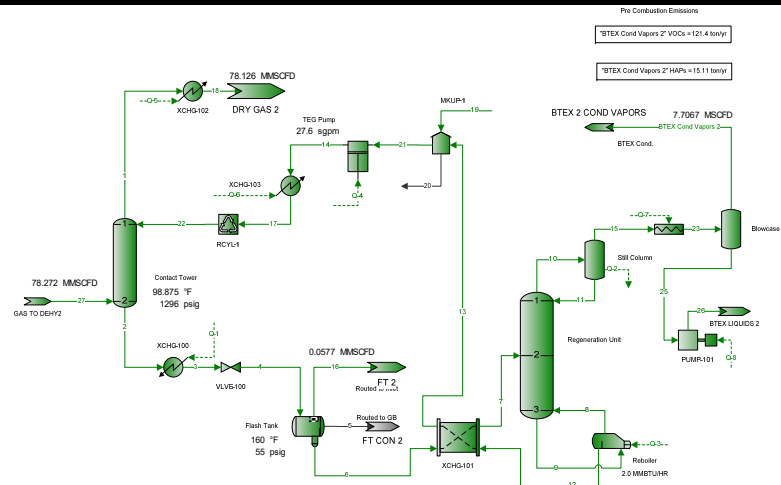
Stream Properties

Property	Units	30	31	32	33
Temperature	°F	136.077	70	84.4073	120
Pressure	psig	15 *	0	16 *	0
Molecular Weight	lb/lbmol	22.0371	24.8194	24.8194	51.8995
Mass Flow	lb/h	181.659	219.194	219.194	223.327
Std Vapor Volumetric Flow	MMSCFD	0.0750774	0.0804342	0.0804342	0.0391907
Std Liquid Volumetric Flow	sgpm	0.385121	0.488348	0.488348	0.739784
API Gravity		18.4013	25.5414	25.603	
Net Ideal Gas Heating Value	Btu/ft ³	239.174	416.331	416.331	2482.22

Remarks

Dehy 2 Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	



* User Specified Values
? Extrapolated or Approximate Values

	Process Streams Report All Streams Tabulated by Total Phase	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections					
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	BTEX Cond Vapors 2	1	2	3	4
From Block	Blowcase	Contact Tower	Contact Tower	XCHG-100	VLVE-100
To Block	BTEX 2 COND VAPORS	XCHG-102	XCHG-100	VLVE-100	Flash Tank

Stream Composition					
--------------------	--	--	--	--	--

	BTEX Cond Vapors 2	1	2	3	4
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	9.20204E-09	0.93257	15444.7	15444.7	15444.7
Water	0.42969	6.21175	273.944	273.944	273.944
Hydrogen Sulfide	0.0407566	2.90086	0.067818	0.067818	0.067818
Carbon Dioxide	0.803996	575.791	3.08524	3.08524	3.08524
Nitrogen	0.0031683	1561.41	0.262169	0.262169	0.262169
Methane	2.67493	107418	61.4294	61.4294	61.4294
Ethane	5.24242	29235.4	40.7741	40.7741	40.7741
Propane	7.93186	19200.7	38.9087	38.9087	38.9087
Isobutane	1.66532	4344.91	7.98804	7.98804	7.98804
n-Butane	5.58491	8882.75	23.1923	23.1923	23.1923
Isopentane	2.3873	3074.05	10.044	10.044	10.044
n-Pentane	3.22858	3554.02	14.5599	14.5599	14.5599
i-C6	2.43875	3390.46	17.0156	17.0156	17.0156
i-C7	1.01515	2312.79	16.1581	16.1581	16.1581
Octane	0.0495419	333.837	3.42391	3.42391	3.42391
Nonane	0.00179078	28.9504	0.378279	0.378279	0.378279
Benzene	1.36858	62.1872	11.4427	11.4427	11.4427
Toluene	0.944752	96.8924	25.406	25.406	25.406
Ethylbenzene	0.00600242	2.2264	0.553163	0.553163	0.553163
o-Xylene	0.0715393	21.2128	7.63699	7.63699	7.63699
n-Hexane	1.01894	1563.1	8.94571	8.94571	8.94571
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.22293E-05	0.218073	0.0231528	0.0231528	0.0231528
Decanes Plus Sat	0	0	0	0	0

	BTEX Cond Vapors 2	1	2	3	4
Mole Fraction	%	%	%	%	%
Triethylene Glycol	7.24152E-09	7.23936E-05	81.5761	81.5761	81.5761
Water	2.81872	0.0040196	12.0614	12.0614	12.0614
Hydrogen Sulfide	0.141327	0.000992263	0.00157838	0.00157838	0.00157838
Carbon Dioxide	2.15896	0.152521	0.0556057	0.0556057	0.0556057
Nitrogen	0.0133659	0.649775	0.00742322	0.00742322	0.00742322
Methane	19.7051	78.058	3.03726	3.03726	3.03726
Ethane	20.6039	11.3345	1.07558	1.07558	1.07558
Propane	21.2577	5.07612	0.699886	0.699886	0.699886
Isobutane	3.38605	0.871463	0.109012	0.109012	0.109012
n-Butane	11.3556	1.78162	0.316504	0.316504	0.316504
Isopentane	3.91035	0.496698	0.110422	0.110422	0.110422
n-Pentane	5.28835	0.574251	0.160068	0.160068	0.160068
i-C6	3.34442	0.458654	0.156617	0.156617	0.156617
i-C7	1.19727	0.269073	0.127906	0.127906	0.127906
Octane	0.0512549	0.0340699	0.0237752	0.0237752	0.0237752
Nonane	0.00165008	0.00263142	0.00233945	0.00233945	0.00233945
Benzene	2.07057	0.009281	0.116195	0.116195	0.116195
Toluene	1.21175	0.0122591	0.218712	0.218712	0.218712
Ethylbenzene	0.00668163	0.000244474	0.00413283	0.00413283	0.00413283
o-Xylene	0.0796343	0.00232931	0.0570581	0.0570581	0.0570581
n-Hexane	1.39734	0.211453	0.0823395	0.0823395	0.0823395
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	9.42132E-06	1.65725E-05	0.000119717	0.000119717	0.000119717

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report All Streams Tabulated by Total Phase						
Client Name:	DELAWARE DIVISION			Job:		
Location:	Tiger Compressor Station					
Flowsheet:	Dehy 2					
Mole Fraction	BTEX Cond Vapors 2 %	1 %	2 %	3 %	4 %	
Decanes Plus Sat	0	0	0	0	0	
Mass Fraction	BTEX Cond Vapors 2 %	1 %	2 %	3 %	4 %	
Triethylene Glycol	2.49324E-08	0.000502275	96.4694	96.4694	96.4694	
Water	1.16422	0.0033456	1.71109	1.71109	1.71109	
Hydrogen Sulfide	0.110428	0.00156238	0.0004236	0.0004236	0.0004236	
Carbon Dioxide	2.17838	0.310117	0.0192708	0.0192708	0.0192708	
Nitrogen	0.00858431	0.840966	0.00163755	0.00163755	0.00163755	
Methane	7.24756	57.8546	0.383696	0.383696	0.383696	
Ethane	14.204	15.746	0.254681	0.254681	0.254681	
Propane	21.4909	10.3413	0.243029	0.243029	0.243029	
Isobutane	4.5121	2.34013	0.0498944	0.0498944	0.0498944	
n-Butane	15.132	4.78418	0.144862	0.144862	0.144862	
Isopentane	6.46825	1.65566	0.0627363	0.0627363	0.0627363	
n-Pentane	8.74765	1.91417	0.0909431	0.0909431	0.0909431	
i-C6	6.60764	1.82607	0.106282	0.106282	0.106282	
i-C7	2.75049	1.24565	0.100926	0.100926	0.100926	
Octane	0.134231	0.179802	0.0213862	0.0213862	0.0213862	
Nonane	0.00485201	0.0155925	0.00236278	0.00236278	0.00236278	
Benzene	3.70809	0.0334936	0.0714728	0.0714728	0.0714728	
Toluene	2.55975	0.0521855	0.158689	0.158689	0.158689	
Ethylbenzene	0.0162632	0.00119912	0.00345513	0.00345513	0.00345513	
o-Xylene	0.193831	0.0114251	0.0477017	0.0477017	0.0477017	
n-Hexane	2.76076	0.841873	0.0558761	0.0558761	0.0558761	
2,2,4-Trimethylpentane	0	0	0	0	0	
Decanes Plus	3.31344E-05	0.000117453	0.000144616	0.000144616	0.000144616	
Decanes Plus Sat	0	0	0	0	0	
Stream Properties						
Property	Units	BTEX Cond Vapors 2	1	2	3	4
Temperature	°F	70	99.1049	99.5967	155 *	159.869
Pressure	psig	0	1291	1296	1286	60 *
Molecular Weight	lb/lbmol	43.6172	21.6446	126.989	126.989	126.989
Mass Flow	lb/h	36.908	185669	16009.9	16009.9	16009.9
Std Vapor Volumetric Flow	MMSCFD	0.00770669	78.1257	1.14823	1.14823	1.14823
Std Liquid Volumetric Flow	sgpm	0.143368	1051.28	29.1058	29.1058	29.1058
API Gravity				-3.26351	-3.26171	
Net Ideal Gas Heating Value	Btu/ft ³	2192.37	1176.52	3195.37	3195.37	3195.37
Remarks						

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections

	5	6	7	8	9
From Block	Flash Tank	Flash Tank	XCHG-101	Reboiler	Regeneration Unit
To Block	FT CON 2	XCHG-101	Regeneration Unit	Regeneration Unit	Reboiler

Stream Composition

Mass Flow	5 lb/h	6 lb/h	7 lb/h	8 lb/h	9 lb/h
Triethylene Glycol		15444.6	15444.6	233.995	15678.3
Water		273.197	273.197	312.068	441.453
Hydrogen Sulfide		0.0432578	0.0432578	0.000259688	0.000268317
Carbon Dioxide		0.818158	0.818158	0.000345317	0.000348987
Nitrogen		0.00317134	0.00317134	1.25995E-08	1.26196E-08
Methane		2.6857	2.6857	6.94807E-05	6.9722E-05
Ethane		5.38761	5.38761	0.000794182	0.000799986
Propane		8.69455	8.69455	0.00319258	0.00322687
Isobutane		2.08624	2.08624	0.00110503	0.00111931
n-Butane		7.77539	7.77539	0.0066395	0.00674229
Isopentane		4.7283	4.7283	0.00917775	0.00938358
n-Pentane		7.4862	7.4862	0.0182334	0.0186783
i-C6		10.3187	10.3187	0.0415582	0.042796
i-C7		11.8787	11.8787	0.098463	0.102473
Octane		2.92382	2.92382	0.066686	0.0707755
Nonane		0.344309	0.344309	0.0151579	0.0164052
Benzene		11.0191	11.0191	1.81778	2.07655
Toluene		24.8602	24.8602	7.58102	8.99931
Ethylbenzene		0.544865	0.544865	0.240674	0.295555
o-Xylene		7.55442	7.55442	4.59899	5.88198
n-Hexane		5.84802	5.84802	0.0293535	0.0303129
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.0228772	0.0228772	0.0135052	0.0172833
Decanes Plus Sat		0	0	0	0

Mole Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol		85.8945	85.8945	8.18585	80.874
Water		12.6652	12.6652	91.0032	18.9821
Hydrogen Sulfide		0.00106007	0.00106007	4.00303E-05	6.0987E-06
Carbon Dioxide		0.0155264	0.0155264	4.12212E-05	6.14275E-06
Nitrogen		9.45489E-05	9.45489E-05	2.36284E-09	3.48963E-10
Methane		0.139819	0.139819	2.27532E-05	3.36666E-06
Ethane		0.149643	0.149643	0.000138755	2.06093E-05
Propane		0.164676	0.164676	0.00038036	5.66874E-05
Isobutane		0.0299779	0.0299779	9.98807E-05	1.4918E-05
n-Butane		0.111727	0.111727	0.000600125	8.98599E-05
Isopentane		0.0547337	0.0547337	0.000668275	0.000100749
n-Pentane		0.0866586	0.0866586	0.00132766	0.000200543
i-C6		0.100005	0.100005	0.00253351	0.000384698
i-C7		0.0990088	0.0990088	0.00516233	0.000792198
Octane		0.0213775	0.0213775	0.00306696	0.000479964
Nonane		0.00224209	0.00224209	0.000620888	9.90849E-05
Benzene		0.117817	0.117817	0.122256	0.0205933
Toluene		0.225343	0.225343	0.43225	0.0756604
Ethylbenzene		0.00428634	0.00428634	0.0119096	0.00215654
o-Xylene		0.0594291	0.0594291	0.227578	0.0429183
n-Hexane		0.0566768	0.0566768	0.00178947	0.000272486
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.000124554	0.000124554	0.000462513	8.72774E-05
Decanes Plus Sat		0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report						
All Streams						
Tabulated by Total Phase						
Client Name:	DELAWARE DIVISION			Job:		
Location:	Tiger Compressor Station					
Flowsheet:	Dehy 2					
Mass Fraction	5 %	6 %	7 %	8 %	9 %	
Triethylene Glycol		97.548	97.548	41.7397	97.1555	
Water		1.7255	1.7255	55.6662	2.7356	
Hydrogen Sulfide		0.000273215	0.000273215	4.63226E-05	1.66271E-06	
Carbon Dioxide		0.00516746	0.00516746	6.15971E-05	2.1626E-06	
Nitrogen		2.00301E-05	2.00301E-05	2.24747E-09	7.82009E-11	
Methane		0.0169628	0.0169628	1.23938E-05	4.32053E-07	
Ethane		0.034028	0.034028	0.000141665	4.95735E-06	
Propane		0.0549146	0.0549146	0.000569487	1.99963E-05	
Isobutane		0.0131766	0.0131766	0.000197114	6.93617E-06	
n-Butane		0.0491092	0.0491092	0.00118434	4.17806E-05	
Isopentane		0.0298638	0.0298638	0.00163711	5.81482E-05	
n-Pentane		0.0472827	0.0472827	0.00325244	0.000115746	
i-C6		0.0651729	0.0651729	0.00741308	0.000265198	
i-C7		0.0750259	0.0750259	0.0175637	0.000635004	
Octane		0.0184668	0.0184668	0.0118953	0.000438582	
Nonane		0.00217465	0.00217465	0.00270384	0.00010166	
Benzene		0.0695964	0.0695964	0.324252	0.0128679	
Toluene		0.157016	0.157016	1.35229	0.0557669	
Ethylbenzene		0.00344136	0.00344136	0.0429311	0.0018315	
o-Xylene		0.0477136	0.0477136	0.820361	0.0364495	
n-Hexane		0.036936	0.036936	0.00523603	0.000187843	
2,2,4-Trimethylpentane		0	0	0	0	
Decanes Plus		0.000144492	0.000144492	0.00240904	0.000107101	
Decanes Plus Sat		0	0	0	0	
Stream Properties						
Property	Units	5	6	7	8	9
Temperature	°F		159.859	290 *	395 *	312.033
Pressure	psig	55	55	35 *	0.5	0.5
Molecular Weight	lb/lbmol		132.233	132.233	29.4514	125.007
Mass Flow	lb/h	0	15832.9	15832.9	560.606	16137.4
Std Vapor Volumetric Flow	MMSCFD	0	1.0905	1.0905	0.173363	1.17572
Std Liquid Volumetric Flow	sgpm	0	28.2295	28.2295	1.07129	28.6691
API Gravity			-5.72619			-6.14115
Net Ideal Gas Heating Value	Btu/ft^3		3286.42	3286.42	344.236	3056.11
Remarks						

	Process Streams Report All Streams Tabulated by Total Phase	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections					
	10	11	12	13	14
From Block	Regeneration Unit	Still Column	Reboiler	XCHG-101	TEG Pump
To Block	Still Column	Regeneration Unit	XCHG-101	MKUP-1	XCHG-103

Stream Composition					
Mass Flow	10 lb/h	11 lb/h	12 lb/h	13 lb/h	14 lb/h
Triethylene Glycol	9.26449	8.96652	15444.3	15444.3	15445.6
Water	146.095	2.2837	129.385	129.385	129.386
Hydrogen Sulfide	0.0432546	5.40165E-06	8.6293E-06	8.6293E-06	8.6293E-06
Carbon Dioxide	0.818179	2.46467E-05	3.66946E-06	3.66946E-06	3.66946E-06
Nitrogen	0.00317135	5.14741E-09	2.01048E-11	2.01048E-11	0
Methane	2.68572	1.24735E-05	2.41306E-07	2.41306E-07	0
Ethane	5.38766	6.24831E-05	5.80388E-06	5.80388E-06	5.80388E-06
Propane	8.69468	0.000161952	3.42919E-05	3.42919E-05	3.42919E-05
Isobutane	2.08626	4.23025E-05	1.42824E-05	1.42824E-05	1.42824E-05
n-Butane	7.77552	0.000235837	0.000102796	0.000102796	0.000102796
Isopentane	4.7283	0.000204065	0.000205838	0.000205838	0.000205838
n-Pentane	7.48612	0.00036441	0.000444904	0.000444904	0.000444904
i-C6	10.3182	0.000695848	0.00123777	0.00123777	0.00123777
i-C7	11.8758	0.00103851	0.00401	0.00401	0.00401
Octane	2.9202	0.000465597	0.00408959	0.00408959	0.00408959
Nonane	0.343131	7.00614E-05	0.00124729	0.00124729	0.00124729
Benzene	10.7705	0.0101554	0.25877	0.25877	0.25877
Toluene	23.4767	0.0348045	1.41829	1.41829	1.41829
Ethylbenzene	0.490939	0.000954414	0.0548807	0.0548807	0.0548807
o-Xylene	6.28807	0.0166322	1.28299	1.28299	1.28299
n-Hexane	5.84748	0.000418319	0.0009594	0.0009594	0.0009594
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0191437	4.45788E-05	0.0037781	0.0037781	0.0037781
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	0.625369	31.8963	93.4457	93.4457	93.4462
Water	82.2055	67.7183	6.52568	6.52568	6.52523
Hydrogen Sulfide	0.0128655	8.46689E-05	2.30063E-07	2.30063E-07	2.30046E-07
Carbon Dioxide	0.188455	0.000299172	7.57595E-08	7.57595E-08	7.57538E-08
Nitrogen	0.00114758	9.81592E-08	6.52101E-13	6.52101E-13	0
Methane	1.69705	0.000415361	1.36672E-08	1.36672E-08	0
Ethane	1.8163	0.00111007	1.7538E-07	1.7538E-07	1.75367E-07
Propane	1.99878	0.001962	7.06607E-07	7.06607E-07	7.06555E-07
Isobutane	0.36386	0.000388806	2.23276E-07	2.23276E-07	2.23259E-07
n-Butane	1.35611	0.00216759	1.607E-06	1.607E-06	1.60688E-06
Isopentane	0.664328	0.00151094	2.59226E-06	2.59226E-06	2.59207E-06
n-Pentane	1.0518	0.00269817	5.60298E-06	5.60298E-06	5.60257E-06
i-C6	1.21375	0.00431359	1.30508E-05	1.30508E-05	1.30498E-05
i-C7	1.20141	0.00553661	3.63622E-05	3.63622E-05	3.63595E-05
Octane	0.259146	0.00217743	3.25302E-05	3.25302E-05	3.25278E-05
Nonane	0.0271202	0.000291818	8.83636E-06	8.83636E-06	8.8357E-06
Benzene	1.39774	0.0694525	0.00301009	0.00301009	0.00300986
Toluene	2.58287	0.201792	0.0139864	0.0139864	0.0139854
Ethylbenzene	0.0468762	0.00480246	0.0004697	0.0004697	0.000469665
o-Xylene	0.600403	0.0836908	0.0109805	0.0109805	0.0109797
n-Hexane	0.687848	0.00259318	1.01158E-05	1.01158E-05	1.0115E-05
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00126505	0.000155243	2.23784E-05	2.23784E-05	2.23767E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Mass Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	3.46442	79.2333	99.1499	99.1499	99.15
Water	54.6316	20.1801	0.83063	0.83063	0.830569
Hydrogen Sulfide	0.0161749	4.77321E-05	5.53986E-08	5.53986E-08	5.53942E-08
Carbon Dioxide	0.305954	0.000217793	2.35572E-08	2.35572E-08	2.35554E-08
Nitrogen	0.00118591	4.54854E-08	1.29069E-13	1.29069E-13	0
Methane	1.00431	0.000110223	1.54914E-09	1.54914E-09	0
Ethane	2.01469	0.000552136	3.72598E-08	3.72598E-08	3.72569E-08
Propane	3.25134	0.0014311	2.20148E-07	2.20148E-07	2.20131E-07
Isobutane	0.78015	0.000373809	9.16906E-08	9.16906E-08	9.16834E-08
n-Butane	2.90762	0.00208399	6.59933E-07	6.59933E-07	6.59881E-07
Isopentane	1.76813	0.00180323	1.32144E-06	1.32144E-06	1.32134E-06
n-Pentane	2.7994	0.00322014	2.85621E-06	2.85621E-06	2.85598E-06
i-C6	3.85845	0.00614891	7.94623E-06	7.94623E-06	7.9456E-06
i-C7	4.4409	0.00917689	2.57435E-05	2.57435E-05	2.57414E-05
Octane	1.092	0.00411428	2.62544E-05	2.62544E-05	2.62523E-05
Nonane	0.128313	0.000619102	8.00735E-06	8.00735E-06	8.00672E-06
Benzene	4.02758	0.0897388	0.00166126	0.00166126	0.00166113
Toluene	8.77902	0.307553	0.00910518	0.00910518	0.00910446
Ethylbenzene	0.183585	0.00843375	0.000352325	0.000352325	0.000352297
o-Xylene	2.3514	0.146972	0.00823655	0.00823655	0.00823589
n-Hexane	2.18664	0.00369651	6.15918E-06	6.15918E-06	6.15869E-06
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0071587	0.000393924	2.42547E-05	2.42547E-05	2.42528E-05
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	10	11	12	13	14
Temperature	°F	290.442	215	395	269.963	271.045
Pressure	psig	0	0	0.5	0.5 *	1315 *
Molecular Weight	lb/lbmol	27.108	60.4539	141.533	141.533	141.534
Mass Flow	lb/h	267.418	11.3166	15576.8	15576.8	15578
Std Vapor Volumetric Flow	MMSCFD	0.0898458	0.00170489	1.00236	1.00236	1.00243
Std Liquid Volumetric Flow	sgpm	0.652304	0.020588	27.5978	27.5978	27.6
API Gravity			-4.52535	-6.73842	-6.73842	-6.92214
Net Ideal Gas Heating Value	Btu/ft^3	583.912	1219.36	3525.14	3525.14	3525.16

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections

	15	16	17	18	19
From Block	Still Column	Flash Tank	XCHG-103	XCHG-102	--
To Block	BTEX Cond.	FT 2	RCYL-1	DRY GAS 2	MKUP-1

Stream Composition

Mass Flow	15 lb/h	16 lb/h	17 lb/h	18 lb/h	19 lb/h
Triethylene Glycol	0.297975	0.015948	15445.6	0.93257	1.23191 *
Water	143.811	0.747111	129.386	6.21175	0.000742634 *
Hydrogen Sulfide	0.0432492	0.0245601	8.6293E-06	2.90086	0 *
Carbon Dioxide	0.818154	2.26708	3.66946E-06	575.791	0 *
Nitrogen	0.00317134	0.258998	0	1561.41	0 *
Methane	2.6857	58.7437	0	107418	0 *
Ethane	5.3876	35.3865	5.80388E-06	29235.4	0 *
Propane	8.69451	30.2141	3.42919E-05	19200.7	0 *
Isobutane	2.08622	5.9018	1.42824E-05	4344.91	0 *
n-Butane	7.77528	15.417	0.000102796	8882.75	0 *
Isopentane	4.72809	5.31572	0.000205838	3074.05	0 *
n-Pentane	7.48575	7.0737	0.000444904	3554.02	0 *
i-C6	10.3175	6.69683	0.00123777	3390.46	0 *
i-C7	11.8747	4.27938	0.00401	2312.79	0 *
Octane	2.91973	0.500085	0.00408959	333.837	0 *
Nonane	0.343061	0.0339702	0.00124729	28.9504	0 *
Benzene	10.7603	0.423628	0.25877	62.1872	0 *
Toluene	23.4419	0.545785	1.41829	96.8924	0 *
Ethylbenzene	0.489984	0.00829747	0.0548807	2.2264	0 *
o-Xylene	6.27144	0.0825667	1.28299	21.2128	0 *
n-Hexane	5.84706	3.09769	0.0009594	1563.1	0 *
2,2,4-Trimethylpentane	0	0	0	0	0 *
Decanes Plus	0.0190991	0.000275627	0.0037781	0.218073	0 *
Decanes Plus Sat	0	0	0	0	0 *

Mole Fraction	15 %	16 %	17 %	18 %	19 %
Triethylene Glycol	0.0205029	0.00167541	93.4462	7.23936E-05	99.5 *
Water	82.4857	0.654263	6.52523	0.0040196	0.5 *
Hydrogen Sulfide	0.0131128	0.0113692	2.30046E-07	0.000992263	0 *
Carbon Dioxide	0.192095	0.812698	7.57538E-08	0.152521	0 *
Nitrogen	0.00116978	0.145861	0	0.649775	0 *
Methane	1.72987	57.7694	0	78.058	0 *
Ethane	1.85141	18.5663	1.75367E-07	11.3345	0 *
Propane	2.0374	10.8099	7.06555E-07	5.07612	0 *
Isobutane	0.37089	1.60196	2.23259E-07	0.871463	0 *
n-Butane	1.3823	4.1847	1.60688E-06	1.78162	0 *
Isopentane	0.677148	1.16236	2.59207E-06	0.496698	0 *
n-Pentane	1.0721	1.54677	5.60257E-06	0.574251	0 *
i-C6	1.23714	1.22601	1.30498E-05	0.458654	0 *
i-C7	1.22455	0.673771	3.63595E-05	0.269073	0 *
Octane	0.264117	0.0690681	3.25278E-05	0.0340699	0 *
Nonane	0.0276391	0.0041786	8.8357E-06	0.00263142	0 *
Benzene	1.42343	0.0855609	0.00300986	0.009281	0 *
Toluene	2.62893	0.0934521	0.0139854	0.0122591	0 *
Ethylbenzene	0.0476901	0.00123303	0.000469665	0.000244474	0 *
o-Xylene	0.610397	0.0122696	0.0109797	0.00232931	0 *
n-Hexane	0.701103	0.567104	1.0115E-05	0.211453	0 *
2,2,4-Trimethylpentane	0	0	0	0	0 *
Decanes Plus	0.00128651	2.83469E-05	2.23767E-05	1.65725E-05	0 *
Decanes Plus Sat	0	0	0	0	0 *

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Mass Fraction	15 %	16 %	17 %	18 %	19 %
Triethylene Glycol	0.11635	0.00900839	99.15	0.000502275	99.9398 *
Water	56.1539	0.422014	0.830569	0.0033456	0.0602469 *
Hydrogen Sulfide	0.0168875	0.0138731	5.53942E-08	0.00156238	0 *
Carbon Dioxide	0.319464	1.28059	2.35554E-08	0.310117	0 *
Nitrogen	0.00123831	0.146298	0	0.840966	0 *
Methane	1.04869	33.182	0	57.8546	0 *
Ethane	2.1037	19.9885	3.72569E-08	15.746	0 *
Propane	3.39494	17.0668	2.20131E-07	10.3413	0 *
Isobutane	0.814606	3.3337	9.16834E-08	2.34013	0 *
n-Butane	3.03601	8.70843	6.59881E-07	4.78418	0 *
Isopentane	1.84618	3.00264	1.32134E-06	1.65566	0 *
n-Pentane	2.92296	3.99566	2.85598E-06	1.91417	0 *
i-C6	4.02867	3.78278	7.9456E-06	1.82607	0 *
i-C7	4.63672	2.41725	2.57414E-05	1.24565	0 *
Octane	1.14007	0.282479	2.62523E-05	0.179802	0 *
Nonane	0.133955	0.0191884	8.00672E-06	0.0155925	0 *
Benzene	4.20158	0.239291	0.00166113	0.0334936	0 *
Toluene	9.15336	0.308293	0.00910446	0.0521855	0 *
Ethylbenzene	0.191324	0.00468692	0.000352297	0.00119912	0 *
o-Xylene	2.44881	0.0466387	0.00823589	0.0114251	0 *
n-Hexane	2.2831	1.74976	6.15869E-06	0.841873	0 *
2,2,4-Trimethylpentane	0	0	0	0	0 *
Decanes Plus	0.00745762	0.000155691	2.42528E-05	0.000117453	0 *
Decanes Plus Sat	0	0	0	0	0 *

Stream Properties

Property	Units	15	16	17	18	19
Temperature	°F	215 *	159.859	95 *	95 *	85 *
Pressure	psig	0	55	1305	1281	0.5 *
Molecular Weight	lb/lbmol	26.463	27.9297	141.534	21.6446	149.512
Mass Flow	lb/h	256.102	177.035	15578	185669	1.23265
Std Vapor Volumetric Flow	MMSCFD	0.0881409	0.0577294	1.00243	78.1257	7.50877E-05
Std Liquid Volumetric Flow	sgpm	0.631716	0.876291	27.6	1051.28	0.00218163
API Gravity				-6.92075		-7.10455
Net Ideal Gas Heating Value	Btu/ft^3	571.62	1475.61	3525.16	1176.52	3752.16

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections

	20	21	22	23	25
From Block	MKUP-1	MKUP-1	RCYL-1	BTEX Cond.	Blowcase
To Block	--	TEG Pump	Contact Tower	Blowcase	PUMP-101

Stream Composition

Mass Flow	20 lb/h	21 lb/h	22 lb/h	23 lb/h	25 lb/h
Triethylene Glycol	0	15445.6	15445.6	0.297975	0.297975
Water	0	129.386	129.377	143.811	143.382
Hydrogen Sulfide	0	8.6293E-06	8.58987E-06	0.0432492	0.00249253
Carbon Dioxide	0	3.66946E-06	3.65285E-06	0.818154	0.0141582
Nitrogen	0	0	0	0.00317134	3.04565E-06
Methane	0	0	0	2.6857	0.0107758
Ethane	0	5.80388E-06	5.77466E-06	5.3876	0.145185
Propane	0	3.42919E-05	3.41181E-05	8.69451	0.762658
Isobutane	0	1.42824E-05	1.42107E-05	2.08622	0.420897
n-Butane	0	0.000102796	0.000102293	7.77528	2.19037
Isopentane	0	0.000205838	0.000204776	4.72809	2.34079
n-Pentane	0	0.000444904	0.00044263	7.48575	4.25717
i-C6	0	0.00123777	0.00123123	10.3175	7.87875
i-C7	0	0.00401	0.0039894	11.8747	10.8596
Octane	0	0.00408959	0.00406908	2.91973	2.87019
Nonane	0	0.00124729	0.0012412	0.343061	0.341271
Benzene	0	0.25877	0.257822	10.7603	9.39175
Toluene	0	1.41829	1.41413	23.4419	22.4972
Ethylbenzene	0	0.0548807	0.0548116	0.489984	0.483982
o-Xylene	0	1.28299	1.28489	6.27144	6.1999
n-Hexane	0	0.0009594	0.000954316	5.84706	4.82812
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0	0.0037781	0.00376275	0.0190991	0.0190869
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	20 %	21 %	22 %	23 %	25 %
Triethylene Glycol	93.4457	93.4462	93.4467	0.0205029	0.0224674
Water	6.52568	6.52523	6.5248	82.4857	90.1189
Hydrogen Sulfide	2.30063E-07	2.30046E-07	2.28995E-07	0.0131128	0.000828121
Carbon Dioxide	7.57595E-08	7.57538E-08	7.54113E-08	0.192095	0.00364273
Nitrogen	6.52101E-13	0	0	0.00116978	1.23106E-06
Methane	1.36672E-08	0	0	1.72987	0.00760577
Ethane	1.7538E-07	1.75367E-07	1.74485E-07	1.85141	0.0546719
Propane	7.06607E-07	7.06555E-07	7.02977E-07	2.0374	0.195838
Isobutane	2.23276E-07	2.23259E-07	2.22139E-07	0.37089	0.081997
n-Butane	1.607E-06	1.60688E-06	1.59903E-06	1.3823	0.426717
Isopentane	2.59226E-06	2.59207E-06	2.57871E-06	0.677148	0.367365
n-Pentane	5.60298E-06	5.60257E-06	5.57395E-06	1.0721	0.668122
i-C6	1.30508E-05	1.30498E-05	1.29809E-05	1.23714	1.03523
i-C7	3.63622E-05	3.63595E-05	3.61728E-05	1.22455	1.22716
Octane	3.25302E-05	3.25278E-05	3.23648E-05	0.264117	0.284512
Nonane	8.83636E-06	8.8357E-06	8.79259E-06	0.0276391	0.0301292
Benzene	0.00301009	0.00300986	0.00299884	1.42343	1.36142
Toluene	0.0139864	0.0139854	0.0139444	2.62893	2.76472
Ethylbenzene	0.0004697	0.000469665	0.000469075	0.0476901	0.0516192
o-Xylene	0.0109805	0.0109797	0.010996	0.610397	0.661252
n-Hexane	1.01158E-05	1.0115E-05	1.00614E-05	0.701103	0.634394
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.23784E-05	2.23767E-05	2.2286E-05	0.00128651	0.00140888
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Mass Fraction	20 %	21 %	22 %	23 %	25 %
Triethylene Glycol	99.1499	99.15	99.1501	0.11635	0.135941
Water	0.83063	0.830569	0.830511	56.1539	65.4131
Hydrogen Sulfide	5.53986E-08	5.53942E-08	5.5141E-08	0.0168875	0.00113714
Carbon Dioxide	2.35572E-08	2.35554E-08	2.34488E-08	0.319464	0.00645923
Nitrogen	1.29069E-13	0	0	0.00123831	1.38948E-06
Methane	1.54914E-09	0	0	1.04869	0.00491612
Ethane	3.72598E-08	3.72569E-08	3.70693E-08	2.1037	0.0662357
Propane	2.20148E-07	2.20131E-07	2.19015E-07	3.39494	0.347938
Isobutane	9.16906E-08	9.16834E-08	9.12229E-08	0.814606	0.192021
n-Butane	6.59933E-07	6.59881E-07	6.56652E-07	3.03601	0.999286
Isopentane	1.32144E-06	1.32134E-06	1.31452E-06	1.84618	1.06791
n-Pentane	2.85621E-06	2.85598E-06	2.84138E-06	2.92296	1.94219
i-C6	7.94623E-06	7.9456E-06	7.90363E-06	4.02867	3.59442
i-C7	2.57435E-05	2.57414E-05	2.56092E-05	4.63672	4.95433
Octane	2.62544E-05	2.62523E-05	2.61207E-05	1.14007	1.30943
Nonane	8.00735E-06	8.00672E-06	7.96763E-06	0.133955	0.155694
Benzene	0.00166126	0.00166113	0.00165504	4.20158	4.28468
Toluene	0.00910518	0.00910446	0.00907776	9.15336	10.2636
Ethylbenzene	0.000352325	0.000352297	0.000351853	0.191324	0.220801
o-Xylene	0.00823655	0.00823589	0.00824809	2.44881	2.8285
n-Hexane	6.15918E-06	6.15869E-06	6.12605E-06	2.2831	2.20267
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.42547E-05	2.42528E-05	2.41543E-05	0.00745762	0.00870776
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	20	21	22	23	25
Temperature	°F		269.949	95	70 *	70
Pressure	psig	0.5	0.5	1305	0	0
Molecular Weight	lb/lbmol	141.533	141.534	141.535	26.463	24.8194
Mass Flow	lb/h	0	15578	15578	256.102	219.194
Std Vapor Volumetric Flow	MMSCFD	0	1.00243	1.00243	0.0881409	0.0804342
Std Liquid Volumetric Flow	sgpm	0	27.6 *	27.6	0.631716	0.488348
API Gravity			-6.73845	-6.92078		25.5414
Net Ideal Gas Heating Value	Btu/ft^3	3525.14	3525.16	3525.17	571.62	416.331

Remarks

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Connections

	26	27			
From Block	PUMP-101	GAS TO DEHY2			
To Block	BTEX LIQUIDS 2	Contact Tower			

Stream Composition

Mass Flow	26 lb/h	27 lb/h			
Triethylene Glycol	0.297975	2.77891E-19			
Water	143.382	150.778			
Hydrogen Sulfide	0.00249253	2.96867			
Carbon Dioxide	0.0141582	578.877			
Nitrogen	3.04565E-06	1561.68			
Methane	0.0107758	107480			
Ethane	0.145185	29276.2			
Propane	0.762658	19239.6			
Isobutane	0.420897	4352.89			
n-Butane	2.19037	8905.94			
Isopentane	2.34079	3084.09			
n-Pentane	4.25717	3568.58			
i-C6	7.87875	3407.47			
i-C7	10.8596	2328.94			
Octane	2.87019	337.257			
Nonane	0.341271	29.3275			
Benzene	9.39175	73.3721			
Toluene	22.4972	120.884			
Ethylbenzene	0.483982	2.72475			
o-Xylene	6.1999	27.5649			
n-Hexane	4.82812	1572.04			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	0.0190869	0.237463			
Decanes Plus Sat	0	0			

Mole Fraction	26 %	27 %			
Triethylene Glycol	0.0224674	2.1532E-23			
Water	90.1189	0.0973865			
Hydrogen Sulfide	0.000828121	0.00101357			
Carbon Dioxide	0.00364273	0.153053			
Nitrogen	1.23106E-06	0.648673			
Methane	0.00760577	77.9572			
Ethane	0.0546719	11.3291			
Propane	0.195838	5.07693			
Isobutane	0.081997	0.871439			
n-Butane	0.426717	1.78295			
Isopentane	0.367365	0.497393			
n-Pentane	0.668122	0.575529			
i-C6	1.03523	0.460097			
i-C7	1.22716	0.270448			
Octane	0.284512	0.0343548			
Nonane	0.0301292	0.00266073			
Benzene	1.36142	0.0109299			
Toluene	2.76472	0.0152662			
Ethylbenzene	0.0516192	0.000298639			
o-Xylene	0.661252	0.00302118			
n-Hexane	0.634394	0.212267			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	0.00140888	1.80124E-05			
Decanes Plus Sat	0	0			

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 2	

Mass Fraction	26 %	27 %			
Triethylene Glycol	0.135941	1.49323E-22			
Water	65.4131	0.0810196			
Hydrogen Sulfide	0.00113714	0.00159519			
Carbon Dioxide	0.00645923	0.311055			
Nitrogen	1.38948E-06	0.839155			
Methane	0.00491612	57.7534			
Ethane	0.0662357	15.7314			
Propane	0.347938	10.3383			
Isobutane	0.192021	2.33899			
n-Butane	0.999286	4.78554			
Isopentane	1.06791	1.65721			
n-Pentane	1.94219	1.91755			
i-C6	3.59442	1.83098			
i-C7	4.95433	1.25144			
Octane	1.30943	0.181222			
Nonane	0.155694	0.0157589			
Benzene	4.28468	0.039426			
Toluene	10.2636	0.0649562			
Ethylbenzene	0.220801	0.00146412			
o-Xylene	2.8285	0.0148118			
n-Hexane	2.20267	0.844726			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	0.00870776	0.000127599			
Decanes Plus Sat	0	0			

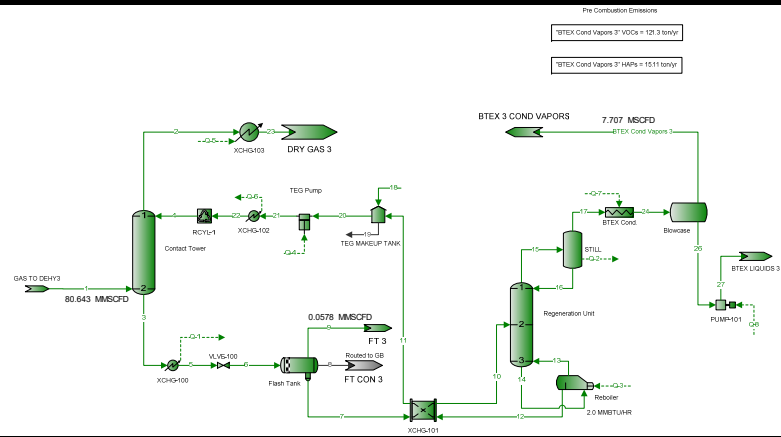
Stream Properties

Property	Units	26	27			
Temperature	°F	77.1826	98.8747			
Pressure	psig	16 *	1296			
Molecular Weight	lb/lbmol	24.8194	21.6546			
Mass Flow	lb/h	219.194	186101			
Std Vapor Volumetric Flow	MMSCFD	0.0804342	78.2715			
Std Liquid Volumetric Flow	sgpm	0.488348	1052.78			
API Gravity		25.5664				
Net Ideal Gas Heating Value	Btu/ft^3	416.331	1176.06			

Remarks

Dehy 3 Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	



* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections

	BTEX Cond Vapors 3	1	2	3	4
From Block	Blowcase	GAS TO DEHY3	Contact Tower	Contact Tower	RCYL-1
To Block	BTEX 3 COND VAPORS	Contact Tower	XCHG-103	XCHG-100	Contact Tower

Stream Composition

	BTEX Cond Vapors 3 lb/h	1 lb/h	2 lb/h	3 lb/h	4 lb/h
Triethylene Glycol	9.06168E-09	2.86312E-19	0.961016	15444.7	15445.7
Water	0.42971	155.347	6.41945	278.342	129.414
Hydrogen Sulfide	0.0407647	3.05863	2.99077	0.0678642	8.27209E-06
Carbon Dioxide	0.804695	596.418	593.33	3.08799	3.51631E-06
Nitrogen	0.00317294	1609	1608.74	0.262472	0
Methane	2.67747	110737	110675	61.483	0
Ethane	5.24461	30163.4	30122.6	40.7986	5.54979E-06
Propane	7.93176	19822.6	19783.7	38.9229	3.27856E-05
Isobutane	1.66475	4484.8	4476.81	7.99022	1.36507E-05
n-Butane	5.58267	9175.82	9152.62	23.1983	9.83139E-05
Isopentane	2.38484	3177.55	3167.51	10.0443	0.000196761
n-Pentane	3.22385	3676.72	3662.16	14.5564	0.000425251
i-C6	2.43515	3510.73	3493.72	17.0122	0.00118333
i-C7	1.01331	2399.52	2383.37	16.1506	0.00383309
Octane	0.0494131	347.477	344.06	3.42069	0.00391102
Nonane	0.00178607	30.2162	29.8395	0.377868	0.00119304
Benzene	1.36841	75.5955	64.3885	11.4561	0.249113
Toluene	0.946093	124.547	100.468	25.4496	1.36993
Ethylbenzene	0.00601697	2.80732	2.30656	0.553949	0.0531896
o-Xylene	0.0719375	28.4002	21.9978	7.65404	1.25163
n-Hexane	1.01704	1619.68	1610.74	8.94157	0.00091693
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.22736E-05	0.244659	0.225162	0.0231547	0.00365779
Decanes Plus Sat	0	0	0	0	0

	BTEX Cond Vapors 3 %	1 %	2 %	3 %	4 %
Triethylene Glycol	7.1308E-09	2.1532E-23	7.24057E-05	81.4151	93.4457
Water	2.81874	0.0973865	0.00403172	12.2308	6.52655
Hydrogen Sulfide	0.141349	0.00101357	0.000992903	0.00157633	2.20521E-07
Carbon Dioxide	2.16076	0.153053	0.15254	0.0555452	7.25913E-08
Nitrogen	0.013385	0.648673	0.64976	0.00741711	0
Methane	19.7231	77.9572	78.0572	3.0339	0
Ethane	20.6117	11.3291	11.3346	1.0741	1.67688E-07
Propane	21.2567	5.07693	5.07628	0.698758	6.75512E-07
Isobutane	3.38477	0.871439	0.871486	0.108826	2.13382E-07
n-Butane	11.3507	1.78295	1.78171	0.315959	1.5368E-06
Isopentane	3.90616	0.497393	0.496732	0.110207	2.47774E-06
n-Pentane	5.2804	0.575529	0.574305	0.159714	5.35502E-06
i-C6	3.33936	0.460097	0.45871	0.156277	1.24757E-05
i-C7	1.19506	0.270448	0.269122	0.127594	3.4755E-05
Octane	0.0511197	0.0343548	0.0340795	0.0237059	3.11071E-05
Nonane	0.00164568	0.00266073	0.00263239	0.00233229	8.45132E-06
Benzene	2.07024	0.0109299	0.00932665	0.116102	0.0028975
Toluene	1.21343	0.0152662	0.0123373	0.218654	0.0135084
Ethylbenzene	0.00669758	0.000298639	0.00024582	0.00413053	0.000455188
o-Xylene	0.0800746	0.00302118	0.0023444	0.0570725	0.0107112
n-Hexane	1.39468	0.212267	0.211484	0.0821387	9.66714E-06
2,2,4-Trimethylpentane	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report					
All Streams					
Tabulated by Total Phase					

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mole Fraction	BTEX Cond Vapors 3 %	1 %	2 %	3 %	4 %
Decanes Plus	9.45513E-06	1.80124E-05	1.66075E-05	0.00011949	2.1664E-05
Decanes Plus Sat	0	0	0	0	0

Mass Fraction	BTEX Cond Vapors 3 %	1 %	2 %	3 %	4 %
Triethylene Glycol	2.45591E-08	1.49323E-22	0.00050235	96.442	99.1504
Water	1.16461	0.0810196	0.00335563	1.73806	0.830745
Hydrogen Sulfide	0.110481	0.00159519	0.00156336	0.000423767	5.31011E-08
Carbon Dioxide	2.1809	0.311055	0.310151	0.0192825	2.25722E-08
Nitrogen	0.00859934	0.839155	0.840932	0.00163897	0
Methane	7.25652	57.7534	57.853	0.383921	0
Ethane	14.214	15.7314	15.7459	0.254761	3.56258E-08
Propane	21.4968	10.3383	10.3415	0.243048	2.10461E-07
Isobutane	4.51184	2.33899	2.34015	0.0498937	8.76281E-08
n-Butane	15.1302	4.78554	4.78433	0.144858	6.31107E-07
Isopentane	6.46341	1.65721	1.65574	0.0627202	1.26307E-06
n-Pentane	8.73733	1.91755	1.91432	0.0908951	2.72981E-06
i-C6	6.59977	1.83098	1.82626	0.10623	7.59612E-06
i-C7	2.7463	1.25144	1.24586	0.10085	2.46057E-05
Octane	0.13392	0.181222	0.17985	0.02136	2.5106E-05
Nonane	0.00484063	0.0157589	0.0155979	0.00235954	7.65847E-06
Benzene	3.70868	0.039426	0.0336577	0.071536	0.00159913
Toluene	2.56411	0.0649562	0.0525173	0.158916	0.00879403
Ethylbenzene	0.0163073	0.00146412	0.0012057	0.00345905	0.00034144
o-Xylene	0.194966	0.0148118	0.0114989	0.0477945	0.00803456
n-Hexane	2.75639	0.844726	0.84198	0.0558342	5.88605E-06
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	3.32641E-05	0.000127599	0.000117699	0.000144586	2.34805E-05
Decanes Plus Sat	0	0	0	0	0

Stream Properties						
Property	Units	BTEX Cond Vapors 3	1	2	3	4
Temperature	°F	70	98.8747	99.1132	99.5966	95
Pressure	psig	0	1296	1291	1296	1305
Molecular Weight	lb/lbmol	43.6031	21.6546	21.645	126.774	141.533
Mass Flow	lb/h	36.8975	191740	191304	16014.5	15578
Std Vapor Volumetric Flow	MMSCFD	0.00770697	80.6434	80.4953	1.1505	1.00244
Std Liquid Volumetric Flow	sgpm	0.143347	1084.68	1083.17	29.1154	27.6
API Gravity					-3.25948	-6.92099
Net Ideal Gas Heating Value	Btu/ft^3	2191.62	1176.06	1176.54	3189.13	3525.1

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections

	5	6	7	8	9
From Block	XCHG-100	VLVE-100	Flash Tank	Flash Tank	Flash Tank
To Block	VLVE-100	Flash Tank	XCHG-101	FT CON 3	FT 3

Stream Composition

Mass Flow	5 lb/h	6 lb/h	7 lb/h	8 lb/h	9 lb/h
Triethylene Glycol	15444.7	15444.7	15444.7		0.0159244
Water	278.342	278.342	277.583		0.758666
Hydrogen Sulfide	0.0678642	0.0678642	0.0432869		0.0245774
Carbon Dioxide	3.08799	3.08799	0.818993		2.269
Nitrogen	0.262472	0.262472	0.003176		0.259296
Methane	61.483	61.483	2.68829		58.7947
Ethane	40.7986	40.7986	5.39011		35.4085
Propane	38.9229	38.9229	8.6955		30.2274
Isobutane	7.99022	7.99022	2.0861		5.90413
n-Butane	23.1983	23.1983	7.77542		15.4228
Isopentane	10.0443	10.0443	4.72692		5.3174
n-Pentane	14.5564	14.5564	7.4817		7.0747
i-C6	17.0122	17.0122	10.3138		6.69839
i-C7	16.1506	16.1506	11.87		4.28063
Octane	3.42069	3.42069	2.92054		0.500151
Nonane	0.377868	0.377868	0.343888		0.0339799
Benzene	11.4561	11.4561	11.0318		0.424309
Toluene	25.4496	25.4496	24.9026		0.547003
Ethylbenzene	0.553949	0.553949	0.545635		0.00831402
o-Xylene	7.65404	7.65404	7.57125		0.0827986
n-Hexane	8.94157	8.94157	5.84346		3.09811
2,2,4-Trimethylpentane	0	0	0		0
Decanes Plus	0.0231547	0.0231547	0.0228789		0.000275823
Decanes Plus Sat	0	0	0		0

Mole Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol	81.4151	81.4151	85.7197		0.00167158
Water	12.2308	12.2308	12.8424		0.663842
Hydrogen Sulfide	0.00157633	0.00157633	0.00105862		0.0113679
Carbon Dioxide	0.0555452	0.0555452	0.0155105		0.812724
Nitrogen	0.00741711	0.00741711	9.44949E-05		0.14591
Methane	3.0339	3.0339	0.139668		57.7727
Ethane	1.0741	1.0741	0.149407		18.5628
Propane	0.698758	0.698758	0.164359		10.8059
Isobutane	0.108826	0.108826	0.0299148		1.60129
n-Butane	0.315959	0.315959	0.1115		4.1829
Isopentane	0.110207	0.110207	0.0546063		1.16179
n-Pentane	0.159714	0.159714	0.08643		1.54573
i-C6	0.156277	0.156277	0.0997536		1.2253
i-C7	0.127594	0.127594	0.0987342		0.673421
Octane	0.0237059	0.0237059	0.0213099		0.0690211
Nonane	0.00233229	0.00233229	0.00223479		0.0041764
Benzene	0.116102	0.116102	0.117713		0.0856291
Toluene	0.218654	0.218654	0.225267		0.0935845
Ethylbenzene	0.00413053	0.00413053	0.00428365		0.00123448
o-Xylene	0.0570725	0.0570725	0.0594401		0.0122941
n-Hexane	0.0821387	0.0821387	0.0565172		0.56672
2,2,4-Trimethylpentane	0	0	0		0
Decanes Plus	0.00011949	0.00011949	0.000124309		2.83439E-05
Decanes Plus Sat	0	0	0		0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mass Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol	96.442	96.442	97.5207		0.00898916
Water	1.73806	1.73806	1.75271		0.428259
Hydrogen Sulfide	0.000423767	0.000423767	0.000273321		0.0138737
Carbon Dioxide	0.0192825	0.0192825	0.00517128		1.28083
Nitrogen	0.00163897	0.00163897	2.00539E-05		0.14637
Methane	0.383921	0.383921	0.0169744		33.189
Ethane	0.254761	0.254761	0.0340342		19.9878
Propane	0.243048	0.243048	0.054905		17.0631
Isobutane	0.0498937	0.0498937	0.013172		3.33282
n-Butane	0.144858	0.144858	0.0490954		8.70604
Isopentane	0.0627202	0.0627202	0.0298467		3.00162
n-Pentane	0.0908951	0.0908951	0.0472409		3.99359
i-C6	0.10623	0.10623	0.0651232		3.78117
i-C7	0.10085	0.10085	0.0749494		2.41637
Octane	0.02136	0.02136	0.0184409		0.28233
Nonane	0.00235954	0.00235954	0.00217138		0.0191813
Benzene	0.071536	0.071536	0.069657		0.239518
Toluene	0.158916	0.158916	0.15724		0.308777
Ethylbenzene	0.00345905	0.00345905	0.00344524		0.00469318
o-Xylene	0.0477945	0.0477945	0.0478063		0.046739
n-Hexane	0.0558342	0.0558342	0.0368967		1.74885
2,2,4-Trimethylpentane	0	0	0		0
Decanes Plus	0.000144586	0.000144586	0.000144462		0.000155699
Decanes Plus Sat	0	0	0		0

Stream Properties

Property	Units	5	6	7	8	9
Temperature	°F	155 *	159.866	159.856		159.856
Pressure	psig	1286	60 *	55	55	55
Molecular Weight	lb/lbmol	126.774	126.774	132.001		27.9254
Mass Flow	lb/h	16014.5	16014.5	15837.3	0	177.151
Std Vapor Volumetric Flow	MMSCFD	1.1505	1.1505	1.09273	0	0.0577762
Std Liquid Volumetric Flow	sgpm	29.1154	29.1154	28.2385	0	0.876887
API Gravity		-3.25768		-5.71941		
Net Ideal Gas Heating Value	Btu/ft ³	3189.13	3189.13	3279.75		1475.29

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections					
	10	11	12	13	14
From Block	XCHG-101	XCHG-101	Reboiler	Reboiler	Regeneration Unit
To Block	Regeneration Unit	TEG MAKEUP TANK	XCHG-101	Regeneration Unit	Reboiler

Stream Composition					
Mass Flow	10 lb/h	11 lb/h	12 lb/h	13 lb/h	14 lb/h
Triethylene Glycol	15444.7	15444.4	15444.4	235.376	15679.8
Water	277.583	129.422	129.422	313.998	443.42
Hydrogen Sulfide	0.0432869	8.30937E-06	8.30937E-06	0.000251538	0.000259847
Carbon Dioxide	0.818993	3.53198E-06	3.53198E-06	0.000334346	0.000337878
Nitrogen	0.003176	1.93233E-11	1.93233E-11	1.21814E-08	1.22007E-08
Methane	2.68829	2.31927E-07	2.31927E-07	6.71756E-05	6.74075E-05
Ethane	5.39011	5.57733E-06	5.57733E-06	0.000767703	0.00077328
Propane	8.6955	3.29495E-05	3.29495E-05	0.00308577	0.00311872
Isobutane	2.0861	1.37183E-05	1.37183E-05	0.00106767	0.00108139
n-Butane	7.77542	9.87875E-05	9.87875E-05	0.00641839	0.00651718
Isopentane	4.72692	0.000197762	0.000197762	0.00886991	0.00906767
n-Pentane	7.4817	0.000427394	0.000427394	0.0176196	0.018047
i-C6	10.3138	0.00118949	0.00118949	0.0401741	0.0413636
i-C7	11.87	0.00385249	0.00385249	0.0951568	0.0990093
Octane	2.92054	0.00393033	0.00393033	0.0644694	0.0683997
Nonane	0.343888	0.00119877	0.00119877	0.0146548	0.0158536
Benzene	11.0318	0.250017	0.250017	1.76668	2.0167
Toluene	24.9026	1.37395	1.37395	7.38748	8.76143
Ethylbenzene	0.545635	0.0532633	0.0532633	0.234965	0.288229
o-Xylene	7.57125	1.25011	1.25011	4.5077	5.75781
n-Hexane	5.84346	0.000921724	0.000921724	0.028368	0.0292897
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0228789	0.00367225	0.00367225	0.0132047	0.016877
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	85.7197	93.4448	93.4448	8.18574	80.81
Water	12.8424	6.52744	6.52744	91.0278	19.0499
Hydrogen Sulfide	0.00105862	2.2153E-07	2.2153E-07	3.85461E-05	5.90099E-06
Carbon Dioxide	0.0155105	7.29203E-08	7.29203E-08	3.96769E-05	5.94198E-06
Nitrogen	9.44949E-05	6.26745E-13	6.26745E-13	2.271E-09	3.37082E-10
Methane	0.139668	1.31358E-08	1.31358E-08	2.1869E-05	3.25203E-06
Ethane	0.149407	1.68532E-07	1.68532E-07	0.00013334	1.99037E-05
Propane	0.164359	6.78937E-07	6.78937E-07	0.000365473	5.47392E-05
Isobutane	0.0299148	2.14454E-07	2.14454E-07	9.59366E-05	1.43999E-05
n-Butane	0.1115	1.54432E-06	1.54432E-06	0.000576729	8.6783E-05
Isopentane	0.0546063	2.49052E-06	2.49052E-06	0.000642063	9.72711E-05
n-Pentane	0.08643	5.38239E-06	5.38239E-06	0.00127542	0.000193594
i-C6	0.0997536	1.25416E-05	1.25416E-05	0.00243473	0.000371495
i-C7	0.0987342	3.49335E-05	3.49335E-05	0.00495965	0.000764746
Octane	0.0213099	3.1263E-05	3.1263E-05	0.00294759	0.000463443
Nonane	0.00223479	8.49254E-06	8.49254E-06	0.000596752	9.56689E-05
Benzene	0.117713	0.00290823	0.00290823	0.118122	0.0199821
Toluene	0.225267	0.013549	0.013549	0.418739	0.0735955
Ethylbenzene	0.00428365	0.000455851	0.000455851	0.0115587	0.00210123
o-Xylene	0.0594401	0.010699	0.010699	0.221749	0.0419752
n-Hexane	0.0565172	9.71838E-06	9.71838E-06	0.00171923	0.000263057
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000124309	2.17512E-05	2.17512E-05	0.000449564	8.51504E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mass Fraction	10 %	11 %	12 %	13 %	14 %
Triethylene Glycol	97.5207	99.1502	99.1502	41.7655	97.1466
Water	1.75271	0.830865	0.830865	55.7164	2.74728
Hydrogen Sulfide	0.000273321	5.33447E-08	5.33447E-08	4.46333E-05	1.60993E-06
Carbon Dioxide	0.00517128	2.26747E-08	2.26747E-08	5.93269E-05	2.09338E-06
Nitrogen	2.00539E-05	1.24052E-13	1.24052E-13	2.16148E-09	7.55914E-11
Methane	0.0169744	1.48893E-09	1.48893E-09	1.19197E-05	4.17634E-07
Ethane	0.0340342	3.58055E-08	3.58055E-08	0.000136222	4.79098E-06
Propane	0.054905	2.1153E-07	2.1153E-07	0.000547544	1.93225E-05
Isobutane	0.013172	8.80689E-08	8.80689E-08	0.00018945	6.69995E-06
n-Butane	0.0490954	6.34199E-07	6.34199E-07	0.00113889	4.03783E-05
Isopentane	0.0298467	1.26959E-06	1.26959E-06	0.00157389	5.61802E-05
n-Pentane	0.0472409	2.74379E-06	2.74379E-06	0.00312644	0.000111813
i-C6	0.0651232	7.63632E-06	7.63632E-06	0.00712856	0.000256275
i-C7	0.0749494	2.47323E-05	2.47323E-05	0.0168848	0.000613429
Octane	0.0184409	2.5232E-05	2.5232E-05	0.0114395	0.000423782
Nonane	0.00217138	7.6959E-06	7.6959E-06	0.00260038	9.82236E-05
Benzene	0.069657	0.00160506	0.00160506	0.313483	0.0124948
Toluene	0.15724	0.0088205	0.0088205	1.31085	0.0542829
Ethylbenzene	0.00344524	0.000341941	0.000341941	0.0416926	0.00178577
o-Xylene	0.0478063	0.0080255	0.0080255	0.799853	0.0356735
n-Hexane	0.0368967	5.91731E-06	5.91731E-06	0.00503366	0.000181469
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000144462	2.35752E-05	2.35752E-05	0.00234307	0.000104564
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	10	11	12	13	14
Temperature	°F	290 *	269.881	395	395 *	311.832
Pressure	psig	35 *	0.5 *	0.5	0.5	0.5
Molecular Weight	lb/lbmol	132.001	141.532	141.532	29.4328	124.919
Mass Flow	lb/h	15837.3	15576.7	15576.7	563.566	16140.3
Std Vapor Volumetric Flow	MMSCFD	1.09273	1.00237	1.00237	0.174388	1.17676
Std Liquid Volumetric Flow	sgpm	28.2385	27.5978	27.5978	1.07678	28.6745
API Gravity			-6.73863	-6.73863		-6.14004
Net Ideal Gas Heating Value	Btu/ft^3	3279.75	3525.07	3525.07	343.168	3053.53

Remarks

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections

	15	16	17	18	19
From Block	Regeneration Unit	STILL	STILL	--	TEG MAKEUP TANK
To Block	STILL	Regeneration Unit	BTEX Cond.	TEG MAKEUP TANK	--

Stream Composition

Mass Flow	15 lb/h	16 lb/h	17 lb/h	18 lb/h	19 lb/h
Triethylene Glycol	9.42027	9.11795	0.302318	1.26457 *	0
Water	150.512	2.35051	148.161	0.000762325 *	0
Hydrogen Sulfide	0.0432839	5.37032E-06	0.0432785	0 *	0
Carbon Dioxide	0.819014	2.45296E-05	0.81899	0 *	0
Nitrogen	0.00317601	5.12423E-09	0.003176	0 *	0
Methane	2.6883	1.23971E-05	2.68829	0 *	0
Ethane	5.39017	6.1956E-05	5.39011	0 *	0
Propane	8.69562	0.000160333	8.69546	0 *	0
Isobutane	2.08612	4.18082E-05	2.08608	0 *	0
n-Butane	7.77555	0.000233338	7.77532	0 *	0
Isopentane	4.72692	0.000201461	4.72672	0 *	0
n-Pentane	7.48163	0.000359542	7.48127	0 *	0
i-C6	10.3133	0.000686416	10.3126	0 *	0
i-C7	11.8672	0.00102126	11.8661	0 *	0
Octane	2.91707	0.000457265	2.91661	0 *	0
Nonane	0.342758	6.86221E-05	0.34269	0 *	0
Benzene	10.7919	0.0100748	10.7818	0 *	0
Toluene	23.5632	0.0345659	23.5286	0 *	0
Ethylbenzene	0.49332	0.00094816	0.492372	0 *	0
o-Xylene	6.33771	0.0165773	6.32113	0 *	0
n-Hexane	5.84295	0.000412069	5.84254	0 *	0
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	0.0192509	4.42226E-05	0.0192067	0 *	0
Decanes Plus Sat	0	0	0	0 *	0

Mole Fraction	15 %	16 %	17 %	18 %	19 %
Triethylene Glycol	0.620298	31.6385	0.0202919	99.5 *	93.4448
Water	82.6148	67.988	82.8977	0.5 *	6.52744
Hydrogen Sulfide	0.0125587	8.21107E-05	0.0128	0 *	2.2153E-07
Carbon Dioxide	0.184024	0.000290439	0.187578	0 *	7.29203E-08
Nitrogen	0.0011211	9.53177E-08	0.00114278	0 *	6.26745E-13
Methane	1.65705	0.000402681	1.68909	0 *	1.31358E-08
Ethane	1.7726	0.00107368	1.80687	0 *	1.68532E-07
Propane	1.95	0.00189469	1.98768	0 *	6.78937E-07
Isobutane	0.354917	0.000374827	0.361775	0 *	2.14454E-07
n-Butane	1.32287	0.00209197	1.34842	0 *	1.54432E-06
Isopentane	0.647856	0.00145503	0.660359	0 *	2.49052E-06
n-Pentane	1.02541	0.00259676	1.04519	0 *	5.38239E-06
i-C6	1.18343	0.00415064	1.20624	0 *	1.25416E-05
i-C7	1.17112	0.00531096	1.19367	0 *	3.49335E-05
Octane	0.252523	0.00208595	0.257367	0 *	3.1263E-05
Nonane	0.0264266	0.000278805	0.0269324	0 *	8.49254E-06
Benzene	1.36618	0.0672096	1.39131	0 *	0.00290823
Toluene	2.52885	0.195487	2.57398	0 *	0.013549
Ethylbenzene	0.045949	0.00465383	0.0467478	0 *	0.000455851
o-Xylene	0.59031	0.0813658	0.600154	0 *	0.010699
n-Hexane	0.670468	0.00249171	0.683389	0 *	9.71838E-06
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	0.00124095	0.000150221	0.00126205	0 *	2.17512E-05
Decanes Plus Sat	0	0	0	0 *	0

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mass Fraction	15 %	16 %	17 %	18 %	19 %
Triethylene Glycol	3.46167	79.0499	0.11601	99.9398 *	99.1502
Water	55.3087	20.3783	56.8548	0.0602469 *	0.830865
Hydrogen Sulfide	0.0159056	4.65591E-05	0.0166075	0 *	5.33447E-08
Carbon Dioxide	0.300964	0.000212664	0.314276	0 *	2.26747E-08
Nitrogen	0.00116709	4.44256E-08	0.00121875	0 *	1.24052E-13
Methane	0.987872	0.00010748	1.03159	0 *	1.48893E-09
Ethane	1.98073	0.00053714	2.06838	0 *	3.58055E-08
Propane	3.19539	0.00139004	3.33676	0 *	2.1153E-07
Isobutane	0.76659	0.000362465	0.800505	0 *	8.80689E-08
n-Butane	2.85729	0.00202298	2.98367	0 *	6.34199E-07
Isopentane	1.73701	0.0017466	1.81381	0 *	1.26959E-06
n-Pentane	2.74928	0.00311712	2.87083	0 *	2.74379E-06
i-C6	3.78983	0.00595102	3.95731	0 *	7.63632E-06
i-C7	4.36084	0.00885406	4.55346	0 *	2.47323E-05
Octane	1.07194	0.00396435	1.11921	0 *	2.5232E-05
Nonane	0.125954	0.000594933	0.131502	0 *	7.6959E-06
Benzene	3.9657	0.0873458	4.13737	0 *	0.00160506
Toluene	8.65879	0.299676	9.02878	0 *	0.0088205
Ethylbenzene	0.181281	0.00822026	0.188941	0 *	0.000341941
o-Xylene	2.32892	0.14372	2.42565	0 *	0.0080255
n-Hexane	2.14711	0.00357251	2.24199	0 *	5.91731E-06
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	0.00707414	0.000383397	0.00737028	0 *	2.35752E-05
Decanes Plus Sat	0	0	0	0 *	0

Stream Properties

Property	Units	15	16	17	18	19
Temperature	°F	290.223	215	215 *	85 *	
Pressure	psig	0	0	0	0.5 *	0.5
Molecular Weight	lb/lbmol	26.9095	60.1044	26.2674	149.512	141.532
Mass Flow	lb/h	272.13	11.5344	260.596	1.26534	0
Std Vapor Volumetric Flow	MMSCFD	0.0921035	0.00174781	0.0903556	7.70786E-05	0
Std Liquid Volumetric Flow	sgpm	0.661728	0.0209885	0.640739	0.00223947	0
API Gravity			-4.50938		-7.10455	
Net Ideal Gas Heating Value	Btu/ft^3	570.615	1209.13	558.263	3752.16	3525.07

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections					
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	20	21	22	23	24
From Block	TEG MAKEUP TANK	TEG Pump	XCHG-102	XCHG-103	BTEX Cond.
To Block	TEG Pump	XCHG-102	RCYL-1	DRY GAS 3	Blowcase

Stream Composition					
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Mass Flow	20 lb/h	21 lb/h	22 lb/h	23 lb/h	24 lb/h
Triethylene Glycol	15445.6	15445.6	15445.6	0.961016	0.302318
Water	129.423	129.423	129.423	6.41945	148.161
Hydrogen Sulfide	8.30937E-06	8.30937E-06	8.30937E-06	2.99077	0.0432785
Carbon Dioxide	3.53198E-06	3.53198E-06	3.53198E-06	593.33	0.81899
Nitrogen	0	0	0	1608.74	0.003176
Methane	0	0	0	110675	2.68829
Ethane	5.57733E-06	5.57733E-06	5.57733E-06	30122.6	5.39011
Propane	3.29495E-05	3.29495E-05	3.29495E-05	19783.7	8.69546
Isobutane	1.37183E-05	1.37183E-05	1.37183E-05	4476.81	2.08608
n-Butane	9.87875E-05	9.87875E-05	9.87875E-05	9152.62	7.77532
Isopentane	0.000197762	0.000197762	0.000197762	3167.51	4.72672
n-Pentane	0.000427394	0.000427394	0.000427394	3662.16	7.48127
i-C6	0.00118949	0.00118949	0.00118949	3493.72	10.3126
i-C7	0.00385249	0.00385249	0.00385249	2383.37	11.8661
Octane	0.00393033	0.00393033	0.00393033	344.06	2.91661
Nonane	0.00119877	0.00119877	0.00119877	29.8395	0.34269
Benzene	0.250017	0.250017	0.250017	64.3885	10.7818
Toluene	1.37395	1.37395	1.37395	100.468	23.5286
Ethylbenzene	0.0532633	0.0532633	0.0532633	2.30656	0.492372
o-Xylene	1.25011	1.25011	1.25011	21.9978	6.32113
n-Hexane	0.000921724	0.000921724	0.000921724	1610.74	5.84254
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00367225	0.00367225	0.00367225	0.225162	0.0192067
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	20 %	21 %	22 %	23 %	24 %
Triethylene Glycol	93.4453	93.4453	93.4453	7.24057E-05	0.0202919
Water	6.52697	6.52697	6.52697	0.00403172	82.8977
Hydrogen Sulfide	2.21513E-07	2.21513E-07	2.21513E-07	0.000992903	0.0128
Carbon Dioxide	7.29147E-08	7.29147E-08	7.29147E-08	0.15254	0.187578
Nitrogen	0	0	0	0.64976	0.00114278
Methane	0	0	0	78.0572	1.68909
Ethane	1.68519E-07	1.68519E-07	1.68519E-07	11.3346	1.80687
Propane	6.78885E-07	6.78885E-07	6.78885E-07	5.07628	1.98768
Isobutane	2.14437E-07	2.14437E-07	2.14437E-07	0.871486	0.361775
n-Butane	1.5442E-06	1.5442E-06	1.5442E-06	1.78171	1.34842
Isopentane	2.49032E-06	2.49032E-06	2.49032E-06	0.496732	0.660359
n-Pentane	5.38198E-06	5.38198E-06	5.38198E-06	0.574305	1.04519
i-C6	1.25407E-05	1.25407E-05	1.25407E-05	0.45871	1.20624
i-C7	3.49308E-05	3.49308E-05	3.49308E-05	0.269122	1.19367
Octane	3.12606E-05	3.12606E-05	3.12606E-05	0.0340795	0.257367
Nonane	8.49189E-06	8.49189E-06	8.49189E-06	0.00263239	0.0269324
Benzene	0.00290801	0.00290801	0.00290801	0.00932665	1.39131
Toluene	0.0135479	0.0135479	0.0135479	0.0123373	2.57398
Ethylbenzene	0.000455816	0.000455816	0.000455816	0.00024582	0.0467478
o-Xylene	0.0106982	0.0106982	0.0106982	0.0023444	0.600154
n-Hexane	9.71764E-06	9.71764E-06	9.71764E-06	0.211484	0.683389
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.17496E-05	2.17496E-05	2.17496E-05	1.66075E-05	0.00126205
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mass Fraction	20 %	21 %	22 %	23 %	24 %
Triethylene Glycol	99.1503	99.1503	99.1503	0.00050235	0.11601
Water	0.830802	0.830802	0.830802	0.00335563	56.8548
Hydrogen Sulfide	5.33403E-08	5.33403E-08	5.33403E-08	0.00156336	0.0166075
Carbon Dioxide	2.26729E-08	2.26729E-08	2.26729E-08	0.310151	0.314276
Nitrogen	0	0	0	0.840932	0.00121875
Methane	0	0	0	57.853	1.03159
Ethane	3.58026E-08	3.58026E-08	3.58026E-08	15.7459	2.06838
Propane	2.11513E-07	2.11513E-07	2.11513E-07	10.3415	3.33676
Isobutane	8.80617E-08	8.80617E-08	8.80617E-08	2.34015	0.800505
n-Butane	6.34147E-07	6.34147E-07	6.34147E-07	4.78433	2.98367
Isopentane	1.26949E-06	1.26949E-06	1.26949E-06	1.65574	1.81381
n-Pentane	2.74357E-06	2.74357E-06	2.74357E-06	1.91432	2.87083
i-C6	7.6357E-06	7.6357E-06	7.6357E-06	1.82626	3.95731
i-C7	2.47303E-05	2.47303E-05	2.47303E-05	1.24586	4.55346
Octane	2.523E-05	2.523E-05	2.523E-05	0.17985	1.11921
Nonane	7.69527E-06	7.69527E-06	7.69527E-06	0.0155979	0.131502
Benzene	0.00160493	0.00160493	0.00160493	0.0336577	4.13737
Toluene	0.00881979	0.00881979	0.00881979	0.0525173	9.02878
Ethylbenzene	0.000341913	0.000341913	0.000341913	0.0012057	0.188941
o-Xylene	0.00802485	0.00802485	0.00802485	0.0114989	2.42565
n-Hexane	5.91682E-06	5.91682E-06	5.91682E-06	0.84198	2.24199
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.35733E-05	2.35733E-05	2.35733E-05	0.000117699	0.00737028
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	20	21	22	23	24
Temperature	°F	269.867	270.963	95 *	95 *	70 *
Pressure	psig	0.5	1315 *	1305	1281	0 *
Molecular Weight	lb/lbmol	141.532	141.532	141.532	21.645	26.2674
Mass Flow	lb/h	15578	15578	15578	191304	260.596
Std Vapor Volumetric Flow	MMSCFD	1.00245	1.00245	1.00245	80.4953	0.0903556
Std Liquid Volumetric Flow	sgpm	27.6 *	27.6	27.6	1083.17	0.640739
API Gravity		-6.73865	-6.92234	-6.92095		
Net Ideal Gas Heating Value	Btu/ft ³	3525.08	3525.08	3525.08	1176.54	558.263

Remarks

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Connections

	26	27		
From Block	Blowcase	PUMP-101		
To Block	PUMP-101	BTEX LIQUIDS 3		

Stream Composition

Mass Flow	26 lb/h	27 lb/h		
Triethylene Glycol	0.302318	0.302318		
Water	147.731	147.731		
Hydrogen Sulfide	0.00251389	0.00251389		
Carbon Dioxide	0.0142941	0.0142941		
Nitrogen	3.06192E-06	3.06192E-06		
Methane	0.0108163	0.0108163		
Ethane	0.145498	0.145498		
Propane	0.763705	0.763705		
Isobutane	0.421328	0.421328		
n-Butane	2.19264	2.19264		
Isopentane	2.34189	2.34189		
n-Pentane	4.25742	4.25742		
i-C6	7.87745	7.87745		
i-C7	10.8528	10.8528		
Octane	2.8672	2.8672		
Nonane	0.340903	0.340903		
Benzene	9.4134	9.4134		
Toluene	22.5825	22.5825		
Ethylbenzene	0.486355	0.486355		
o-Xylene	6.2492	6.2492		
n-Hexane	4.8255	4.8255		
2,2,4-Trimethylpentane	0	0		
Decanes Plus	0.0191944	0.0191944		
Decanes Plus Sat	0	0		

Mole Fraction	26 %	27 %		
Triethylene Glycol	0.0221841	0.0221841		
Water	90.3651	90.3651		
Hydrogen Sulfide	0.000812839	0.000812839		
Carbon Dioxide	0.00357914	0.00357914		
Nitrogen	1.20447E-06	1.20447E-06		
Methane	0.00742977	0.00742977		
Ethane	0.053322	0.053322		
Propane	0.190853	0.190853		
Isobutane	0.0798817	0.0798817		
n-Butane	0.415714	0.415714		
Isopentane	0.357689	0.357689		
n-Pentane	0.650258	0.650258		
i-C6	1.00733	1.00733		
i-C7	1.19354	1.19354		
Octane	0.2766	0.2766		
Nonane	0.0292904	0.0292904		
Benzene	1.328	1.328		
Toluene	2.70085	2.70085		
Ethylbenzene	0.0504825	0.0504825		
o-Xylene	0.648652	0.648652		
n-Hexane	0.617061	0.617061		
2,2,4-Trimethylpentane	0	0		
Decanes Plus	0.00137885	0.00137885		
Decanes Plus Sat	0	0		

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Dehy 3	

Mass Fraction	26 %	27 %			
Triethylene Glycol	0.135145	0.135145			
Water	66.0404	66.0404			
Hydrogen Sulfide	0.00112379	0.00112379			
Carbon Dioxide	0.00638989	0.00638989			
Nitrogen	1.36877E-06	1.36877E-06			
Methane	0.0048352	0.0048352			
Ethane	0.065042	0.065042			
Propane	0.341399	0.341399			
Isobutane	0.188347	0.188347			
n-Butane	0.980179	0.980179			
Isopentane	1.04689	1.04689			
n-Pentane	1.90319	1.90319			
i-C6	3.52146	3.52146			
i-C7	4.85154	4.85154			
Octane	1.28172	1.28172			
Nonane	0.152394	0.152394			
Benzene	4.20808	4.20808			
Toluene	10.0951	10.0951			
Ethylbenzene	0.217415	0.217415			
o-Xylene	2.79358	2.79358			
n-Hexane	2.15714	2.15714			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	0.00858047	0.00858047			
Decanes Plus Sat	0	0			

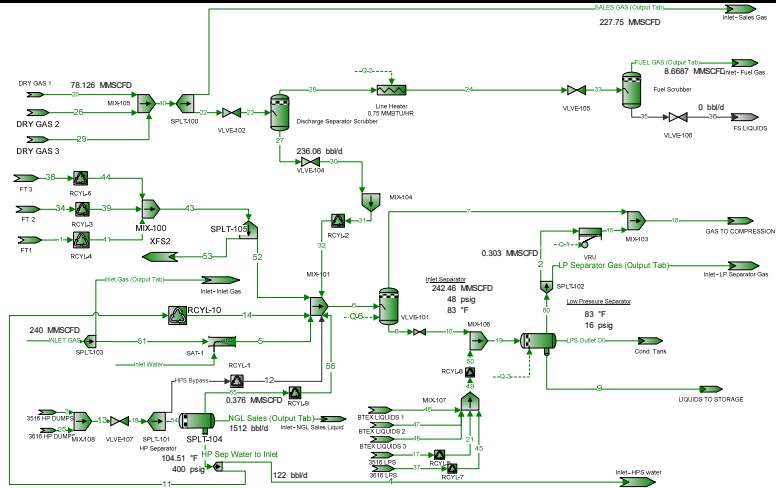
Stream Properties

Property	Units	26	27			
Temperature	°F	70	77.0088			
Pressure	psig	0	16 *			
Molecular Weight	lb/lbmol	24.6508	24.6508			
Mass Flow	lb/h	223.698	223.698			
Std Vapor Volumetric Flow	MMSCFD	0.0826487	0.0826487			
Std Liquid Volumetric Flow	sgpm	0.497392	0.497392			
API Gravity		25.2397	25.2636			
Net Ideal Gas Heating Value	Btu/ft^3	405.953	405.953			

Remarks

Inlet Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	



* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	FUEL GAS (Output Tab)	HP Sep Water to Inlet	HPS Bypass	INLET GAS	Inlet Gas (Output Tab)
From Block	Fuel Scrubber	HP Separator	SPLT-101	--	SPLT-103
To Block	Inlet - Fuel Gas	SPLT-104	RCYL-1	SPLT-103	Inlet - Inlet Gas

Stream Composition

Mass Flow	FUEL GAS (Output Tab) lb/h	HP Sep Water to Inlet lb/h	HPS Bypass lb/h	INLET GAS lb/h	Inlet Gas (Output Tab) lb/h
Triethylene Glycol	0.00307297	1.6315E-12	0	0 *	0
Water	0.701728	1777.15	0	0 *	0
Hydrogen Sulfide	0.317743	0.00122028	0	8.98076 *	8.98076
Carbon Dioxide	64.8552	0.0721611	0	1751.16 *	1751.16
Nitrogen	179.195	0.00270462	0	4731.8 *	4731.8
Methane	12246.2	0.614655	0	325713 *	325713
Ethane	3221.6	0.27477	0	89092.8 *	89092.8
Propane	1970.58	0.1104	0	59260.8 *	59260.8
Isobutane	399.511	0.0123835	0	13707.8 *	13707.8
n-Butane	758.175	0.0375467	0	28487.7 *	28487.7
Isopentane	210.884	0.00642741	0	10437.7 *	10437.7
n-Pentane	221.152	0.00368851	0	12433.9 *	12433.9
i-C6	139.259	0.00353026	0	13897.5 *	13897.5
i-C7	49.8376	0.000981107	0	13862.4 *	13862.4
Octane	2.5648	3.22796E-05	0	6260.95 *	6260.95
Nonane	0.081627	1.56662E-06	0	2906.53 *	2906.53
Benzene	2.23327	0.0229615	0	329.336 *	329.336
Toluene	1.62466	0.0224333	0	946.908 *	946.908
Ethylbenzene	0.0168469	0.000311282	0	55.9517 *	55.9517
o-Xylene	0.133086	0.00465266	0	755.348 *	755.348
n-Hexane	52.2445	0.000788184	0	7016.88 *	7016.88
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	0.000157719	1.95117E-06	0	1374.38 *	1374.38
Decanes Plus Sat	0	0	0	0 *	0

Mole Fraction	FUEL GAS (Output Tab) %	HP Sep Water to Inlet %	HPS Bypass %	INLET GAS %	Inlet Gas (Output Tab) %
Triethylene Glycol	2.1499E-06	1.10072E-14	3.21503E-15	0 *	0
Water	0.0040924	99.9459	29.2651	0 *	0
Hydrogen Sulfide	0.000979527	3.6277E-05	0.000772587	0.00099999 *	0.00099999
Carbon Dioxide	0.154828	0.00166126	0.0559876	0.150998 *	0.150998
Nitrogen	0.672063	9.78187E-05	0.0504762	0.640994 *	0.640994
Methane	80.2015	0.0388188	14.4552	77.0472 *	77.0472
Ethane	11.2565	0.00925831	7.33106	11.2439 *	11.2439
Propane	4.69515	0.00253662	7.55139	5.09995 *	5.09995
Isobutane	0.722168	0.000215866	2.39074	0.894991 *	0.894991
n-Butane	1.3705	0.000654503	6.44749	1.85998 *	1.85998
Isopentane	0.307089	9.02587E-05	3.1474	0.548995 *	0.548995
n-Pentane	0.322042	5.17968E-05	4.44857	0.653993 *	0.653993
i-C6	0.169782	4.15055E-05	6.93663	0.611994 *	0.611994
i-C7	0.0522555	9.92024E-06	8.7808	0.524995 *	0.524995
Octane	0.00235901	2.86309E-07	3.17036	0.207998 *	0.207998
Nonane	6.68667E-05	1.23758E-08	0.60546	0.0859991 *	0.0859991
Benzene	0.00300383	0.000297828	0.210452	0.0159998 *	0.0159998
Toluene	0.00185256	0.00024668	0.685566	0.0389996 *	0.0389996
Ethylbenzene	1.66721E-05	2.97067E-06	0.0289186	0.00199998 *	0.00199998
o-Xylene	0.000131705	4.44019E-05	0.35189	0.0269997 *	0.0269997
n-Hexane	0.0636954	9.26672E-06	4.0679	0.308997 *	0.308997
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	1.08021E-07	1.2887E-08	0.0177994	0.0339997 *	0.0339997
Decanes Plus Sat	0	0	0	0 *	0

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	FUEL GAS (Output Tab) %	HP Sep Water to Inlet %	HPS Bypass %	INLET GAS %	Inlet Gas (Output Tab) %
Triethylene Glycol	1.57417E-05	9.17428E-14	1.01241E-14	0 *	0
Water	0.0035947	99.933	11.0553	0 *	0
Hydrogen Sulfide	0.00162768	6.8619E-05	0.000552126	0.00151438 *	0.00151438
Carbon Dioxide	0.33223	0.00405777	0.0516676	0.295289 *	0.295289
Nitrogen	0.917949	0.000152087	0.0296506	0.7979 *	0.7979
Methane	62.733	0.0345634	4.86268	54.9233 *	54.9233
Ethane	16.5031	0.0154509	4.62239	15.0233 *	15.0233
Propane	10.0946	0.00620803	6.98237	9.99287 *	9.99287
Isobutane	2.04655	0.000696353	2.91376	2.31148 *	2.31148
n-Butane	3.88386	0.00211133	7.85802	4.80374 *	4.80374
Isopentane	1.08028	0.000361427	4.76169	1.76005 *	1.76005
n-Pentane	1.13288	0.000207413	6.73022	2.09668 *	2.09668
i-C6	0.713375	0.000198514	12.5346	2.34347 *	2.34347
i-C7	0.2553	5.51698E-05	18.4498	2.33754 *	2.33754
Octane	0.0131385	1.81515E-06	7.59389	1.05575 *	1.05575
Nonane	0.000418145	8.80946E-08	1.62832	0.490115 *	0.490115
Benzene	0.0114402	0.00129117	0.344706	0.0555343 *	0.0555343
Toluene	0.00832255	0.00126147	1.32456	0.159672 *	0.159672
Ethylbenzene	8.63005E-05	1.7504E-05	0.0643783	0.00943487 *	0.00943487
o-Xylene	0.00068175	0.000261629	0.783373	0.127371 *	0.127371
n-Hexane	0.267629	4.43212E-05	7.35078	1.18322 *	1.18322
2,2,4-Trimethylpentane	0	0	0	0 *	0
Decanes Plus	8.07938E-07	1.09719E-07	0.0572548	0.231755 *	0.231755
Decanes Plus Sat	0	0	0	0 *	0

Stream Properties

Property	Units	FUEL GAS (Output Tab)	HP Sep Water to Inlet	HPS Bypass	INLET GAS	Inlet Gas (Output Tab)
Temperature	°F	78.4268	104.508		100 *	100
Pressure	psig	120	400	400	48 *	48
Molecular Weight	lb/lbmol	20.5096	18.0176	47.6892	22.5046	22.5046
Mass Flow	lb/h	19521.2	1778.34	0	593031	593031
Std Vapor Volumetric Flow	MMSCFD	8.6687	0.898924	0	240 *	240
Std Liquid Volumetric Flow	sgpm	114.221	3.55925	0 *	3277.73	3277.73
API Gravity			10.0377			
Net Ideal Gas Heating Value	Btu/ft ³	1119.76	0.619624	2179.66	1219.1	1219.1

Remarks

INLET GAS:

Process Streams Report	
All Streams	
Tabulated by Total Phase	

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections					
	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
From Block	--	SPLT-102	Low Pressure Separator	HP Separator	SPLT-100
To Block	SAT-1	Inlet - LP Separator Gas	Cond. Tank	Inlet - NGL Sales Liquid	Inlet - Sales Gas

Stream Composition					
	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	0 *	3.38434E-08	0.000127574	1.00847E-15	2.71872
Water	7627.74 *	11.6448	2.34408	3.38013	18.1266
Hydrogen Sulfide	0 *	0.0300098	0.0133745	0.0679919	8.45825
Carbon Dioxide	0 *	2.52953	0.389013	4.89576	1678.58
Nitrogen	0 *	1.11555	0.0173219	0.886875	4551.69
Methane	0 *	215.829	11.9215	309.156	313137
Ethane	0 *	213.201	73.3267	555.798	85225.6
Propane	0 *	242.301	289.939	1000.43	55973.1
Isobutane	0 *	65.7857	192.021	443.249	12666.1
n-Butane	0 *	140.67	597.768	1214.22	25894.8
Isopentane	0 *	48.7338	501.843	751.261	8961.47
n-Pentane	0 *	56.5242	768.158	1066.48	10360.8
i-C6	0 *	54.9012	1843.4	2004.9	9884.03
i-C7	0 *	39.8971	4060.91	2965.18	6742.51
Octane	0 *	8.71161	4021.13	1223.28	973.272
Nonane	0 *	1.72869	2534	262.468	84.4048
Benzene	0 *	1.74101	85.2158	55.2099	181.587
Toluene	0 *	2.69013	441.747	213.049	283.066
Ethylbenzene	0 *	0.0785051	38.654	10.3703	6.5024
o-Xylene	0 *	0.915927	561.149	126.211	61.9743
n-Hexane	0 *	25.2001	1214.36	1178.11	4556.86
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	0.143078	1350.87	9.23153	0.636169
Decanes Plus Sat	0 *	0	0	0	0

	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
Mole Fraction	%	%	%	%	%
Triethylene Glycol	0 *	6.77301E-10	4.41536E-07	3.38926E-18	7.23978E-05
Water	100 *	1.94263	0.0676282	0.0946952	0.00402373
Hydrogen Sulfide	0 *	0.00264637	0.000203969	0.00100689	0.000992481
Carbon Dioxide	0 *	0.17274	0.00459425	0.0561448	0.152527
Nitrogen	0 *	0.11968	0.000321385	0.0159784	0.64977
Methane	0 *	40.4332	0.38624	9.72618	78.0577
Ethane	0 *	21.3093	1.26747	9.32895	11.3345
Propane	0 *	16.5143	3.4175	11.4506	5.07618
Isobutane	0 *	3.40164	1.71713	3.84894	0.871471
n-Butane	0 *	7.27375	5.34548	10.5436	1.78165
Isopentane	0 *	2.03002	3.61523	5.2553	0.49671
n-Pentane	0 *	2.35453	5.53373	7.46037	0.574269
i-C6	0 *	1.91469	11.1181	11.7421	0.458673
i-C7	0 *	1.19664	21.0642	14.9352	0.26909
Octane	0 *	0.229204	18.2966	5.40489	0.0340731
Nonane	0 *	0.0405081	10.269	1.03285	0.00263175
Benzene	0 *	0.0669858	0.567022	0.356726	0.00929652
Toluene	0 *	0.0877467	2.4919	1.16701	0.0122857
Ethylbenzene	0 *	0.00222236	0.189239	0.0492999	0.000244932

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
Mole Fraction	%	%	%	%	%
o-Xylene	0 *	0.0259286	2.74722	0.599998	0.00233444
n-Hexane	0 *	0.878858	7.32421	6.89982	0.211463
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	0.00280315	4.57703	0.0303727	1.65844E-05
Decanes Plus Sat	0 *	0	0	0	0

	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
Mass Fraction	%	%	%	%	%
Triethylene Glycol	0 *	2.98345E-09	6.8628E-07	7.52709E-18	0.000502301
Water	100 *	1.02654	0.0126099	0.0252289	0.00334901
Hydrogen Sulfide	0 *	0.0026455	7.1948E-05	0.000507484	0.00156272
Carbon Dioxide	0 *	0.222989	0.00209269	0.0365414	0.310128
Nitrogen	0 *	0.0983405	9.31826E-05	0.00661954	0.840954
Methane	0 *	19.0263	0.0641315	2.30751	57.8541
Ethane	0 *	18.7946	0.394459	4.14841	15.746
Propane	0 *	21.3599	1.55972	7.4671	10.3414
Isobutane	0 *	5.7993	1.03297	3.30836	2.34014
n-Butane	0 *	12.4007	3.21568	9.06278	4.78423
Isopentane	0 *	4.29611	2.69965	5.60733	1.65569
n-Pentane	0 *	4.98286	4.13229	7.96011	1.91422
i-C6	0 *	4.83978	9.91651	14.9644	1.82614
i-C7	0 *	3.5171	21.8456	22.1318	1.24572
Octane	0 *	0.767968	21.6316	9.13043	0.179818
Nonane	0 *	0.152392	13.6316	1.95903	0.0155943
Benzene	0 *	0.153477	0.458417	0.41208	0.0335494
Toluene	0 *	0.237147	2.37637	1.59018	0.0522983
Ethylbenzene	0 *	0.00692057	0.207939	0.0774029	0.00120136
o-Xylene	0 *	0.0807431	3.01869	0.942022	0.0114502
n-Hexane	0 *	2.2215	6.53262	8.79327	0.84191
2,2,4-Trimethylpentane	0 *	0	0	0	0
Decanes Plus	0 *	0.012613	7.26696	0.0689032	0.000117536
Decanes Plus Sat	0 *	0	0	0	0

Stream Properties

Property	Units	Inlet Water	LP Separator Gas (Output Tab)	LPS Outlet Oil	NGL Sales (Output Tab)	SALES GAS (Output Tab)
Temperature	°F	293.732	83	83	104.508	93.2686
Pressure	psig	48	16	16	400	1281
Molecular Weight	lb/lbmol	18.0153	34.0922	96.6176	67.6192	21.6448
Mass Flow	lb/h	7627.74	1134.37	18589.2	13397.8	541253
Std Vapor Volumetric Flow	MMSCFD	3.8562	0.303044	1.7523	1.80455	227.747
Std Liquid Volumetric Flow	sgpm	15.2484	5.07402	53.873	44.1028	3064.61
API Gravity				71.4577	94.2923	
Net Ideal Gas Heating Value	Btu/ft ³	0	1785.4	4876.76	3459.98	1176.53

Remarks

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	1	2	3	4	5
From Block	FT1	SPLT-102	3516 HP DUMPS	SPLT-104	SAT-1
To Block	RCYL-4	VRU	MIX-108	Inlet - HPS water	MIX-101

Stream Composition

Mass Flow	1 lb/h	2 lb/h	3 lb/h	4 lb/h	5 lb/h
Triethylene Glycol	0.015948	3.38434E-08	2.61573E-15	1.6315E-12	0
Water	0.747111	11.6448	67.2631	1777.15	7627.74
Hydrogen Sulfide	0.0245601	0.0300098	0.00474317	0.00122028	8.98076
Carbon Dioxide	2.26708	2.52953	0.508521	0.0721611	1751.16
Nitrogen	0.258998	1.11555	0.385964	0.00270462	4731.8
Methane	58.7437	215.829	54.3434	0.614655	325713
Ethane	35.3865	213.201	40.761	0.27477	89092.8
Propane	30.2141	242.301	52.0716	0.1104	59260.8
Isobutane	5.9018	65.7857	19.0349	0.0123835	13707.8
n-Butane	15.417	140.67	48.7352	0.0375467	28487.7
Isopentane	5.31572	48.7338	25.6972	0.00642741	10437.7
n-Pentane	7.0737	56.5242	35.0462	0.00368851	12433.9
i-C6	6.69683	54.9012	56.4063	0.00353026	13897.5
i-C7	4.27938	39.8971	66.9394	0.000981107	13862.4
Octane	0.500085	8.71161	17.9944	3.22796E-05	6260.95
Nonane	0.0339702	1.72869	2.35248	1.56662E-06	2906.53
Benzene	0.423628	1.74101	1.47484	0.0229615	329.336
Toluene	0.545785	2.69013	4.46334	0.0224333	946.908
Ethylbenzene	0.00829747	0.0785051	0.15575	0.000311282	55.9517
o-Xylene	0.0825667	0.915927	1.7499	0.00465266	755.348
n-Hexane	3.09769	25.2001	31.2258	0.000788184	7016.88
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000275627	0.143078	0.0281787	1.95117E-06	1374.38
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	1 %	2 %	3 %	4 %	5 %
Triethylene Glycol	0.00167541	6.77301E-10	1.27725E-16	1.10072E-14	0
Water	0.654263	1.94263	27.3784	99.9459	1.58134
Hydrogen Sulfide	0.0113692	0.00264637	0.00102054	3.6277E-05	0.000984177
Carbon Dioxide	0.812698	0.17274	0.0847296	0.00166126	0.148611
Nitrogen	0.145861	0.11968	0.101031	9.78187E-05	0.630857
Methane	57.7694	40.4332	24.8398	0.0388188	75.8288
Ethane	18.5663	21.3093	9.94028	0.00925831	11.0661
Propane	10.8099	16.5143	8.65921	0.00253662	5.0193
Isobutane	1.60196	3.40164	2.4015	0.000215866	0.880838
n-Butane	4.1847	7.27375	6.14856	0.000654503	1.83057
Isopentane	1.16236	2.03002	2.61173	9.02587E-05	0.540313
n-Pentane	1.54677	2.35453	3.56192	5.17968E-05	0.643652
i-C6	1.22601	1.91469	4.79974	4.15055E-05	0.602316
i-C7	0.673771	1.19664	4.89868	9.92024E-06	0.516693
Octane	0.0690681	0.229204	1.15514	2.86309E-07	0.204709
Nonane	0.0041786	0.0405081	0.134501	1.23758E-08	0.0846392
Benzene	0.0855609	0.0669858	0.138453	0.000297828	0.0157468
Toluene	0.0934521	0.0877467	0.355216	0.00024668	0.0383829
Ethylbenzene	0.00123303	0.00222236	0.0107577	2.97067E-06	0.00196835
o-Xylene	0.0122696	0.0259286	0.120866	4.44019E-05	0.0265728
n-Hexane	0.567104	0.878858	2.65707	9.26672E-06	0.304111
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.83469E-05	0.00280315	0.001347	1.2887E-08	0.033462
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	1 %	2 %	3 %	4 %	5 %
Triethylene Glycol	0.00900839	2.98345E-09	4.96682E-16	9.17428E-14	0
Water	0.422014	1.02654	12.7721	99.933	1.2699
Hydrogen Sulfide	0.0138731	0.0026455	0.000900644	6.8619E-05	0.00149515
Carbon Dioxide	1.28059	0.222989	0.096559	0.00405777	0.29154
Nitrogen	0.146298	0.0983405	0.0732878	0.000152087	0.787767
Methane	33.182	19.0263	10.3188	0.0345634	54.2259
Ethane	19.9885	18.7946	7.7398	0.0154509	14.8325
Propane	17.0668	21.3599	9.88747	0.00620803	9.86597
Isobutane	3.3337	5.7993	3.61439	0.000696353	2.28212
n-Butane	8.70843	12.4007	9.25394	0.00211133	4.74274
Isopentane	3.00264	4.29611	4.87943	0.000361427	1.7377
n-Pentane	3.99566	4.98286	6.65465	0.000207413	2.07005
i-C6	3.78278	4.83978	10.7106	0.000198514	2.31371
i-C7	2.41725	3.5171	12.7106	5.51698E-05	2.30786
Octane	0.282479	0.767968	3.41681	1.81515E-06	1.04235
Nonane	0.0191884	0.152392	0.446694	8.80946E-08	0.483891
Benzene	0.239291	0.153477	0.280046	0.00129117	0.0548291
Toluene	0.308293	0.237147	0.847509	0.00126147	0.157645
Ethylbenzene	0.00468692	0.00692057	0.0295741	1.7504E-05	0.00931506
o-Xylene	0.0466387	0.0807431	0.332275	0.000261629	0.125753
n-Hexane	1.74976	2.2215	5.92923	4.43212E-05	1.1682
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000155691	0.012613	0.00535064	1.09719E-07	0.228812
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	1	2	3	4	5
Temperature	°F	159.859	83	100	104.508	100
Pressure	psig	55	16	1296	400	48
Molecular Weight	lb/lbmol	27.9297	34.0922	38.6179	18.0176	22.4336
Mass Flow	lb/h	177.035	1134.37	526.642	1778.34	600659
Std Vapor Volumetric Flow	MMSCFD	0.0577294	0.303044	0.124203	0.898924	243.856
Std Liquid Volumetric Flow	sgpm	0.876291	5.07402	1.89716	3.55925	3292.98
API Gravity				118.718	10.0377	
Net Ideal Gas Heating Value	Btu/ft ³	1475.61	1785.4	1750.88	0.619624	1199.82

Remarks

Process Streams Report	
All Streams	
Tabulated by Total Phase	

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections					
	6	7	8	9	10
From Block	MIX-101	Inlet Separator	Inlet Separator	Low Pressure Separator	VLVE-101
To Block	Inlet Separator	MIX-103	VLVE-101	LIQUIDS TO STORAGE	MIX-106

Stream Composition					
Mass Flow	6 lb/h	7 lb/h	8 lb/h	9 lb/h	10 lb/h
Triethylene Glycol	0.149841	2.95157E-06	0.149838	1.04798	0.149838
Water	9409.25	4473.55	4935.71	7601.87	4935.71
Hydrogen Sulfide	9.09203	9.08737	0.00466352	0.00115335	0.00466352
Carbon Dioxide	1762.88	1762.58	0.301403	0.0321572	0.301403
Nitrogen	4737.15	4737.07	0.0759125	0.000489771	0.0759125
Methane	326492	326474	18.0195	0.244799	18.0195
Ethane	89535	89504.7	30.2532	0.91607	30.2532
Propane	59718.4	59647.3	71.1005	3.0673	71.1005
Isobutane	13853.1	13813.8	39.3672	1.96453	39.3672
n-Butane	28852	28733.6	118.415	6.11129	118.415
Isopentane	10613.4	10507	106.423	5.08638	106.423
n-Pentane	12662.2	12494.8	167.468	7.76767	167.468
i-C6	14185.2	13739.2	445.977	18.631	445.977
i-C7	14101.6	12848.7	1252.98	41.0243	1252.98
Octane	6299.57	4363.2	1936.37	40.6177	1936.37
Nonane	2909.99	1216.42	1693.57	25.596	1693.57
Benzene	335.924	319.987	15.9372	0.978505	15.9372
Toluene	958.655	819.126	139.529	4.59819	139.529
Ethylbenzene	56.2302	37.192	19.0382	0.393866	19.0382
o-Xylene	758.064	462.906	295.158	5.72779	295.158
n-Hexane	7161.17	6842.83	318.337	12.2688	318.337
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1374.41	135.865	1238.54	13.6459	1238.54
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	6 %	7 %	8 %	9 %	10 %
Triethylene Glycol	3.69957E-06	7.38284E-11	0.000286288	0.00164609	0.000286288
Water	1.93654	0.932766	78.6108	99.5348	78.6108
Hydrogen Sulfide	0.000989152	0.00100159	3.92624E-05	7.98259E-06	3.92624E-05
Carbon Dioxide	0.148522	0.15044	0.00196506	0.000172356	0.00196506
Nitrogen	0.626996	0.635194	0.000777537	4.12403E-06	0.000777537
Methane	75.4596	76.4433	0.322289	0.00359943	0.322289
Ethane	11.0404	11.1812	0.288686	0.00718628	0.288686
Propane	5.02141	5.08109	0.462649	0.016408	0.462649
Isobutane	0.883729	0.892754	0.194342	0.00797282	0.194342
n-Butane	1.84055	1.85699	0.584574	0.0248019	0.584574
Isopentane	0.545431	0.547031	0.423233	0.0166293	0.423233
n-Pentane	0.65072	0.65052	0.666002	0.0253955	0.666002
i-C6	0.61033	0.59888	1.48492	0.0509975	1.48492
i-C7	0.521803	0.481664	3.5879	0.096574	3.5879
Octane	0.204479	0.14348	4.86393	0.0838757	4.86393
Nonane	0.0841259	0.0356264	3.7888	0.0470752	3.7888
Benzene	0.0159455	0.0153878	0.0585422	0.00295489	0.0585422
Toluene	0.0385775	0.0333942	0.434507	0.0117718	0.434507
Ethylbenzene	0.00196382	0.00131592	0.051454	0.00087511	0.051454
o-Xylene	0.0264751	0.0163785	0.797714	0.0127263	0.797714
n-Hexane	0.308116	0.298273	1.05993	0.0335825	1.05993
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0332202	0.00332693	2.31664	0.0209832	2.31664
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	6 %	7 %	8 %	9 %	10 %
Triethylene Glycol	2.47349E-05	4.97784E-10	0.00116671	0.0134501	0.00116671
Water	1.55323	0.754465	38.432	97.565	38.432
Hydrogen Sulfide	0.00150087	0.00153259	3.63126E-05	1.48024E-05	3.63126E-05
Carbon Dioxide	0.291008	0.29726	0.00234688	0.000412716	0.00234688
Nitrogen	0.781985	0.798909	0.000591094	6.28589E-06	0.000591094
Methane	53.8956	55.0599	0.140309	0.00314183	0.140309
Ethane	14.78	15.095	0.235567	0.0117572	0.235567
Propane	9.85801	10.0595	0.553626	0.0393668	0.553626
Isobutane	2.28681	2.3297	0.306533	0.0252135	0.306533
n-Butane	4.76275	4.84594	0.922043	0.0784343	0.922043
Isopentane	1.75201	1.77201	0.828663	0.0652803	0.828663
n-Pentane	2.09022	2.10725	1.30399	0.0996929	1.30399
i-C6	2.34162	2.31712	3.47261	0.239117	3.47261
i-C7	2.32783	2.16693	9.75631	0.52652	9.75631
Octane	1.0399	0.735856	15.0776	0.521301	15.0776
Nonane	0.480366	0.20515	13.187	0.328507	13.187
Benzene	0.0554526	0.0539659	0.124095	0.0125585	0.124095
Toluene	0.15825	0.138146	1.08644	0.0590148	1.08644
Ethylbenzene	0.0092822	0.00627244	0.148242	0.00505502	0.148242
o-Xylene	0.125137	0.0780693	2.29825	0.0735124	2.29825
n-Hexane	1.18213	1.15405	2.47873	0.157462	2.47873
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.22688	0.0229136	9.64392	0.175136	9.64392
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	6	7	8	9	10
Temperature	°F	99.4462	83 *	83	83	82.5497
Pressure	psig	48	48	48	16	16 *
Molecular Weight	lb/lbmol	22.4612	22.2728	36.8494	18.379	36.8494
Mass Flow	lb/h	605785	592943	12842.7	7791.6	12842.7
Std Vapor Volumetric Flow	MMSCFD	245.636	242.462	3.17417	3.86109	3.17417
Std Liquid Volumetric Flow	sgpm	3311.28	3279.12	32.1611	15.7463	32.1611
API Gravity				44.6001	11.5003	
Net Ideal Gas Heating Value	Btu/ft^3	1197.66	1198.39	1141.96	22.5263	1141.96

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	11	12	13	14	15
From Block	SPLT-104	RCYL-1	MIX-108	RCYL-10	VRU
To Block	RCYL-10	MIX-101	VLVE-107	MIX-101	MIX-103

Stream Composition

Mass Flow	11 lb/h	12 lb/h	13 lb/h	14 lb/h	15 lb/h
Triethylene Glycol	1.6315E-12	0	1.63251E-12	0	3.38434E-08
Water	1777.15	0	1782.67	1777.1	11.6448
Hydrogen Sulfide	0.00122028	0	0.0890302	0.00122117	0.0300098
Carbon Dioxide	0.0721611	0	8.33139	0.0723417	2.52953
Nitrogen	0.00270462	0	4.78115	0.00270782	1.11555
Methane	0.614655	0	784.106	0.614716	215.829
Ethane	0.27477	0	745.359	0.274955	213.201
Propane	0.1104	0	1125.9	0.110454	242.301
Isobutane	0.0123835	0	469.843	0.0123856	65.7857
n-Butane	0.0375467	0	1267.1	0.0375728	140.67
Isopentane	0.00642741	0	767.821	0.00642267	48.7338
n-Pentane	0.00368851	0	1085.25	0.00369741	56.5242
i-C6	0.00353026	0	2021.21	0.003524	54.9012
i-C7	0.000981107	0	2975.02	0.000980052	39.8971
Octane	3.22796E-05	0	1224.51	3.19498E-05	8.71161
Nonane	1.56662E-06	0	262.566	1.57137E-06	1.72869
Benzene	0.0229615	0	55.5838	0.0229461	1.74101
Toluene	0.0224333	0	213.584	0.0221812	2.69013
Ethylbenzene	0.000311282	0	10.381	0.000295328	0.0785051
o-Xylene	0.00465266	0	126.319	0.00425961	0.915927
n-Hexane	0.000788184	0	1185.31	0.000786285	25.2001
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.95117E-06	0	9.23233	1.95738E-06	0.143078
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	11 %	12 %	13 %	14 %	15 %
Triethylene Glycol	1.10072E-14	8.20676E-13	3.21503E-15	0	6.77301E-10
Water	99.9459	23.6004	29.2651	99.9459	1.94263
Hydrogen Sulfide	3.6277E-05	0.000814536	0.000772587	3.63042E-05	0.00264637
Carbon Dioxide	0.00166126	0.0527788	0.0559876	0.00166546	0.17274
Nitrogen	9.78187E-05	0.146682	0.0504762	9.79369E-05	0.11968
Methane	0.0388188	19.1534	14.4552	0.0388236	40.4332
Ethane	0.00925831	10.2694	7.33106	0.00926477	21.3093
Propane	0.00253662	11.6167	7.55139	0.00253792	16.5143
Isobutane	0.000215866	2.73797	2.39074	0.000215908	3.40164
n-Butane	0.000654503	8.8775	6.44749	0.000654975	7.27375
Isopentane	9.02587E-05	3.33175	3.1474	9.01944E-05	2.03002
n-Pentane	5.17968E-05	4.66764	4.44857	5.19232E-05	2.35453
i-C6	4.15055E-05	2.81714	6.93663	4.14329E-05	1.91469
i-C7	9.92024E-06	6.16513	8.7808	9.90983E-06	1.19664
Octane	2.86309E-07	2.61371	3.17036	2.83392E-07	0.229204
Nonane	1.23758E-08	0.356182	0.60546	1.24136E-08	0.0405081
Benzene	0.000297828	0.164297	0.210452	0.000297635	0.0669858
Toluene	0.00024668	0.401253	0.685566	0.000243914	0.0877467
Ethylbenzene	2.97067E-06	0.0259811	0.0289186	2.81849E-06	0.00222236
o-Xylene	4.44019E-05	0.218441	0.35189	4.0652E-05	0.0259286
n-Hexane	9.26672E-06	2.52742	4.0679	9.24463E-06	0.878858
2,2,4-Trimethylpentane	0	0.255304	0	0	0
Decanes Plus	1.2887E-08	0.000144212	0.0177994	1.29284E-08	0.00280315
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	11 %	12 %	13 %	14 %	15 %
Triethylene Glycol	9.17428E-14	2.8399E-12	1.01241E-14	0	2.98345E-09
Water	99.933	9.79715	11.0553	99.933	1.02654
Hydrogen Sulfide	6.8619E-05	0.000639677	0.000552126	6.86705E-05	0.0026455
Carbon Dioxide	0.00405777	0.0535236	0.0516676	0.00406803	0.222989
Nitrogen	0.000152087	0.094685	0.0296506	0.00015227	0.0983405
Methane	0.0345634	7.08037	4.86268	0.0345677	19.0263
Ethane	0.0154509	7.11547	4.62239	0.0154617	18.7946
Propane	0.00620803	11.8037	6.98237	0.00621122	21.3599
Isobutane	0.000696353	3.667	2.91376	0.000696487	5.7993
n-Butane	0.00211133	11.8897	7.85802	0.00211286	12.4007
Isopentane	0.000361427	5.53913	4.76169	0.00036117	4.29611
n-Pentane	0.000207413	7.76009	6.73022	0.000207919	4.98286
i-C6	0.000198514	5.59411	12.5346	0.000198167	4.83978
i-C7	5.51698E-05	14.235	18.4498	5.51119E-05	3.5171
Octane	1.81515E-06	6.87975	7.59389	1.79665E-06	0.767968
Nonane	8.80946E-08	1.05266	1.62832	8.8364E-08	0.152392
Benzene	0.00129117	0.295725	0.344706	0.00129034	0.153477
Toluene	0.00126147	0.85192	1.32456	0.00124733	0.237147
Ethylbenzene	1.7504E-05	0.0635593	0.0643783	1.66073E-05	0.00692057
o-Xylene	0.000261629	0.534387	0.783373	0.000239533	0.0807431
n-Hexane	4.43212E-05	5.01881	7.35078	4.42156E-05	2.2215
2,2,4-Trimethylpentane	0	0.672004	0	0	0
Decanes Plus	1.09719E-07	0.000509763	0.0572548	1.10071E-07	0.012613
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	11	12	13	14	15
Temperature	°F	104.508		111.189	104.467	184.57
Pressure	psig	400	500	718	400	70 *
Molecular Weight	lb/lbmol	18.0176	43.397	47.6892	18.0176	34.0922
Mass Flow	lb/h	1778.34	0	16125	1778.3	1134.37
Std Vapor Volumetric Flow	MMSCFD	0.898924	0	3.07953	0.898901	0.303044
Std Liquid Volumetric Flow	sgpm	3.55925	0	52.8963	3.55916	5.07402
API Gravity		10.0377			10.0377	
Net Ideal Gas Heating Value	Btu/ft ³	0.619624	2025.92	2179.66	0.619497	1785.4

Remarks

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	16	17	18	19	20
From Block	MIX-103	3516 LPS	VLVE-107	MIX-106	DRY GAS 1
To Block	GAS TO COMPRESSIO N	RCYL-5	SPLT-101	Low Pressure Separator	MIX-105

Stream Composition

Mass Flow	16 lb/h	17 lb/h	18 lb/h	19 lb/h	20 lb/h
Triethylene Glycol	2.98541E-06	1.96761E-07	1.63251E-12	1.0481	0.93257
Water	4485.19	197.845	1782.67	7615.86	6.21175
Hydrogen Sulfide	9.11738	0.00355615	0.0890302	0.0445377	2.90086
Carbon Dioxide	1765.11	0.285506	8.33139	2.9507	575.791
Nitrogen	4738.19	0.113251	4.78115	1.13336	1561.41
Methane	326690	22.7614	784.106	227.996	107418
Ethane	89717.9	28.6944	745.359	287.444	29235.4
Propane	59889.6	52.6382	1125.9	535.308	19200.7
Isobutane	13879.6	25.5009	469.843	259.771	4344.91
n-Butane	28874.3	72.7284	1267.1	744.549	8882.75
Isopentane	10555.7	52.1938	767.821	555.663	3074.05
n-Pentane	12551.3	77.2501	1085.25	832.45	3554.02
i-C6	13794.1	171.515	2021.21	1916.93	3390.46
i-C7	12888.6	328.162	2975.02	4141.83	2312.79
Octane	4371.91	213.467	1224.51	4070.46	333.837
Nonane	1218.15	74.1692	262.566	2561.32	28.9504
Benzene	321.728	5.10364	55.5838	87.9354	62.1872
Toluene	821.816	26.5977	213.584	449.036	96.8924
Ethylbenzene	37.2705	1.84148	10.381	39.1264	2.2264
o-Xylene	463.822	24.3437	126.319	567.792	21.2128
n-Hexane	6868.03	108.84	1185.31	1251.83	1563.1
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	136.008	8.91886	9.23233	1364.66	0.218073
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	16 %	17 %	18 %	19 %	20 %
Triethylene Glycol	7.45817E-11	4.73385E-09	3.21503E-15	0.00107438	7.23936E-05
Water	0.934027	39.6782	29.2651	65.0763	0.0040196
Hydrogen Sulfide	0.00100364	0.000376996	0.000772587	0.000201169	0.000992263
Carbon Dioxide	0.150468	0.0234389	0.0559876	0.010321	0.152521
Nitrogen	0.63455	0.0146064	0.0504762	0.00622798	0.649775
Methane	76.3983	5.1262	14.4552	2.18776	78.058
Ethane	11.1938	3.44782	7.33106	1.47156	11.3345
Propane	5.09536	4.31293	7.55139	1.86876	5.07612
Isobutane	0.895886	1.58519	2.39074	0.688009	0.871463
n-Butane	1.86375	4.52095	6.44749	1.97195	1.78162
Isopentane	0.548882	2.61371	3.1474	1.18557	0.496698
n-Pentane	0.652647	3.86845	4.44857	1.77613	0.574251
i-C6	0.600522	7.19093	6.93663	3.42427	0.458654
i-C7	0.482556	11.8326	8.7808	6.36299	0.269073
Octane	0.143587	6.75186	3.17036	5.48547	0.0340699
Nonane	0.0356325	2.08937	0.60546	3.07422	0.00263142
Benzene	0.0154522	0.236064	0.210452	0.173297	0.009281
Toluene	0.0334621	1.04297	0.685566	0.750214	0.0122591
Ethylbenzene	0.00131705	0.0626689	0.0289186	0.0567327	0.000244474
o-Xylene	0.0163904	0.828461	0.35189	0.823291	0.00232931
n-Hexane	0.298998	4.56322	4.0679	2.23618	0.211453
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00332627	0.210064	0.0177994	1.36944	1.65725E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	16 %	17 %	18 %	19 %	20 %
Triethylene Glycol	5.0253E-10	1.31792E-08	1.01241E-14	0.00380919	0.000502275
Water	0.754985	13.2518	11.0553	27.6788	0.0033456
Hydrogen Sulfide	0.00153471	0.000238193	0.000552126	0.000161866	0.00156238
Carbon Dioxide	0.297118	0.0191233	0.0516676	0.0107239	0.310117
Nitrogen	0.797571	0.00758558	0.0296506	0.00411904	0.840966
Methane	54.9911	1.52457	4.86268	0.828619	57.8546
Ethane	15.1021	1.92197	4.62239	1.04468	15.746
Propane	10.0811	3.52573	6.98237	1.9455	10.3413
Isobutane	2.33632	1.70806	2.91376	0.944103	2.34013
n-Butane	4.86036	4.87139	7.85802	2.70596	4.78418
Isopentane	1.77683	3.49596	4.76169	2.01948	1.65566
n-Pentane	2.11274	5.17425	6.73022	3.02542	1.91417
i-C6	2.32194	11.4881	12.5346	6.96681	1.82607
i-C7	2.16951	21.9804	18.4498	15.0529	1.24565
Octane	0.735917	14.2981	7.59389	14.7935	0.179802
Nonane	0.205049	4.96789	1.62832	9.30877	0.0155925
Benzene	0.0541559	0.341844	0.344706	0.319589	0.0334936
Toluene	0.138335	1.78153	1.32456	1.63196	0.0521855
Ethylbenzene	0.00627368	0.123343	0.0643783	0.1422	0.00119912
o-Xylene	0.0780744	1.63055	0.783373	2.06356	0.0114251
n-Hexane	1.15608	7.29013	7.35078	4.5496	0.841873
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.022894	0.597389	0.0572548	4.95965	0.000117453
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	16	17	18	19	20
Temperature	°F	83.1817	99.3415	104.508	89.8011	90
Pressure	psig	48	141	400 *	16	1286
Molecular Weight	lb/lbmol	22.2875	53.941	47.6892	42.3562	21.6446
Mass Flow	lb/h	594077	1492.97	16125	27515.1	185669
Std Vapor Volumetric Flow	MMSCFD	242.765	0.25208	3.07953	5.91643	78.1257
Std Liquid Volumetric Flow	sgpm	3284.2	4.44014	52.8963	74.6933	1051.28
API Gravity						
Net Ideal Gas Heating Value	Btu/ft^3	1199.13	2380.68	2179.66	1550.53	1176.52

Remarks

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections					
	21	22	23	24	25
From Block	RCYL-5	SPLT-100	VLVE-102	Line Heater	3616 HP DUMPS
To Block	MIX-107	VLVE-102	Discharge Separator Scrubber	VLVE-105	MIX-108

Stream Composition					
Mass Flow	21 lb/h	22 lb/h	23 lb/h	24 lb/h	25 lb/h
Triethylene Glycol	1.96761E-07	0.107437	0.107437	0.00307297	1.62989E-12
Water	197.845	0.71632	0.71632	0.701728	1715.41
Hydrogen Sulfide	0.00355615	0.334249	0.334249	0.317743	0.084287
Carbon Dioxide	0.285506	66.3334	66.3334	64.8552	7.82287
Nitrogen	0.113251	179.872	179.872	179.195	4.39518
Methane	22.7614	12374.4	12374.4	12246.2	729.762
Ethane	28.6944	3367.91	3367.91	3221.6	704.598
Propane	52.6382	2211.92	2211.92	1970.58	1073.83
Isobutane	25.5009	500.533	500.533	399.511	450.808
n-Butane	72.7284	1023.3	1023.3	758.175	1218.37
Isopentane	52.1938	354.135	354.135	210.884	742.123
n-Pentane	77.2501	409.433	409.433	221.152	1050.2
i-C6	171.515	390.593	390.593	139.259	1964.8
i-C7	328.162	266.447	266.447	49.8376	2908.08
Octane	213.467	38.4614	38.4614	2.5648	1206.52
Nonane	74.1692	3.33547	3.33547	0.081627	260.214
Benzene	5.10364	7.17588	7.17588	2.23327	54.109
Toluene	26.5977	11.1861	11.1861	1.62466	209.121
Ethylbenzene	1.84148	0.256959	0.256959	0.0168469	10.2252
o-Xylene	24.3437	2.44907	2.44907	0.133086	124.569
n-Hexane	108.84	180.076	180.076	52.2445	1154.09
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	8.91886	0.0251398	0.0251398	0.000157719	9.20415
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	21 %	22 %	23 %	24 %	25 %
Triethylene Glycol	4.73385E-09	7.23978E-05	7.23978E-05	2.1499E-06	3.34478E-15
Water	39.6782	0.00402373	0.00402373	0.0040924	29.3444
Hydrogen Sulfide	0.000376996	0.000992481	0.000992481	0.000979527	0.000762166
Carbon Dioxide	0.0234389	0.152527	0.152527	0.154828	0.0547796
Nitrogen	0.0146064	0.64977	0.64977	0.672063	0.0483516
Methane	5.1262	78.0577	78.0577	80.2015	14.0188
Ethane	3.44782	11.3345	11.3345	11.2565	7.2214
Propane	4.31293	5.07618	5.07618	4.69515	7.50483
Isobutane	1.58519	0.871471	0.871471	0.722168	2.39028
n-Butane	4.52095	1.78165	1.78165	1.3705	6.46006
Isopentane	2.61371	0.49671	0.49671	0.307089	3.16991
n-Pentane	3.86845	0.574269	0.574269	0.322042	4.48583
i-C6	7.19093	0.458673	0.458673	0.169782	7.02643
i-C7	11.8326	0.26909	0.26909	0.0522555	8.94396
Octane	6.75186	0.0340731	0.0340731	0.00235901	3.25506
Nonane	2.08937	0.00263175	0.00263175	6.68667E-05	0.625253
Benzene	0.236064	0.00929652	0.00929652	0.00300383	0.213477
Toluene	1.04297	0.0122857	0.0122857	0.00185256	0.69945
Ethylbenzene	0.0626689	0.000244932	0.000244932	1.66721E-05	0.0296819
o-Xylene	0.828461	0.00233444	0.00233444	0.000131705	0.361599
n-Hexane	4.56322	0.211463	0.211463	0.0636954	4.12719
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.210064	1.65844E-05	1.65844E-05	1.08021E-07	0.0184909
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	21 %	22 %	23 %	24 %	25 %
Triethylene Glycol	1.31792E-08	0.000502301	0.000502301	1.57417E-05	1.04492E-14
Water	13.2518	0.00334901	0.00334901	0.0035947	10.9974
Hydrogen Sulfide	0.000238193	0.00156272	0.00156272	0.00162768	0.000540359
Carbon Dioxide	0.0191233	0.310128	0.310128	0.33223	0.050152
Nitrogen	0.00758558	0.840954	0.840954	0.917949	0.0281773
Methane	1.52457	57.8541	57.8541	62.733	4.67847
Ethane	1.92197	15.746	15.746	16.5031	4.51714
Propane	3.52573	10.3414	10.3414	10.0946	6.88428
Isobutane	1.70806	2.34014	2.34014	2.04655	2.89011
n-Butane	4.87139	4.78423	4.78423	3.88386	7.81089
Isopentane	3.49596	1.65569	1.65569	1.08028	4.75771
n-Pentane	5.17425	1.91422	1.91422	1.13288	6.73277
i-C6	11.4881	1.82614	1.82614	0.713375	12.5962
i-C7	21.9804	1.24572	1.24572	0.2553	18.6435
Octane	14.2981	0.179818	0.179818	0.0131385	7.73492
Nonane	4.96789	0.0155943	0.0155943	0.000418145	1.66822
Benzene	0.341844	0.0335494	0.0335494	0.0114402	0.34689
Toluene	1.78153	0.0522983	0.0522983	0.00832255	1.34066
Ethylbenzene	0.123343	0.00120136	0.00120136	8.63005E-05	0.0655533
o-Xylene	1.63055	0.0114502	0.0114502	0.00068175	0.798603
n-Hexane	7.29013	0.84191	0.84191	0.267629	7.39878
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.597389	0.000117536	0.000117536	8.07938E-07	0.0590073
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	21	22	23	24	25
Temperature	°F	99.3415	93.2686	63.3038	120 *	111.952
Pressure	psig	141	1281	700 *	690	718
Molecular Weight	lb/lbmol	53.941	21.6448	21.6448	20.5096	48.0704
Mass Flow	lb/h	1492.97	21389	21389	19521.2	15598.3
Std Vapor Volumetric Flow	MMSCFD	0.25208	9 *	9	8.6687	2.95532
Std Liquid Volumetric Flow	sgpm	4.44014	121.106	121.106	114.221	50.9991
API Gravity						
Net Ideal Gas Heating Value	Btu/ft^3	2380.68	1176.53	1176.53	1119.76	2197.68

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	26	27	28	29	30
From Block	DRY GAS 2	Discharge Separator Scrubber	Discharge Separator Scrubber	DRY GAS 3	VLVE-104
To Block	MIX-105	VLVE-104	Line Heater	MIX-105	MIX-104

Stream Composition

Mass Flow	26 lb/h	27 lb/h	28 lb/h	29 lb/h	30 lb/h
Triethylene Glycol	0.93257	0.104364	0.00307297	0.961016	0.104364
Water	6.21175	0.0145925	0.701728	6.41945	0.0145925
Hydrogen Sulfide	2.90086	0.0165064	0.317743	2.99077	0.0165064
Carbon Dioxide	575.791	1.47822	64.8552	593.33	1.47822
Nitrogen	1561.41	0.677283	179.195	1608.74	0.677283
Methane	107418	128.186	12246.2	110675	128.186
Ethane	29235.4	146.312	3221.6	30122.6	146.312
Propane	19200.7	241.344	1970.58	19783.7	241.344
Isobutane	4344.91	101.022	399.511	4476.81	101.022
n-Butane	8882.75	265.125	758.175	9152.62	265.125
Isopentane	3074.05	143.252	210.884	3167.51	143.252
n-Pentane	3554.02	188.281	221.152	3662.16	188.281
i-C6	3390.46	251.334	139.259	3493.72	251.334
i-C7	2312.79	216.61	49.8376	2383.37	216.61
Octane	333.837	35.8966	2.5648	344.06	35.8966
Nonane	28.9504	3.25385	0.081627	29.8395	3.25385
Benzene	62.1872	4.94261	2.23327	64.3885	4.94261
Toluene	96.8924	9.56144	1.62466	100.468	9.56144
Ethylbenzene	2.2264	0.240112	0.0168469	2.30656	0.240112
o-Xylene	21.2128	2.31599	0.133086	21.9978	2.31599
n-Hexane	1563.1	127.832	52.2445	1610.74	127.832
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.218073	0.0249821	0.000157719	0.225162	0.0249821
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	26 %	27 %	28 %	29 %	30 %
Triethylene Glycol	7.23936E-05	0.00191046	2.1499E-06	7.24057E-05	0.00191046
Water	0.0040196	0.00222672	0.0040924	0.00403172	0.00222672
Hydrogen Sulfide	0.000992263	0.00133143	0.000979527	0.000992903	0.00133143
Carbon Dioxide	0.152521	0.0923358	0.154828	0.15254	0.0923358
Nitrogen	0.649775	0.0664635	0.672063	0.64976	0.0664635
Methane	78.058	21.9659	80.2015	78.0572	21.9659
Ethane	11.3345	13.3764	11.2565	11.3346	13.3764
Propane	5.07612	15.046	4.69515	5.07628	15.046
Isobutane	0.871463	4.77805	0.722168	0.871486	4.77805
n-Butane	1.78162	12.5397	1.3705	1.78171	12.5397
Isopentane	0.496698	5.4582	0.307089	0.496732	5.4582
n-Pentane	0.574251	7.17391	0.322042	0.574305	7.17391
i-C6	0.458654	8.01763	0.169782	0.45871	8.01763
i-C7	0.269073	5.94266	0.0522555	0.269122	5.94266
Octane	0.0340699	0.863886	0.00235901	0.0340795	0.863886
Nonane	0.00263142	0.0697431	6.68667E-05	0.00263239	0.0697431
Benzene	0.009281	0.173948	0.00300383	0.00932665	0.173948
Toluene	0.0122591	0.285273	0.00185256	0.0123373	0.285273
Ethylbenzene	0.000244474	0.00621744	1.66721E-05	0.00024582	0.00621744
o-Xylene	0.00232931	0.0599699	0.000131705	0.0023444	0.0599699
n-Hexane	0.211453	4.07788	0.0636954	0.211484	4.07788
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.65725E-05	0.000447695	1.08021E-07	1.66075E-05	0.000447695
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	26 %	27 %	28 %	29 %	30 %
Triethylene Glycol	0.000502275	0.00558748	1.57417E-05	0.00050235	0.00558748
Water	0.0033456	0.000781255	0.0035947	0.00335563	0.000781255
Hydrogen Sulfide	0.00156238	0.000883722	0.00162768	0.00156336	0.000883722
Carbon Dioxide	0.310117	0.0791411	0.33223	0.310151	0.0791411
Nitrogen	0.840966	0.0362606	0.917949	0.840932	0.0362606
Methane	57.8546	6.86287	62.733	57.853	6.86287
Ethane	15.746	7.83327	16.5031	15.7459	7.83327
Propane	10.3413	12.9212	10.0946	10.3415	12.9212
Isobutane	2.34013	5.40852	2.04655	2.34015	5.40852
n-Butane	4.78418	14.1943	3.88386	4.78433	14.1943
Isopentane	1.65566	7.66945	1.08028	1.65574	7.66945
n-Pentane	1.91417	10.0802	1.13288	1.91432	10.0802
i-C6	1.82607	13.456	0.713375	1.82626	13.456
i-C7	1.24565	11.5969	0.2553	1.24586	11.5969
Octane	0.179802	1.92184	0.0131385	0.17985	1.92184
Nonane	0.0155925	0.174205	0.000418145	0.0155979	0.174205
Benzene	0.0334936	0.264619	0.0114402	0.0336577	0.264619
Toluene	0.0521855	0.511903	0.00832255	0.0525173	0.511903
Ethylbenzene	0.00119912	0.0128552	8.63005E-05	0.0012057	0.0128552
o-Xylene	0.0114251	0.123994	0.00068175	0.0114989	0.123994
n-Hexane	0.841873	6.84389	0.267629	0.84198	6.84389
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000117453	0.0013375	8.07938E-07	0.000117699	0.0013375
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	26	27	28	29	30
Temperature	°F	95	63.3038	63.3038	95	15.6282
Pressure	psig	1281	700	700	1281	55 *
Molecular Weight	lb/lbmol	21.6446	51.3469	20.5096	21.645	51.3469
Mass Flow	lb/h	185669	1867.82	19521.2	191304	1867.82
Std Vapor Volumetric Flow	MMSCFD	78.1257	0.331304	8.6687	80.4953	0.331304
Std Liquid Volumetric Flow	sgpm	1051.28	6.88502	114.221	1083.17	6.88502
API Gravity			122.863			
Net Ideal Gas Heating Value	Btu/ft^3	1176.52	2661.82	1119.76	1176.54	2661.82

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	31	32	33	34	35
From Block	MIX-104	RCYL-2	VLVE-105	FT 2	Fuel Scrubber
To Block	RCYL-2	MIX-101	Fuel Scrubber	RCYL-3	VLVE-106

Stream Composition

Mass Flow	31 lb/h	32 lb/h	33 lb/h	34 lb/h	35 lb/h
Triethylene Glycol	0.104364	0.102034	0.00307297	0.015948	
Water	0.0145925	0.0143781	0.701728	0.747111	
Hydrogen Sulfide	0.0165064	0.0165088	0.317743	0.0245601	
Carbon Dioxide	1.47822	1.47864	64.8552	2.26708	
Nitrogen	0.677283	0.677377	179.195	0.258998	
Methane	128.186	128.205	12246.2	58.7437	
Ethane	146.312	146.337	3221.6	35.3865	
Propane	241.344	241.379	1970.58	30.2141	
Isobutane	101.022	101.049	399.511	5.9018	
n-Butane	265.125	265.207	758.175	15.417	
Isopentane	143.252	143.266	210.884	5.31572	
n-Pentane	188.281	188.304	221.152	7.0737	
i-C6	251.334	251.305	139.259	6.69683	
i-C7	216.61	216.618	49.8376	4.27938	
Octane	35.8966	35.9007	2.5648	0.500085	
Nonane	3.25385	3.25467	0.081627	0.0339702	
Benzene	4.94261	4.94188	2.23327	0.423628	
Toluene	9.56144	9.57839	1.62466	0.545785	
Ethylbenzene	0.240112	0.243386	0.0168469	0.00829747	
o-Xylene	2.31599	2.36765	0.133086	0.0825667	
n-Hexane	127.832	127.817	52.2445	3.09769	
2,2,4-Trimethylpentane	0	0	0	0	
Decanes Plus	0.0249821	0.0247414	0.000157719	0.000275627	
Decanes Plus Sat	0	0	0	0	

Mole Fraction	31 %	32 %	33 %	34 %	35 %
Triethylene Glycol	0.00191046	0.00186751	2.1499E-06	0.00167541	
Water	0.00222672	0.00219368	0.0040924	0.654263	
Hydrogen Sulfide	0.00133143	0.00133143	0.000979527	0.0113692	
Carbon Dioxide	0.0923358	0.0923482	0.154828	0.812698	
Nitrogen	0.0664635	0.0664627	0.672063	0.145861	
Methane	21.9659	21.9658	80.2015	57.7694	
Ethane	13.3764	13.3766	11.2565	18.5663	
Propane	15.046	15.0459	4.69515	10.8099	
Isobutane	4.77805	4.77863	0.722168	1.60196	
n-Butane	12.5397	12.5417	1.3705	4.1847	
Isopentane	5.4582	5.45793	0.307089	1.16236	
n-Pentane	7.17391	7.17371	0.322042	1.54677	
i-C6	8.01763	8.01551	0.169782	1.22601	
i-C7	5.94266	5.94199	0.0522555	0.673771	
Octane	0.863886	0.863856	0.00235901	0.0690681	
Nonane	0.0697431	0.0697502	6.68667E-05	0.0041786	
Benzene	0.173948	0.173895	0.00300383	0.0855609	
Toluene	0.285273	0.285736	0.00185256	0.0934521	
Ethylbenzene	0.00621744	0.00630126	1.66721E-05	0.00123303	
o-Xylene	0.0599699	0.0612983	0.000131705	0.0122696	
n-Hexane	4.07788	4.07679	0.0636954	0.567104	
2,2,4-Trimethylpentane	0	0	0	0	
Decanes Plus	0.000447695	0.000443315	1.08021E-07	2.83469E-05	
Decanes Plus Sat	0	0	0	0	

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	31 %	32 %	33 %	34 %	35 %
Triethylene Glycol	0.00558748	0.00546192	1.57417E-05	0.00900839	
Water	0.000781255	0.000769669	0.0035947	0.422014	
Hydrogen Sulfide	0.000883722	0.000883726	0.00162768	0.0138731	
Carbon Dioxide	0.0791411	0.0791525	0.33223	1.28059	
Nitrogen	0.0362606	0.0362605	0.917949	0.146298	
Methane	6.86287	6.86289	62.733	33.182	
Ethane	7.83327	7.83349	16.5031	19.9885	
Propane	12.9212	12.9212	10.0946	17.0668	
Isobutane	5.40852	5.40923	2.04655	3.3337	
n-Butane	14.1943	14.1967	3.88386	8.70843	
Isopentane	7.66945	7.66915	1.08028	3.00264	
n-Pentane	10.0802	10.08	1.13288	3.99566	
i-C6	13.456	13.4525	0.713375	3.78278	
i-C7	11.5969	11.5957	0.2553	2.41725	
Octane	1.92184	1.92179	0.0131385	0.282479	
Nonane	0.174205	0.174225	0.000418145	0.0191884	
Benzene	0.264619	0.264542	0.0114402	0.239291	
Toluene	0.511903	0.512738	0.00832255	0.308293	
Ethylbenzene	0.0128552	0.0130286	8.63005E-05	0.00468692	
o-Xylene	0.123994	0.126742	0.00068175	0.0466387	
n-Hexane	6.84389	6.84212	0.267629	1.74976	
2,2,4-Trimethylpentane	0	0	0	0	
Decanes Plus	0.0013375	0.00132442	8.07938E-07	0.000155691	
Decanes Plus Sat	0	0	0	0	

Stream Properties

Property	Units	31	32	33	34	35
Temperature	°F	15.6282	15.6264	78.4268	159.859	
Pressure	psig	55	55	120 *	55	120
Molecular Weight	lb/lbmol	51.3469	51.3464	20.5096	27.9297	
Mass Flow	lb/h	1867.82	1868.09	19521.2	177.035	0
Std Vapor Volumetric Flow	MMSCFD	0.331304	0.331354	8.6687	0.0577294	0
Std Liquid Volumetric Flow	sgpm	6.88502	6.88599	114.221	0.876291	0
API Gravity						
Net Ideal Gas Heating Value	Btu/ft^3	2661.82	2661.79	1119.76	1475.61	

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections					
	36	37	38	39	40
From Block	VLVE-106	3616 LPS	FT 3	RCYL-3	MIX-105
To Block	FS LIQUIDS	RCYL-7	RCYL-6	MIX-100	SPLT-100

Stream Composition					
Mass Flow	36 lb/h	37 lb/h	38 lb/h	39 lb/h	40 lb/h
Triethylene Glycol		2.78865E-06	0.0159244	0.0159435	2.82616
Water		2047.77	0.758666	0.748471	18.8429
Hydrogen Sulfide		0.0288186	0.0245774	0.0245663	8.7925
Carbon Dioxide		2.32103	2.269	2.26791	1744.91
Nitrogen		0.944129	0.259296	0.258991	4731.56
Methane		187.171	58.7947	58.7438	325511
Ethane		228.044	35.4085	35.3869	88593.5
Propane		409.249	30.2274	30.213	58185.1
Isobutane		193.62	5.90413	5.90203	13166.6
n-Butane		546.773	15.4228	15.4185	26918.1
Isopentane		389.988	5.3174	5.31493	9315.6
n-Pentane		574.906	7.0747	7.07293	10770.2
i-C6		1275.7	6.69839	6.69468	10274.6
i-C7		2527.98	4.28063	4.27876	7008.95
Octane		1911.95	0.500151	0.500038	1011.73
Nonane		792.545	0.0339799	0.0339715	87.7403
Benzene		38.7004	0.424309	0.423976	188.763
Toluene		215.318	0.547003	0.546492	294.253
Ethylbenzene		16.7912	0.00831402	0.00831989	6.75936
o-Xylene		229.63	0.0827986	0.0829843	64.4234
n-Hexane		810.111	3.09811	3.0967	4736.94
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		117.137	0.000275823	0.000275494	0.661308
Decanes Plus Sat		0	0	0	0

Mole Fraction	36 %	37 %	38 %	39 %	40 %
Triethylene Glycol		7.52818E-09	0.00167158	0.00167492	7.23978E-05
Water		46.0816	0.663842	0.655446	0.00402373
Hydrogen Sulfide		0.000342807	0.0113679	0.0113719	0.000992481
Carbon Dioxide		0.0213807	0.812724	0.812984	0.152527
Nitrogen		0.0136632	0.14591	0.145855	0.64977
Methane		4.72993	57.7727	57.7689	78.0577
Ethane		3.07458	18.5628	18.5663	11.3345
Propane		3.76253	10.8059	10.8094	5.07618
Isobutane		1.3505	1.60129	1.602	0.871471
n-Butane		3.81375	4.1829	4.18508	1.78165
Isopentane		2.19134	1.16179	1.16218	0.49671
n-Pentane		3.23039	1.54573	1.54658	0.574269
i-C6		6.00141	1.2253	1.2256	0.458673
i-C7		10.2279	0.673421	0.673666	0.26909
Octane		6.7856	0.0690211	0.0690608	0.0340731
Nonane		2.50517	0.0041764	0.00417872	0.00263175
Benzene		0.200857	0.0856291	0.0856303	0.00929652
Toluene		0.947386	0.0935845	0.093572	0.0122857
Ethylbenzene		0.0641192	0.00123448	0.00123634	0.000244932
o-Xylene		0.876868	0.0122941	0.0123316	0.00233444
n-Hexane		3.81109	0.56672	0.566917	0.211463
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.309568	2.83439E-05	2.83328E-05	1.65844E-05
Decanes Plus Sat		0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	36 %	37 %	38 %	39 %	40 %
Triethylene Glycol		2.22795E-08	0.00898916	0.00900589	0.000502301
Water		16.3603	0.428259	0.422783	0.00334901
Hydrogen Sulfide		0.000230242	0.0138737	0.0138766	0.00156272
Carbon Dioxide		0.0185435	1.28083	1.28106	0.310128
Nitrogen		0.00754296	0.14637	0.146295	0.840954
Methane		1.49537	33.189	33.1822	57.8541
Ethane		1.82192	19.9878	19.9888	15.746
Propane		3.26963	17.0631	17.0662	10.3414
Isobutane		1.5469	3.33282	3.33384	2.34014
n-Butane		4.36836	8.70604	8.70936	4.78423
Isopentane		3.11574	3.00162	3.00221	1.65569
n-Pentane		4.59312	3.99359	3.99523	1.91422
i-C6		10.192	3.78117	3.78157	1.82614
i-C7		20.1969	2.41637	2.41691	1.24572
Octane		15.2752	0.28233	0.282453	0.179818
Nonane		6.33191	0.0191813	0.0191892	0.0155943
Benzene		0.309191	0.239518	0.239488	0.0335494
Toluene		1.72025	0.308777	0.308693	0.0522983
Ethylbenzene		0.134151	0.00469318	0.00469959	0.00120136
o-Xylene		1.83459	0.046739	0.0468748	0.0114502
n-Hexane		6.47225	1.74885	1.74921	0.84191
2,2,4-Trimethylpentane		0	0	0	0
Decanes Plus		0.935848	0.000155699	0.000155616	0.000117536
Decanes Plus Sat		0	0	0	0

Stream Properties

Property	Units	36	37	38	39	40
Temperature	°F		115.782	159.856	159.858	93.2686
Pressure	psig	0.25 *	158	55	55	1281
Molecular Weight	lb/lbmol		50.743	27.9254	27.9293	21.6448
Mass Flow	lb/h	0	12516.7	177.151	177.034	562642
Std Vapor Volumetric Flow	MMSCFD	0	2.24656	0.0577762	0.05773	236.747
Std Liquid Volumetric Flow	sgpm	0	36.6159	0.876887	0.876287	3185.72
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³		2157.9	1475.29	1475.57	1176.53

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	41	43	44	45	46
From Block	RCYL-4	MIX-100	RCYL-6	RCYL-7	BTEX LIQUIDS 1
To Block	MIX-100	SPLT-105	MIX-100	MIX-107	MIX-107

Stream Composition

Mass Flow	41 lb/h	43 lb/h	44 lb/h	45 lb/h	46 lb/h
Triethylene Glycol	0.0159435	0.047807	0.01592	2.78865E-06	0.297975
Water	0.748471	2.25697	0.76003	2047.77	143.382
Hydrogen Sulfide	0.0245663	0.0737158	0.0245832	0.0288186	0.00249253
Carbon Dioxide	2.26791	6.80562	2.2698	2.32103	0.0141582
Nitrogen	0.258991	0.777274	0.259291	0.944129	3.04565E-06
Methane	58.7438	176.282	58.7949	187.171	0.0107758
Ethane	35.3869	106.183	35.409	228.044	0.145185
Propane	30.213	90.6522	30.2262	409.249	0.762658
Isobutane	5.90203	17.7084	5.90438	193.62	0.420897
n-Butane	15.4185	46.2615	15.4245	546.773	2.19037
Isopentane	5.31493	15.9465	5.31664	389.988	2.34079
n-Pentane	7.07293	21.2198	7.07395	574.906	4.25717
i-C6	6.69468	20.0856	6.69626	1275.7	7.87875
i-C7	4.27876	12.8375	4.28003	2527.98	10.8596
Octane	0.500038	1.50018	0.500107	1911.95	2.87019
Nonane	0.0339715	0.101924	0.0339814	792.545	0.341271
Benzene	0.423976	1.27259	0.42464	38.7004	9.39175
Toluene	0.546492	1.64066	0.547672	215.318	22.4972
Ethylbenzene	0.00831989	0.0249746	0.00833486	16.7912	0.483982
o-Xylene	0.0829843	0.249159	0.0831902	229.63	6.1999
n-Hexane	3.0967	9.29053	3.09713	810.111	4.82812
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000275494	0.000826694	0.000275707	117.137	0.0190869
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	41 %	43 %	44 %	45 %	46 %
Triethylene Glycol	0.00167492	0.00167365	0.00167109	7.52818E-09	0.0224674
Water	0.655446	0.658642	0.665028	46.0816	90.1189
Hydrogen Sulfide	0.0113719	0.0113714	0.0113704	0.000342807	0.000828121
Carbon Dioxide	0.812984	0.81299	0.813	0.0213807	0.00364273
Nitrogen	0.145855	0.145872	0.145905	0.0136632	1.23106E-06
Methane	57.7689	57.77	57.7721	4.72993	0.00760577
Ethane	18.5663	18.5652	18.5628	3.07458	0.0546719
Propane	10.8094	10.808	10.8053	3.76253	0.195838
Isobutane	1.602	1.60178	1.60133	1.3505	0.081997
n-Butane	4.18508	4.18449	4.18329	3.81375	0.426717
Isopentane	1.16218	1.16198	1.1616	2.19134	0.367365
n-Pentane	1.54658	1.54624	1.54555	3.23039	0.668122
i-C6	1.2256	1.22537	1.2249	6.00141	1.03523
i-C7	0.673666	0.67355	0.673319	10.2279	1.22716
Octane	0.0690608	0.0690452	0.0690141	6.7856	0.284512
Nonane	0.00417872	0.00417799	0.00417654	2.50517	0.0301292
Benzene	0.0856303	0.0856518	0.0856947	0.200857	1.36142
Toluene	0.093572	0.093614	0.0936979	0.947386	2.76472
Ethylbenzene	0.00123634	0.00123675	0.00123756	0.0641192	0.0516192
o-Xylene	0.0123316	0.0123384	0.0123521	0.876868	0.661252
n-Hexane	0.566917	0.566789	0.566535	3.81109	0.634394
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.83328E-05	2.83324E-05	2.83317E-05	0.309568	0.00140888
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	41 %	43 %	44 %	45 %	46 %
Triethylene Glycol	0.00900589	0.00899948	0.00898667	2.22795E-08	0.135941
Water	0.422783	0.424867	0.42903	16.3603	65.4131
Hydrogen Sulfide	0.0138766	0.0138767	0.013877	0.000230242	0.00113714
Carbon Dioxide	1.28106	1.28113	1.28128	0.0185435	0.00645923
Nitrogen	0.146295	0.146319	0.146367	0.00754296	1.38948E-06
Methane	33.1822	33.1845	33.1892	1.49537	0.00491612
Ethane	19.9888	19.9885	19.988	1.82192	0.0662357
Propane	17.0662	17.0649	17.0624	3.26963	0.347938
Isobutane	3.33384	3.33355	3.33297	1.5469	0.192021
n-Butane	8.70936	8.70856	8.70698	4.36836	0.999286
Isopentane	3.00221	3.00187	3.00119	3.11574	1.06791
n-Pentane	3.99523	3.99455	3.99318	4.59312	1.94219
i-C6	3.78157	3.78104	3.77998	10.192	3.59442
i-C7	2.41691	2.41662	2.41604	20.1969	4.95433
Octane	0.282453	0.282404	0.282306	15.2752	1.30943
Nonane	0.0191892	0.0191869	0.0191822	6.33191	0.155694
Benzene	0.239488	0.239561	0.239706	0.309191	4.28468
Toluene	0.308693	0.308847	0.309156	1.72025	10.2636
Ethylbenzene	0.00469959	0.00470138	0.00470495	0.134151	0.220801
o-Xylene	0.0468748	0.0469032	0.0469601	1.83459	2.8285
n-Hexane	1.74921	1.74891	1.7483	6.47225	2.20267
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000155616	0.000155622	0.000155634	0.935848	0.00870776
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	41	43	44	45	46
Temperature	°F	159.858	159.857	159.855	115.782	84.4073
Pressure	psig	55	55	55	158	16
Molecular Weight	lb/lbmol	27.9293	27.9279	27.925	50.743	24.8194
Mass Flow	lb/h	177.034	531.219	177.151	12516.7	219.194
Std Vapor Volumetric Flow	MMSCFD	0.05773	0.173237	0.057777	2.24656	0.0804342
Std Liquid Volumetric Flow	sgpm	0.876287	2.62946	0.876884	36.6159	0.488348
API Gravity						25.603
Net Ideal Gas Heating Value	Btu/ft ³	1475.57	1475.46	1475.25	2157.9	416.331

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	47	48	49	50	51
From Block	BTEX LIQUIDS 2	BTEX LIQUIDS 3	MIX-107	RCYL-8	SPLT-103
To Block	MIX-107	MIX-107	RCYL-8	MIX-106	SAT-1

Stream Composition

Mass Flow	47 lb/h	48 lb/h	49 lb/h	50 lb/h	51 lb/h
Triethylene Glycol	0.297975	0.302318	0.898272	0.898266	0
Water	143.382	147.731	2680.11	2680.15	0
Hydrogen Sulfide	0.00249253	0.00251389	0.0398737	0.0398741	8.98076
Carbon Dioxide	0.0141582	0.0142941	2.64915	2.64929	1751.16
Nitrogen	3.04565E-06	3.06192E-06	1.05739	1.05745	4731.8
Methane	0.0107758	0.0108163	209.964	209.976	325713
Ethane	0.145185	0.145498	257.174	257.191	89092.8
Propane	0.762658	0.763705	464.177	464.207	59260.8
Isobutane	0.420897	0.421328	220.384	220.404	13707.8
n-Butane	2.19037	2.19264	626.075	626.134	28487.7
Isopentane	2.34079	2.34189	449.205	449.241	10437.7
n-Pentane	4.25717	4.25742	664.928	664.982	12433.9
i-C6	7.87875	7.87745	1470.85	1470.95	13897.5
i-C7	10.8596	10.8528	2888.72	2888.86	13862.4
Octane	2.87019	2.8672	2134.02	2134.09	6260.95
Nonane	0.341271	0.340903	867.738	867.755	2906.53
Benzene	9.39175	9.4134	72.0009	71.9981	329.336
Toluene	22.4972	22.5825	309.492	309.507	946.908
Ethylbenzene	0.483982	0.486355	20.087	20.0882	55.9517
o-Xylene	6.1999	6.2492	272.622	272.634	755.348
n-Hexane	4.82812	4.8255	933.432	933.492	7016.88
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0190869	0.0191944	126.113	126.115	1374.38
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	47 %	48 %	49 %	50 %	51 %
Triethylene Glycol	0.0224674	0.0221841	0.00198669	0.0019866	0
Water	90.1189	90.3651	49.4111	49.4101	0
Hydrogen Sulfide	0.000828121	0.000812839	0.000388588	0.000388577	0.00099999
Carbon Dioxide	0.00364273	0.00357914	0.0199928	0.0199931	0.150998
Nitrogen	1.23106E-06	1.20447E-06	0.0125367	0.0125369	0.640994
Methane	0.00760577	0.00742977	4.34698	4.34706	77.0472
Ethane	0.0546719	0.053322	2.84067	2.84075	11.2439
Propane	0.195838	0.190853	3.49624	3.49634	5.09995
Isobutane	0.081997	0.0798817	1.25936	1.25943	0.894991
n-Butane	0.426717	0.415714	3.57765	3.57785	1.85998
Isopentane	0.367365	0.357689	2.0679	2.06798	0.548995
n-Pentane	0.668122	0.650258	3.06097	3.0611	0.653993
i-C6	1.03523	1.00733	5.6689	5.66907	0.611994
i-C7	1.22716	1.19354	9.57507	9.57518	0.524995
Octane	0.284512	0.2766	6.20493	6.2049	0.207998
Nonane	0.0301292	0.0292904	2.24712	2.24708	0.0859991
Benzene	1.36142	1.328	0.30615	0.306127	0.0159998
Toluene	2.76472	2.70085	1.11564	1.11565	0.0389996
Ethylbenzene	0.0516192	0.0504825	0.0628416	0.0628429	0.00199998
o-Xylene	0.661252	0.648652	0.852891	0.852896	0.0269997
n-Hexane	0.634394	0.617061	3.5976	3.59769	0.308997
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00140888	0.00137885	0.273054	0.273047	0.0339997
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	47 %	48 %	49 %	50 %	51 %
Triethylene Glycol	0.135941	0.135145	0.00612246	0.00612214	0
Water	65.4131	66.0404	18.2672	18.2666	0
Hydrogen Sulfide	0.00113714	0.00112379	0.000271772	0.000271763	0.00151438
Carbon Dioxide	0.00645923	0.00638989	0.0180561	0.0180563	0.295289
Nitrogen	1.38948E-06	1.36877E-06	0.00720698	0.00720704	0.7979
Methane	0.00491612	0.0048352	1.43108	1.43109	54.9233
Ethane	0.0662357	0.065042	1.75285	1.75288	15.0233
Propane	0.347938	0.341399	3.16375	3.16381	9.99287
Isobutane	0.192021	0.188347	1.5021	1.50217	2.31148
n-Butane	0.999286	0.980179	4.26722	4.26742	4.80374
Isopentane	1.06791	1.04689	3.0617	3.0618	1.76005
n-Pentane	1.94219	1.90319	4.53203	4.53219	2.09668
i-C6	3.59442	3.52146	10.0251	10.0253	2.34347
i-C7	4.95433	4.85154	19.689	19.689	2.33754
Octane	1.30943	1.28172	14.5451	14.5449	1.05575
Nonane	0.155694	0.152394	5.91435	5.91419	0.490115
Benzene	4.28468	4.20808	0.490746	0.490704	0.0555343
Toluene	10.2636	10.0951	2.10945	2.10945	0.159672
Ethylbenzene	0.220801	0.217415	0.13691	0.136911	0.00943487
o-Xylene	2.8285	2.79358	1.85815	1.85814	0.127371
n-Hexane	2.20267	2.15714	6.36211	6.36222	1.18322
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00870776	0.00858047	0.859567	0.859537	0.231755
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	47	48	49	50	51
Temperature	°F	77.1826	77.0088	92.5743	92.5737	100
Pressure	psig	16	16	16	16	48
Molecular Weight	lb/lbmol	24.8194	24.6508	48.7298	48.7302	22.5046
Mass Flow	lb/h	219.194	223.698	14671.7	14672.4	593031
Std Vapor Volumetric Flow	MMSCFD	0.0804342	0.0826487	2.74215	2.74225	240
Std Liquid Volumetric Flow	sgpm	0.488348	0.497392	42.5301	42.5322	3277.73
API Gravity		25.5664	25.2636			
Net Ideal Gas Heating Value	Btu/ft ³	416.331	405.953	2023.41	2023.44	1219.1

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	52	53	54	55	56
From Block	SPLT-105	SPLT-105	SPLT-101	HP Separator	RCYL-9
To Block	MIX-101	XFS2	HP Separator	RCYL-9	MIX-101

Stream Composition

Mass Flow	52 lb/h	53 lb/h	54 lb/h	55 lb/h	56 lb/h
Triethylene Glycol	0.047807	0.047807	1.63251E-12	2.44114E-19	0
Water	2.25697	2.25697	1782.67	2.13834	2.13541
Hydrogen Sulfide	0.0737158	0.0737158	0.0890302	0.019818	0.0198263
Carbon Dioxide	6.80562	6.80562	8.33139	3.36347	3.36558
Nitrogen	0.777274	0.777274	4.78115	3.89157	3.89547
Methane	176.282	176.282	784.106	474.335	474.265
Ethane	106.183	106.183	745.359	189.287	189.357
Propane	90.6522	90.6522	1125.9	125.364	125.396
Isobutane	17.7084	17.7084	469.843	26.5823	26.577
n-Butane	46.2615	46.2615	1267.1	52.8502	52.8481
Isopentane	15.9465	15.9465	767.821	16.5531	16.5358
n-Pentane	21.2198	21.2198	1085.25	18.7601	18.7521
i-C6	20.0856	20.0856	2021.21	16.3013	16.2679
i-C7	12.8375	12.8375	2975.02	9.83439	9.81611
Octane	1.50018	1.50018	1224.51	1.23242	1.22083
Nonane	0.101924	0.101924	262.566	0.0985771	0.0987229
Benzene	1.27259	1.27259	55.5838	0.350995	0.350543
Toluene	1.64066	1.64066	213.584	0.512474	0.505731
Ethylbenzene	0.0249746	0.0249746	10.381	0.0103481	0.00981587
o-Xylene	0.249159	0.249159	126.319	0.103416	0.0946694
n-Hexane	9.29053	9.29053	1185.31	7.20211	7.18303
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000826694	0.000826694	9.23233	0.000789229	0.000846369
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	52 %	53 %	54 %	55 %	56 %
Triethylene Glycol	0.00167365	0.00167365	3.21503E-15	3.93692E-21	0
Water	0.658642	0.658642	29.2651	0.28747	0.287096
Hydrogen Sulfide	0.0113714	0.0113714	0.000772587	0.00140834	0.00140902
Carbon Dioxide	0.81299	0.81299	0.0559876	0.185096	0.185225
Nitrogen	0.145872	0.145872	0.0504762	0.336446	0.336807
Methane	57.77	57.77	14.4552	71.6096	71.6039
Ethane	18.5652	18.5652	7.33106	15.2461	15.2527
Propane	10.808	10.808	7.55139	6.88548	6.8877
Isobutane	1.60178	1.60178	2.39074	1.10766	1.10752
n-Butane	4.18449	4.18449	6.44749	2.20222	2.20229
Isopentane	1.16198	1.16198	3.1474	0.555658	0.555115
n-Pentane	1.54624	1.54624	4.44857	0.629744	0.629517
i-C6	1.22537	1.22537	6.93663	0.458138	0.457231
i-C7	0.67355	0.67355	8.7808	0.237699	0.237274
Octane	0.0690452	0.0690452	3.17036	0.0261301	0.0258861
Nonane	0.00417799	0.00417799	0.60546	0.00186148	0.00186436
Benzene	0.0856518	0.0856518	0.210452	0.0108828	0.0108695
Toluene	0.093614	0.093614	0.685566	0.0134706	0.0132943
Ethylbenzene	0.00123675	0.00123675	0.0289186	0.000236067	0.000223941
o-Xylene	0.0123384	0.0123384	0.35189	0.0023592	0.00215981
n-Hexane	0.566789	0.566789	4.0679	0.202411	0.201888
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	2.83324E-05	2.83324E-05	0.0177994	1.24605E-05	1.33635E-05
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Mass Fraction	52 %	53 %	54 %	55 %	56 %
Triethylene Glycol	0.00899948	0.00899948	1.01241E-14	2.57289E-20	0
Water	0.424867	0.424867	11.0553	0.225375	0.225089
Hydrogen Sulfide	0.0138767	0.0138767	0.000552126	0.00208876	0.00208985
Carbon Dioxide	1.28113	1.28113	0.0516676	0.3545	0.354759
Nitrogen	0.146319	0.146319	0.0296506	0.41016	0.410614
Methane	33.1845	33.1845	4.86268	49.9936	49.9913
Ethane	19.9885	19.9885	4.62239	19.9503	19.9597
Propane	17.0649	17.0649	6.98237	13.213	13.2177
Isobutane	3.33355	3.33355	2.91376	2.8017	2.80143
n-Butane	8.70856	8.70856	7.85802	5.57027	5.57062
Isopentane	3.00187	3.00187	4.76169	1.74465	1.743
n-Pentane	3.99455	3.99455	6.73022	1.97727	1.97662
i-C6	3.78104	3.78104	12.5346	1.71811	1.71477
i-C7	2.41662	2.41662	18.4498	1.03652	1.0347
Octane	0.282404	0.282404	7.59389	0.129894	0.128685
Nonane	0.0191869	0.0191869	1.62832	0.0103898	0.0104062
Benzene	0.239561	0.239561	0.344706	0.0369939	0.03695
Toluene	0.308847	0.308847	1.32456	0.0540133	0.0533081
Ethylbenzene	0.00470138	0.00470138	0.0643783	0.00109066	0.00103467
o-Xylene	0.0469032	0.0469032	0.783373	0.0108998	0.00997891
n-Hexane	1.74891	1.74891	7.35078	0.759082	0.757149
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000155622	0.000155622	0.0572548	8.31825E-05	8.92141E-05
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	52	53	54	55	56
Temperature	°F	159.857	159.857	104.508	104.508	104.463
Pressure	psig	55	55	400	400	400
Molecular Weight	lb/lbmol	27.9279	27.9279	47.6892	22.9788	22.9781
Mass Flow	lb/h	531.219	531.219	16125	948.792	948.695
Std Vapor Volumetric Flow	MMSCFD	0.173237	0.173237	3.07953	0.376052	0.376026
Std Liquid Volumetric Flow	sgpm	2.62946	2.62946	52.8963	5.23426	5.23392
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1475.46	1475.46	2179.66	1244.68	1244.64

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Inlet	

Connections

	60			
From Block	Low Pressure Separator			
To Block	SPLT-102			

Stream Composition

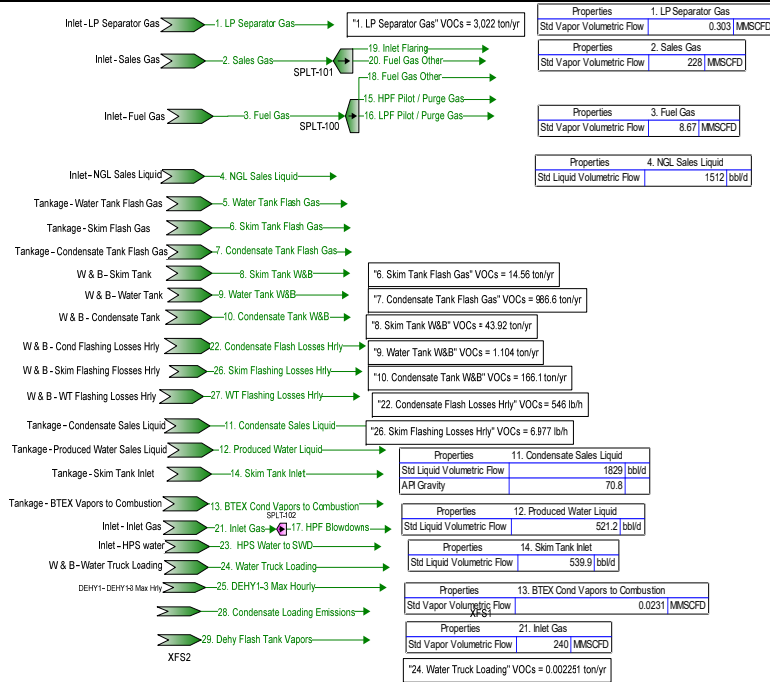
Mass Flow	60 lb/h			
Triethylene Glycol	3.38434E-08			
Water	11.6448			
Hydrogen Sulfide	0.0300098			
Carbon Dioxide	2.52953			
Nitrogen	1.11555			
Methane	215.829			
Ethane	213.201			
Propane	242.301			
Isobutane	65.7857			
n-Butane	140.67			
Isopentane	48.7338			
n-Pentane	56.5242			
i-C6	54.9012			
i-C7	39.8971			
Octane	8.71161			
Nonane	1.72869			
Benzene	1.74101			
Toluene	2.69013			
Ethylbenzene	0.0785051			
o-Xylene	0.915927			
n-Hexane	25.2001			
2,2,4-Trimethylpentane	0			
Decanes Plus	0.143078			
Decanes Plus Sat	0			

Mole Fraction	60 %			
Triethylene Glycol	6.77301E-10			
Water	1.94263			
Hydrogen Sulfide	0.00264637			
Carbon Dioxide	0.17274			
Nitrogen	0.11968			
Methane	40.4332			
Ethane	21.3093			
Propane	16.5143			
Isobutane	3.40164			
n-Butane	7.27375			
Isopentane	2.03002			
n-Pentane	2.35453			
i-C6	1.91469			
i-C7	1.19664			
Octane	0.229204			
Nonane	0.0405081			
Benzene	0.0669858			
Toluene	0.0877467			
Ethylbenzene	0.00222236			
o-Xylene	0.0259286			
n-Hexane	0.878858			
2,2,4-Trimethylpentane	0			
Decanes Plus	0.00280315			
Decanes Plus Sat	0			

Client Name:		DELAWARE DIVISION		Job:	
Location:		Tiger Compressor Station			
Flowsheet:		Inlet			
Process Streams Report					
All Streams					
Tabulated by Total Phase					
Mass Fraction	60 %				
Triethylene Glycol	2.98345E-09				
Water	1.02654				
Hydrogen Sulfide	0.0026455				
Carbon Dioxide	0.222989				
Nitrogen	0.0983405				
Methane	19.0263				
Ethane	18.7946				
Propane	21.3599				
Isobutane	5.7993				
n-Butane	12.4007				
Isopentane	4.29611				
n-Pentane	4.98286				
i-C6	4.83978				
i-C7	3.5171				
Octane	0.767968				
Nonane	0.152392				
Benzene	0.153477				
Toluene	0.237147				
Ethylbenzene	0.00692057				
o-Xylene	0.0807431				
n-Hexane	2.2215				
2,2,4-Trimethylpentane	0				
Decanes Plus	0.012613				
Decanes Plus Sat	0				
Stream Properties					
Property	Units	60			
Temperature	°F	83 *			
Pressure	psig	16			
Molecular Weight	lb/lbmol	34.0922			
Mass Flow	lb/h	1134.37			
Std Vapor Volumetric Flow	MMSCFD	0.303044			
Std Liquid Volumetric Flow	sgpm	5.07402			
API Gravity					
Net Ideal Gas Heating Value	Btu/ft^3	1785.4			
Remarks					

Output Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	



* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections

	1. LP Separator Gas	2. Sales Gas	3. Fuel Gas	4. NGL Sales Liquid	5. Water Tank Flash Gas
From Block	Inlet - LP Separator Gas	Inlet - Sales Gas	Inlet - Fuel Gas	Inlet - NGL Sales Liquid	Tankage - Water Tank Flash Gas
To Block	--	SPLT-101	SPLT-100	--	--

Stream Composition

Mass Flow	1. LP Separator Gas lb/h	2. Sales Gas lb/h	3. Fuel Gas lb/h	4. NGL Sales Liquid lb/h	5. Water Tank Flash Gas lb/h
Triethylene Glycol	3.38434E-08	2.71872	0.00307297	1.00847E-15	1.24313E-11
Water	11.6448	18.1266	0.701728	3.38013	0.0020012
Hydrogen Sulfide	0.0300098	8.45825	0.317743	0.0679919	3.1256E-06
Carbon Dioxide	2.52953	1678.58	64.8552	4.89576	0.000207556
Nitrogen	1.11555	4551.69	179.195	0.886875	6.22399E-06
Methane	215.829	313137	12246.2	309.156	0.0032935
Ethane	213.201	85225.6	3221.6	555.798	0.00963364
Propane	242.301	55973.1	1970.58	1000.43	0.0168815
Isobutane	65.7857	12666.1	399.511	443.249	0.00557158
n-Butane	140.67	25894.8	758.175	1214.22	0.0121817
Isopentane	48.7338	8961.47	210.884	751.261	0.00438731
n-Pentane	56.5242	10360.8	221.152	1066.48	0.00341517
i-C6	54.9012	9884.03	139.259	2004.9	0.00398066
i-C7	39.8971	6742.51	49.8376	2965.18	0.00263519
Octane	8.71161	973.272	2.5648	1223.28	0.000202906
Nonane	1.72869	84.4048	0.081627	262.468	4.04841E-05
Benzene	1.74101	181.587	2.23327	55.2099	0.00023919
Toluene	2.69013	283.066	1.62466	213.049	0.00036139
Ethylbenzene	0.0785051	6.5024	0.0168469	10.3703	1.11296E-05
o-Xylene	0.915927	61.9743	0.133086	126.211	0.000128194
n-Hexane	25.2001	4556.86	52.2445	1178.11	0.00130677
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.143078	0.636169	0.000157719	9.23153	2.04607E-05
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	1. LP Separator Gas %	2. Sales Gas %	3. Fuel Gas %	4. NGL Sales Liquid %	5. Water Tank Flash Gas %
Triethylene Glycol	6.77301E-10	7.23978E-05	2.1499E-06	3.38926E-18	5.38792E-09
Water	1.94263	0.00402373	0.0040924	0.0946952	7.2301
Hydrogen Sulfide	0.00264637	0.000992481	0.000979527	0.00100689	0.00596922
Carbon Dioxide	0.17274	0.152527	0.154828	0.0561448	0.306962
Nitrogen	0.11968	0.64977	0.672063	0.0159784	0.014461
Methane	40.4332	78.0577	80.2015	9.72618	13.3623
Ethane	21.3093	11.3345	11.2565	9.32895	20.8529
Propane	16.5143	5.07618	4.69515	11.4506	24.9178
Isobutane	3.40164	0.871471	0.722168	3.84894	6.23923
n-Butane	7.27375	1.78165	1.3705	10.5436	13.6414
Isopentane	2.03002	0.49671	0.307089	5.2553	3.9579
n-Pentane	2.35453	0.574269	0.322042	7.46037	3.0809
i-C6	1.91469	0.458673	0.169782	11.7421	3.00654
i-C7	1.19664	0.26909	0.0522555	14.9352	1.71171
Octane	0.229204	0.0340731	0.00235901	5.40489	0.115615
Nonane	0.0405081	0.00263175	6.68667E-05	1.03285	0.0205449
Benzene	0.0669858	0.00929652	0.00300383	0.356726	0.199307
Toluene	0.0877467	0.0122857	0.00185256	1.16701	0.255288
Ethylbenzene	0.00222236	0.000244932	1.66721E-05	0.0492999	0.00682325
o-Xylene	0.0259286	0.00233444	0.000131705	0.599998	0.0785924
n-Hexane	0.878858	0.211463	0.0636954	6.89982	0.986988
2,2,4-Trimethylpentane	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

	1. LP Separator Gas %	2. Sales Gas %	3. Fuel Gas %	4. NGL Sales Liquid %	5. Water Tank Flash Gas %
Mole Fraction					
Decanes Plus	0.00280315	1.65844E-05	1.08021E-07	0.0303727	0.00868139
Decanes Plus Sat	0	0	0	0	0

	1. LP Separator Gas %	2. Sales Gas %	3. Fuel Gas %	4. NGL Sales Liquid %	5. Water Tank Flash Gas %
Mass Fraction					
Triethylene Glycol	2.98345E-09	0.000502301	1.57417E-05	7.52709E-18	1.86913E-08
Water	1.02654	0.00334901	0.0035947	0.0252289	3.00893
Hydrogen Sulfide	0.0026455	0.00156272	0.00162768	0.000507484	0.00469953
Carbon Dioxide	0.222989	0.310128	0.33223	0.0365414	0.312073
Nitrogen	0.0983405	0.840954	0.917949	0.00661954	0.00935814
Methane	19.0263	57.8541	62.733	2.30751	4.95198
Ethane	18.7946	15.746	16.5031	4.14841	14.4848
Propane	21.3599	10.3414	10.0946	7.4671	25.3823
Isobutane	5.7993	2.34014	2.04655	3.30836	8.3772
n-Butane	12.4007	4.78423	3.88386	9.06278	18.3159
Isopentane	4.29611	1.65569	1.08028	5.60733	6.59659
n-Pentane	4.98286	1.91422	1.13288	7.96011	5.13491
i-C6	4.83978	1.82614	0.713375	14.9644	5.98517
i-C7	3.5171	1.24572	0.2553	22.1318	3.96217
Octane	0.767968	0.179818	0.0131385	9.13043	0.305081
Nonane	0.152392	0.0155943	0.000418145	1.95903	0.0608703
Benzene	0.153477	0.0335494	0.0114402	0.41208	0.359637
Toluene	0.237147	0.0522983	0.00832255	1.59018	0.543372
Ethylbenzene	0.00692057	0.00120136	8.63005E-05	0.0774029	0.016734
o-Xylene	0.0807431	0.0114502	0.00068175	0.942022	0.192747
n-Hexane	2.2215	0.84191	0.267629	8.79327	1.96481
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.012613	0.000117536	8.07938E-07	0.0689032	0.0307638
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	1. LP Separator Gas	2. Sales Gas	3. Fuel Gas	4. NGL Sales Liquid	5. Water Tank Flash Gas
Temperature	°F	83	93.2686	78.4268	104.508	100
Pressure	psig	16	1281	120	400	0.25
Molecular Weight	lb/lbmol	34.0922	21.6448	20.5096	67.6192	43.2887
Mass Flow	lb/h	1134.37	541253	19521.2	13397.8	0.0665088
Std Vapor Volumetric Flow	MMSCFD	0.303044	227.747	8.6687	1.80455	1.3993E-05
Std Liquid Volumetric Flow	sgpm	5.07402	3064.61	114.221	44.1028	0.000259569
API Gravity					94.2923	
Net Ideal Gas Heating Value	Btu/ft ³	1785.4	1176.53	1119.76	3459.98	2187.56

Remarks

Process Streams Report		
All Streams		
Tabulated by Total Phase		
Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections					
	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
From Block	Tankage - Skim Flash Gas	Tankage - Condensate Tank Flash Gas	W & B - Skim Tank	W & B - Water Tank	W & B - Condensate Tank
To Block	--	--	--	--	--

Stream Composition					
	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
Mass Flow	lb/h	Gas lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	1.50792E-10	1.12085E-08	4.35517E-10	3.95504E-10	1.34E-12
Water	0.0626021	1.54928	0.213611	0.200929	0.000132133
Hydrogen Sulfide	0.000149722	0.00620753	0.000520847	0.000522553	0.000807839
Carbon Dioxide	0.0100285	0.279785	0.0197634	0.0129523	0.0373954
Nitrogen	0.000456294	0.016682	2.55266E-05	1.45898E-05	0.000114057
Methane	0.205749	10.4636	0.0303077	0.0134929	0.351547
Ethane	0.53123	38.739	0.314963	0.0507711	7.45441
Propane	0.971529	69.6605	1.85305	0.0651009	12.6542
Isobutane	0.319414	21.7939	1.08521	0.0145036	3.63272
n-Butane	0.716667	48.1086	2.47008	0.0439215	8.05881
Isopentane	0.263099	17.2713	0.923045	0.0111748	2.76423
n-Pentane	0.307627	20.1132	1.08093	0.00540868	3.17806
i-C6	0.302672	19.6302	1.06598	0.00715037	3.20771
i-C7	0.218479	14.1246	0.764081	0.00338184	2.21049
Octane	0.0467206	3.01806	0.16089	0.00017197	0.42647
Nonane	0.00915743	0.59095	0.0311803	3.24175E-05	0.0717432
Benzene	0.00955305	0.620453	0.0335601	0.0320753	0.0667575
Toluene	0.0146455	0.947786	0.0510061	0.049272	0.103546
Ethylbenzene	0.00042133	0.0272486	0.00145128	0.00139587	0.00300814
o-Xylene	0.00490694	0.317312	0.0168785	0.0163015	0.0304454
n-Hexane	0.138669	8.97893	0.486766	0.00164013	1.51521
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000736482	0.0476077	0.00246119	0.000525006	0.00533432
Decanes Plus Sat	0	0	0	0	0

	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
Mole Fraction	%	Gas %	%	%	%
Triethylene Glycol	1.11441E-09	1.27366E-09	1.5751E-09	1.46661E-08	9.64986E-13
Water	3.85664	1.46753	6.43987	62.1095	0.000793187
Hydrogen Sulfide	0.0048757	0.00310817	0.0083003	0.0853837	0.00256343
Carbon Dioxide	0.2529	0.108486	0.243899	1.63891	0.0918921
Nitrogen	0.0180776	0.010162	0.000494905	0.00290027	0.000440314
Methane	14.2341	11.1303	1.02607	4.68371	2.36984
Ethane	19.6076	21.9849	5.68897	9.4027	26.8102
Propane	24.4524	26.958	22.8237	8.22142	31.0346
Isobutane	6.0992	6.39868	10.1406	1.38959	6.75921
n-Butane	13.6848	14.1246	23.0815	4.20815	14.9946
Isopentane	4.04716	4.08501	6.94846	0.862516	4.14335
n-Pentane	4.73214	4.75718	8.13694	0.417463	4.76365
i-C6	3.89808	3.88722	6.71832	0.462063	4.02548
i-C7	2.41988	2.40545	4.1415	0.187946	2.38571
Octane	0.453936	0.450868	0.764977	0.00838365	0.403758
Nonane	0.0792429	0.0786273	0.132038	0.00140754	0.060494
Benzene	0.135733	0.135547	0.233346	2.2867	0.0924251
Toluene	0.176411	0.175536	0.30066	2.97793	0.121535

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
Mole Fraction	%	%	%	%	%
Ethylbenzene	0.00440456	0.00437986	0.00742443	0.073218	0.00306425
o-Xylene	0.0512968	0.0510037	0.0863469	0.855072	0.0310132
n-Hexane	1.7859	1.77803	3.06783	0.105986	1.9015
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00532841	0.00529601	0.00871392	0.0190588	0.00376063
Decanes Plus Sat	0	0	0	0	0

	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
Mass Fraction	%	%	%	%	%
Triethylene Glycol	3.64714E-09	4.05656E-09	4.10642E-09	7.45196E-08	2.92749E-12
Water	1.51414	0.560714	2.01411	37.8584	0.000288668
Hydrogen Sulfide	0.00362128	0.00224662	0.00491099	0.0984577	0.00176487
Carbon Dioxide	0.242555	0.101259	0.186346	2.44043	0.0816971
Nitrogen	0.0110362	0.00603752	0.000240686	0.00274895	0.000249179
Methane	4.97639	3.78698	0.285766	2.54229	0.76802
Ethane	12.8487	14.0204	2.96973	9.56612	16.2856
Propane	23.498	25.2114	17.4721	12.2661	27.6455
Isobutane	7.72555	7.88763	10.2322	2.73271	7.93635
n-Butane	17.3338	17.4114	23.29	8.27554	17.606
Isopentane	6.36347	6.2508	8.70325	2.10552	6.03898
n-Pentane	7.44047	7.27936	10.1919	1.01909	6.94306
i-C6	7.32062	7.10455	10.051	1.34725	7.00783
i-C7	5.28427	5.11195	7.20441	0.637195	4.82922
Octane	1.13001	1.09229	1.517	0.032402	0.931704
Nonane	0.221487	0.213876	0.293994	0.006108	0.156736
Benzene	0.231056	0.224554	0.316433	6.04353	0.145844
Toluene	0.354225	0.343021	0.480929	9.28366	0.226216
Ethylbenzene	0.0101906	0.00986179	0.0136839	0.263004	0.00657185
o-Xylene	0.118682	0.114841	0.159145	3.07148	0.0665137
n-Hexane	3.35394	3.24964	4.58964	0.309027	3.31026
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.017813	0.0172301	0.0232061	0.0989199	0.0116538
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	6. Skim Tank Flash Gas	7. Condensate Tank Flash Gas	8. Skim Tank W&B	9. Water Tank W&B	10. Condensate Tank W&B
Temperature	°F	80	80	86.1588	85.2658	84.5587
Pressure	psig	0.25	0.25	-3.76438	-11.9111	2.99416
Molecular Weight	lb/lbmol	45.8866	47.1505	57.6018	29.5554	49.5014
Mass Flow	lb/h	4.13451	276.305	10.6058	0.530739	45.7732
Std Vapor Volumetric Flow	MMSCFD	0.000820622	0.0533713	0.00167691	0.000163549	0.00842167
Std Liquid Volumetric Flow	sgpm	0.015939	1.06919	0.0361563	0.00158476	0.17619
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	2352.33	2443.31	2906.65	893.312	2577.13

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections

	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
From Block	Tankage - Condensate Sales Liquid	Tankage - Produced Water Sales Liquid	Tankage - BTEX Vapors to Combustion	Tankage - Skim Tank Inlet	SPLT-100
To Block	--	--	--	--	--

Stream Composition

	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	0.000128693	1.04797	2.74658E-08	1.04798	4.25389E-05
Water	0.816108	7601.79	1.28909	7601.87	0.00971396
Hydrogen Sulfide	0.00728024	0.000887266	0.122278	0.00115335	0.00439849
Carbon Dioxide	0.111811	0.0193386	2.41269	0.0321572	0.897785
Nitrogen	0.000651345	1.57932E-05	0.00950953	0.000489771	2.48057
Methane	1.47659	0.0170685	8.02733	0.244799	169.523
Ethane	34.896	0.0669842	15.7294	0.91607	44.5963
Propane	222.276	0.0813613	23.7955	3.0673	27.2785
Isobutane	171.85	0.0163155	4.9954	1.96453	5.5304
n-Butane	554.988	0.0540996	16.7525	6.11129	10.4954
Isopentane	489.378	0.0124764	7.15944	5.08638	2.91924
n-Pentane	755.496	0.00474699	9.68102	7.76767	3.06138
i-C6	1842.08	0.00680985	7.31264	18.631	1.92775
i-C7	4087.59	0.00246829	3.04362	41.0243	0.689898
Octane	4058.68	5.66114E-05	0.148497	40.6177	0.0355043
Nonane	2558.99	8.4367E-06	0.00536763	25.596	0.00112995
Benzene	85.4454	0.118664	4.10557	0.978505	0.0309149
Toluene	445.246	0.136595	2.8356	4.59819	0.02249
Ethylbenzene	39.0168	0.00344563	0.0180218	0.393866	0.00023321
o-Xylene	566.494	0.0599056	0.215016	5.72779	0.00184229
n-Hexane	1217.51	0.00116832	3.05492	12.2688	0.723215
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1364.46	0.000771818	3.67321E-05	13.6459	2.18329E-06
Decanes Plus Sat	0	0	0	0	0

	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
Mole Fraction	%	%	%	%	%
Triethylene Glycol	4.54849E-07	0.00165374	7.20461E-09	0.00164609	2.1499E-06
Water	0.0240442	99.9958	2.81873	99.5348	0.0040924
Hydrogen Sulfide	0.00011338	6.1695E-06	0.141334	7.98259E-06	0.000979527
Carbon Dioxide	0.00134847	0.000104132	2.15956	0.000172356	0.154828
Nitrogen	1.23409E-05	1.33601E-07	0.0133722	4.12403E-06	0.672063
Methane	0.048853	0.000252133	19.7111	0.00359943	80.2015
Ethane	0.615969	0.00052791	20.6065	0.00718628	11.2565
Propane	2.67547	0.000437249	21.2574	0.016408	4.69515
Isobutane	1.56932	6.65221E-05	3.38562	0.00797282	0.722168
n-Butane	5.06809	0.000220577	11.354	0.0248019	1.3705
Isopentane	3.60014	4.09797E-05	3.90895	0.0166293	0.307089
n-Pentane	5.55785	1.55918E-05	5.2857	0.0253955	0.322042
i-C6	11.3456	1.87267E-05	3.34273	0.0509975	0.169782
i-C7	21.6518	5.83751E-06	1.19653	0.096574	0.0522555
Octane	18.8588	1.17445E-07	0.0512099	0.0838757	0.00235901

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
Mole Fraction	%	%	%	%	%
Nonane	10.59	1.55885E-08	0.00164861	0.0470752	6.68667E-05
Benzene	0.580598	0.000360007	2.07046	0.00295489	0.00300383
Toluene	2.56485	0.000351318	1.21231	0.0117718	0.00185256
Ethylbenzene	0.195062	7.6912E-06	0.00668694	0.00087511	1.66721E-05
o-Xylene	2.83216	0.000133719	0.0797811	0.0127263	0.000131705
n-Hexane	7.4988	3.21281E-06	1.39646	0.0335825	0.0636954
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	4.72106	1.19233E-06	9.43259E-06	0.0209832	1.08021E-07
Decanes Plus Sat	0	0	0	0	0

	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
Mass Fraction	%	%	%	%	%
Triethylene Glycol	6.95759E-07	0.0137829	2.4808E-08	0.0134501	1.57417E-05
Water	0.00441216	99.9783	1.16435	97.565	0.0035947
Hydrogen Sulfide	3.93594E-05	1.16693E-05	0.110445	1.48024E-05	0.00162768
Carbon Dioxide	0.000604489	0.00025434	2.17922	0.000412716	0.33223
Nitrogen	3.52139E-06	2.07711E-07	0.00858932	6.28589E-06	0.917949
Methane	0.00798293	0.000224483	7.25054	0.00314183	62.733
Ethane	0.188659	0.000880973	14.2073	0.0117572	16.5031
Propane	1.2017	0.00107006	21.4928	0.0393668	10.0946
Isobutane	0.929081	0.000214581	4.51201	0.0252135	2.04655
n-Butane	3.00045	0.000711515	15.1314	0.0784343	3.88386
Isopentane	2.64574	0.000164089	6.46664	0.0652803	1.08028
n-Pentane	4.08447	6.24322E-05	8.74421	0.0996929	1.13288
i-C6	9.95892	8.95627E-05	6.60502	0.239117	0.713375
i-C7	22.0989	3.24628E-05	2.7491	0.52652	0.2553
Octane	21.9426	7.4455E-07	0.134127	0.521301	0.0131385
Nonane	13.8348	1.10959E-07	0.00484822	0.328507	0.000418145
Benzene	0.461947	0.00156067	3.70829	0.0125585	0.0114402
Toluene	2.40715	0.00179649	2.5612	0.0590148	0.00832255
Ethylbenzene	0.210938	4.53167E-05	0.0162779	0.00505502	8.63005E-05
o-Xylene	3.06266	0.000787875	0.19421	0.0735124	0.00068175
n-Hexane	6.58226	1.53656E-05	2.75931	0.157462	0.267629
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	7.37675	1.01509E-05	3.31776E-05	0.175136	8.07938E-07
Decanes Plus Sat	0	0	0	0	0

Stream Properties						
Property	Units	11. Condensate Sales Liquid	12. Produced Water Liquid	13. BTEX Cond Vapors to Combustion	14. Skim Tank Inlet	15. HPF Pilot / Purge Gas
Temperature	°F	80	100	70	83	78.4268
Pressure	psig	0.25	0.25	0	16	120
Molecular Weight	lb/lbmol	98.1748	18.0184	43.6125	18.379	20.5096
Mass Flow	lb/h	18496.8	7603.44	110.713	7791.6	270.23
Std Vapor Volumetric Flow	MMSCFD	1.71594	3.84324	0.0231203	3.86109	0.12 *
Std Liquid Volumetric Flow	sgpm	53.3336	15.2003	0.430083	15.7463	1.58115
API Gravity		70.8305	9.99723		11.5003	
Net Ideal Gas Heating Value	Btu/ft^3	4953.36	0.130401	2192.12	22.5263	1119.76

Remarks

* User Specified Values
? Extrapolated or Approximate Values

		Process Streams Report All Streams Tabulated by Total Phase					
		Client Name:	DELAWARE DIVISION			Job:	
		Location:	Tiger Compressor Station				
		Flowsheet:	Output				

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections					
	16. LPF Pilot / Purge Gas	17. HPF Blowdowns	18. Fuel Gas Other	19. Inlet Flaring	20. Fuel Gas Other
From Block	SPLT-100	SPLT-102	SPLT-100	SPLT-101	SPLT-101
To Block	--	--	--	--	--

Stream Composition					
	16. LPF Pilot / Purge Gas lb/h	17. HPF Blowdowns lb/h	18. Fuel Gas Other lb/h	19. Inlet Flaring lb/h	20. Fuel Gas Other lb/h
Mass Flow					
Triethylene Glycol	3.54491E-05	0	0.00453147	0.835623	1.8831
Water	0.00809496	0	1.03478	5.57138	12.5552
Hydrogen Sulfide	0.00366541	0.000854582	0.468551	2.59972	5.85853
Carbon Dioxide	0.748154	0.166635	95.6368	515.926	1162.65
Nitrogen	2.06715	0.450264	264.244	1399	3152.69
Methane	141.27	30.9938	18058.5	96245.4	216892
Ethane	37.1636	8.4778	4750.63	26194.8	59030.7
Propane	22.7321	5.63908	2905.86	17203.8	38769.3
Isobutane	4.60867	1.30439	589.128	3893.04	8773.05
n-Butane	8.74613	2.7108	1118.02	7959	17935.8
Isopentane	2.4327	0.993217	310.974	2754.39	6207.08
n-Pentane	2.55115	1.18318	326.115	3184.48	7176.3
i-C6	1.60646	1.32244	205.355	3037.95	6846.09
i-C7	0.574915	1.3191	73.4916	2072.37	4670.14
Octane	0.0295869	0.595773	3.78211	299.144	674.128
Nonane	0.000941629	0.276577	0.120369	25.9426	58.4623
Benzene	0.0257624	0.0313386	3.29322	55.8124	125.775
Toluene	0.0187417	0.0901049	2.39576	87.003	196.063
Ethylbenzene	0.000194342	0.0053242	0.0248428	1.99857	4.50383
o-Xylene	0.00153524	0.0718767	0.196251	19.0484	42.926
n-Hexane	0.60268	0.667705	77.0408	1400.59	3156.27
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.81941E-06	0.130782	0.000232576	0.195532	0.440637
Decanes Plus Sat	0	0	0	0	0

	16. LPF Pilot / Purge Gas %	17. HPF Blowdowns %	18. Fuel Gas Other %	19. Inlet Flaring %	20. Fuel Gas Other %
Mole Fraction					
Triethylene Glycol	2.1499E-06	0	2.1499E-06	7.23978E-05	7.23978E-05
Water	0.0040924	0	0.0040924	0.00402373	0.00402373
Hydrogen Sulfide	0.000979527	0.00099999	0.000979527	0.000992481	0.000992481
Carbon Dioxide	0.154828	0.150998	0.154828	0.152527	0.152527
Nitrogen	0.672063	0.640994	0.672063	0.64977	0.64977
Methane	80.2015	77.0472	80.2015	78.0577	78.0577
Ethane	11.2565	11.2439	11.2565	11.3345	11.3345
Propane	4.69515	5.09995	4.69515	5.07618	5.07618
Isobutane	0.722168	0.894991	0.722168	0.871471	0.871471
n-Butane	1.3705	1.85998	1.3705	1.78165	1.78165
Isopentane	0.307089	0.548995	0.307089	0.49671	0.49671
n-Pentane	0.322042	0.653993	0.322042	0.574269	0.574269
i-C6	0.169782	0.611994	0.169782	0.458673	0.458673
i-C7	0.0522555	0.524995	0.0522555	0.26909	0.26909
Octane	0.00235901	0.207998	0.00235901	0.0340731	0.0340731
Nonane	6.68667E-05	0.0859991	6.68667E-05	0.00263175	0.00263175
Benzene	0.00300383	0.0159998	0.00300383	0.00929652	0.00929652
Toluene	0.00185256	0.0389996	0.00185256	0.0122857	0.0122857
Ethylbenzene	1.66721E-05	0.00199998	1.66721E-05	0.000244932	0.000244932
o-Xylene	0.000131705	0.0269997	0.000131705	0.00233444	0.00233444
n-Hexane	0.0636954	0.308997	0.0636954	0.211463	0.211463
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.08021E-07	0.0339997	1.08021E-07	1.65844E-05	1.65844E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Mass Fraction	16. LPF Pilot / Purge Gas %	17. HPF Blowdowns %	18. Fuel Gas Other %	19. Inlet Flaring %	20. Fuel Gas Other %
Triethylene Glycol	1.57417E-05	0	1.57417E-05	0.000502301	0.000502301
Water	0.0035947	0	0.0035947	0.00334901	0.00334901
Hydrogen Sulfide	0.00162768	0.00151438	0.00162768	0.00156272	0.00156272
Carbon Dioxide	0.33223	0.295289	0.33223	0.310128	0.310128
Nitrogen	0.917949	0.7979	0.917949	0.840954	0.840954
Methane	62.733	54.9233	62.733	57.8541	57.8541
Ethane	16.5031	15.0233	16.5031	15.746	15.746
Propane	10.0946	9.99287	10.0946	10.3414	10.3414
Isobutane	2.04655	2.31148	2.04655	2.34014	2.34014
n-Butane	3.88386	4.80374	3.88386	4.78423	4.78423
Isopentane	1.08028	1.76005	1.08028	1.65569	1.65569
n-Pentane	1.13288	2.09668	1.13288	1.91422	1.91422
i-C6	0.713375	2.34347	0.713375	1.82614	1.82614
i-C7	0.2553	2.33754	0.2553	1.24572	1.24572
Octane	0.0131385	1.05575	0.0131385	0.179818	0.179818
Nonane	0.000418145	0.490115	0.000418145	0.0155943	0.0155943
Benzene	0.0114402	0.0555343	0.0114402	0.0335494	0.0335494
Toluene	0.00832255	0.159672	0.00832255	0.0522983	0.0522983
Ethylbenzene	8.63005E-05	0.00943487	8.63005E-05	0.00120136	0.00120136
o-Xylene	0.00068175	0.127371	0.00068175	0.0114502	0.0114502
n-Hexane	0.267629	1.18322	0.267629	0.84191	0.84191
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	8.07938E-07	0.231755	8.07938E-07	0.000117536	0.000117536
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	16. LPF Pilot / Purge Gas	17. HPF Blowdowns	18. Fuel Gas Other	19. Inlet Flaring	20. Fuel Gas Other
Temperature	°F	78.4268	100	78.4268	93.2686	93.2686
Pressure	psig	120	48	120	1281	1281
Molecular Weight	lb/lbmol	20.5096	22.5046	20.5096	21.6448	21.6448
Mass Flow	lb/h	225.192	56.4311	28786.4	166359	374894
Std Vapor Volumetric Flow	MMSCFD	0.1 *	0.0228377 *	12.783	70 *	157.747
Std Liquid Volumetric Flow	sgpm	1.31763	0.311899	168.433	941.936	2122.68
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1119.76	1219.1	1119.76	1176.53	1176.53

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections					
	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
From Block	Inlet - Inlet Gas	W & B - Cond Flashing Losses Hrly	Inlet - HPS water	W & B - Water Truck Loading	DEHY1 - DEHY1-3 Max Hrly
To Block	SPLT-102	--	--	--	--

Stream Composition					
	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	0	1.0776E-11	1.6315E-12	1.38847E-09	2.28222E-06
Water	0	0.000379734	1777.15	0.147897	10.1761
Hydrogen Sulfide	8.98076	0.00515401	0.00122028	8.9055E-06	0.127941
Carbon Dioxide	1751.16	0.116558	0.0721611	0.000613584	2.44387
Nitrogen	4731.8	0.00076804	0.00270462	2.30763E-07	0.00951139
Methane	325713	1.29562	0.614655	0.000337345	8.04895
Ethane	89092.8	43.2577	0.27477	0.00126719	16.0763
Propane	59260.8	147.738	0.1104	0.000397037	25.6847
Isobutane	13707.8	49.4307	0.0123835	2.92679E-05	6.04156
n-Butane	28487.7	155.836	0.0375467	6.65809E-05	22.1603
Isopentane	10437.7	51.5781	0.00642741	6.07713E-06	12.6842
n-Pentane	12433.9	61.3891	0.00368851	1.73928E-06	19.4983
i-C6	13897.5	24.8127	0.00353026	1.05701E-06	23.3082
i-C7	13862.4	27.1578	0.000981107	1.2385E-07	18.7277
Octane	6260.95	5.0199	3.22796E-05	5.91605E-10	1.75425
Nonane	2906.53	0.554904	1.56662E-06	2.36368E-11	0.0862799
Benzene	329.336	1.87864	0.0229615	8.5319E-06	18.8525
Toluene	946.908	1.55388	0.0224333	3.03156E-06	22.7285
Ethylbenzene	55.9517	0.0453497	0.000311282	2.64234E-08	0.213013
o-Xylene	755.348	0.306669	0.00465266	3.24022E-07	2.57149
n-Hexane	7016.88	17.6232	0.000788184	1.31298E-07	12.1327
2,2,4-Trimethylpentane	0	1.08231	0	0	0
Decanes Plus	1374.38	0.000366104	1.95117E-06	3.36097E-10	0.000766724
Decanes Plus Sat	0	0	0	0	0

	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
Mole Fraction	%	%	%	%	%
Triethylene Glycol	0	6.62247E-13	1.10072E-14	1.11425E-07	3.53173E-07
Water	0	0.000194532	99.9459	98.9358	13.1269
Hydrogen Sulfide	0.000999999	0.00139568	3.6277E-05	0.00314908	0.0872411
Carbon Dioxide	0.150998	0.0244426	0.00166126	0.168021	1.29049
Nitrogen	0.640994	0.000253029	9.78187E-05	9.92741E-05	0.00789042
Methane	77.0472	0.745348	0.0388188	0.253419	11.6598
Ethane	11.2439	13.2769	0.00925831	0.507874	12.4248
Propane	5.09995	30.9207	0.00253662	0.10851	13.5363
Isobutane	0.894991	7.84887	0.000215866	0.00606855	2.41562
n-Butane	1.85998	24.7445	0.000654503	0.0138052	8.86044
Isopentane	0.548995	6.59765	9.02587E-05	0.00101509	4.0856
n-Pentane	0.653993	7.85262	5.17968E-05	0.000290521	6.28045
i-C6	0.611994	2.65732	4.15055E-05	0.000147819	6.28561
i-C7	0.524995	2.50133	9.92024E-06	1.48955E-05	4.34341
Octane	0.207998	0.405576	2.86309E-07	6.24157E-08	0.356894
Nonane	0.0859991	0.0399297	1.23758E-08	2.22101E-09	0.0156335

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report					
All Streams					
Tabulated by Total Phase					

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
Mole Fraction	%	%	%	%	%
Benzene	0.0159998	0.221963	0.000297828	0.00131633	5.60886
Toluene	0.0389996	0.155643	0.00024668	0.000396516	5.7326
Ethylbenzene	0.00199998	0.00394226	2.97067E-06	2.99946E-06	0.0466281
o-Xylene	0.0269997	0.0266588	4.44019E-05	3.67815E-05	0.562892
n-Hexane	0.308997	1.88736	9.26672E-06	1.83617E-05	3.27186
2,2,4-Trimethylpentane	0	0.0874435	0	0	0
Decanes Plus	0.0339997	2.20258E-05	1.2887E-08	2.64043E-08	0.000116154
Decanes Plus Sat	0	0	0	0	0

	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
Mass Fraction	%	%	%	%	%
Triethylene Glycol	0	1.82433E-12	9.17428E-14	9.2173E-07	1.02192E-06
Water	0	6.42871E-05	99.933	98.1803	4.55658
Hydrogen Sulfide	0.00151438	0.00087255	6.8619E-05	0.00591185	0.0572887
Carbon Dioxide	0.295289	0.0197327	0.00405777	0.407324	1.0943
Nitrogen	0.7979	0.000130026	0.000152087	0.00015319	0.00425895
Methane	54.9233	0.219342	0.0345634	0.223944	3.60411
Ethane	15.0233	7.32333	0.0154509	0.841212	7.19855
Propane	9.99287	25.0113	0.00620803	0.26357	11.5009
Isobutane	2.31148	8.36839	0.000696353	0.0194293	2.70525
n-Butane	4.80374	26.3823	0.00211133	0.0441993	9.9228
Isopentane	1.76005	8.73194	0.000361427	0.00403426	5.67965
n-Pentane	2.09668	10.3929	0.000207413	0.00115461	8.73085
i-C6	2.34347	4.20068	0.000198514	0.000701689	10.4368
i-C7	2.33754	4.59769	5.51698E-05	8.22169E-05	8.38578
Octane	1.05575	0.849845	1.81515E-06	3.92733E-07	0.785507
Nonane	0.490115	0.0939427	8.80946E-08	1.56912E-08	0.0386339
Benzene	0.0555343	0.318045	0.00129117	0.00566385	8.44166
Toluene	0.159672	0.263065	0.00126147	0.00201248	10.1772
Ethylbenzene	0.00943487	0.00767749	1.7504E-05	1.7541E-05	0.0953818
o-Xylene	0.127371	0.0519176	0.000261629	0.0002151	1.15144
n-Hexane	1.18322	2.98352	4.43212E-05	8.71616E-05	5.43268
2,2,4-Trimethylpentane	0	0.183229	0	0	0
Decanes Plus	0.231755	6.19796E-05	1.09719E-07	2.23116E-07	0.000343319
Decanes Plus Sat	0	0	0	0	0

Stream Properties						
Property	Units	21. Inlet Gas	22. Condensate Flash Losses Hrly	23. HPS Water to SWD	24. Water Truck Loading	25. DEHY1-3 Max Hourly
Temperature	°F	100	97.6568	104.508	97.1838	120
Pressure	psig	48	8.2542	400	-11.9981	0
Molecular Weight	lb/lbmol	22.5046	54.5139	18.0176	18.1539	51.8995
Mass Flow	lb/h	593031	590.684	1778.34	0.150638	223.327
Std Vapor Volumetric Flow	MMSCFD	240	0.0986853	0.898924	7.55734E-05	0.0391907
Std Liquid Volumetric Flow	sgpm	3277.73	2.13765	3.55925	0.000308492	0.739784
API Gravity				10.0377		
Net Ideal Gas Heating Value	Btu/ft^3	1219.1	2826.67	0.619624	13.7779	2482.22

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

Connections

	26. Skim Flashing Losses Hrly	27. WT Flashing Losses Hrly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
From Block	W & B - Skim Flashing Losses Hrly	W & B - WT Flashing Losses Hrly	XFS1	XFS2
To Block	--	--	--	--

Stream Composition

	26. Skim Flashing Losses Hrly	27. WT Flashing Losses Hrly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
Mass Flow	lb/h	lb/h	lb/h	lb/h
Triethylene Glycol	9.87002E-10	7.18752E-12	7.46149E-13	0.047807
Water	0.18723	0.00145968	7.15166E-05	2.25697
Hydrogen Sulfide	0.000277775	2.53607E-06	0.000456564	0.0737158
Carbon Dioxide	0.0157294	0.000168575	0.0191992	6.80562
Nitrogen	0.000471781	5.42898E-06	2.03718E-05	0.777274
Methane	0.223191	0.00280829	0.132091	176.282
Ethane	0.682315	0.00801737	4.16206	106.183
Propane	1.56268	0.0141441	7.14154	90.6522
Isobutane	0.614413	0.00464876	2.01921	17.7084
n-Butane	1.46956	0.0102456	4.45555	46.2615
Isopentane	0.60668	0.00369061	1.51692	15.9465
n-Pentane	0.732079	0.00305083	1.74216	21.2198
i-C6	0.773522	0.00347327	1.75486	20.0856
i-C7	0.599541	0.00231498	1.21009	12.8375
Octane	0.139403	0.000193729	0.234218	1.50018
Nonane	0.0290926	3.85315E-05	0.0394098	0.101924
Benzene	0.0247968	0.00018547	0.0365606	1.27259
Toluene	0.0408313	0.00028123	0.0567571	1.64066
Ethylbenzene	0.00124839	8.52015E-06	0.00165221	0.0249746
o-Xylene	0.0146542	9.83813E-05	0.0167327	0.249159
n-Hexane	0.366271	0.00118472	0.828963	9.29053
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.00252559	1.54851E-05	0.00294831	0.000826694
Decanes Plus Sat	0	0	0	0

	26. Skim Flashing Losses Hrly	27. WT Flashing Losses Hrly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
Mole Fraction	%	%	%	%
Triethylene Glycol	4.1385E-09	3.73058E-09	9.71709E-13	0.00167365
Water	6.54412	6.31546	0.000776369	0.658642
Hydrogen Sulfide	0.00513215	0.00580014	0.00261995	0.0113714
Carbon Dioxide	0.225051	0.298563	0.0853177	0.81299
Nitrogen	0.0106045	0.0151057	0.000142222	0.145872
Methane	8.76035	13.6446	1.61029	57.77
Ethane	14.2883	20.7827	27.0702	18.5652
Propane	22.3147	25.0017	31.6737	10.808
Isobutane	6.65633	6.23424	6.79427	1.60178
n-Butane	15.9206	13.74	14.9921	4.18449
Isopentane	5.29477	3.98711	4.11183	1.16198
n-Pentane	6.38918	3.29593	4.72239	1.54624
i-C6	5.65205	3.14156	3.98256	1.22537
i-C7	3.76755	1.80078	2.36181	0.67355
Octane	0.768448	0.132193	0.401004	0.0690452
Nonane	0.142831	0.0234169	0.0600941	0.00417799

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report	
All Streams	
Tabulated by Total Phase	

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Output	

	26. Skim Flashing Losses Hrlly	27. WT Flashing Losses Hrlly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
Mole Fraction	%	%	%	%
Benzene	0.199892	0.185074	0.0915376	0.0856518
Toluene	0.279042	0.237908	0.120471	0.093614
Ethylbenzene	0.00740431	0.00625539	0.0030436	0.00123675
o-Xylene	0.0869154	0.0722304	0.0308238	0.0123384
n-Hexane	2.6763	1.07157	1.88129	0.566789
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.010367	0.00786823	0.0037588	2.83324E-05
Decanes Plus Sat	0	0	0	0

	26. Skim Flashing Losses Hrlly	27. WT Flashing Losses Hrlly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
Mass Fraction	%	%	%	%
Triethylene Glycol	1.22055E-08	1.28266E-08	2.9409E-12	0.00899948
Water	2.31534	2.60488	0.000281878	0.424867
Hydrogen Sulfide	0.00343505	0.00452577	0.00179952	0.0138767
Carbon Dioxide	0.194514	0.300833	0.0756723	1.28113
Nitrogen	0.00583417	0.00968834	8.02943E-05	0.146319
Methane	2.76004	5.01157	0.520627	33.1845
Ethane	8.4377	14.3075	16.4045	19.9885
Propane	19.3245	25.2411	28.1479	17.0649
Isobutane	7.59801	8.29599	7.9586	3.33355
n-Butane	18.1729	18.284	17.5612	8.70856
Isopentane	7.50238	6.58612	5.97883	3.00187
n-Pentane	9.05309	5.4444	6.86661	3.99455
i-C6	9.56559	6.19827	6.91667	3.78104
i-C7	7.41409	4.13123	4.7695	2.41662
Octane	1.7239	0.345721	0.923156	0.282404
Nonane	0.359767	0.0687618	0.155331	0.0191869
Benzene	0.306644	0.330983	0.144101	0.239561
Toluene	0.504932	0.501872	0.223704	0.308847
Ethylbenzene	0.0154379	0.0152047	0.00651209	0.00470138
o-Xylene	0.181218	0.175567	0.0659508	0.0469032
n-Hexane	4.5294	2.1142	3.2673	1.74891
2,2,4-Trimethylpentane	0	0	0	0
Decanes Plus	0.0312322	0.0276341	0.0116206	0.000155622
Decanes Plus Sat	0	0	0	0

Stream Properties					
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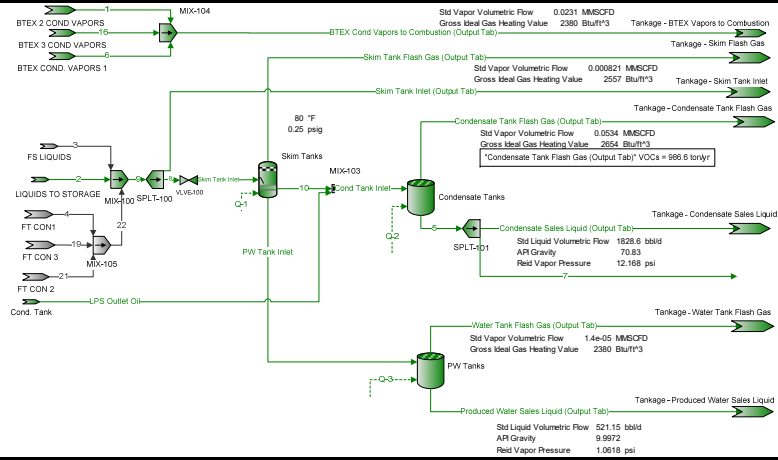
Property	Units	26. Skim Flashing Losses Hrlly	27. WT Flashing Losses Hrlly	28. Condensate Loading Emissions	29. Dehy Flash Tank Vapors
Temperature	°F	96.1635	94.9252	85.2658	159.857
Pressure	psig	9.60098E-09	2.21707E-07	3.40644	55
Molecular Weight	lb/lbmol	50.9187	43.6775	49.619	27.9279
Mass Flow	lb/h	8.08651	0.0560362	25.3715	531.219
Std Vapor Volumetric Flow	MMSCFD	0.0014464	1.16847E-05	0.00465696	0.173237
Std Liquid Volumetric Flow	sgpm	0.0292357	0.000218741	0.0976231	2.62946
API Gravity					
Net Ideal Gas Heating Value	Btu/ft^3	2574.25	2216.45	2583.24	1475.46

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Tankage Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	



* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Connections

	BTEX Cond Vapors to Combustion (Output Tab)	Cond Tank Inlet	Condensate Sales Liquid (Output Tab)	Condensate Tank Flash Gas (Output Tab)	LPS Outlet Oil
From Block	MIX-104	MIX-103	SPLT-101	Condensate Tanks	Cond. Tank
To Block	Tankage - BTEX Vapors to Combustion	Condensate Tanks	Tankage - Condensate Sales Liquid	Tankage - Condensate Tank Flash Gas	MIX-103

Stream Composition

	BTEX Cond Vapors to Combustion (Output Tab) lb/h	Cond Tank Inlet lb/h	Condensate Sales Liquid (Output Tab) lb/h	Condensate Tank Flash Gas (Output Tab) lb/h	LPS Outlet Oil lb/h
Triethylene Glycol	2.74658E-08	0.000128704	0.000128693	1.12085E-08	0.000127574
Water	1.28909	2.36539	0.816108	1.54928	2.34408
Hydrogen Sulfide	0.122278	0.0134878	0.00728024	0.00620753	0.0133745
Carbon Dioxide	2.41269	0.391596	0.111811	0.279785	0.389013
Nitrogen	0.00950953	0.0173333	0.000651345	0.016682	0.0173219
Methane	8.02733	11.9402	1.47659	10.4636	11.9215
Ethane	15.7294	73.6349	34.896	38.739	73.3267
Propane	23.7955	291.937	222.276	69.6605	289.939
Isobutane	4.9954	193.644	171.85	21.7939	192.021
n-Butane	16.7525	603.096	554.988	48.1086	597.768
Isopentane	7.15944	506.65	489.378	17.2713	501.843
n-Pentane	9.68102	775.61	755.496	20.1132	768.158
i-C6	7.31264	1861.71	1842.08	19.6302	1843.4
i-C7	3.04362	4101.71	4087.59	14.1246	4060.91
Octane	0.148497	4061.7	4058.68	3.01806	4021.13
Nonane	0.00536763	2559.58	2558.99	0.59095	2534
Benzene	4.10557	86.0659	85.4454	0.620453	85.2158
Toluene	2.8356	446.194	445.246	0.947786	441.747
Ethylbenzene	0.0180218	39.044	39.0168	0.0272486	38.654
o-Xylene	0.215016	566.812	566.494	0.317312	561.149
n-Hexane	3.05492	1226.49	1217.51	8.97893	1214.36
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	3.67321E-05	1364.51	1364.46	0.0476077	1350.87
Decanes Plus Sat	0	0	0	0	0

	BTEX Cond Vapors to Combustion (Output Tab) %	Cond Tank Inlet %	Condensate Sales Liquid (Output Tab) %	Condensate Tank Flash Gas (Output Tab) %	LPS Outlet Oil %
Triethylene Glycol	7.20461E-09	4.41167E-07	4.54849E-07	1.27366E-09	4.41536E-07
Water	2.81873	0.067587	0.0240442	1.46753	0.0676282
Hydrogen Sulfide	0.141334	0.000203718	0.00011338	0.00310817	0.000203969
Carbon Dioxide	2.15956	0.00458029	0.00134847	0.108486	0.00459425
Nitrogen	0.0133722	0.000318506	1.23409E-05	0.010162	0.000321385
Methane	19.7111	0.383126	0.048853	11.1303	0.38624
Ethane	20.6065	1.26057	0.615969	21.9849	1.26747
Propane	21.2574	3.40796	2.67547	26.958	3.4175
Isobutane	3.38562	1.715	1.56932	6.39868	1.71713
n-Butane	11.354	5.34128	5.06809	14.1246	5.34548
Isopentane	3.90895	3.61476	3.60014	4.08501	3.61523
n-Pentane	5.2857	5.53369	5.55785	4.75718	5.53373
i-C6	3.34273	11.1207	11.3456	3.88722	11.1181
i-C7	1.19653	21.0712	21.6518	2.40545	21.0642
Octane	0.0512099	18.3035	18.8588	0.450868	18.2966

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

	BTEX Cond Vapors to Combustion (Output Tab)	Cond Tank Inlet	Condensate Sales Liquid (Output Tab)	Condensate Tank Flash Gas (Output Tab)	LPS Outlet Oil
Mole Fraction	%	%	%	%	%
Nonane	0.00164861	10.273	10.59	0.0786273	10.269
Benzene	2.07046	0.567173	0.580598	0.135547	0.567022
Toluene	1.21231	2.49278	2.56485	0.175536	2.4919
Ethylbenzene	0.00668694	0.18931	0.195062	0.00437986	0.189239
o-Xylene	0.0797811	2.74826	2.83216	0.0510037	2.74722
n-Hexane	1.39646	7.32624	7.4988	1.77803	7.32421
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	9.43259E-06	4.57881	4.72106	0.00529601	4.57703
Decanes Plus Sat	0	0	0	0	0

	BTEX Cond Vapors to Combustion (Output Tab)	Cond Tank Inlet	Condensate Sales Liquid (Output Tab)	Condensate Tank Flash Gas (Output Tab)	LPS Outlet Oil
Mass Fraction	%	%	%	%	%
Triethylene Glycol	2.4808E-08	6.85578E-07	6.95759E-07	4.05656E-09	6.8628E-07
Water	1.16435	0.0125999	0.00441216	0.560714	0.0126099
Hydrogen Sulfide	0.110445	7.18462E-05	3.93594E-05	0.00224662	7.1948E-05
Carbon Dioxide	2.17922	0.00208594	0.000604489	0.101259	0.00209269
Nitrogen	0.00858932	9.23306E-05	3.52139E-06	0.00603752	9.31826E-05
Methane	7.25054	0.0636026	0.00798293	3.78698	0.0641315
Ethane	14.2073	0.392236	0.188659	14.0204	0.394459
Propane	21.4928	1.55508	1.2017	25.2114	1.55972
Isobutane	4.51201	1.0315	0.929081	7.88763	1.03297
n-Butane	15.1314	3.21255	3.00045	17.4114	3.21568
Isopentane	6.46664	2.6988	2.64574	6.2508	2.69965
n-Pentane	8.74421	4.13149	4.08447	7.27936	4.13229
i-C6	6.60502	9.91691	9.95892	7.10455	9.91651
i-C7	2.7491	21.8489	22.0989	5.11195	21.8456
Octane	0.134127	21.6357	21.9426	1.09229	21.6316
Nonane	0.00484822	13.6343	13.8348	0.213876	13.6316
Benzene	3.70829	0.458453	0.461947	0.224554	0.458417
Toluene	2.5612	2.37677	2.40715	0.343021	2.37637
Ethylbenzene	0.0162779	0.207978	0.210938	0.00986179	0.207939
o-Xylene	0.19421	3.01927	3.06266	0.114841	3.01869
n-Hexane	2.75931	6.53321	6.58226	3.24964	6.53262
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	3.31776E-05	7.26843	7.37675	0.0172301	7.26696
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	BTEX Cond Vapors to Combustion (Output Tab)	Cond Tank Inlet	Condensate Sales Liquid (Output Tab)	Condensate Tank Flash Gas (Output Tab)	LPS Outlet Oil
Temperature	°F	70	78.8134	80	80 *	83
Pressure	psig	0	0.25	0.25	0.25 *	16
Molecular Weight	lb/lbmol	43.6125	96.6357	98.1748	47.1505	96.6176
Mass Flow	lb/h	110.713	18773.1	18496.8	276.305	18589.2
Std Vapor Volumetric Flow	MMSCFD	0.0231203	1.76931	1.71594	0.0533713	1.7523
Std Liquid Volumetric Flow	sgpm	0.430083	54.4028	53.3336	1.06919	53.873
API Gravity				70.8305		71.4577
Net Ideal Gas Heating Value	Btu/ft^3	2192.12	4877.64	4953.36	2443.31	4876.76

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

		Process Streams Report All Streams Tabulated by Total Phase					
		Client Name:	DELAWARE DIVISION			Job:	
		Location:	Tiger Compressor Station				
		Flowsheet:	Tankage				

Process Streams Report All Streams Tabulated by Total Phase		
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Connections					
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	Produced Water Sales Liquid (Output Tab)	PW Tank Inlet	Skim Tank Flash Gas (Output Tab)	Skim Tank Inlet	Skim Tank Inlet (Output Tab)
From Block	PW Tanks	Skim Tanks	Skim Tanks	VLVE-100	SPLT-100
To Block	Tankage - Produced Water Sales Liquid	PW Tanks	Tankage - Skim Flash Gas	Skim Tanks	Tankage - Skim Tank Inlet

Stream Composition					
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	Produced Water Sales Liquid (Output Tab) lb/h	PW Tank Inlet lb/h	Skim Tank Flash Gas (Output Tab) lb/h	Skim Tank Inlet lb/h	Skim Tank Inlet (Output Tab) lb/h
Mass Flow					
Triethylene Glycol	1.04797	1.04797	1.50792E-10	1.04798	1.04798
Water	7601.79	7601.79	0.0626021	7601.87	7601.87
Hydrogen Sulfide	0.000887266	0.000890391	0.000149722	0.00115335	0.00115335
Carbon Dioxide	0.0193386	0.0195461	0.0100285	0.0321572	0.0321572
Nitrogen	1.57932E-05	2.20172E-05	0.000456294	0.000489771	0.000489771
Methane	0.0170685	0.020362	0.205749	0.244799	0.244799
Ethane	0.0669842	0.0766179	0.53123	0.91607	0.91607
Propane	0.0813613	0.0982427	0.971529	3.0673	3.0673
Isobutane	0.0163155	0.0218871	0.319414	1.96453	1.96453
n-Butane	0.0540996	0.0662813	0.716667	6.11129	6.11129
Isopentane	0.0124764	0.0168638	0.263099	5.08638	5.08638
n-Pentane	0.00474699	0.00816216	0.307627	7.76767	7.76767
i-C6	0.00680985	0.0107905	0.302672	18.631	18.631
i-C7	0.00246829	0.00510348	0.218479	41.0243	41.0243
Octane	5.66114E-05	0.000259517	0.0467206	40.6177	40.6177
Nonane	8.4367E-06	4.89208E-05	0.00915743	25.596	25.596
Benzene	0.118664	0.118904	0.00955305	0.978505	0.978505
Toluene	0.136595	0.136956	0.0146455	4.59819	4.59819
Ethylbenzene	0.00344563	0.00345676	0.00042133	0.393866	0.393866
o-Xylene	0.0599056	0.0600338	0.00490694	5.72779	5.72779
n-Hexane	0.00116832	0.00247509	0.138669	12.2688	12.2688
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000771818	0.000792279	0.000736482	13.6459	13.6459
Decanes Plus Sat	0	0	0	0	0

	Produced Water Sales Liquid (Output Tab) %	PW Tank Inlet %	Skim Tank Flash Gas (Output Tab) %	Skim Tank Inlet %	Skim Tank Inlet (Output Tab) %
Mole Fraction					
Triethylene Glycol	0.00165374	0.00165373	1.11441E-09	0.00164609	0.00164609
Water	99.9958	99.9955	3.85664	99.5348	99.5348
Hydrogen Sulfide	6.1695E-06	6.19121E-06	0.0048757	7.98259E-06	7.98259E-06
Carbon Dioxide	0.000104132	0.000105249	0.2529	0.000172356	0.000172356
Nitrogen	1.33601E-07	1.86252E-07	0.0180776	4.12403E-06	4.12403E-06
Methane	0.000252133	0.000300783	14.2341	0.00359943	0.00359943
Ethane	0.00052791	0.000603832	19.6076	0.00718628	0.00718628
Propane	0.000437249	0.000527971	24.4524	0.016408	0.016408
Isobutane	6.65221E-05	8.92384E-05	6.0992	0.00797282	0.00797282
n-Butane	0.000220577	0.000270243	13.6848	0.0248019	0.0248019
Isopentane	4.09797E-05	5.53899E-05	4.04716	0.0166293	0.0166293
n-Pentane	1.55918E-05	2.68091E-05	4.73214	0.0253955	0.0253955
i-C6	1.87267E-05	2.96732E-05	3.89808	0.0509975	0.0509975
i-C7	5.83751E-06	1.20697E-05	2.41988	0.096574	0.096574
Octane	1.17445E-07	5.38389E-07	0.453936	0.0838757	0.0838757

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

	Produced Water Sales Liquid (Output Tab)	PW Tank Inlet	Skim Tank Flash Gas (Output Tab)	Skim Tank Inlet	Skim Tank Inlet (Output Tab)
Mole Fraction	%	%	%	%	%
Nonane	1.55885E-08	9.03908E-08	0.0792429	0.0470752	0.0470752
Benzene	0.000360007	0.000360731	0.135733	0.00295489	0.00295489
Toluene	0.000351318	0.000352246	0.176411	0.0117718	0.0117718
Ethylbenzene	7.6912E-06	7.71602E-06	0.00440456	0.00087511	0.00087511
o-Xylene	0.000133719	0.000134005	0.0512968	0.0127263	0.0127263
n-Hexane	3.21281E-06	6.80633E-06	1.7859	0.0335825	0.0335825
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.19233E-06	1.22393E-06	0.00532841	0.0209832	0.0209832
Decanes Plus Sat	0	0	0	0	0

	Produced Water Sales Liquid (Output Tab)	PW Tank Inlet	Skim Tank Flash Gas (Output Tab)	Skim Tank Inlet	Skim Tank Inlet (Output Tab)
Mass Fraction	%	%	%	%	%
Triethylene Glycol	0.0137829	0.0137828	3.64714E-09	0.0134501	0.0134501
Water	99.9783	99.9774	1.51414	97.565	97.565
Hydrogen Sulfide	1.16693E-05	1.17103E-05	0.00362128	1.48024E-05	1.48024E-05
Carbon Dioxide	0.00025434	0.000257067	0.242555	0.000412716	0.000412716
Nitrogen	2.07711E-07	2.89566E-07	0.0110362	6.28589E-06	6.28589E-06
Methane	0.000224483	0.000267797	4.97639	0.00314183	0.00314183
Ethane	0.000880973	0.00100767	12.8487	0.0117572	0.0117572
Propane	0.00107006	0.00129207	23.498	0.0393668	0.0393668
Isobutane	0.000214581	0.000287855	7.72555	0.0252135	0.0252135
n-Butane	0.000711515	0.00087172	17.3338	0.0784343	0.0784343
Isopentane	0.000164089	0.000221789	6.36347	0.0652803	0.0652803
n-Pentane	6.24322E-05	0.000107347	7.44047	0.0996929	0.0996929
i-C6	8.95627E-05	0.000141915	7.32062	0.239117	0.239117
i-C7	3.24628E-05	6.71201E-05	5.28427	0.52652	0.52652
Octane	7.4455E-07	3.41312E-06	1.13001	0.521301	0.521301
Nonane	1.10959E-07	6.43398E-07	0.221487	0.328507	0.328507
Benzene	0.00156067	0.0015638	0.231056	0.0125585	0.0125585
Toluene	0.00179649	0.00180122	0.354225	0.0590148	0.0590148
Ethylbenzene	4.53167E-05	4.54627E-05	0.0101906	0.00505502	0.00505502
o-Xylene	0.000787875	0.000789554	0.118682	0.0735124	0.0735124
n-Hexane	1.53656E-05	3.2552E-05	3.35394	0.157462	0.157462
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.01509E-05	1.04199E-05	0.017813	0.175136	0.175136
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	Produced Water Sales Liquid (Output Tab)	PW Tank Inlet	Skim Tank Flash Gas (Output Tab)	Skim Tank Inlet	Skim Tank Inlet (Output Tab)
Temperature	°F	100	80	80 *	82.94	83
Pressure	psig	0.25	0.25	0.25	0.25 *	16
Molecular Weight	lb/lbmol	18.0184	18.0185	45.8866	18.379	18.379
Mass Flow	lb/h	7603.44	7603.51	4.13451	7791.6	7791.6
Std Vapor Volumetric Flow	MMSCFD	3.84324	3.84326	0.000820622	3.86109	3.86109
Std Liquid Volumetric Flow	sgpm	15.2003	15.2006	0.015939	15.7463	15.7463
API Gravity		9.99723	9.99771			11.5003
Net Ideal Gas Heating Value	Btu/ft^3	0.130401	0.138366	2352.33	22.5263	22.5263

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

		Process Streams Report All Streams Tabulated by Total Phase					
		Client Name:	DELAWARE DIVISION			Job:	
		Location:	Tiger Compressor Station				
		Flowsheet:	Tankage				

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Connections

	Water Tank Flash Gas (Output Tab)	1	2	3	4
From Block	PW Tanks	BTEX 2 COND VAPORS	LIQUIDS TO STORAGE	FS LIQUIDS	FT CON1
To Block	Tankage - Water Tank Flash Gas	MIX-104	MIX-100	MIX-100	MIX-105

Stream Composition

	Water Tank Flash Gas (Output Tab) lb/h	1 lb/h	2 lb/h	3 lb/h	4 lb/h
Triethylene Glycol	1.24313E-11	9.20204E-09	1.04798		
Water	0.0020012	0.42969	7601.87		
Hydrogen Sulfide	3.1256E-06	0.0407566	0.00115335		
Carbon Dioxide	0.000207556	0.803996	0.0321572		
Nitrogen	6.22399E-06	0.0031683	0.000489771		
Methane	0.0032935	2.67493	0.244799		
Ethane	0.00963364	5.24242	0.91607		
Propane	0.0168815	7.93186	3.0673		
Isobutane	0.00557158	1.66532	1.96453		
n-Butane	0.0121817	5.58491	6.11129		
Isopentane	0.00438731	2.3873	5.08638		
n-Pentane	0.00341517	3.22858	7.76767		
i-C6	0.00398066	2.43875	18.631		
i-C7	0.00263519	1.01515	41.0243		
Octane	0.000202906	0.0495419	40.6177		
Nonane	4.04841E-05	0.00179078	25.596		
Benzene	0.00023919	1.36858	0.978505		
Toluene	0.00036139	0.944752	4.59819		
Ethylbenzene	1.11296E-05	0.00600242	0.393866		
o-Xylene	0.000128194	0.0715393	5.72779		
n-Hexane	0.00130677	1.01894	12.2688		
2,2,4-Trimethylpentane	0	0	0		
Decanes Plus	2.04607E-05	1.22293E-05	13.6459		
Decanes Plus Sat	0	0	0		

	Water Tank Flash Gas (Output Tab) %	1 %	2 %	3 %	4 %
Triethylene Glycol	5.38792E-09	7.24152E-09	0.00164609		
Water	7.2301	2.81872	99.5348		
Hydrogen Sulfide	0.00596922	0.141327	7.98259E-06		
Carbon Dioxide	0.306962	2.15896	0.000172356		
Nitrogen	0.014461	0.0133659	4.12403E-06		
Methane	13.3623	19.7051	0.00359943		
Ethane	20.8529	20.6039	0.00718628		
Propane	24.9178	21.2577	0.016408		
Isobutane	6.23923	3.38605	0.00797282		
n-Butane	13.6414	11.3556	0.0248019		
Isopentane	3.9579	3.91035	0.0166293		
n-Pentane	3.0809	5.28835	0.0253955		
i-C6	3.00654	3.34442	0.0509975		
i-C7	1.71171	1.19727	0.096574		
Octane	0.115615	0.0512549	0.0838757		
Nonane	0.0205449	0.00165008	0.0470752		
Benzene	0.199307	2.07057	0.00295489		
Toluene	0.255288	1.21175	0.0117718		

* User Specified Values
 ? Extrapolated or Approximate Values

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Process Streams Report					
All Streams					
Tabulated by Total Phase					

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

	Water Tank Flash Gas (Output Tab) %	1 %	2 %	3 %	4 %
Mole Fraction					
Ethylbenzene	0.00682325	0.00668163	0.00087511		
o-Xylene	0.0785924	0.0796343	0.0127263		
n-Hexane	0.986988	1.39734	0.0335825		
2,2,4-Trimethylpentane	0	0	0		
Decanes Plus	0.00868139	9.42132E-06	0.0209832		
Decanes Plus Sat	0	0	0		

	Water Tank Flash Gas (Output Tab) %	1 %	2 %	3 %	4 %
Mass Fraction					
Triethylene Glycol	1.86913E-08	2.49324E-08	0.0134501		
Water	3.00893	1.16422	97.565		
Hydrogen Sulfide	0.00469953	0.110428	1.48024E-05		
Carbon Dioxide	0.312073	2.17838	0.000412716		
Nitrogen	0.00935814	0.00858431	6.28589E-06		
Methane	4.95198	7.24756	0.00314183		
Ethane	14.4848	14.204	0.0117572		
Propane	25.3823	21.4909	0.0393668		
Isobutane	8.3772	4.5121	0.0252135		
n-Butane	18.3159	15.132	0.0784343		
Isopentane	6.59659	6.46825	0.0652803		
n-Pentane	5.13491	8.74765	0.0996929		
i-C6	5.98517	6.60764	0.239117		
i-C7	3.96217	2.75049	0.52652		
Octane	0.305081	0.134231	0.521301		
Nonane	0.0608703	0.00485201	0.328507		
Benzene	0.359637	3.70809	0.0125585		
Toluene	0.543372	2.55975	0.0590148		
Ethylbenzene	0.016734	0.0162632	0.00505502		
o-Xylene	0.192747	0.193831	0.0735124		
n-Hexane	1.96481	2.76076	0.157462		
2,2,4-Trimethylpentane	0	0	0		
Decanes Plus	0.0307638	3.31344E-05	0.175136		
Decanes Plus Sat	0	0	0		

Stream Properties						
Property	Units	Water Tank Flash Gas (Output Tab)	1	2	3	4
Temperature	°F	100 *	70	83		
Pressure	psig	0.25 *	0	16	0.25	55
Molecular Weight	lb/lbmol	43.2887	43.6172	18.379		
Mass Flow	lb/h	0.0665088	36.908	7791.6	0	0
Std Vapor Volumetric Flow	MMSCFD	1.3993E-05	0.00770669	3.86109	0	0
Std Liquid Volumetric Flow	sgpm	0.000259569	0.143368	15.7463	0	0
API Gravity				11.5003		
Net Ideal Gas Heating Value	Btu/ft^3	2187.56	2192.37	22.5263		

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Connections

	5	6	7	8	9
From Block	Condensate Tanks	BTEX COND. VAPORS 1	SPLT-101	SPLT-100	MIX-100
To Block	SPLT-101	MIX-104	--	VLVE-100	SPLT-100

Stream Composition

Mass Flow	5 lb/h	6 lb/h	7 lb/h	8 lb/h	9 lb/h
Triethylene Glycol	0.000128693	9.20204E-09	0.000128693	1.04798	1.04798
Water	0.816108	0.42969	0.816108	7601.87	7601.87
Hydrogen Sulfide	0.00728024	0.0407566	0.00728024	0.00115335	0.00115335
Carbon Dioxide	0.111811	0.803996	0.111811	0.0321572	0.0321572
Nitrogen	0.000651345	0.0031683	0.000651345	0.000489771	0.000489771
Methane	1.47659	2.67493	1.47659	0.244799	0.244799
Ethane	34.896	5.24242	34.896	0.91607	0.91607
Propane	222.276	7.93186	222.276	3.0673	3.0673
Isobutane	171.85	1.66532	171.85	1.96453	1.96453
n-Butane	554.988	5.58491	554.988	6.11129	6.11129
Isopentane	489.378	2.3873	489.378	5.08638	5.08638
n-Pentane	755.496	3.22858	755.496	7.76767	7.76767
i-C6	1842.08	2.43875	1842.08	18.631	18.631
i-C7	4087.59	1.01515	4087.59	41.0243	41.0243
Octane	4058.68	0.0495419	4058.68	40.6177	40.6177
Nonane	2558.99	0.00179078	2558.99	25.596	25.596
Benzene	85.4454	1.36858	85.4454	0.978505	0.978505
Toluene	445.246	0.944752	445.246	4.59819	4.59819
Ethylbenzene	39.0168	0.00600242	39.0168	0.393866	0.393866
o-Xylene	566.494	0.0715393	566.494	5.72779	5.72779
n-Hexane	1217.51	1.01894	1217.51	12.2688	12.2688
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1364.46	1.22293E-05	1364.46	13.6459	13.6459
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol	4.54849E-07	7.24152E-09	4.54849E-07	0.00164609	0.00164609
Water	0.0240442	2.81872	0.0240442	99.5348	99.5348
Hydrogen Sulfide	0.00011338	0.141327	0.00011338	7.98259E-06	7.98259E-06
Carbon Dioxide	0.00134847	2.15896	0.00134847	0.000172356	0.000172356
Nitrogen	1.23409E-05	0.0133659	1.23409E-05	4.12403E-06	4.12403E-06
Methane	0.048853	19.7051	0.048853	0.00359943	0.00359943
Ethane	0.615969	20.6039	0.615969	0.00718628	0.00718628
Propane	2.67547	21.2577	2.67547	0.016408	0.016408
Isobutane	1.56932	3.38605	1.56932	0.00797282	0.00797282
n-Butane	5.06809	11.3556	5.06809	0.0248019	0.0248019
Isopentane	3.60014	3.91035	3.60014	0.0166293	0.0166293
n-Pentane	5.55785	5.28835	5.55785	0.0253955	0.0253955
i-C6	11.3456	3.34442	11.3456	0.0509975	0.0509975
i-C7	21.6518	1.19727	21.6518	0.096574	0.096574
Octane	18.8588	0.0512549	18.8588	0.0838757	0.0838757
Nonane	10.59	0.00165008	10.59	0.0470752	0.0470752
Benzene	0.580598	2.07057	0.580598	0.00295489	0.00295489
Toluene	2.56485	1.21175	2.56485	0.0117718	0.0117718
Ethylbenzene	0.195062	0.00668163	0.195062	0.00087511	0.00087511
o-Xylene	2.83216	0.0796343	2.83216	0.0127263	0.0127263
n-Hexane	7.4988	1.39734	7.4988	0.0335825	0.0335825
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	4.72106	9.42132E-06	4.72106	0.0209832	0.0209832
Decanes Plus Sat	0	0	0	0	0

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Mass Fraction	5 %	6 %	7 %	8 %	9 %
Triethylene Glycol	6.95759E-07	2.49324E-08	6.95759E-07	0.0134501	0.0134501
Water	0.00441216	1.16422	0.00441216	97.565	97.565
Hydrogen Sulfide	3.93594E-05	0.110428	3.93594E-05	1.48024E-05	1.48024E-05
Carbon Dioxide	0.000604489	2.17838	0.000604489	0.000412716	0.000412716
Nitrogen	3.52139E-06	0.00858431	3.52139E-06	6.28589E-06	6.28589E-06
Methane	0.00798293	7.24756	0.00798293	0.00314183	0.00314183
Ethane	0.188659	14.204	0.188659	0.0117572	0.0117572
Propane	1.2017	21.4909	1.2017	0.0393668	0.0393668
Isobutane	0.929081	4.5121	0.929081	0.0252135	0.0252135
n-Butane	3.00045	15.132	3.00045	0.0784343	0.0784343
Isopentane	2.64574	6.46825	2.64574	0.0652803	0.0652803
n-Pentane	4.08447	8.74765	4.08447	0.0996929	0.0996929
i-C6	9.95892	6.60764	9.95892	0.239117	0.239117
i-C7	22.0989	2.75049	22.0989	0.52652	0.52652
Octane	21.9426	0.134231	21.9426	0.521301	0.521301
Nonane	13.8348	0.00485201	13.8348	0.328507	0.328507
Benzene	0.461947	3.70809	0.461947	0.0125585	0.0125585
Toluene	2.40715	2.55975	2.40715	0.0590148	0.0590148
Ethylbenzene	0.210938	0.0162632	0.210938	0.00505502	0.00505502
o-Xylene	3.06266	0.193831	3.06266	0.0735124	0.0735124
n-Hexane	6.58226	2.76076	6.58226	0.157462	0.157462
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	7.37675	3.31344E-05	7.37675	0.175136	0.175136
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	5	6	7	8	9
Temperature	°F	80	70	80	83	83
Pressure	psig	0.25	0	0.25	16	16
Molecular Weight	lb/lbmol	98.1748	43.6172	98.1748	18.379	18.379
Mass Flow	lb/h	18496.8	36.908	18496.8	7791.6	7791.6
Std Vapor Volumetric Flow	MMSCFD	1.71594	0.00770669	1.71594	3.86109	3.86109
Std Liquid Volumetric Flow	sgpm	53.3336	0.143368	53.3336	15.7463	15.7463
API Gravity		70.8305		70.8305	11.5003	11.5003
Net Ideal Gas Heating Value	Btu/ft ³	4953.36	2192.37	4953.36	22.5263	22.5263

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Connections

	10	16	19	21	22
From Block	Skim Tanks	BTEX 3 COND VAPORS	FT CON 3	FT CON 2	MIX-105
To Block	MIX-103	MIX-104	MIX-105	MIX-105	MIX-100

Stream Composition

Mass Flow	10 lb/h	16 lb/h	19 lb/h	21 lb/h	22 lb/h
Triethylene Glycol	1.13066E-06	9.06168E-09			
Water	0.0213141	0.42971			
Hydrogen Sulfide	0.000113232	0.0407647			
Carbon Dioxide	0.0025826	0.804695			
Nitrogen	1.14594E-05	0.00317294			
Methane	0.0186877	2.67747			
Ethane	0.308223	5.24461			
Propane	1.99753	7.93176			
Isobutane	1.62323	1.66475			
n-Butane	5.32834	5.58267			
Isopentane	4.80641	2.38484			
n-Pentane	7.45188	3.22385			
i-C6	18.3176	2.43515			
i-C7	40.8007	1.01331			
Octane	40.5707	0.0494131			
Nonane	25.5868	0.00178607			
Benzene	0.850049	1.36841			
Toluene	4.44659	0.946093			
Ethylbenzene	0.389988	0.00601697			
o-Xylene	5.66285	0.0719375			
n-Hexane	12.1276	1.01704			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	13.6444	1.22736E-05			
Decanes Plus Sat	0	0			

Mole Fraction	10 %	16 %	19 %	21 %	22 %
Triethylene Glycol	4.03115E-07	7.1308E-09			
Water	0.0633453	2.81874			
Hydrogen Sulfide	0.000177888	0.141349			
Carbon Dioxide	0.00314195	2.16076			
Nitrogen	2.19021E-05	0.013385			
Methane	0.0623698	19.7231			
Ethane	0.548825	20.6117			
Propane	2.42542	21.2567			
Isobutane	1.49529	3.38477			
n-Butane	4.90838	11.3507			
Isopentane	3.56682	3.90616			
n-Pentane	5.53	5.2804			
i-C6	11.3808	3.33936			
i-C7	21.8012	1.19506			
Octane	19.0163	0.0511197			
Nonane	10.6814	0.00164568			
Benzene	0.58266	2.07024			
Toluene	2.5839	1.21343			
Ethylbenzene	0.196679	0.00669758			
o-Xylene	2.8559	0.0800746			
n-Hexane	7.53497	1.39468			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	4.7623	9.45513E-06			
Decanes Plus Sat	0	0			

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	Tankage	

Mass Fraction	10 %	16 %	19 %	21 %	22 %
Triethylene Glycol	6.14638E-07	2.45591E-08			
Water	0.0115865	1.16461			
Hydrogen Sulfide	6.1554E-05	0.110481			
Carbon Dioxide	0.00140392	2.1809			
Nitrogen	6.22946E-06	0.00859934			
Methane	0.0101588	7.25652			
Ethane	0.167553	14.214			
Propane	1.08588	21.4968			
Isobutane	0.882403	4.51184			
n-Butane	2.89653	15.1302			
Isopentane	2.61281	6.46341			
n-Pentane	4.05091	8.73733			
i-C6	9.95761	6.59977			
i-C7	22.1797	2.7463			
Octane	22.0546	0.13392			
Nonane	13.9092	0.00484063			
Benzene	0.462094	3.70868			
Toluene	2.41721	2.56411			
Ethylbenzene	0.212001	0.0163073			
o-Xylene	3.07838	0.194966			
n-Hexane	6.59269	2.75639			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	7.41721	3.32641E-05			
Decanes Plus Sat	0	0			

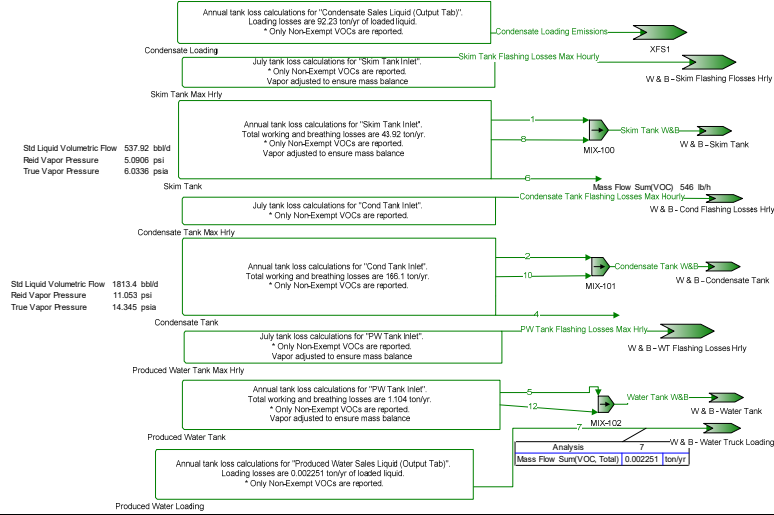
Stream Properties

Property	Units	10	16	19	21	22
Temperature	°F	80	70			
Pressure	psig	0.25	0	55	55	55
Molecular Weight	lb/lbmol	98.4922	43.6031			
Mass Flow	lb/h	183.956	36.8975	0	0	0
Std Vapor Volumetric Flow	MMSCFD	0.0170105	0.00770697	0	0	0
Std Liquid Volumetric Flow	sgpm	0.529813	0.143347	0	0	0
API Gravity		70.6383				
Net Ideal Gas Heating Value	Btu/ft ³	4968.34	2191.62			

Remarks

W & B Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	



* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report All Streams

Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Connections

	Condensate Loading Emissions	Condensate Tank Flashing Losses Max Hourly	Condensate Tank W&B	PW Tank Flashing Losses Max Hrly	Skim Tank Flashing Losses Max Hourly
From Block	--	--	MIX-101	--	--
To Block	XFS1	W & B - Cond Flashing Losses Hrlly	W & B - Condensate Tank	W & B - WT Flashing Losses Hrlly	W & B - Skim Flashing Flosses Hrlly

Stream Composition

	Condensate Loading Emissions lb/h	Condensate Tank Flashing Losses Max Hourly lb/h	Condensate Tank W&B lb/h	PW Tank Flashing Losses Max Hrlly lb/h	Skim Tank Flashing Losses Max Hourly lb/h
Triethylene Glycol	7.46149E-13	1.0776E-11	1.34E-12	7.18752E-12	9.87002E-10
Water	7.15166E-05	0.000379734	0.000132133	0.00145968	0.18723
Hydrogen Sulfide	0.000456564	0.00515401	0.000807839	2.53607E-06	0.000277775
Carbon Dioxide	0.0191992	0.116558	0.0373954	0.000168575	0.0157294
Nitrogen	2.03718E-05	0.00076804	0.000114057	5.42898E-06	0.000471781
Methane	0.132091	1.29562	0.351547	0.00280829	0.223191
Ethane	4.16206	43.2577	7.45441	0.00801737	0.682315
Propane	7.14154	147.738	12.6542	0.0141441	1.56268
Isobutane	2.01921	49.4307	3.63272	0.00464876	0.614413
n-Butane	4.45555	155.836	8.05881	0.0102456	1.46956
Isopentane	1.51692	51.5781	2.76423	0.00369061	0.60668
n-Pentane	1.74216	61.3891	3.17806	0.00305083	0.732079
i-C6	1.75486	24.8127	3.20771	0.00347327	0.773522
i-C7	1.21009	27.1578	2.21049	0.00231498	0.599541
Octane	0.234218	5.0199	0.42647	0.000193729	0.139403
Nonane	0.0394098	0.554904	0.0717432	3.85315E-05	0.0290926
Benzene	0.0365606	1.87864	0.0667575	0.00018547	0.0247968
Toluene	0.0567571	1.55388	0.103546	0.00028123	0.0408313
Ethylbenzene	0.00165221	0.0453497	0.00300814	8.52015E-06	0.00124839
o-Xylene	0.0167327	0.306669	0.0304454	9.83813E-05	0.0146542
n-Hexane	0.828963	17.6232	1.51521	0.00118472	0.366271
2,2,4-Trimethylpentane	0	1.08231	0	0	0
Decanes Plus	0.00294831	0.000366104	0.00533432	1.54851E-05	0.00252559
Decanes Plus Sat	0	0	0	0	0

	Condensate Loading Emissions %	Condensate Tank Flashing Losses Max Hourly %	Condensate Tank W&B %	PW Tank Flashing Losses Max Hrlly %	Skim Tank Flashing Losses Max Hourly %
Triethylene Glycol	9.71709E-13	6.62247E-13	9.64986E-13	3.73058E-09	4.1385E-09
Water	0.000776369	0.000194532	0.000793187	6.31546	6.54412
Hydrogen Sulfide	0.00261995	0.00139568	0.00256343	0.00580014	0.00513215
Carbon Dioxide	0.0853177	0.0244426	0.0918921	0.298563	0.225051
Nitrogen	0.000142222	0.000253029	0.000440314	0.0151057	0.0106045
Methane	1.61029	0.745348	2.36984	13.6446	8.76035
Ethane	27.0702	13.2769	26.8102	20.7827	14.2883
Propane	31.6737	30.9207	31.0346	25.0017	22.3147
Isobutane	6.79427	7.84887	6.75921	6.23424	6.65633
n-Butane	14.9921	24.7445	14.9946	13.74	15.9206
Isopentane	4.11183	6.59765	4.14335	3.98711	5.29477
n-Pentane	4.72239	7.85262	4.76365	3.29593	6.38918
i-C6	3.98256	2.65732	4.02548	3.14156	5.65205
i-C7	2.36181	2.50133	2.38571	1.80078	3.76755
Octane	0.401004	0.405576	0.403758	0.132193	0.768448
Nonane	0.0600941	0.0399297	0.060494	0.0234169	0.142831
Benzene	0.0915376	0.221963	0.0924251	0.185074	0.199892

* User Specified Values

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? Extrapolated or Approximate Values

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Process Streams Report					
All Streams					
Tabulated by Total Phase					

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

	Condensate Loading Emissions	Condensate Tank Flashing Losses Max Hourly	Condensate Tank W&B	PW Tank Flashing Losses Max Hrly	Skim Tank Flashing Losses Max Hourly
Mole Fraction	%	%	%	%	%
Toluene	0.120471	0.155643	0.121535	0.237908	0.279042
Ethylbenzene	0.0030436	0.00394226	0.00306425	0.00625539	0.00740431
o-Xylene	0.0308238	0.0266588	0.0310132	0.0722304	0.0869154
n-Hexane	1.88129	1.88736	1.9015	1.07157	2.6763
2,2,4-Trimethylpentane	0	0.0874435	0	0	0
Decanes Plus	0.0037588	2.20258E-05	0.00376063	0.00786823	0.010367
Decanes Plus Sat	0	0	0	0	0

	Condensate Loading Emissions	Condensate Tank Flashing Losses Max Hourly	Condensate Tank W&B	PW Tank Flashing Losses Max Hrly	Skim Tank Flashing Losses Max Hourly
Mass Fraction	%	%	%	%	%
Triethylene Glycol	2.9409E-12	1.82433E-12	2.92749E-12	1.28266E-08	1.22055E-08
Water	0.000281878	6.42871E-05	0.000288668	2.60488	2.31534
Hydrogen Sulfide	0.00179952	0.00087255	0.00176487	0.00452577	0.00343505
Carbon Dioxide	0.0756723	0.0197327	0.0816971	0.300833	0.194514
Nitrogen	8.02943E-05	0.000130026	0.000249179	0.00968834	0.00583417
Methane	0.520627	0.219342	0.76802	5.01157	2.76004
Ethane	16.4045	7.32333	16.2856	14.3075	8.4377
Propane	28.1479	25.0113	27.6455	25.2411	19.3245
Isobutane	7.9586	8.36839	7.93635	8.29599	7.59801
n-Butane	17.5612	26.3823	17.606	18.284	18.1729
Isopentane	5.97883	8.73194	6.03898	6.58612	7.50238
n-Pentane	6.86661	10.3929	6.94306	5.4444	9.05309
i-C6	6.91667	4.20068	7.00783	6.19827	9.56559
i-C7	4.7695	4.59769	4.82922	4.13123	7.41409
Octane	0.923156	0.849845	0.931704	0.345721	1.7239
Nonane	0.155331	0.0939427	0.156736	0.0687618	0.359767
Benzene	0.144101	0.318045	0.145844	0.330983	0.306644
Toluene	0.223704	0.263065	0.226216	0.501872	0.504932
Ethylbenzene	0.00651209	0.00767749	0.00657185	0.0152047	0.0154379
o-Xylene	0.0659508	0.0519176	0.0665137	0.175567	0.181218
n-Hexane	3.2673	2.98352	3.31026	2.1142	4.5294
2,2,4-Trimethylpentane	0	0.183229	0	0	0
Decanes Plus	0.0116206	6.19796E-05	0.0116538	0.0276341	0.0312322
Decanes Plus Sat	0	0	0	0	0

Stream Properties						
Property	Units	Condensate Loading Emissions	Condensate Tank Flashing Losses Max Hourly	Condensate Tank W&B	PW Tank Flashing Losses Max Hrly	Skim Tank Flashing Losses Max Hourly
Temperature	°F	85.2658	97.6568	84.5587	94.9252	96.1635
Pressure	psig	3.40644	8.2542	2.99416	2.21707E-07	9.60098E-09
Molecular Weight	lb/lbmol	49.619	54.5139	49.5014	43.6775	50.9187
Mass Flow	lb/h	25.3715	590.684	45.7732	0.0560362	8.08651
Std Vapor Volumetric Flow	MMSCFD	0.00465696	0.0986853	0.00842167	1.16847E-05	0.0014464
Std Liquid Volumetric Flow	sgpm	0.0976231	2.13765	0.17619	0.000218741	0.0292357
API Gravity						
Net Ideal Gas Heating Value	Btu/ft^3	2583.24	2826.67	2577.13	2216.45	2574.25

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Connections

	Skim Tank W&B	Water Tank W&B	1	2	3
From Block	MIX-100	MIX-102	--	--	--
To Block	W & B - Skim Tank	W & B - Water Tank	MIX-100	MIX-101	--

Stream Composition

	Skim Tank W&B lb/h	Water Tank W&B lb/h	1 lb/h	2 lb/h	3 lb/h
Mass Flow					
Triethylene Glycol	4.35517E-10	3.95504E-10	3.7424E-10	1.21451E-12	7.20482E-13
Water	0.213611	0.200929	0.183556	0.000119758	7.10439E-05
Hydrogen Sulfide	0.000520847	0.000522553	0.000447564	0.000732183	0.000434352
Carbon Dioxide	0.0197634	0.0129523	0.0169827	0.0338932	0.0201064
Nitrogen	2.55266E-05	1.45898E-05	2.1935E-05	0.000103375	6.13251E-05
Methane	0.0303077	0.0134929	0.0260434	0.318624	0.189017
Ethane	0.314963	0.0507711	0.270647	6.75629	4.00803
Propane	1.85305	0.0651009	1.59233	11.4691	6.80381
Isobutane	1.08521	0.0145036	0.932519	3.2925	1.95321
n-Butane	2.47008	0.0439215	2.12254	7.30408	4.33299
Isopentane	0.923045	0.0111748	0.793173	2.50535	1.48625
n-Pentane	1.08093	0.00540868	0.92884	2.88042	1.70875
i-C6	1.06598	0.00715037	0.915997	2.9073	1.72469
i-C7	0.764081	0.00338184	0.656576	2.00347	1.18852
Octane	0.16089	0.00017197	0.138253	0.38653	0.229301
Nonane	0.0311803	3.24175E-05	0.0267932	0.0650242	0.0385743
Benzene	0.0335601	0.0320753	0.0288382	0.0605055	0.0358936
Toluene	0.0510061	0.049272	0.0438296	0.093849	0.0556739
Ethylbenzene	0.00145128	0.00139587	0.00124708	0.00272642	0.00161739
o-Xylene	0.0168785	0.0163015	0.0145037	0.0275941	0.0163696
n-Hexane	0.486766	0.00164013	0.418278	1.37331	0.814687
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00246119	0.000525006	0.0021149	0.00483475	0.00286811
Decanes Plus Sat	0	0	0	0	0

	Skim Tank W&B %	Water Tank W&B %	1 %	2 %	3 %
Mole Fraction					
Triethylene Glycol	1.5751E-09	1.46661E-08	1.5751E-09	9.64986E-13	9.64986E-13
Water	6.43987	62.1095	6.43987	0.000793187	0.000793187
Hydrogen Sulfide	0.0083003	0.0853837	0.0083003	0.00256343	0.00256343
Carbon Dioxide	0.243899	1.63891	0.243899	0.0918921	0.0918921
Nitrogen	0.000494905	0.00290027	0.000494905	0.000440314	0.000440314
Methane	1.02607	4.68371	1.02607	2.36984	2.36984
Ethane	5.68897	9.4027	5.68897	26.8102	26.8102
Propane	22.8237	8.22142	22.8237	31.0346	31.0346
Isobutane	10.1406	1.38959	10.1406	6.75921	6.75921
n-Butane	23.0815	4.20815	23.0815	14.9946	14.9946
Isopentane	6.94846	0.862516	6.94846	4.14335	4.14335
n-Pentane	8.13694	0.417463	8.13694	4.76365	4.76365
i-C6	6.71832	0.462063	6.71832	4.02548	4.02548
i-C7	4.1415	0.187946	4.1415	2.38571	2.38571
Octane	0.764977	0.00838365	0.764977	0.403758	0.403758
Nonane	0.132038	0.00140754	0.132038	0.060494	0.060494
Benzene	0.233346	2.2867	0.233346	0.0924251	0.0924251
Toluene	0.30066	2.97793	0.30066	0.121535	0.121535
Ethylbenzene	0.00742443	0.073218	0.00742443	0.00306425	0.00306425
o-Xylene	0.0863469	0.855072	0.0863469	0.0310132	0.0310132
n-Hexane	3.06783	0.105986	3.06783	1.9015	1.9015
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00871392	0.0190588	0.00871392	0.00376063	0.00376063

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

	Skim Tank W&B %	Water Tank W&B %	1 %	2 %	3 %
Mole Fraction					
Decanes Plus Sat	0	0	0	0	0

	Skim Tank W&B %	Water Tank W&B %	1 %	2 %	3 %
Mass Fraction					
Triethylene Glycol	4.10642E-09	7.45196E-08	4.10642E-09	2.92749E-12	2.92749E-12
Water	2.01411	37.8584	2.01411	0.000288668	0.000288668
Hydrogen Sulfide	0.00491099	0.0984577	0.00491099	0.00176487	0.00176487
Carbon Dioxide	0.186346	2.44043	0.186346	0.0816971	0.0816971
Nitrogen	0.000240686	0.00274895	0.000240686	0.000249179	0.000249179
Methane	0.285766	2.54229	0.285766	0.76802	0.76802
Ethane	2.96973	9.56612	2.96973	16.2856	16.2856
Propane	17.4721	12.2661	17.4721	27.6455	27.6455
Isobutane	10.2322	2.73271	10.2322	7.93635	7.93635
n-Butane	23.29	8.27554	23.29	17.606	17.606
Isopentane	8.70325	2.10552	8.70325	6.03898	6.03898
n-Pentane	10.1919	1.01909	10.1919	6.94306	6.94306
i-C6	10.051	1.34725	10.051	7.00783	7.00783
i-C7	7.20441	0.637195	7.20441	4.82922	4.82922
Octane	1.517	0.032402	1.517	0.931704	0.931704
Nonane	0.293994	0.006108	0.293994	0.156736	0.156736
Benzene	0.316433	6.04353	0.316433	0.145844	0.145844
Toluene	0.480929	9.28366	0.480929	0.226216	0.226216
Ethylbenzene	0.0136839	0.263004	0.0136839	0.00657185	0.00657185
o-Xylene	0.159145	3.07148	0.159145	0.0665137	0.0665137
n-Hexane	4.58964	0.309027	4.58964	3.31026	3.31026
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0232061	0.0989199	0.0232061	0.0116538	0.0116538
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	Skim Tank W&B	Water Tank W&B	1	2	3
Temperature	°F	86.1588	85.2658	86.1588	84.5587	84.5587
Pressure	psig	-3.76438	-11.9111	-3.76438	2.99416	2.99416
Molecular Weight	lb/lbmol	57.6018	29.5554	57.6018	49.5014	49.5014
Mass Flow	lb/h	10.6058	0.530739	9.11353	41.4864	24.6109
Std Vapor Volumetric Flow	MMSCFD	0.00167691	0.000163549	0.00144097	0.00763295	0.00452809
Std Liquid Volumetric Flow	sgpm	0.0361563	0.00158476	0.0310691	0.15969	0.0947325
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	2906.65	893.312	2906.65	2577.13	2577.13

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Connections					
	4	5	6	7	8
From Block	--	--	--	--	--
To Block	--	MIX-102	--	W & B - Water Truck Loading	MIX-100

Stream Composition					
Mass Flow	4 lb/h	5 lb/h	6 lb/h	7 lb/h	8 lb/h
Triethylene Glycol	0.000128688	3.39854E-10	1.04798	1.38847E-09	6.12771E-11
Water	0.683885	0.172657	7601.56	0.147897	0.030055
Hydrogen Sulfide	0.00556039	0.000449026	0.000434645	8.9055E-06	7.3283E-05
Carbon Dioxide	0.0548481	0.0111298	3.3613E-18	0.000613584	0.00278071
Nitrogen	0.000407633	1.25369E-05	3.28252E-21	2.30763E-07	3.59158E-06
Methane	0.8372	0.0115944	6.7226E-18	0.000337345	0.00426428
Ethane	22.5991	0.0436272	5.37808E-17	0.00126719	0.0443151
Propane	193.444	0.0559407	2.15123E-16	0.000397037	0.260724
Isobutane	161.787	0.0124628	0.450446	2.92679E-05	0.152688
n-Butane	531.76	0.0377415	2.65551	6.65809E-05	0.347539
Isopentane	480.552	0.00960245	3.78558	6.07713E-06	0.129872
n-Pentane	745.055	0.00464764	6.23994	1.73928E-06	0.152086
i-C6	1831.34	0.00614426	17.114	1.05701E-06	0.149983
i-C7	4079.59	0.00290599	39.926	1.2385E-07	0.107506
Octane	4056.92	0.000147772	40.383	5.91605E-10	0.0226371
Nonane	2558.64	2.78561E-05	25.55	2.36368E-11	0.00438705
Benzene	85.1355	0.0275621	0.930628	8.5319E-06	0.0047219
Toluene	444.747	0.0423391	4.52464	3.03156E-06	0.00717654
Ethylbenzene	39.0018	0.00119946	0.391751	2.64234E-08	0.000204194
o-Xylene	566.323	0.0140078	5.70316	3.24022E-07	0.0023748
n-Hexane	1212.44	0.00140935	11.5728	1.31298E-07	0.0684877
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1364.43	0.000451134	13.6422	3.36097E-10	0.000346288
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	4 %	5 %	6 %	7 %	8 %
Triethylene Glycol	4.60313E-07	1.46661E-08	0.00164726	1.11425E-07	1.5751E-09
Water	0.0203915	62.1095	99.6009	98.9358	6.43987
Hydrogen Sulfide	8.76397E-05	0.0853837	3.01041E-06	0.00314908	0.0083003
Carbon Dioxide	0.000669456	1.63891	1.80286E-20	0.168021	0.243899
Nitrogen	7.81646E-06	0.00290027	2.76594E-23	9.92741E-05	0.000494905
Methane	0.0280327	4.68371	9.89162E-20	0.253419	1.02607
Ethane	0.403718	9.4027	4.22191E-19	0.507874	5.68897
Propane	2.3565	8.22142	1.15158E-18	0.10851	22.8237
Isobutane	1.49523	1.38959	0.00182937	0.00606855	10.1406
n-Butane	4.91451	4.20815	0.0107847	0.0138052	23.0815
Isopentane	3.57782	0.862516	0.0123853	0.00101509	6.94846
n-Pentane	5.5471	0.417463	0.0204152	0.000290521	8.13694
i-C6	11.4154	0.462063	0.0468781	0.000147819	6.71832
i-C7	21.8699	0.187946	0.0940547	1.48955E-05	4.1415
Octane	19.0778	0.00838365	0.0834498	6.24157E-08	0.764977
Nonane	10.7162	0.00140754	0.0470237	2.22101E-09	0.132038
Benzene	0.585464	2.2867	0.00281229	0.00131633	0.233346
Toluene	2.59286	2.97793	0.0115916	0.000396516	0.30066
Ethylbenzene	0.197338	0.073218	0.000871025	2.99946E-06	0.00742443
o-Xylene	2.86543	0.855072	0.0126805	3.67815E-05	0.0863469
n-Hexane	7.55758	0.105986	0.0316997	1.83617E-05	3.06783
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	4.77787	0.0190588	0.0209923	2.64043E-08	0.00871392
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Mass Fraction	4 %	5 %	6 %	7 %	8 %
Triethylene Glycol	7.0033E-07	7.45196E-08	0.013478	9.2173E-07	4.10642E-09
Water	0.00372175	37.8584	97.7633	98.1803	2.01411
Hydrogen Sulfide	3.026E-05	0.0984577	5.58995E-06	0.00591185	0.00491099
Carbon Dioxide	0.000298487	2.44043	4.32295E-20	0.407324	0.186346
Nitrogen	2.21837E-06	0.00274895	4.22163E-23	0.00015319	0.000240686
Methane	0.00455611	2.54229	8.64589E-20	0.223944	0.285766
Ethane	0.122986	9.56612	6.91671E-19	0.841212	2.96973
Propane	1.05274	12.2661	2.76669E-18	0.26357	17.4721
Isobutane	0.880456	2.73271	0.00579316	0.0194293	10.2322
n-Butane	2.89388	8.27554	0.0341524	0.0441993	23.29
Isopentane	2.6152	2.10552	0.0486861	0.00403426	8.70325
n-Pentane	4.05464	1.01909	0.0802516	0.00115461	10.1919
i-C6	9.96627	1.34725	0.220102	0.000701689	10.051
i-C7	22.2014	0.637195	0.513485	8.22169E-05	7.20441
Octane	22.078	0.032402	0.519364	3.92733E-07	1.517
Nonane	13.9243	0.006108	0.328597	1.56912E-08	0.293994
Benzene	0.463314	6.04353	0.0119688	0.00566385	0.316433
Toluene	2.42035	9.28366	0.0581911	0.00201248	0.480929
Ethylbenzene	0.212251	0.263004	0.00503829	1.7541E-05	0.0136839
o-Xylene	3.08197	3.07148	0.073348	0.0002151	0.159145
n-Hexane	6.59817	0.309027	0.148837	8.71616E-05	4.58964
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	7.42535	0.0989199	0.175452	2.23116E-07	0.0232061
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	4	5	6	7	8
Temperature	°F	84.5587	85.2658	86.1588	97.1838	86.1588
Pressure	psig	-1.23844	-11.9111	-8.3641	-11.9981	-3.76438
Molecular Weight	lb/lbmol	98.7057	29.5554	18.3539	18.1539	57.6018
Mass Flow	lb/h	18375.3	0.45606	7775.48	0.150638	1.49223
Std Vapor Volumetric Flow	MMSCFD	1.6955	0.000140537	3.85836	7.55734E-05	0.000235941
Std Liquid Volumetric Flow	sgpm	52.8901	0.00136177	15.6895	0.000308492	0.00508718
API Gravity		70.5941		11.3165		
Net Ideal Gas Heating Value	Btu/ft^3	4979.29	893.312	20.6156	13.7779	2906.65

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Connections

	10	12		
From Block	--	--		
To Block	MIX-101	MIX-102		

Stream Composition

Mass Flow	10 lb/h	12 lb/h		
Triethylene Glycol	1.25495E-13	5.56502E-11		
Water	1.23746E-05	0.0282722		
Hydrogen Sulfide	7.56563E-05	7.35269E-05		
Carbon Dioxide	0.00350218	0.00182248		
Nitrogen	1.06817E-05	2.05288E-06		
Methane	0.0329233	0.00189855		
Ethane	0.698126	0.00714385		
Propane	1.1851	0.00916015		
Isobutane	0.340214	0.00204075		
n-Butane	0.75473	0.00618006		
Isopentane	0.258878	0.00157238		
n-Pentane	0.297634	0.00076104		
i-C6	0.30041	0.00100611		
i-C7	0.207018	0.000475848		
Octane	0.0399401	2.41973E-05		
Nonane	0.00671894	4.56137E-06		
Benzene	0.00625202	0.00451322		
Toluene	0.0096974	0.00693291		
Ethylbenzene	0.000281721	0.000196408		
o-Xylene	0.0028513	0.00229374		
n-Hexane	0.141904	0.000230777		
2,2,4-Trimethylpentane	0	0		
Decanes Plus	0.000499574	7.38721E-05		
Decanes Plus Sat	0	0		

Mole Fraction	10 %	12 %		
Triethylene Glycol	9.64986E-13	1.46661E-08		
Water	0.000793187	62.1095		
Hydrogen Sulfide	0.00256343	0.0853837		
Carbon Dioxide	0.0918921	1.63891		
Nitrogen	0.000440314	0.00290027		
Methane	2.36984	4.68371		
Ethane	26.8102	9.4027		
Propane	31.0346	8.22142		
Isobutane	6.75921	1.38959		
n-Butane	14.9946	4.20815		
Isopentane	4.14335	0.862516		
n-Pentane	4.76365	0.417463		
i-C6	4.02548	0.462063		
i-C7	2.38571	0.187946		
Octane	0.403758	0.00838365		
Nonane	0.060494	0.00140754		
Benzene	0.0924251	2.2867		
Toluene	0.121535	2.97793		
Ethylbenzene	0.00306425	0.073218		
o-Xylene	0.0310132	0.855072		
n-Hexane	1.9015	0.105986		
2,2,4-Trimethylpentane	0	0		
Decanes Plus	0.00376063	0.0190588		
Decanes Plus Sat	0	0		

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	W & B	

Mass Fraction	10 %	12 %			
Triethylene Glycol	2.92749E-12	7.45196E-08			
Water	0.000288668	37.8584			
Hydrogen Sulfide	0.00176487	0.0984577			
Carbon Dioxide	0.0816971	2.44043			
Nitrogen	0.000249179	0.00274895			
Methane	0.76802	2.54229			
Ethane	16.2856	9.56612			
Propane	27.6455	12.2661			
Isobutane	7.93635	2.73271			
n-Butane	17.606	8.27554			
Isopentane	6.03898	2.10552			
n-Pentane	6.94306	1.01909			
i-C6	7.00783	1.34725			
i-C7	4.82922	0.637195			
Octane	0.931704	0.032402			
Nonane	0.156736	0.006108			
Benzene	0.145844	6.04353			
Toluene	0.226216	9.28366			
Ethylbenzene	0.00657185	0.263004			
o-Xylene	0.0665137	3.07148			
n-Hexane	3.31026	0.309027			
2,2,4-Trimethylpentane	0	0			
Decanes Plus	0.0116538	0.0989199			
Decanes Plus Sat	0	0			

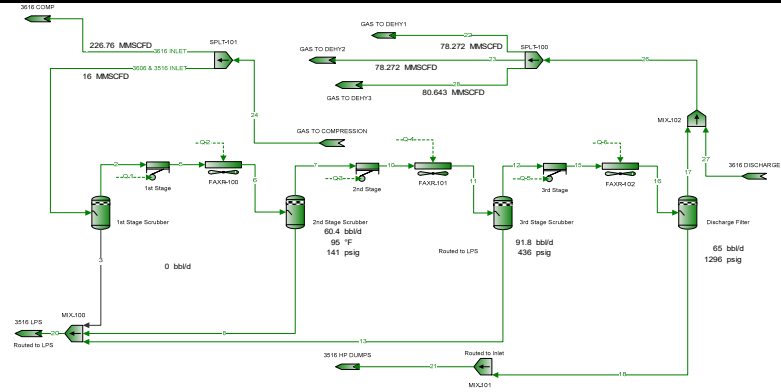
Stream Properties

Property	Units	10	12			
Temperature	°F	84.5587	85.2658			
Pressure	psig	2.99416	-11.9111			
Molecular Weight	lb/lbmol	49.5014	29.5554			
Mass Flow	lb/h	4.28678	0.0746787			
Std Vapor Volumetric Flow	MMSCFD	0.000788712	2.30126E-05			
Std Liquid Volumetric Flow	sgpm	0.0165007	0.000222987			
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	2577.13	893.312			

Remarks

3516s Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	



Names	Units	1st Stage	2nd Stage	3rd Stage
Power	hp	1380.9	1326.3	1104.7
Compression Ratio		2.8253	2.9431	2.9248

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Connections

	2	3	5	6	7
From Block	1st Stage Scrubber	1st Stage Scrubber	1st Stage	FAXR-100	2nd Stage Scrubber
To Block	1st Stage	MIX-100	FAXR-100	2nd Stage Scrubber	2nd Stage

Stream Composition

Mass Flow	2 lb/h	3 lb/h	5 lb/h	6 lb/h	7 lb/h
Triethylene Glycol	1.96761E-07		1.96761E-07	1.96761E-07	1.28776E-11
Water	295.608		295.608	295.608	172.763
Hydrogen Sulfide	0.600903		0.600903	0.600903	0.600207
Carbon Dioxide	116.334		116.334	116.334	116.284
Nitrogen	312.282		312.282	312.282	312.267
Methane	21531.3		21531.3	21531.3	21527.8
Ethane	5913.08		5913.08	5913.08	5907.85
Propane	3947.17		3947.17	3947.17	3936.13
Isobutane	914.766		914.766	914.766	908.896
n-Butane	1903.03		1903.03	1903.03	1885.72
Isopentane	695.702		695.702	695.702	681.549
n-Pentane	827.223		827.223	827.223	805.54
i-C6	909.134		909.134	909.134	854.912
i-C7	849.453		849.453	849.453	721.92
Octane	288.142		288.142	288.142	168.008
Nonane	80.2853		80.2853	80.2853	25.8911
Benzene	21.2043		21.2043	21.2043	19.4612
Toluene	54.1638		54.1638	54.1638	42.4933
Ethylbenzene	2.4564		2.4564	2.4564	1.40062
o-Xylene	30.5693		30.5693	30.5693	15.8794
n-Hexane	452.655		452.655	452.655	415.975
2,2,4-Trimethylpentane	0		0	0	0
Decanes Plus	8.96394		8.96394	8.96394	0.691556
Decanes Plus Sat	0		0	0	0

Mole Fraction	2 %	3 %	5 %	6 %	7 %
Triethylene Glycol	7.45817E-11		7.45817E-11	7.45817E-11	4.91623E-15
Water	0.934027		0.934027	0.934027	0.549792
Hydrogen Sulfide	0.00100364		0.00100364	0.00100364	0.00100967
Carbon Dioxide	0.150468		0.150468	0.150468	0.151482
Nitrogen	0.63455		0.63455	0.63455	0.639071
Methane	76.3983		76.3983	76.3983	76.9339
Ethane	11.1938		11.1938	11.1938	11.2641
Propane	5.09536		5.09536	5.09536	5.11756
Isobutane	0.895886		0.895886	0.895886	0.896521
n-Butane	1.86375		1.86375	1.86375	1.86005
Isopentane	0.548882		0.548882	0.548882	0.541573
n-Pentane	0.652647		0.652647	0.652647	0.640098
i-C6	0.600522		0.600522	0.600522	0.568757
i-C7	0.482556		0.482556	0.482556	0.413049
Octane	0.143587		0.143587	0.143587	0.0843225
Nonane	0.0356325		0.0356325	0.0356325	0.0115735
Benzene	0.0154522		0.0154522	0.0154522	0.0142837
Toluene	0.0334621		0.0334621	0.0334621	0.0264404
Ethylbenzene	0.00131705		0.00131705	0.00131705	0.000756358
o-Xylene	0.0163904		0.0163904	0.0163904	0.00857514
n-Hexane	0.298998		0.298998	0.298998	0.276741
2,2,4-Trimethylpentane	0		0	0	0
Decanes Plus	0.00332627		0.00332627	0.00332627	0.000258458
Decanes Plus Sat	0		0	0	0

Process Streams Report						
All Streams						
Tabulated by Total Phase						
Client Name:	DELAWARE DIVISION				Job:	
Location:	Tiger Compressor Station					
Flowsheet:	3516s					
Mass Fraction	2 %	3 %	5 %	6 %	7 %	
Triethylene Glycol	5.0253E-10		5.0253E-10	5.0253E-10	3.34292E-14	
Water	0.754985		0.754985	0.754985	0.448478	
Hydrogen Sulfide	0.00153471		0.00153471	0.00153471	0.00155809	
Carbon Dioxide	0.297118		0.297118	0.297118	0.301863	
Nitrogen	0.797571		0.797571	0.797571	0.810618	
Methane	54.9911		54.9911	54.9911	55.8844	
Ethane	15.1021		15.1021	15.1021	15.3363	
Propane	10.0811		10.0811	10.0811	10.2179	
Isobutane	2.33632		2.33632	2.33632	2.35942	
n-Butane	4.86036		4.86036	4.86036	4.89517	
Isopentane	1.77683		1.77683	1.77683	1.76924	
n-Pentane	2.11274		2.11274	2.11274	2.09111	
i-C6	2.32194		2.32194	2.32194	2.21928	
i-C7	2.16951		2.16951	2.16951	1.87404	
Octane	0.735917		0.735917	0.735917	0.436134	
Nonane	0.205049		0.205049	0.205049	0.0672111	
Benzene	0.0541559		0.0541559	0.0541559	0.0505195	
Toluene	0.138335		0.138335	0.138335	0.110309	
Ethylbenzene	0.00627368		0.00627368	0.00627368	0.00363589	
o-Xylene	0.0780744		0.0780744	0.0780744	0.0412216	
n-Hexane	1.15608		1.15608	1.15608	1.07984	
2,2,4-Trimethylpentane	0		0	0	0	
Decanes Plus	0.022894		0.022894	0.022894	0.00179522	
Decanes Plus Sat	0		0	0	0	
Stream Properties						
Property	Units	2	3	5	6	7
Temperature	°F	82.7413		260 *	95 *	95
Pressure	psig	43	43	145 *	141	141
Molecular Weight	lb/lbmol	22.2875		22.2875	22.2875	22.085
Mass Flow	lb/h	39154.1	0	39154.1	39154.1	38522.1
Std Vapor Volumetric Flow	MMSCFD	16	0	16	16	15.8861
Std Liquid Volumetric Flow	sgpm	216.453	0	216.453	216.453	214.692
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1199.13		1199.13	1199.13	1192.95
Remarks						

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Connections

	8	10	11	12	13
From Block	2nd Stage Scrubber	2nd Stage	FAXR-101	3rd Stage Scrubber	3rd Stage Scrubber
To Block	MIX-100	FAXR-101	3rd Stage Scrubber	3rd Stage	MIX-100

Stream Composition

Mass Flow	8 lb/h	10 lb/h	11 lb/h	12 lb/h	13 lb/h
Triethylene Glycol	1.96748E-07	1.28776E-11	1.28776E-11	2.61638E-15	1.2875E-11
Water	122.845	172.763	172.763	97.7624	75.0006
Hydrogen Sulfide	0.000696344	0.600207	0.600207	0.597347	0.00285981
Carbon Dioxide	0.049914	116.284	116.284	116.048	0.235592
Nitrogen	0.0150495	312.267	312.267	312.169	0.0982011
Methane	3.45935	21527.8	21527.8	21508.5	19.3021
Ethane	5.23064	5907.85	5907.85	5884.39	23.4638
Propane	11.0381	3936.13	3936.13	3894.53	41.6
Isobutane	5.87056	908.896	908.896	889.265	19.6304
n-Butane	17.3125	1885.72	1885.72	1830.3	55.416
Isopentane	14.1526	681.549	681.549	643.508	38.0412
n-Pentane	21.6832	805.54	805.54	749.973	55.5669
i-C6	54.2215	854.912	854.912	737.619	117.293
i-C7	127.533	721.92	721.92	521.291	200.629
Octane	120.134	168.008	168.008	74.6748	93.3331
Nonane	54.3942	25.8911	25.8911	6.11611	19.775
Benzene	1.74308	19.4612	19.4612	16.1006	3.36056
Toluene	11.6705	42.4933	42.4933	27.5661	14.9272
Ethylbenzene	1.05578	1.40062	1.40062	0.614926	0.785694
o-Xylene	14.6899	15.8794	15.8794	6.22567	9.65373
n-Hexane	36.6791	415.975	415.975	343.815	72.1606
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	8.27238	0.691556	0.691556	0.0450802	0.646476
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	8 %	10 %	11 %	12 %	13 %
Triethylene Glycol	1.04722E-08	4.91623E-15	4.91623E-15	1.00761E-18	5.65263E-13
Water	54.5046	0.549792	0.549792	0.313843	27.4485
Hydrogen Sulfide	0.000163317	0.00100967	0.00100967	0.00101367	0.000553249
Carbon Dioxide	0.00906555	0.151482	0.151482	0.152502	0.0352947
Nitrogen	0.00429413	0.639071	0.639071	0.644474	0.0231124
Methane	1.72362	76.9339	76.9339	77.5392	7.93282
Ethane	1.39044	11.2641	11.2641	11.3178	5.14486
Propane	2.00087	5.11756	5.11756	5.10789	6.22004
Isobutane	0.807339	0.896521	0.896521	0.884852	2.2268
n-Butane	2.38087	1.86005	1.86005	1.82122	6.28619
Isopentane	1.56793	0.541573	0.541573	0.51583	3.47632
n-Pentane	2.40222	0.640098	0.640098	0.601171	5.07788
i-C6	5.02929	0.568757	0.568757	0.495029	8.97397
i-C7	10.1734	0.413049	0.413049	0.300875	13.2012
Octane	8.4064	0.0843225	0.0843225	0.0378077	5.38711
Nonane	3.38998	0.0115735	0.0115735	0.00275792	1.01657
Benzene	0.178369	0.0142837	0.0142837	0.0119208	0.283654
Toluene	1.01243	0.0264404	0.0264404	0.0173028	1.06815
Ethylbenzene	0.07949	0.000756358	0.000756358	0.000334983	0.048794
o-Xylene	1.10601	0.00857514	0.00857514	0.00339146	0.599527
n-Hexane	3.40215	0.276741	0.276741	0.23074	5.52093
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.431046	0.000258458	0.000258458	1.69958E-05	0.0277857
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Mass Fraction	8 %	10 %	11 %	12 %	13 %
Triethylene Glycol	3.11286E-08	3.34292E-14	3.34292E-14	6.94717E-18	1.49549E-12
Water	19.4359	0.448478	0.448478	0.259584	8.71166
Hydrogen Sulfide	0.000110172	0.00155809	0.00155809	0.00158611	0.00033218
Carbon Dioxide	0.00789715	0.301863	0.301863	0.308138	0.0273651
Nitrogen	0.00238106	0.810618	0.810618	0.828888	0.0114065
Methane	0.547322	55.8844	55.8844	57.1107	2.24202
Ethane	0.827566	15.3363	15.3363	15.6246	2.72543
Propane	1.7464	10.2179	10.2179	10.341	4.83203
Isobutane	0.928812	2.35942	2.35942	2.36123	2.28016
n-Butane	2.7391	4.89517	4.89517	4.85992	6.43682
Isopentane	2.23916	1.76924	1.76924	1.70868	4.41865
n-Pentane	3.43062	2.09111	2.09111	1.99137	6.45435
i-C6	8.57866	2.21928	2.21928	1.95857	13.6241
i-C7	20.1776	1.87404	1.87404	1.38416	23.3039
Octane	19.007	0.436134	0.436134	0.198281	10.8411
Nonane	8.60599	0.0672111	0.0672111	0.0162398	2.29695
Benzene	0.275782	0.0505195	0.0505195	0.0427513	0.390344
Toluene	1.84645	0.110309	0.110309	0.0731951	1.73386
Ethylbenzene	0.167041	0.00363589	0.00363589	0.00163278	0.0912619
o-Xylene	2.32417	0.0412216	0.0412216	0.0165307	1.12133
n-Hexane	5.80318	1.07984	1.07984	0.912917	8.38178
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.30882	0.00179522	0.00179522	0.0001197	0.0750912
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	8	10	11	12	13
Temperature	°F	95	272 *	110 *	110	110
Pressure	psig	141	440 *	436	436	436
Molecular Weight	lb/lbmol	50.5208	22.085	22.085	21.7809	56.7621
Mass Flow	lb/h	632.051	38522.1	38522.1	37661.2	860.922
Std Vapor Volumetric Flow	MMSCFD	0.113943	15.8861	15.8861	15.7479	0.138137
Std Liquid Volumetric Flow	sgpm	1.76147	214.692	214.692	212.013	2.67867
API Gravity		63.1618				83.0933
Net Ideal Gas Heating Value	Btu/ft ³	2060.55	1192.95	1192.95	1180.21	2644.75

Remarks

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Connections

	15	16	17	18	20
From Block	3rd Stage	FAXR-102	Discharge Filter	Discharge Filter	MIX-100
To Block	FAXR-102	Discharge Filter	MIX-102	MIX-101	3516 LPS

Stream Composition

Mass Flow	15 lb/h	16 lb/h	17 lb/h	18 lb/h	20 lb/h
Triethylene Glycol	2.61638E-15	2.61638E-15	6.48541E-19	2.61573E-15	1.96761E-07
Water	97.7624	97.7624	30.4993	67.2631	197.845
Hydrogen Sulfide	0.597347	0.597347	0.592604	0.00474317	0.00355615
Carbon Dioxide	116.048	116.048	115.54	0.508521	0.285506
Nitrogen	312.169	312.169	311.783	0.385964	0.113251
Methane	21508.5	21508.5	21454.2	54.3434	22.7614
Ethane	5884.39	5884.39	5843.62	40.761	28.6944
Propane	3894.53	3894.53	3842.46	52.0716	52.6382
Isobutane	889.265	889.265	870.23	19.0349	25.5009
n-Butane	1830.3	1830.3	1781.57	48.7352	72.7284
Isopentane	643.508	643.508	617.811	25.6972	52.1938
n-Pentane	749.973	749.973	714.927	35.0462	77.2501
i-C6	737.619	737.619	681.213	56.4063	171.515
i-C7	521.291	521.291	454.352	66.9394	328.162
Octane	74.6748	74.6748	56.6804	17.9944	213.467
Nonane	6.11611	6.11611	3.76363	2.35248	74.1692
Benzene	16.1006	16.1006	14.6258	1.47484	5.10364
Toluene	27.5661	27.5661	23.1028	4.46334	26.5977
Ethylbenzene	0.614926	0.614926	0.459176	0.15575	1.84148
o-Xylene	6.22567	6.22567	4.47577	1.7499	24.3437
n-Hexane	343.815	343.815	312.589	31.2258	108.84
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0450802	0.0450802	0.0169015	0.0281787	8.91886
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	15 %	16 %	17 %	18 %	20 %
Triethylene Glycol	1.00761E-18	1.00761E-18	2.51748E-22	1.27725E-16	4.73385E-09
Water	0.313843	0.313843	0.0986892	27.3784	39.6782
Hydrogen Sulfide	0.00101367	0.00101367	0.00101362	0.00102054	0.000376996
Carbon Dioxide	0.152502	0.152502	0.15304	0.0847296	0.0234389
Nitrogen	0.644474	0.644474	0.648794	0.101031	0.0146064
Methane	77.5392	77.5392	77.9581	24.8398	5.1262
Ethane	11.3178	11.3178	11.3288	9.94028	3.44782
Propane	5.10789	5.10789	5.07966	8.65921	4.31293
Isobutane	0.884852	0.884852	0.872795	2.4015	1.58519
n-Butane	1.82122	1.82122	1.78682	6.14856	4.52095
Isopentane	0.51583	0.51583	0.499168	2.61173	2.61371
n-Pentane	0.601171	0.601171	0.577634	3.56192	3.86845
i-C6	0.495029	0.495029	0.460808	4.79974	7.19093
i-C7	0.300875	0.300875	0.264324	4.89868	11.8326
Octane	0.0378077	0.0378077	0.0289253	1.15514	6.75186
Nonane	0.00275792	0.00275792	0.00171062	0.134501	2.08937
Benzene	0.0119208	0.0119208	0.010915	0.138453	0.236064
Toluene	0.0173028	0.0173028	0.0146165	0.355216	1.04297
Ethylbenzene	0.000334983	0.000334983	0.000252126	0.0107577	0.0626689
o-Xylene	0.00339146	0.00339146	0.00245757	0.120866	0.828461
n-Hexane	0.23074	0.23074	0.211452	2.65707	4.56322
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	1.69958E-05	1.69958E-05	6.42274E-06	0.001347	0.210064
Decanes Plus Sat	0	0	0	0	0

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Process Streams Report					
All Streams					
Tabulated by Total Phase					

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Mass Fraction	15 %	16 %	17 %	18 %	20 %
Triethylene Glycol	6.94717E-18	6.94717E-18	1.74646E-21	4.96682E-16	1.31792E-08
Water	0.259584	0.259584	0.082132	12.7721	13.2518
Hydrogen Sulfide	0.00158611	0.00158611	0.00159583	0.000900644	0.000238193
Carbon Dioxide	0.308138	0.308138	0.311139	0.096559	0.0191233
Nitrogen	0.828888	0.828888	0.839604	0.0732878	0.00758558
Methane	57.1107	57.1107	57.7743	10.3188	1.52457
Ethane	15.6246	15.6246	15.7364	7.7398	1.92197
Propane	10.341	10.341	10.3474	9.88747	3.52573
Isobutane	2.36123	2.36123	2.34345	3.61439	1.70806
n-Butane	4.85992	4.85992	4.79761	9.25394	4.87139
Isopentane	1.70868	1.70868	1.66371	4.87943	3.49596
n-Pentane	1.99137	1.99137	1.92524	6.65465	5.17425
i-C6	1.95857	1.95857	1.83445	10.7106	11.4881
i-C7	1.38416	1.38416	1.22353	12.7106	21.9804
Octane	0.198281	0.198281	0.152635	3.41681	14.2981
Nonane	0.0162398	0.0162398	0.0101351	0.446694	4.96789
Benzene	0.0427513	0.0427513	0.0393859	0.280046	0.341844
Toluene	0.0731951	0.0731951	0.0622138	0.847509	1.78153
Ethylbenzene	0.00163278	0.00163278	0.00123652	0.0295741	0.123343
o-Xylene	0.0165307	0.0165307	0.0120529	0.332275	1.63055
n-Hexane	0.912917	0.912917	0.841775	5.92923	7.29013
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0001197	0.0001197	4.55143E-05	0.00535064	0.597389
Decanes Plus Sat	0	0	0	0	0

Stream Properties						
Property	Units	15	16	17	18	20
Temperature	°F	275 *	100 *	100	100	99.3415
Pressure	psig	1300 *	1296	1296	1296	141
Molecular Weight	lb/lbmol	21.7809	21.7809	21.647	38.6179	53.941
Mass Flow	lb/h	37661.2	37661.2	37134.5	526.642	1492.97
Std Vapor Volumetric Flow	MMSCFD	15.7479	15.7479	15.6237	0.124203	0.25208
Std Liquid Volumetric Flow	sgpm	212.013	212.013	210.116	1.89716	4.44014
API Gravity					118.718	
Net Ideal Gas Heating Value	Btu/ft^3	1180.21	1180.21	1175.68	1750.88	2380.68

Remarks

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Connections

	21	22	23	24	26
From Block	MIX-101	SPLT-100	SPLT-100	GAS TO COMPRESSIO N	MIX-102
To Block	3516 HP DUMPS	GAS TO DEHY1	GAS TO DEHY2	SPLT-101	SPLT-100

Stream Composition

Mass Flow	21 lb/h	22 lb/h	23 lb/h	24 lb/h	26 lb/h
Triethylene Glycol	2.61573E-15	2.77891E-19	2.77891E-19	2.98541E-06	8.42095E-19
Water	67.2631	150.778	150.778	4485.19	456.904
Hydrogen Sulfide	0.00474317	2.96867	2.96867	9.11738	8.99597
Carbon Dioxide	0.508521	578.877	578.877	1765.11	1754.17
Nitrogen	0.385964	1561.68	1561.68	4738.19	4732.35
Methane	54.3434	107480	107480	326690	325696
Ethane	40.761	29276.2	29276.2	89717.9	88715.8
Propane	52.0716	19239.6	19239.6	59889.6	58301.8
Isobutane	19.0349	4352.89	4352.89	13879.6	13190.6
n-Butane	48.7352	8905.94	8905.94	28874.3	26987.7
Isopentane	25.6972	3084.09	3084.09	10555.7	9345.73
n-Pentane	35.0462	3568.58	3568.58	12551.3	10813.9
i-C6	56.4063	3407.47	3407.47	13794.1	10325.7
i-C7	66.9394	2328.94	2328.94	12888.6	7057.41
Octane	17.9944	337.257	337.257	4371.91	1021.99
Nonane	2.35248	29.3275	29.3275	1218.15	88.8711
Benzene	1.47484	73.3721	73.3721	321.728	222.34
Toluene	4.46334	120.884	120.884	821.816	366.316
Ethylbenzene	0.15575	2.72475	2.72475	37.2705	8.25682
o-Xylene	1.7499	27.5649	27.5649	463.822	83.53
n-Hexane	31.2258	1572.04	1572.04	6868.03	4763.77
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0281787	0.237463	0.237463	136.008	0.719586
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	21 %	22 %	23 %	24 %	26 %
Triethylene Glycol	1.27725E-16	2.1532E-23	2.1532E-23	7.45817E-11	2.1532E-23
Water	27.3784	0.0973865	0.0973865	0.934027	0.0973865
Hydrogen Sulfide	0.00102054	0.00101357	0.00101357	0.00100364	0.00101357
Carbon Dioxide	0.0847296	0.153053	0.153053	0.150468	0.153053
Nitrogen	0.101031	0.648673	0.648673	0.63455	0.648673
Methane	24.8398	77.9572	77.9572	76.3983	77.9572
Ethane	9.94028	11.3291	11.3291	11.1938	11.3291
Propane	8.65921	5.07693	5.07693	5.09536	5.07693
Isobutane	2.4015	0.871439	0.871439	0.895886	0.871439
n-Butane	6.14856	1.78295	1.78295	1.86375	1.78295
Isopentane	2.61173	0.497393	0.497393	0.548882	0.497393
n-Pentane	3.56192	0.575529	0.575529	0.652647	0.575529
i-C6	4.79974	0.460097	0.460097	0.600522	0.460097
i-C7	4.89868	0.270448	0.270448	0.482556	0.270448
Octane	1.15514	0.0343548	0.0343548	0.143587	0.0343548
Nonane	0.134501	0.00266073	0.00266073	0.0356325	0.00266073
Benzene	0.138453	0.0109299	0.0109299	0.0154522	0.0109299
Toluene	0.355216	0.0152662	0.0152662	0.0334621	0.0152662
Ethylbenzene	0.0107577	0.000298639	0.000298639	0.00131705	0.000298639
o-Xylene	0.120866	0.00302118	0.00302118	0.0163904	0.00302118
n-Hexane	2.65707	0.212267	0.212267	0.298998	0.212267
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.001347	1.80124E-05	1.80124E-05	0.00332627	1.80124E-05
Decanes Plus Sat	0	0	0	0	0

* User Specified Values

? Extrapolated or Approximate Values

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Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Mass Fraction	21 %	22 %	23 %	24 %	26 %
Triethylene Glycol	4.96682E-16	1.49323E-22	1.49323E-22	5.0253E-10	1.49323E-22
Water	12.7721	0.0810196	0.0810196	0.754985	0.0810196
Hydrogen Sulfide	0.000900644	0.00159519	0.00159519	0.00153471	0.00159519
Carbon Dioxide	0.096559	0.311055	0.311055	0.297118	0.311055
Nitrogen	0.0732878	0.839155	0.839155	0.797571	0.839155
Methane	10.3188	57.7534	57.7534	54.9911	57.7534
Ethane	7.7398	15.7314	15.7314	15.1021	15.7314
Propane	9.88747	10.3383	10.3383	10.0811	10.3383
Isobutane	3.61439	2.33899	2.33899	2.33632	2.33899
n-Butane	9.25394	4.78554	4.78554	4.86036	4.78554
Isopentane	4.87943	1.65721	1.65721	1.77683	1.65721
n-Pentane	6.65465	1.91755	1.91755	2.11274	1.91755
i-C6	10.7106	1.83098	1.83098	2.32194	1.83098
i-C7	12.7106	1.25144	1.25144	2.16951	1.25144
Octane	3.41681	0.181222	0.181222	0.735917	0.181222
Nonane	0.446694	0.0157589	0.0157589	0.205049	0.0157589
Benzene	0.280046	0.039426	0.039426	0.0541559	0.039426
Toluene	0.847509	0.0649562	0.0649562	0.138335	0.0649562
Ethylbenzene	0.0295741	0.00146412	0.00146412	0.00627368	0.00146412
o-Xylene	0.332275	0.0148118	0.0148118	0.0780744	0.0148118
n-Hexane	5.92923	0.844726	0.844726	1.15608	0.844726
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00535064	0.000127599	0.000127599	0.022894	0.000127599
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	21	22	23	24	26
Temperature	°F	100	98.8747	98.8747	83.1817	98.8747
Pressure	psig	1296	1296	1296	48	1296
Molecular Weight	lb/lbmol	38.6179	21.6546	21.6546	22.2875	21.6546
Mass Flow	lb/h	526.642	186101	186101	594077	563943
Std Vapor Volumetric Flow	MMSCFD	0.124203	78.2715	78.2715	242.765	237.186
Std Liquid Volumetric Flow	sgpm	1.89716	1052.78	1052.78	3284.2	3190.25
API Gravity		118.718				
Net Ideal Gas Heating Value	Btu/ft ³	1750.88	1176.06	1176.06	1199.13	1176.06

Remarks

<h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p>	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

Connections					
	27	28	3606 & 3516 INLET	3616 INLET	
From Block	3616 DISCHARGE	SPLT-100	SPLT-101	SPLT-101	
To Block	MIX-102	GAS TO DEHY3	1st Stage Scrubber	3616 COMP	

Stream Composition					
	27	28	3606 & 3516 INLET	3616 INLET	
Mass Flow	lb/h	lb/h	lb/h	lb/h	
Triethylene Glycol	1.93554E-19	2.86312E-19	1.96761E-07	2.78865E-06	
Water	426.405	155.347	295.608	4189.58	
Hydrogen Sulfide	8.40337	3.05863	0.600903	8.51647	
Carbon Dioxide	1638.63	596.418	116.334	1648.78	
Nitrogen	4420.57	1609	312.282	4425.91	
Methane	304242	110737	21531.3	305158	
Ethane	82872.2	30163.4	5913.08	83804.8	
Propane	54459.3	19822.6	3947.17	55942.4	
Isobutane	12320.4	4484.8	914.766	12964.8	
n-Butane	25206.1	9175.82	1903.03	26971.3	
Isopentane	8727.92	3177.55	695.702	9860.03	
n-Pentane	10099	3676.72	827.223	11724.1	
i-C6	9644.45	3510.73	909.134	12885	
i-C7	6603.06	2399.52	849.453	12039.1	
Octane	965.309	347.477	288.142	4083.77	
Nonane	85.1074	30.2162	80.2853	1137.87	
Benzene	207.714	75.5955	21.2043	300.523	
Toluene	343.213	124.547	54.1638	767.652	
Ethylbenzene	7.79765	2.80732	2.4564	34.8141	
o-Xylene	79.0543	28.4002	30.5693	433.253	
n-Hexane	4451.18	1619.68	452.655	6415.38	
2,2,4-Trimethylpentane	0	0	0	0	
Decanes Plus	0.702684	0.244659	8.96394	127.044	
Decanes Plus Sat	0	0	0	0	

	27	28	3606 & 3516 INLET	3616 INLET	
Mole Fraction	%	%	%	%	
Triethylene Glycol	5.29807E-24	2.1532E-23	7.45817E-11	7.45817E-11	
Water	0.0972947	0.0973865	0.934027	0.934027	
Hydrogen Sulfide	0.00101356	0.00101357	0.00100364	0.00100364	
Carbon Dioxide	0.153053	0.153053	0.150468	0.150468	
Nitrogen	0.648665	0.648673	0.63455	0.63455	
Methane	77.9571	77.9572	76.3983	76.3983	
Ethane	11.3291	11.3291	11.1938	11.1938	
Propane	5.07674	5.07693	5.09536	5.09536	
Isobutane	0.871343	0.871439	0.895886	0.895886	
n-Butane	1.78267	1.78295	1.86375	1.86375	
Isopentane	0.497267	0.497393	0.548882	0.548882	
n-Pentane	0.575381	0.575529	0.652647	0.652647	
i-C6	0.460047	0.460097	0.600522	0.600522	
i-C7	0.27088	0.270448	0.482556	0.482556	
Octane	0.0347376	0.0343548	0.143587	0.143587	
Nonane	0.00272773	0.00266073	0.0356325	0.0356325	
Benzene	0.0109309	0.0109299	0.0154522	0.0154522	
Toluene	0.015312	0.0152662	0.0334621	0.0334621	
Ethylbenzene	0.000301919	0.000298639	0.00131705	0.00131705	
o-Xylene	0.00306092	0.00302118	0.0163904	0.0163904	
n-Hexane	0.212324	0.212267	0.298998	0.298998	
2,2,4-Trimethylpentane	0	0	0	0	

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3516s	

	27	28	3606 & 3516 INLET	3616 INLET	
Mole Fraction	%	%	%	%	
Decanes Plus	1.88297E-05	1.80124E-05	0.00332627	0.00332627	
Decanes Plus Sat	0	0	0	0	

	27	28	3606 & 3516 INLET	3616 INLET	
Mass Fraction	%	%	%	%	
Triethylene Glycol	3.67409E-23	1.49323E-22	5.0253E-10	5.0253E-10	
Water	0.0809412	0.0810196	0.754985	0.754985	
Hydrogen Sulfide	0.00159515	0.00159519	0.00153471	0.00153471	
Carbon Dioxide	0.311049	0.311055	0.297118	0.297118	
Nitrogen	0.839123	0.839155	0.797571	0.797571	
Methane	57.7519	57.7534	54.9911	54.9911	
Ethane	15.731	15.7314	15.1021	15.1021	
Propane	10.3376	10.3383	10.0811	10.0811	
Isobutane	2.33868	2.33899	2.33632	2.33632	
n-Butane	4.78469	4.78554	4.86036	4.86036	
Isopentane	1.65676	1.65721	1.77683	1.77683	
n-Pentane	1.91701	1.91755	2.11274	2.11274	
i-C6	1.83073	1.83098	2.32194	2.32194	
i-C7	1.25341	1.25144	2.16951	2.16951	
Octane	0.183237	0.181222	0.735917	0.735917	
Nonane	0.0161553	0.0157589	0.205049	0.205049	
Benzene	0.0394288	0.039426	0.0541559	0.0541559	
Toluene	0.0651496	0.0649562	0.138335	0.138335	
Ethylbenzene	0.00148017	0.00146412	0.00627368	0.00627368	
o-Xylene	0.0150063	0.0148118	0.0780744	0.0780744	
n-Hexane	0.844934	0.844726	1.15608	1.15608	
2,2,4-Trimethylpentane	0	0	0	0	
Decanes Plus	0.000133385	0.000127599	0.022894	0.022894	
Decanes Plus Sat	0	0	0	0	

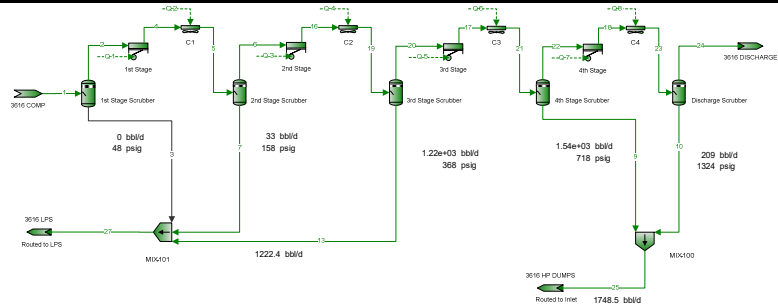
Stream Properties

Property	Units	27	28	3606 & 3516 INLET	3616 INLET	
Temperature	°F	100	98.8747	83.1817	83.1817	
Pressure	psig	1324	1296	48	48	
Molecular Weight	lb/lbmol	21.6551	21.6546	22.2875	22.2875	
Mass Flow	lb/h	526808	191740	39154.1	554923	
Std Vapor Volumetric Flow	MMSCFD	221.563	80.6434	16 *	226.765	
Std Liquid Volumetric Flow	sgpm	2980.13	1084.68	216.453	3067.74	
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1176.09	1176.06	1199.13	1199.13	

Remarks

3616s Plant Schematic

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	



Names	Units	1st Stage	2nd Stage	3rd Stage	4th Stage
Compression Ratio		2.8397	2.2406	1.8242	1.8319
Flow rate	hp	14579	13294	12276	8337.3

* User Specified Values
 ? Extrapolated or Approximate Values

	Process Streams Report All Streams Tabulated by Total Phase	
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Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Connections					
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	1	2	3	4	5
From Block	3616 COMP	1st Stage Scrubber	1st Stage Scrubber	1st Stage	C1
To Block	1st Stage Scrubber	1st Stage	MIX-101	C1	2nd Stage Scrubber

Stream Composition					
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Mass Flow	1 lb/h	2 lb/h	3 lb/h	4 lb/h	5 lb/h
Triethylene Glycol	2.78865E-06	2.78865E-06		2.78865E-06	2.78865E-06
Water	4189.58	4189.58		4189.58	4189.58
Hydrogen Sulfide	8.51647	8.51647		8.51647	8.51647
Carbon Dioxide	1648.78	1648.78		1648.78	1648.78
Nitrogen	4425.91	4425.91		4425.91	4425.91
Methane	305158	305158		305158	305158
Ethane	83804.8	83804.8		83804.8	83804.8
Propane	55942.4	55942.4		55942.4	55942.4
Isobutane	12964.8	12964.8		12964.8	12964.8
n-Butane	26971.3	26971.3		26971.3	26971.3
Isopentane	9860.03	9860.03		9860.03	9860.03
n-Pentane	11724.1	11724.1		11724.1	11724.1
i-C6	12885	12885		12885	12885
i-C7	12039.1	12039.1		12039.1	12039.1
Octane	4083.77	4083.77		4083.77	4083.77
Nonane	1137.87	1137.87		1137.87	1137.87
Benzene	300.523	300.523		300.523	300.523
Toluene	767.652	767.652		767.652	767.652
Ethylbenzene	34.8141	34.8141		34.8141	34.8141
o-Xylene	433.253	433.253		433.253	433.253
n-Hexane	6415.38	6415.38		6415.38	6415.38
2,2,4-Trimethylpentane	0	0		0	0
Decanes Plus	127.044	127.044		127.044	127.044
Decanes Plus Sat	0	0		0	0

Mole Fraction	1 %	2 %	3 %	4 %	5 %
Triethylene Glycol	7.45817E-11	7.45817E-11		7.45817E-11	7.45817E-11
Water	0.934027	0.934027		0.934027	0.934027
Hydrogen Sulfide	0.00100364	0.00100364		0.00100364	0.00100364
Carbon Dioxide	0.150468	0.150468		0.150468	0.150468
Nitrogen	0.63455	0.63455		0.63455	0.63455
Methane	76.3983	76.3983		76.3983	76.3983
Ethane	11.1938	11.1938		11.1938	11.1938
Propane	5.09536	5.09536		5.09536	5.09536
Isobutane	0.895886	0.895886		0.895886	0.895886
n-Butane	1.86375	1.86375		1.86375	1.86375
Isopentane	0.548882	0.548882		0.548882	0.548882
n-Pentane	0.652647	0.652647		0.652647	0.652647
i-C6	0.600522	0.600522		0.600522	0.600522
i-C7	0.482556	0.482556		0.482556	0.482556
Octane	0.143587	0.143587		0.143587	0.143587
Nonane	0.0356325	0.0356325		0.0356325	0.0356325
Benzene	0.0154522	0.0154522		0.0154522	0.0154522
Toluene	0.0334621	0.0334621		0.0334621	0.0334621
Ethylbenzene	0.00131705	0.00131705		0.00131705	0.00131705
o-Xylene	0.0163904	0.0163904		0.0163904	0.0163904
n-Hexane	0.298998	0.298998		0.298998	0.298998
2,2,4-Trimethylpentane	0	0		0	0
Decanes Plus	0.00332627	0.00332627		0.00332627	0.00332627
Decanes Plus Sat	0	0		0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Mass Fraction	1 %	2 %	3 %	4 %	5 %
Triethylene Glycol	5.0253E-10	5.0253E-10		5.0253E-10	5.0253E-10
Water	0.754985	0.754985		0.754985	0.754985
Hydrogen Sulfide	0.00153471	0.00153471		0.00153471	0.00153471
Carbon Dioxide	0.297118	0.297118		0.297118	0.297118
Nitrogen	0.797571	0.797571		0.797571	0.797571
Methane	54.9911	54.9911		54.9911	54.9911
Ethane	15.1021	15.1021		15.1021	15.1021
Propane	10.0811	10.0811		10.0811	10.0811
Isobutane	2.33632	2.33632		2.33632	2.33632
n-Butane	4.86036	4.86036		4.86036	4.86036
Isopentane	1.77683	1.77683		1.77683	1.77683
n-Pentane	2.11274	2.11274		2.11274	2.11274
i-C6	2.32194	2.32194		2.32194	2.32194
i-C7	2.16951	2.16951		2.16951	2.16951
Octane	0.735917	0.735917		0.735917	0.735917
Nonane	0.205049	0.205049		0.205049	0.205049
Benzene	0.0541559	0.0541559		0.0541559	0.0541559
Toluene	0.138335	0.138335		0.138335	0.138335
Ethylbenzene	0.00627368	0.00627368		0.00627368	0.00627368
o-Xylene	0.0780744	0.0780744		0.0780744	0.0780744
n-Hexane	1.15608	1.15608		1.15608	1.15608
2,2,4-Trimethylpentane	0	0		0	0
Decanes Plus	0.022894	0.022894		0.022894	0.022894
Decanes Plus Sat	0	0		0	0

Stream Properties

Property	Units	1	2	3	4	5
Temperature	°F	83.1817	83.1817		220 *	115 *
Pressure	psig	48	48	48	160 *	158
Molecular Weight	lb/lbmol	22.2875	22.2875		22.2875	22.2875
Mass Flow	lb/h	554923	554923	0	554923	554923
Std Vapor Volumetric Flow	MMSCFD	226.765	226.765	0	226.765	226.765
Std Liquid Volumetric Flow	sgpm	3067.74	3067.74	0	3067.74	3067.74
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1199.13	1199.13		1199.13	1199.13

Remarks

Process Streams Report	
All Streams	
Tabulated by Total Phase	

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Connections					
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	6	7	9	10	13
From Block	2nd Stage Scrubber	2nd Stage Scrubber	4th Stage Scrubber	Discharge Scrubber	3rd Stage Scrubber
To Block	2nd Stage	MIX-101	MIX-100	MIX-100	MIX-101

Stream Composition					
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Mass Flow	6 lb/h	7 lb/h	9 lb/h	10 lb/h	13 lb/h
Triethylene Glycol	7.00992E-09	2.78164E-06	1.62941E-12	4.83173E-16	7.00829E-09
Water	4009.24	180.339	1104.22	611.184	1867.43
Hydrogen Sulfide	8.5162	0.000278215	0.0705966	0.0136905	0.0285404
Carbon Dioxide	1648.76	0.0200077	6.35794	1.46492	2.30103
Nitrogen	4425.9	0.00639561	3.28856	1.10662	0.937733
Methane	305157	1.3593	575.498	154.265	185.811
Ethane	83803	1.85882	590.815	113.783	226.185
Propane	55938.7	3.72221	930.054	143.779	405.527
Isobutane	12962.9	1.86695	398.739	52.0693	191.753
n-Butane	26965.9	5.39954	1085.56	132.805	541.374
Isopentane	9855.73	4.30934	672.695	69.4282	385.678
n-Pentane	11717.5	6.53226	955.658	94.5422	568.373
i-C6	12869	15.9302	1813.49	151.313	1259.77
i-C7	12000.2	38.8781	2725.6	182.48	2489.1
Octane	4034.99	48.7862	1149.71	56.8063	1863.16
Nonane	1101.44	36.4259	250.459	9.75524	756.119
Benzene	299.99	0.533514	50.131	3.97801	38.1669
Toluene	763.677	3.97493	196.65	12.4709	211.343
Ethylbenzene	34.3487	0.465412	9.73284	0.492382	16.3258
o-Xylene	426.206	7.04655	118.828	5.74067	222.583
n-Hexane	6404.66	10.7155	1070.1	83.9847	799.395
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	108.147	18.897	8.99201	0.212136	98.2402
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	6 %	7 %	9 %	10 %	13 %
Triethylene Glycol	1.8757E-13	1.52208E-07	4.12549E-15	5.23293E-18	1.99013E-11
Water	0.894259	82.2576	23.3052	55.1779	44.2043
Hydrogen Sulfide	0.0010041	6.70806E-05	0.000787607	0.000653343	0.000357116
Carbon Dioxide	0.15054	0.00373575	0.0549296	0.0541381	0.0222964
Nitrogen	0.634859	0.00187604	0.0446351	0.0642489	0.0142749
Methane	76.4354	0.696261	13.6398	15.6398	4.93926
Ethane	11.1991	0.507978	7.47082	6.1545	3.20778
Propane	5.09752	0.693636	8.01953	5.30317	3.92179
Isobutane	0.896195	0.263948	2.60845	1.45705	1.40689
n-Butane	1.86429	0.763381	7.10149	3.71627	3.97206
Isopentane	0.54891	0.490805	3.54508	1.56509	2.27959
n-Pentane	0.652602	0.74398	5.03628	2.13123	3.35943
i-C6	0.600073	1.51903	8.00144	2.85579	6.23403
i-C7	0.481233	3.18828	10.3424	2.96191	10.5932
Octane	0.141941	3.50954	3.82693	0.808828	6.95562
Nonane	0.0345087	2.33379	0.742502	0.123708	2.51406
Benzene	0.0154323	0.0561249	0.24402	0.0828291	0.208368
Toluene	0.0333051	0.3545	0.811502	0.220136	0.978154
Ethylbenzene	0.00130008	0.0360233	0.0348574	0.00754319	0.0655773
o-Xylene	0.0161317	0.545409	0.425573	0.0879458	0.89407
n-Hexane	0.298645	1.02178	4.72148	1.58508	3.95584
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0028329	1.01226	0.0222878	0.00224917	0.273101
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Mass Fraction	6 %	7 %	9 %	10 %	13 %
Triethylene Glycol	1.26411E-12	7.18645E-07	1.18791E-14	2.56778E-17	5.77784E-11
Water	0.722991	46.5911	8.05023	32.4808	15.3957
Hydrogen Sulfide	0.00153573	7.18777E-05	0.000514678	0.000727567	0.000235295
Carbon Dioxide	0.297322	0.00516905	0.046352	0.0778522	0.0189703
Nitrogen	0.798127	0.00165232	0.023975	0.0588103	0.00773094
Methane	55.0293	0.35118	4.19561	8.19828	1.53188
Ethane	15.1123	0.480232	4.30728	6.04691	1.86473
Propane	10.0875	0.961642	6.78047	7.64104	3.34328
Isobutane	2.33762	0.482332	2.90697	2.76718	1.58087
n-Butane	4.86278	1.39499	7.9142	7.05782	4.46324
Isopentane	1.77729	1.11333	4.90422	3.6897	3.17964
n-Pentane	2.11303	1.68763	6.96714	5.02436	4.68583
i-C6	2.32068	4.11561	13.2211	8.0414	10.3859
i-C7	2.16401	10.0443	19.8707	9.69773	20.5209
Octane	0.727633	12.6041	8.38187	3.01893	15.3604
Nonane	0.198624	9.41073	1.82595	0.518434	6.23366
Benzene	0.0540975	0.137835	0.365475	0.211408	0.314659
Toluene	0.137715	1.02693	1.43366	0.662755	1.74237
Ethylbenzene	0.00619413	0.12024	0.0709564	0.0261672	0.134595
o-Xylene	0.0768582	1.8205	0.866305	0.305083	1.83504
n-Hexane	1.15496	2.76838	7.80147	4.4633	6.59045
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0195022	4.88209	0.0655554	0.0112738	0.80992
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	6	7	9	10	13
Temperature	°F	115	115	115	100	120
Pressure	psig	158	158	718	1324	368
Molecular Weight	lb/lbmol	22.2829	31.8064	52.1536	30.604	51.7258
Mass Flow	lb/h	554536	387.068	13716.7	1881.67	12129.6
Std Vapor Volumetric Flow	MMSCFD	226.654	0.110835	2.39535	0.559978	2.13572
Std Liquid Volumetric Flow	sgpm	3066.78	0.962123	44.8899	6.10923	35.6537
API Gravity			43.0181	92.9691	95.5163	72.0609
Net Ideal Gas Heating Value	Btu/ft ³	1199.29	857.865	2460.33	1074.21	2225.36

Remarks

Process Streams Report	
All Streams	
Tabulated by Total Phase	

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Connections					
	16	17	18	19	20
From Block	2nd Stage	3rd Stage	4th Stage	C2	3rd Stage Scrubber
To Block	C2	C3	C4	3rd Stage Scrubber	3rd Stage

Stream Composition					
Mass Flow	16 lb/h	17 lb/h	18 lb/h	19 lb/h	20 lb/h
Triethylene Glycol	7.00992E-09	1.62989E-12	4.83367E-16	7.00992E-09	1.62989E-12
Water	4009.24	2141.81	1037.59	4009.24	2141.81
Hydrogen Sulfide	8.5162	8.48766	8.41706	8.5162	8.48766
Carbon Dioxide	1648.76	1646.45	1640.1	1648.76	1646.45
Nitrogen	4425.9	4424.96	4421.67	4425.9	4424.96
Methane	305157	304971	304396	305157	304971
Ethane	83803	83576.8	82986	83803	83576.8
Propane	55938.7	55533.2	54603.1	55938.7	55533.2
Isobutane	12962.9	12771.2	12372.4	12962.9	12771.2
n-Butane	26965.9	26424.5	25338.9	26965.9	26424.5
Isopentane	9855.73	9470.05	8797.35	9855.73	9470.05
n-Pentane	11717.5	11149.2	10193.5	11717.5	11149.2
i-C6	12869	11609.3	9795.77	12869	11609.3
i-C7	12000.2	9511.13	6785.54	12000.2	9511.13
Octane	4034.99	2171.83	1022.12	4034.99	2171.83
Nonane	1101.44	345.321	94.8627	1101.44	345.321
Benzene	299.99	261.823	211.692	299.99	261.823
Toluene	763.677	552.334	355.684	763.677	552.334
Ethylbenzene	34.3487	18.0229	8.29003	34.3487	18.0229
o-Xylene	426.206	203.623	84.7949	426.206	203.623
n-Hexane	6404.66	5605.27	4535.16	6404.66	5605.27
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	108.147	9.90683	0.91482	108.147	9.90683
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	16 %	17 %	18 %	19 %	20 %
Triethylene Glycol	1.8757E-13	4.40272E-17	1.31977E-20	1.8757E-13	4.40272E-17
Water	0.894259	0.482274	0.236154	0.894259	0.482274
Hydrogen Sulfide	0.0010041	0.00101025	0.00101265	0.0010041	0.00101025
Carbon Dioxide	0.15054	0.15176	0.152804	0.15054	0.15176
Nitrogen	0.634859	0.640763	0.647191	0.634859	0.640763
Methane	76.4354	77.1155	77.8	76.4354	77.1155
Ethane	11.1991	11.2751	11.3161	11.1991	11.2751
Propane	5.09752	5.1087	5.07731	5.09752	5.1087
Isobutane	0.896195	0.891337	0.87282	0.896195	0.891337
n-Butane	1.86429	1.84424	1.78755	1.86429	1.84424
Isopentane	0.54891	0.532447	0.499959	0.54891	0.532447
n-Pentane	0.652602	0.626854	0.579303	0.652602	0.626854
i-C6	0.600073	0.54648	0.466087	0.600073	0.54648
i-C7	0.481233	0.385043	0.277664	0.481233	0.385043
Octane	0.141941	0.0771266	0.0366891	0.141941	0.0771266
Nonane	0.0345087	0.010922	0.00303272	0.0345087	0.010922
Benzene	0.0154323	0.013597	0.0111122	0.0154323	0.013597
Toluene	0.0333051	0.0243173	0.0158283	0.0333051	0.0243173
Ethylbenzene	0.00130008	0.000688646	0.000320174	0.00130008	0.000688646
o-Xylene	0.0161317	0.00778035	0.00327492	0.0161317	0.00778035
n-Hexane	0.298645	0.263856	0.215785	0.298645	0.263856
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0028329	0.000261977	2.44524E-05	0.0028329	0.000261977
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
 ? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Mass Fraction	16 %	17 %	18 %	19 %	20 %
Triethylene Glycol	1.26411E-12	3.00493E-16	9.14274E-20	1.26411E-12	3.00493E-16
Water	0.722991	0.394872	0.196257	0.722991	0.394872
Hydrogen Sulfide	0.00153573	0.00156481	0.00159206	0.00153573	0.00156481
Carbon Dioxide	0.297322	0.303546	0.310219	0.297322	0.303546
Nitrogen	0.798127	0.815802	0.836346	0.798127	0.815802
Methane	55.0293	56.2256	57.5755	55.0293	56.2256
Ethane	15.1123	15.4085	15.6965	15.1123	15.4085
Propane	10.0875	10.2383	10.328	10.0875	10.2383
Isobutane	2.33762	2.35454	2.34021	2.33762	2.35454
n-Butane	4.86278	4.87172	4.79278	4.86278	4.87172
Isopentane	1.77729	1.74593	1.66399	1.77729	1.74593
n-Pentane	2.11303	2.0555	1.92807	2.11303	2.0555
i-C6	2.32068	2.14032	1.85284	2.32068	2.14032
i-C7	2.16401	1.75351	1.28346	2.16401	1.75351
Octane	0.727633	0.400406	0.19333	0.727633	0.400406
Nonane	0.198624	0.0636647	0.017943	0.198624	0.0636647
Benzene	0.0540975	0.0482706	0.0400409	0.0540975	0.0482706
Toluene	0.137715	0.10183	0.0672765	0.137715	0.10183
Ethylbenzene	0.00619413	0.00332276	0.00156803	0.00619413	0.00332276
o-Xylene	0.0768582	0.0375407	0.0160387	0.0768582	0.0375407
n-Hexane	1.15496	1.03341	0.857812	1.15496	1.03341
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.0195022	0.00182646	0.000173035	0.0195022	0.00182646
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	16	17	18	19	20
Temperature	°F	240 *	240 *	210 *	120 *	120
Pressure	psig	370 *	720 *	1326 *	368	368
Molecular Weight	lb/lbmol	22.2829	22.0028	21.6777	22.2829	22.0028
Mass Flow	lb/h	554536	542406	528690	554536	542406
Std Vapor Volumetric Flow	MMSCFD	226.654	224.518	222.123	226.654	224.518
Std Liquid Volumetric Flow	sgpm	3066.78	3031.13	2986.24	3066.78	3031.13
API Gravity						
Net Ideal Gas Heating Value	Btu/ft ³	1199.29	1189.53	1175.83	1199.29	1189.53

Remarks

Process Streams Report All Streams Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Connections					
	21	22	23	24	25
From Block	C3	4th Stage Scrubber	C4	Discharge Scrubber	MIX-100
To Block	4th Stage Scrubber	4th Stage	Discharge Scrubber	3616 DISCHARGE	3616 HP DUMPS

Stream Composition					
Mass Flow	21 lb/h	22 lb/h	23 lb/h	24 lb/h	25 lb/h
Triethylene Glycol	1.62989E-12	4.83367E-16	4.83367E-16	1.93554E-19	1.62989E-12
Water	2141.81	1037.59	1037.59	426.405	1715.41
Hydrogen Sulfide	8.48766	8.41706	8.41706	8.40337	0.084287
Carbon Dioxide	1646.45	1640.1	1640.1	1638.63	7.82287
Nitrogen	4424.96	4421.67	4421.67	4420.57	4.39518
Methane	304971	304396	304396	304242	729.762
Ethane	83576.8	82986	82986	82872.2	704.598
Propane	55533.2	54603.1	54603.1	54459.3	1073.83
Isobutane	12771.2	12372.4	12372.4	12320.4	450.808
n-Butane	26424.5	25338.9	25338.9	25206.1	1218.37
Isopentane	9470.05	8797.35	8797.35	8727.92	742.123
n-Pentane	11149.2	10193.5	10193.5	10099	1050.2
i-C6	11609.3	9795.77	9795.77	9644.45	1964.8
i-C7	9511.13	6785.54	6785.54	6603.06	2908.08
Octane	2171.83	1022.12	1022.12	965.309	1206.52
Nonane	345.321	94.8627	94.8627	85.1074	260.214
Benzene	261.823	211.692	211.692	207.714	54.109
Toluene	552.334	355.684	355.684	343.213	209.121
Ethylbenzene	18.0229	8.29003	8.29003	7.79765	10.2252
o-Xylene	203.623	84.7949	84.7949	79.0543	124.569
n-Hexane	5605.27	4535.16	4535.16	4451.18	1154.09
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	9.90683	0.91482	0.91482	0.702684	9.20415
Decanes Plus Sat	0	0	0	0	0

Mole Fraction	21 %	22 %	23 %	24 %	25 %
Triethylene Glycol	4.40272E-17	1.31977E-20	1.31977E-20	5.29807E-24	3.34478E-15
Water	0.482274	0.236154	0.236154	0.0972947	29.3444
Hydrogen Sulfide	0.00101025	0.00101265	0.00101265	0.00101356	0.000762166
Carbon Dioxide	0.15176	0.152804	0.152804	0.153053	0.0547796
Nitrogen	0.640763	0.647191	0.647191	0.648665	0.0483516
Methane	77.1155	77.8	77.8	77.9571	14.0188
Ethane	11.2751	11.3161	11.3161	11.3291	7.2214
Propane	5.1087	5.07731	5.07731	5.07674	7.50483
Isobutane	0.891337	0.87282	0.87282	0.871343	2.39028
n-Butane	1.84424	1.78755	1.78755	1.78267	6.46006
Isopentane	0.532447	0.499959	0.499959	0.497267	3.16991
n-Pentane	0.626854	0.579303	0.579303	0.575381	4.48583
i-C6	0.54648	0.466087	0.466087	0.460047	7.02643
i-C7	0.385043	0.277664	0.277664	0.27088	8.94396
Octane	0.0771266	0.0366891	0.0366891	0.0347376	3.25506
Nonane	0.010922	0.00303272	0.00303272	0.00272773	0.625253
Benzene	0.013597	0.0111122	0.0111122	0.0109309	0.213477
Toluene	0.0243173	0.0158283	0.0158283	0.015312	0.69945
Ethylbenzene	0.000688646	0.000320174	0.000320174	0.000301919	0.0296819
o-Xylene	0.00778035	0.00327492	0.00327492	0.00306092	0.361599
n-Hexane	0.263856	0.215785	0.215785	0.212324	4.12719
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.000261977	2.44524E-05	2.44524E-05	1.88297E-05	0.0184909
Decanes Plus Sat	0	0	0	0	0

* User Specified Values
? Extrapolated or Approximate Values

Process Streams Report
All Streams
 Tabulated by Total Phase

Client Name:	DELAWARE DIVISION	Job:
Location:	Tiger Compressor Station	
Flowsheet:	3616s	

Mass Fraction	21 %	22 %	23 %	24 %	25 %
Triethylene Glycol	3.00493E-16	9.14274E-20	9.14274E-20	3.67409E-23	1.04492E-14
Water	0.394872	0.196257	0.196257	0.0809412	10.9974
Hydrogen Sulfide	0.00156481	0.00159206	0.00159206	0.00159515	0.000540359
Carbon Dioxide	0.303546	0.310219	0.310219	0.311049	0.050152
Nitrogen	0.815802	0.836346	0.836346	0.839123	0.0281773
Methane	56.2256	57.5755	57.5755	57.7519	4.67847
Ethane	15.4085	15.6965	15.6965	15.731	4.51714
Propane	10.2383	10.328	10.328	10.3376	6.88428
Isobutane	2.35454	2.34021	2.34021	2.33868	2.89011
n-Butane	4.87172	4.79278	4.79278	4.78469	7.81089
Isopentane	1.74593	1.66399	1.66399	1.65676	4.75771
n-Pentane	2.0555	1.92807	1.92807	1.91701	6.73277
i-C6	2.14032	1.85284	1.85284	1.83073	12.5962
i-C7	1.75351	1.28346	1.28346	1.25341	18.6435
Octane	0.400406	0.19333	0.19333	0.183237	7.73492
Nonane	0.0636647	0.017943	0.017943	0.0161553	1.66822
Benzene	0.0482706	0.0400409	0.0400409	0.0394288	0.34689
Toluene	0.10183	0.0672765	0.0672765	0.0651496	1.34066
Ethylbenzene	0.00332276	0.00156803	0.00156803	0.00148017	0.0655533
o-Xylene	0.0375407	0.0160387	0.0160387	0.0150063	0.798603
n-Hexane	1.03341	0.857812	0.857812	0.844934	7.39878
2,2,4-Trimethylpentane	0	0	0	0	0
Decanes Plus	0.00182646	0.000173035	0.000173035	0.000133385	0.0590073
Decanes Plus Sat	0	0	0	0	0

Stream Properties

Property	Units	21	22	23	24	25
Temperature	°F	115 *	115	100 *	100	111.952
Pressure	psig	718	718	1324	1324	718
Molecular Weight	lb/lbmol	22.0028	21.6777	21.6777	21.6551	48.0704
Mass Flow	lb/h	542406	528690	528690	526808	15598.3
Std Vapor Volumetric Flow	MMSCFD	224.518	222.123	222.123	221.563	2.95532
Std Liquid Volumetric Flow	sgpm	3031.13	2986.24	2986.24	2980.13	50.9991
API Gravity						
Net Ideal Gas Heating Value	Btu/ft^3	1189.53	1175.83	1175.83	1176.09	2197.68

Remarks

Process Streams Report					
All Streams					
Tabulated by Total Phase					
Client Name:	DELAWARE DIVISION				Job:
Location:	Tiger Compressor Station				
Flowsheet:	3616s				
Connections					
	27				
From Block	MIX-101				
To Block	3616 LPS				
Stream Composition					
Mass Flow	27 lb/h				
Triethylene Glycol	2.78865E-06				
Water	2047.77				
Hydrogen Sulfide	0.0288186				
Carbon Dioxide	2.32103				
Nitrogen	0.944129				
Methane	187.171				
Ethane	228.044				
Propane	409.249				
Isobutane	193.62				
n-Butane	546.773				
Isopentane	389.988				
n-Pentane	574.906				
i-C6	1275.7				
i-C7	2527.98				
Octane	1911.95				
Nonane	792.545				
Benzene	38.7004				
Toluene	215.318				
Ethylbenzene	16.7912				
o-Xylene	229.63				
n-Hexane	810.111				
2,2,4-Trimethylpentane	0				
Decanes Plus	117.137				
Decanes Plus Sat	0				
Mole Fraction	27 %				
Triethylene Glycol	7.52818E-09				
Water	46.0816				
Hydrogen Sulfide	0.000342807				
Carbon Dioxide	0.0213807				
Nitrogen	0.0136632				
Methane	4.72993				
Ethane	3.07458				
Propane	3.76253				
Isobutane	1.3505				
n-Butane	3.81375				
Isopentane	2.19134				
n-Pentane	3.23039				
i-C6	6.00141				
i-C7	10.2279				
Octane	6.7856				
Nonane	2.50517				
Benzene	0.200857				
Toluene	0.947386				
Ethylbenzene	0.0641192				
o-Xylene	0.876868				
n-Hexane	3.81109				
2,2,4-Trimethylpentane	0				
Decanes Plus	0.309568				
Decanes Plus Sat	0				

Process Streams Report All Streams Tabulated by Total Phase		
Client Name:	DELAWARE DIVISION	
Location:	Tiger Compressor Station	
Flowsheet:	3616s	
Job:		
Mass Fraction	27 %	
Triethylene Glycol	2.22795E-08	
Water	16.3603	
Hydrogen Sulfide	0.000230242	
Carbon Dioxide	0.0185435	
Nitrogen	0.00754296	
Methane	1.49537	
Ethane	1.82192	
Propane	3.26963	
Isobutane	1.5469	
n-Butane	4.36836	
Isopentane	3.11574	
n-Pentane	4.59312	
i-C6	10.192	
i-C7	20.1969	
Octane	15.2752	
Nonane	6.33191	
Benzene	0.309191	
Toluene	1.72025	
Ethylbenzene	0.134151	
o-Xylene	1.83459	
n-Hexane	6.47225	
2,2,4-Trimethylpentane	0	
Decanes Plus	0.935848	
Decanes Plus Sat	0	
Stream Properties		
Property	Units	27
Temperature	°F	115.782
Pressure	psig	158
Molecular Weight	lb/lbmol	50.743
Mass Flow	lb/h	12516.7
Std Vapor Volumetric Flow	MMSCFD	2.24656
Std Liquid Volumetric Flow	sgpm	36.6159
API Gravity		
Net Ideal Gas Heating Value	Btu/ft ³	2157.9
Remarks		

August 26, 2020

FESCO, Ltd.
1100 Fesco Ave. - Alice, Texas 78332

For: XTO Energy, Inc.
22777 Springswoods Village Pkwy., W4.6B.345
Spring, Texas 77389

Sample: Maverick Compressor Station
First Stage Separator
Spot Gas Sample @ 48 psig & 100 °F

Date Sampled: 08/19/2020

Job Number: 202352.001

CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286

COMPONENT	MOL%	GPM
Hydrogen Sulfide*	< 0.001	
Nitrogen	0.641	
Carbon Dioxide	0.151	
Methane	77.048	
Ethane	11.244	3.080
Propane	5.100	1.439
Isobutane	0.895	0.300
n-Butane	1.860	0.601
2-2 Dimethylpropane	0.012	0.005
Isopentane	0.549	0.206
n-Pentane	0.642	0.238
Hexanes	0.697	0.294
Heptanes Plus	<u>1.161</u>	<u>0.511</u>
Totals	100.000	6.674

Computed Real Characteristics Of Heptanes Plus:

Specific Gravity -----	3.518	(Air=1)
Molecular Weight -----	101.45	
Gross Heating Value -----	5410	BTU/CF

Computed Real Characteristics Of Total Sample:

Specific Gravity -----	0.780	(Air=1)
Compressibility (Z) -----	0.9956	
Molecular Weight -----	22.48	
Gross Heating Value		
Dry Basis -----	1374	BTU/CF
Saturated Basis -----	1351	BTU/CF

*Hydrogen Sulfide tested on location by: Stain Tube Method (GPA 2377)
Results: <0.013 Gr/100 CF, <0.2 PPMV or <0.001 Mol %

Base Conditions: 15.025 PSI & 60 Deg F

Sampled By: (24) D. Field
Analyst: RG
Processor: RG
Cylinder ID: T-4014

Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

**CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2286
TOTAL REPORT**

COMPONENT	MOL %	GPM	WT %
Hydrogen Sulfide*	< 0.001		< 0.001
Nitrogen	0.641		0.799
Carbon Dioxide	0.151		0.296
Methane	77.048		54.973
Ethane	11.244	3.080	15.037
Propane	5.100	1.439	10.002
Isobutane	0.895	0.300	2.314
n-Butane	1.860	0.601	4.808
2,2 Dimethylpropane	0.012	0.005	0.039
Isopentane	0.549	0.206	1.762
n-Pentane	0.642	0.238	2.060
2,2 Dimethylbutane	0.015	0.006	0.057
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.047	0.020	0.180
2 Methylpentane	0.211	0.090	0.809
3 Methylpentane	0.115	0.048	0.441
n-Hexane	0.309	0.130	1.184
Methylcyclopentane	0.090	0.032	0.337
Benzene	0.016	0.005	0.056
Cyclohexane	0.134	0.047	0.501
2-Methylhexane	0.059	0.028	0.263
3-Methylhexane	0.059	0.028	0.263
2,2,4 Trimethylpentane	0.000	0.000	0.000
Other C7's	0.112	0.050	0.494
n-Heptane	0.133	0.063	0.593
Methylcyclohexane	0.162	0.067	0.707
Toluene	0.039	0.013	0.160
Other C8's	0.157	0.075	0.770
n-Octane	0.051	0.027	0.259
Ethylbenzene	0.002	0.001	0.009
M & P Xylenes	0.023	0.009	0.109
O-Xylene	0.004	0.002	0.019
Other C9's	0.070	0.036	0.393
n-Nonane	0.016	0.009	0.091
Other C10's	0.025	0.015	0.157
n-Decane	0.005	0.003	0.032
Undecanes (11)	<u>0.004</u>	<u>0.003</u>	<u>0.026</u>
Totals	100.000	6.674	100.000

Computed Real Characteristics of Total Sample

Specific Gravity -----	0.780	(Air=1)
Compressibility (Z) -----	0.9956	
Molecular Weight -----	22.48	
Gross Heating Value		
Dry Basis -----	1374	BTU/CF
Saturated Basis -----	1351	BTU/CF

August 26, 2020

FESCO, Ltd.
1100 Fesco Ave. - Alice, Texas 78332

Sample: Maverick Compressor Station
First Stage Separator
Spot Gas Sample @ 48 psig & 100 °F

Date Sampled: 08/19/2020

Job Number: 202352.001

GLYCALC FORMAT

COMPONENT	MOL%	GPM	Wt %
Carbon Dioxide	0.151		0.296
Hydrogen Sulfide	< 0.001		< 0.001
Nitrogen	0.641		0.799
Methane	77.048		54.973
Ethane	11.244	3.080	15.037
Propane	5.100	1.439	10.002
Isobutane	0.895	0.300	2.314
n-Butane	1.872	0.605	4.847
Isopentane	0.549	0.206	1.762
n-Pentane	0.642	0.238	2.060
Cyclopentane	0.000	0.000	0.000
n-Hexane	0.309	0.130	1.184
Cyclohexane	0.134	0.047	0.501
Other C6's	0.388	0.164	1.487
Heptanes	0.453	0.200	1.950
Methylcyclohexane	0.162	0.067	0.707
2,2,4 Trimethylpentane	0.000	0.000	0.000
Benzene	0.016	0.005	0.056
Toluene	0.039	0.013	0.160
Ethylbenzene	0.002	0.001	0.009
Xylenes	0.027	0.011	0.128
Octanes Plus	<u>0.328</u>	<u>0.168</u>	<u>1.728</u>
Totals	100.000	6.674	100.000

Real Characteristics Of Octanes Plus:

Specific Gravity ----- 4.108 (Air=1)
Molecular Weight ----- 118.45
Gross Heating Value ----- 6263 BTU/CF

Real Characteristics Of Total Sample:

Specific Gravity ----- 0.780 (Air=1)
Compressibility (Z) ----- 0.9956
Molecular Weight ----- 22.48
Gross Heating Value
Dry Basis ----- 1374 BTU/CF
Saturated Basis ----- 1351 BTU/CF

GAS COMPRESSION APPLICATION

ENGINE SPEED (rpm):	1000	RATING STRATEGY:	STANDARD
COMPRESSION RATIO:	7.6	FUEL SYSTEM:	GAV
AFTERCOOLER TYPE:	SCAC		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 2 INLET (°F):	130	SITE CONDITIONS:	
AFTERCOOLER - STAGE 1 INLET (°F):	214	FUEL:	Maverick
JACKET WATER OUTLET (°F):	230	FUEL PRESSURE RANGE (psig): (See note 1)	58.0-70.3
ASPIRATION:	TA	FUEL METHANE NUMBER:	29.5
COOLING SYSTEM:	JW+1AC, OC+2AC	FUEL LHV (Btu/scf):	1223
CONTROL SYSTEM:	ADEM4	ALTITUDE(ft):	3366
EXHAUST MANIFOLD:	DRY	INLET AIR TEMPERATURE(°F):	77
COMBUSTION:	LOW EMISSION	STANDARD RATED POWER:	5000 bhp@1000rpm
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.3		
SET POINT TIMING:	16		

RATING	NOTES	LOAD	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE			
			100%	100%	75%	50%
ENGINE POWER (WITHOUT FAN)	(2)	bhp	4938	4938	3703	2500
INLET AIR TEMPERATURE		°F	77	77	77	77

ENGINE DATA							
FUEL CONSUMPTION (LHV)		(3)	Btu/bhp-hr	6797	6797	6925	7377
FUEL CONSUMPTION (HHV)		(3)	Btu/bhp-hr	7481	7481	7622	8118
AIR FLOW (@inlet air temp, 14.7 psia)	(WET)	(4)(5)	ft3/min	13464	13464	10076	6910
AIR FLOW	(WET)	(4)(5)	lb/hr	59701	59701	44678	30637
FUEL FLOW (60°F, 14.7 psia)			scfm	457	457	349	251
INLET MANIFOLD PRESSURE		(6)	in Hg(abs)	117.6	117.6	87.3	61.1
EXHAUST TEMPERATURE - ENGINE OUTLET		(7)	°F	722	722	787	860
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(8)(5)	ft3/min	31415	31415	24805	18050
EXHAUST GAS MASS FLOW	(WET)	(8)(5)	lb/hr	61303	61303	45905	31518

EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)		(9)(10)	g/bhp-hr	0.30	0.30	0.30	0.30
CO		(9)(10)	g/bhp-hr	3.47	3.47	3.47	3.48
THC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	3.20	3.20	3.42	3.65
NMHC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	1.49	1.49	1.59	1.70
NMNEHC (VOCs) (mol. wt. of 15.84)		(9)(10)(11)	g/bhp-hr	0.99	0.99	1.06	1.13
HCHO (Formaldehyde)		(9)(10)	g/bhp-hr	0.18	0.18	0.18	0.20
CO2		(9)(10)	g/bhp-hr	493	493	507	531
EXHAUST OXYGEN		(9)(12)	% DRY	12.1	12.1	11.9	11.6

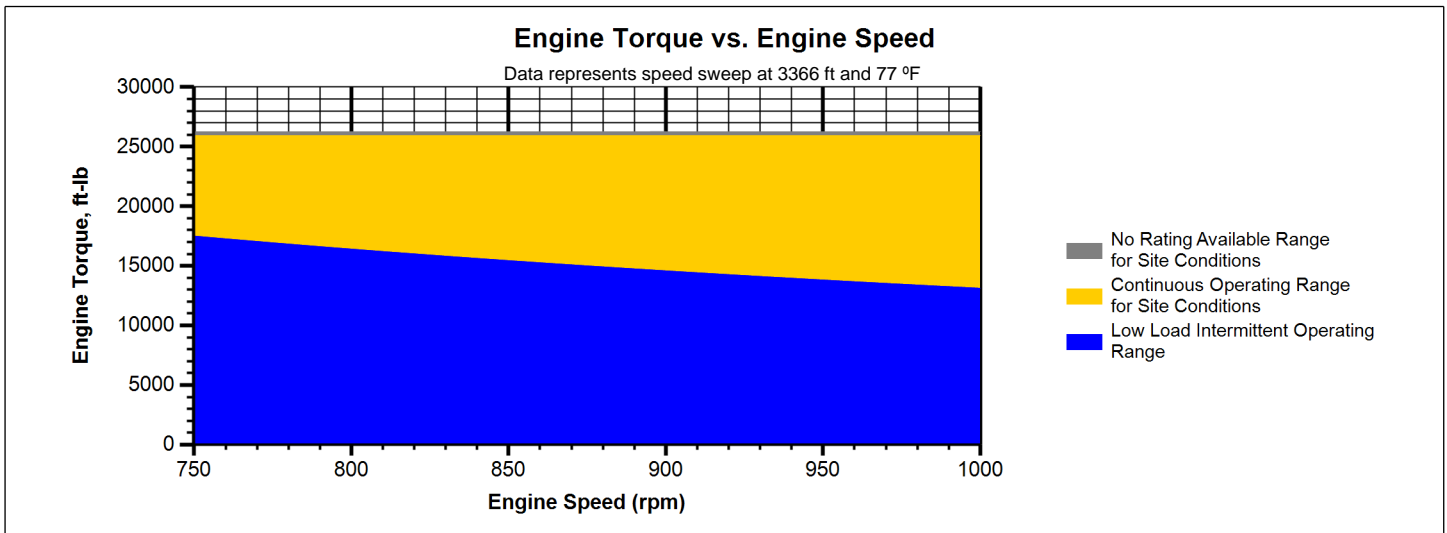
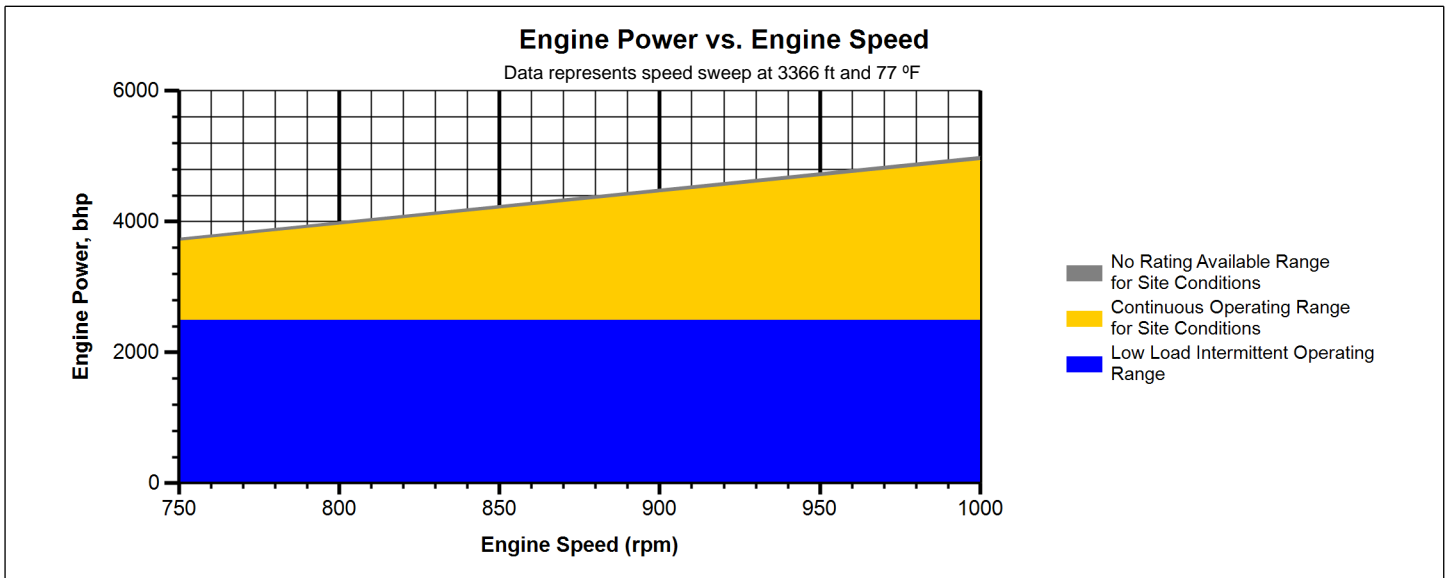
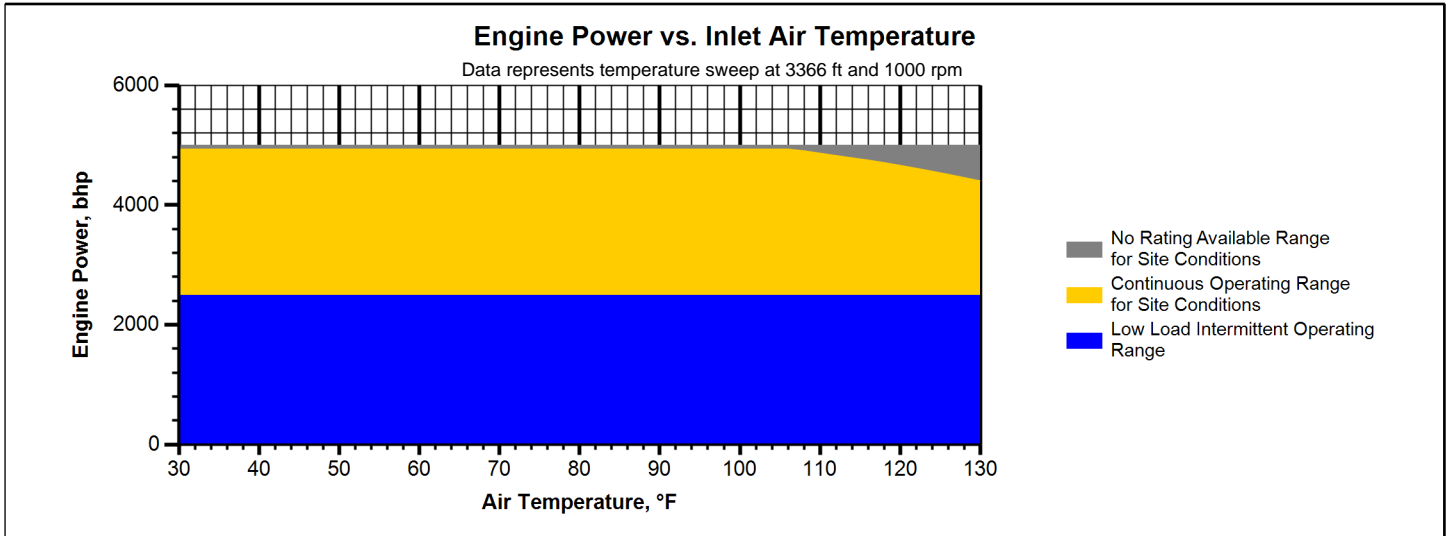
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)		(13)	Btu/min	51385	51385	40587	35052
HEAT REJ. TO ATMOSPHERE		(13)	Btu/min	20454	20454	18807	17049
HEAT REJ. TO LUBE OIL (OC)		(13)	Btu/min	30509	30509	26764	23482
HEAT REJ. TO A/C - STAGE 1 (1AC)		(13)(14)	Btu/min	52276	52276	23846	4677
HEAT REJ. TO A/C - STAGE 2 (2AC)		(13)(14)	Btu/min	23117	23117	15675	9427

COOLING SYSTEM SIZING CRITERIA			
TOTAL JACKET WATER CIRCUIT (JW+1AC)	(14)(15)	Btu/min	111413
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (OC+2AC)	(14)(15)	Btu/min	60883

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. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.



Note:

At site conditions of 3366 ft and 77°F inlet air temp., constant torque can be maintained down to 750 rpm. The minimum speed for loading at these conditions is 750 rpm.

GAS COMPRESSION APPLICATION

NOTES:

1. Fuel pressure range specified is to the engine gas shutoff valve (GSOV). Additional fuel train components should be considered in pressure and flow calculations.
2. Engine rating is with two engine driven water pumps. Tolerance is $\pm 3\%$ of full load.
3. Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site ambient temperature.
4. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of $\pm 5\%$.
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 $\pm 5\%$.
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 $\pm 6\%$.
9. Emissions data is at engine exhaust flange prior to any after treatment.
10. 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 . THC, 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. Exhaust Oxygen level is the result of adjusting the engine to operate at the specified NOx level. Tolerance is ± 0.5 .
13. Heat rejection values are nominal. Tolerances, based on treated water, are $\pm 10\%$ for jacket water circuit, $\pm 50\%$ for radiation, $\pm 20\%$ for lube oil circuit, and $\pm 5\%$ for aftercooler circuit.
14. 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.
15. Cooling system sizing criteria are maximum circuit heat rejection for the site, with applied tolerances.

GAS COMPRESSION APPLICATION

Constituent	Abbrev	Mole %	Norm
Water Vapor	H2O	0.0000	0.0000
Methane	CH4	77.0480	77.0472
Ethane	C2H6	11.2440	11.2439
Propane	C3H8	5.1000	5.0999
Isobutane	iso-C4H10	0.8950	0.8950
Norbutane	nor-C4H10	1.8600	1.8600
Isopentane	iso-C5H12	0.5610	0.5610
Noropentane	nor-C5H12	0.6420	0.6420
Hexane	C6H14	0.6970	0.6970
Heptane	C7H16	1.1610	1.1610
Nitrogen	N2	0.6410	0.6410
Carbon Dioxide	CO2	0.1510	0.1510
Hydrogen Sulfide	H2S	0.0010	0.0010
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 %)		100.0010	100.0000

Fuel Makeup: Nat Gas
Unit of Measure: English

Calculated Fuel Properties

Caterpillar Methane Number: 29.5

Lower Heating Value (Btu/scf): 1223
Higher Heating Value (Btu/scf): 1346
WOBBE Index (Btu/scf): 1389

THC: Free Inert Ratio: 125.26
Total % Inerts (% N2, CO2, He): 0.792%
RPC (%) (To 905 Btu/scf Fuel): 100%

Compressibility Factor: 0.996
Stoich A/F Ratio (Vol/Vol): 12.67
Stoich A/F Ratio (Mass/Mass): 16.33
Specific Gravity (Relative to Air): 0.776

Fuel Specific Heat Ratio (K): 1.277

CONDITIONS AND DEFINITIONS

Caterpillar Methane Number represents the knock resistance of a gaseous fuel. It should be used with the Caterpillar 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 generated by the Caterpillar Gas Engine Rating Pro program 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.

GAS COMPRESSION APPLICATION

ENGINE SPEED (rpm):	1400	RATING STRATEGY:	STANDARD
COMPRESSION RATIO:	8	FUEL SYSTEM:	CAT WIDE RANGE
AFTERCOOLER TYPE:	SCAC	SITE CONDITIONS:	WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 2 INLET (°F):	130	FUEL:	Maverick
AFTERCOOLER - STAGE 1 INLET (°F):	201	FUEL PRESSURE RANGE (psig): (See note 1)	7.0-40.0
JACKET WATER OUTLET (°F):	210	FUEL METHANE NUMBER:	29.5
ASPIRATION:	TA	FUEL LHV (Btu/scf):	1223
COOLING SYSTEM:	JW+OC+1AC, 2AC	ALTITUDE(ft):	3366
CONTROL SYSTEM:	ADEM3	INLET AIR TEMPERATURE(°F):	77
EXHAUST MANIFOLD:	ASWC	STANDARD RATED POWER:	1380 bhp@1400rpm
COMBUSTION:	LOW EMISSION		
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.5		
SET POINT TIMING:	27		

RATING	NOTES	LOAD	MAXIMUM RATING		SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
			100%	100%	75%	50%	
ENGINE POWER (WITHOUT FAN)	(2)	bhp	1225	1225	918	690	
INLET AIR TEMPERATURE		°F	77	77	77	77	

ENGINE DATA							
FUEL CONSUMPTION (LHV)		(3)	Btu/bhp-hr	7234	7234	7594	8018
FUEL CONSUMPTION (HHV)		(3)	Btu/bhp-hr	7962	7962	8358	8824
AIR FLOW (@inlet air temp, 14.7 psia)	(WET)	(4)(5)	ft3/min	2774	2774	2120	1624
AIR FLOW	(WET)	(4)(5)	lb/hr	12301	12301	9400	7201
FUEL FLOW (60°F, 14.7 psia)			scfm	121	121	95	75
INLET MANIFOLD PRESSURE		(6)	in Hg(abs)	77.6	77.6	61.7	47.4
EXHAUST TEMPERATURE - ENGINE OUTLET		(7)	°F	848	848	846	889
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(8)(5)	ft3/min	7232	7232	5527	4381
EXHAUST GAS MASS FLOW	(WET)	(8)(5)	lb/hr	12728	12728	9736	7468

EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)		(9)(10)	g/bhp-hr	0.50	0.50	0.50	0.50
CO		(9)(10)	g/bhp-hr	2.60	2.60	2.61	2.53
THC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	3.38	3.38	3.31	3.16
NMHC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	1.57	1.57	1.54	1.47
NMNEHC (VOCs) (mol. wt. of 15.84)		(9)(10)(11)	g/bhp-hr	1.05	1.05	1.02	0.98
HCHO (Formaldehyde)		(9)(10)	g/bhp-hr	0.35	0.35	0.33	0.32
CO2		(9)(10)	g/bhp-hr	530	530	554	586
EXHAUST OXYGEN		(9)(12)	% DRY	9.0	9.0	8.7	8.3

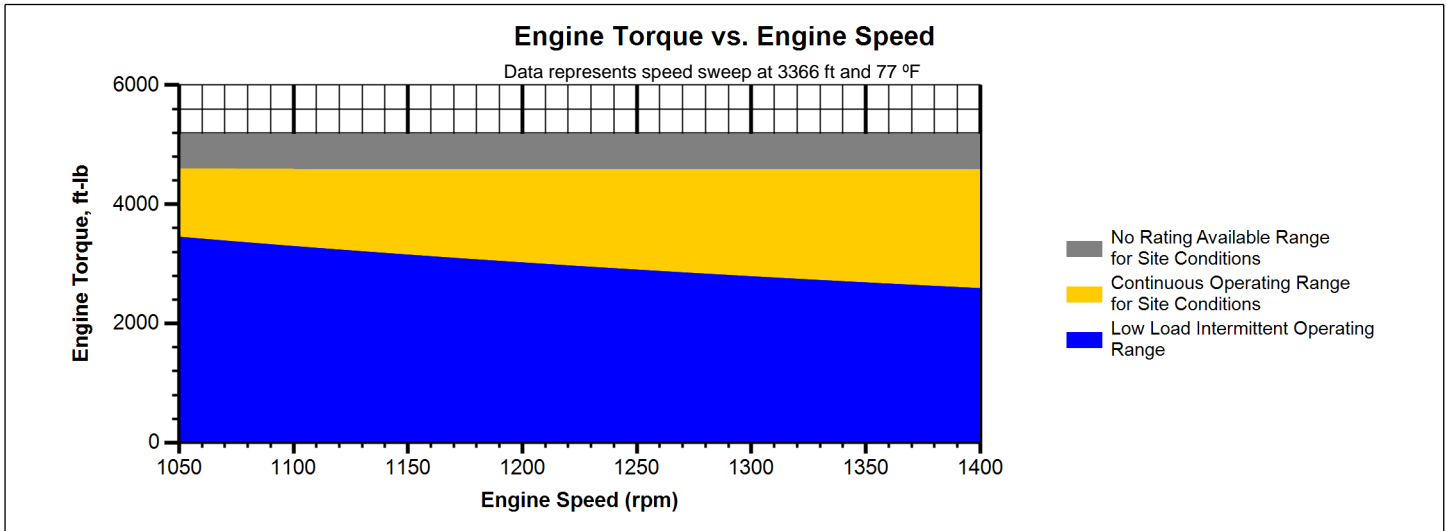
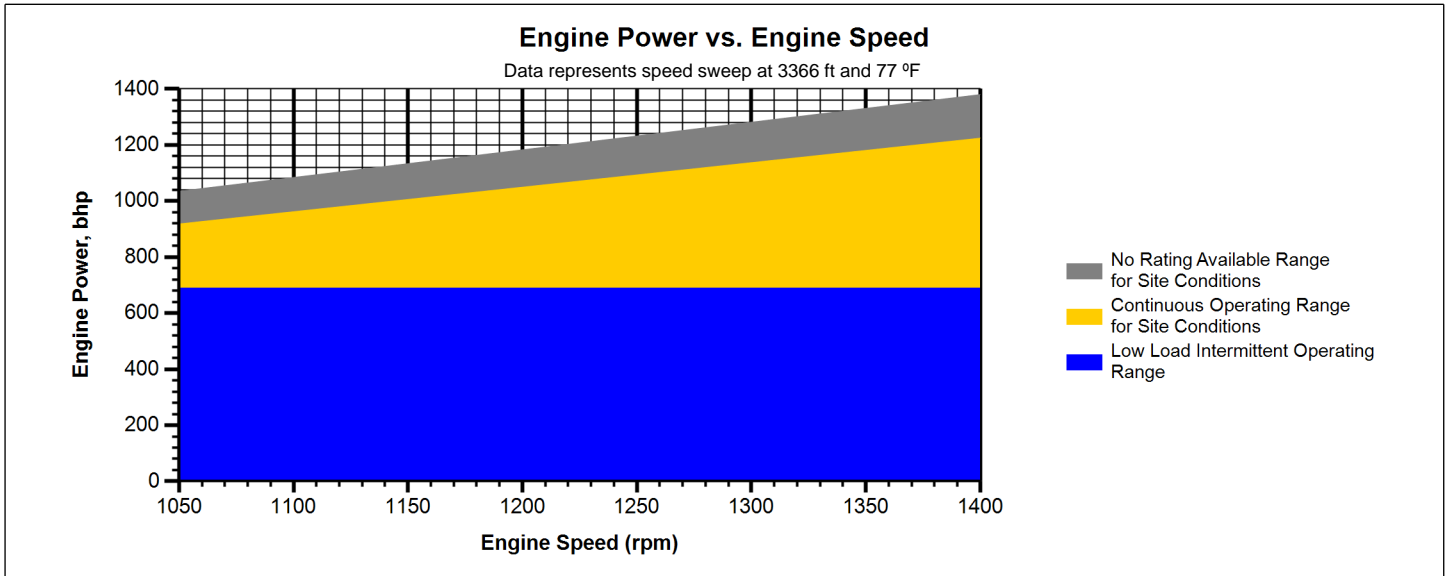
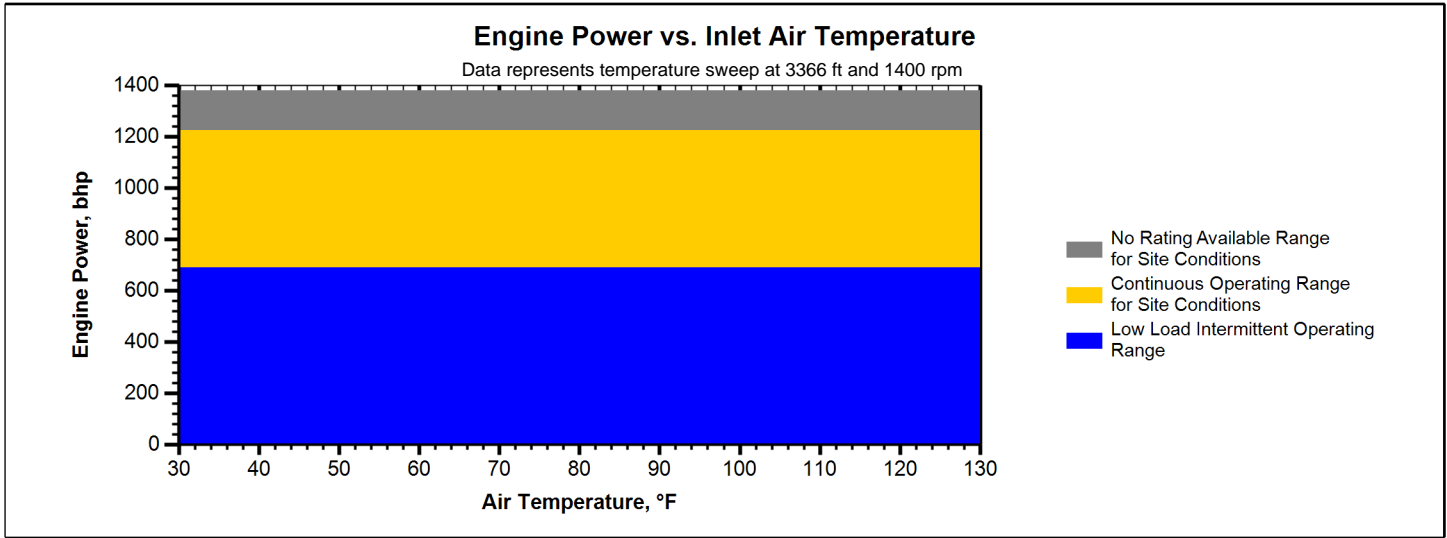
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)		(13)	Btu/min	31012	31012	26712	23889
HEAT REJ. TO ATMOSPHERE		(13)	Btu/min	4914	4914	4129	3543
HEAT REJ. TO LUBE OIL (OC)		(13)	Btu/min	3749	3749	3229	2888
HEAT REJ. TO A/C - STAGE 1 (1AC)		(13)(14)	Btu/min	6592	6592	4838	1422
HEAT REJ. TO A/C - STAGE 2 (2AC)		(13)(14)	Btu/min	4438	4438	3911	2786

COOLING SYSTEM SIZING CRITERIA							
TOTAL JACKET WATER CIRCUIT (JW+OC+1AC)		(14)(15)	Btu/min	45533			
TOTAL AFTERCOOLER CIRCUIT (2AC)		(14)(15)	Btu/min	4660			

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. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.



Note:

At site conditions of 3366 ft and 77°F inlet air temp., constant torque can be maintained down to 1050 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 $\pm 3\%$ of full load.
3. Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site ambient temperature.
4. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of $\pm 5\%$.
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 $\pm 5\%$.
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 $\pm 6\%$.
9. Emissions data is at engine exhaust flange prior to any after treatment.
10. 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 . THC, 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. Exhaust Oxygen level is the result of adjusting the engine to operate at the specified NOx level. Tolerance is ± 0.5 .
13. Heat rejection values are nominal. Tolerances, based on treated water, are $\pm 10\%$ for jacket water circuit, $\pm 50\%$ for radiation, $\pm 20\%$ for lube oil circuit, and $\pm 5\%$ for aftercooler circuit.
14. 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.
15. Cooling system sizing criteria are maximum circuit heat rejection for the site, with applied tolerances.

GAS COMPRESSION APPLICATION

Constituent	Abbrev	Mole %	Norm
Water Vapor	H2O	0.0000	0.0000
Methane	CH4	77.0480	77.0472
Ethane	C2H6	11.2440	11.2439
Propane	C3H8	5.1000	5.0999
Isobutane	iso-C4H10	0.8950	0.8950
Norbutane	nor-C4H10	1.8600	1.8600
Isopentane	iso-C5H12	0.5610	0.5610
Noropentane	nor-C5H12	0.6420	0.6420
Hexane	C6H14	0.6970	0.6970
Heptane	C7H16	1.1610	1.1610
Nitrogen	N2	0.6410	0.6410
Carbon Dioxide	CO2	0.1510	0.1510
Hydrogen Sulfide	H2S	0.0010	0.0010
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 %)		100.0010	100.0000

Fuel Makeup: Nat Gas
Unit of Measure: English

Calculated Fuel Properties

Caterpillar Methane Number: 29.5

Lower Heating Value (Btu/scf): 1223
Higher Heating Value (Btu/scf): 1346
WOBBE Index (Btu/scf): 1389

THC: Free Inert Ratio: 125.26
Total % Inerts (% N2, CO2, He): 0.792%
RPC (%) (To 905 Btu/scf Fuel): 100%

Compressibility Factor: 0.996
Stoich A/F Ratio (Vol/Vol): 12.67
Stoich A/F Ratio (Mass/Mass): 16.33
Specific Gravity (Relative to Air): 0.776

Fuel Specific Heat Ratio (K): 1.277

CONDITIONS AND DEFINITIONS

Caterpillar Methane Number represents the knock resistance of a gaseous fuel. It should be used with the Caterpillar 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 generated by the Caterpillar Gas Engine Rating Pro program 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.

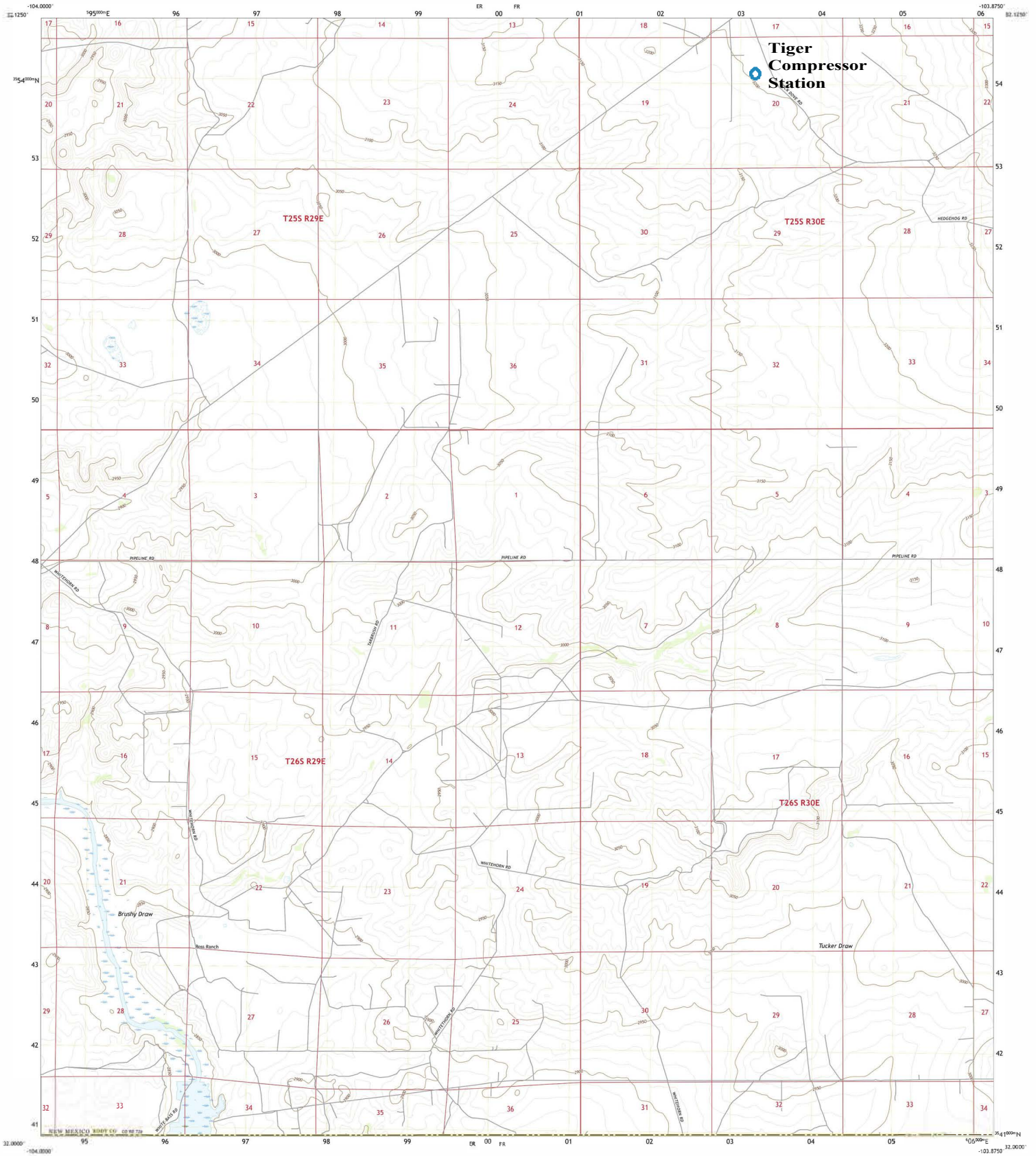
Section 8

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:

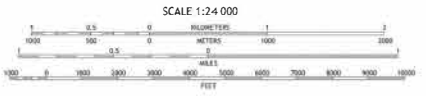
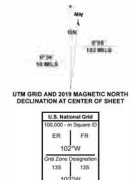
The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public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

A site location map and aerial image illustrating the property boundary and surrounding access roads is provided.

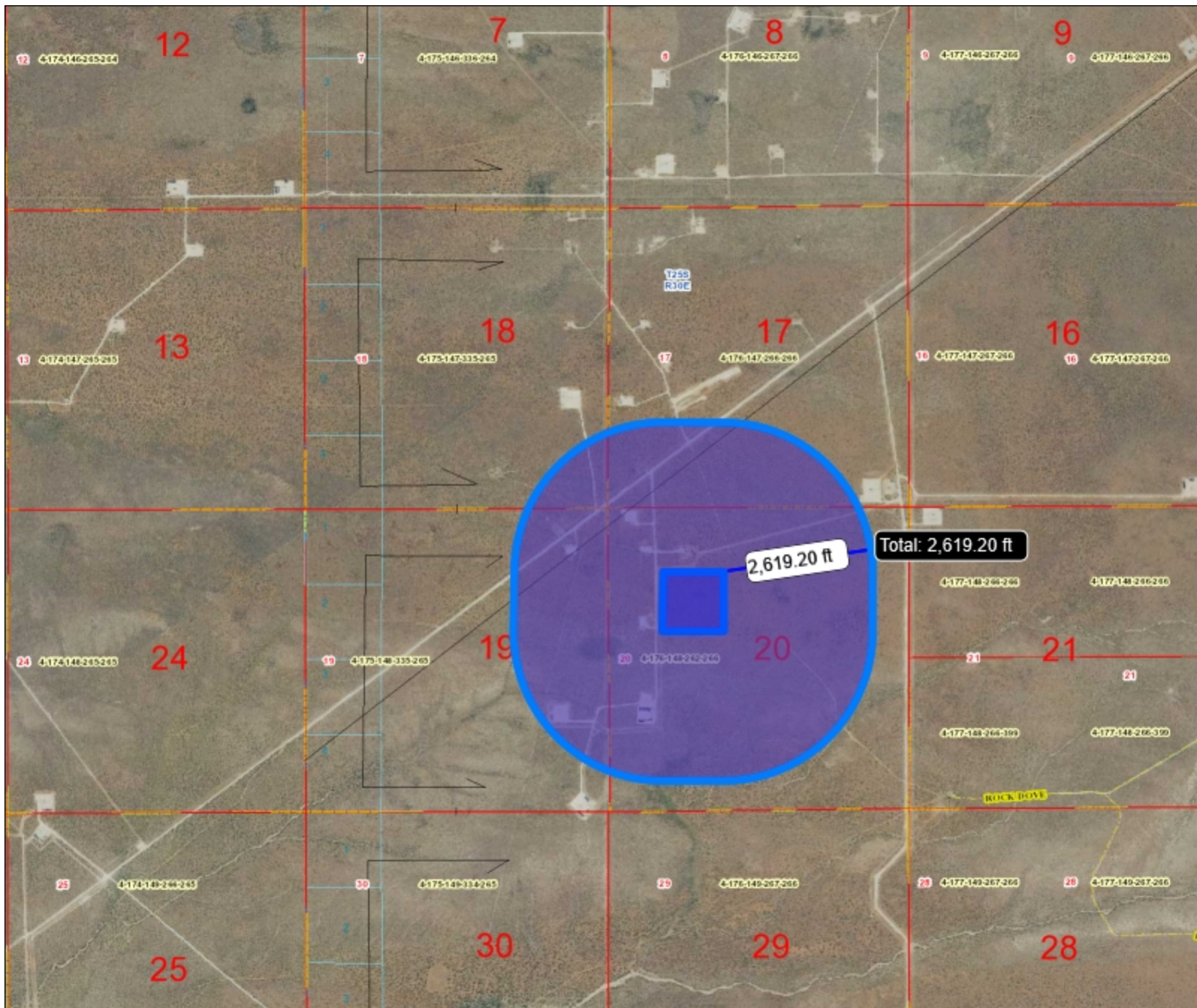


Produced by the United States Geological Survey North American Datum of 1983 (NAD83) World Geodetic System of 1984 (WGS84) Projection and 1:000-meter grid interval Transverse Mercator, Zone 12N(11H) This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government ownership are shown with a hatched pattern.

History table with columns: Date, Description, and Author/Editor. Rows include dates from 2010 to 2014 and descriptions like 'Initial Release' and 'Map Content Change'.



Legend table with 8 numbered boxes corresponding to features: 1 Malaga, 2 Pierce Canyon, 3 Big Oaks, 4 Red Bluff, 5 Phantom Banks, 6 Screw Bean Draw NE, 7 Red Bluff, 8 Old NE.



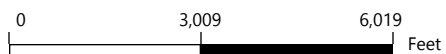
Legend

Cartography

- <all other values>
- Govt Lot Lines
- Dimension Tic
- Leader Lines
- Misc Carto
- Owner Hooks
- Sub Corners
- Roads
- Railroads
- Water
- Geographic
- Section
- Subdivision
- Parcel

Tiger Compressor Station 1/2 Miles Radius

Web Print: 09/20/2020



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



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.
-

The public notice documents are included.

Item 1.

Certified Mail Receipts with Postmarks

2

DEPARTMENT (XTO)

CONTACT: Benjamin Schneider

LOCATION: W4.6B.374

PHONE: 832 624-2768

SPRING, TX 77389



CERTIFIED MAIL

LINE	ARTICLE NUMBER	NAME OF ADDRESSEE	Description	POSTAGE	Certified Fee/Registered Fee	Return Fee
1	7017 3380 0001 1262 1875 ✓	Bureau of Land Management 620 E. Greene St. Carlsbad, New Mexico, 88220-6292	Tiger Compressor Station Notification of NSR Permit Application	0.50	3.55	2.85
2	7017 3380 0001 1262 1882 ✓	Eddy County Manager 101 W. Greene St. Suite 110 Carlsbad, New Mexico, 88220	Tiger Compressor Station Notification of NSR Permit Application			
3	7018 1130 0002 2476 2543 ✓	Lea County Manager 100 N. Main Avenue Suite 4 Lovington, New Mexico, 88260	Tiger Compressor Station Notification of NSR Permit Application			
4	7018 1130 0002 2476 4707 ✓	State of New Mexico Land Office 310 Old Santa Fe Trail Santa Fe, New Mexico, 87501	Tiger Compressor Station Notification of NSR Permit Application			

Mail Center: Please have this form stamped by the Post Office

Benjamin Schneider
2277 Springwoods Village Pkwy,
Spring, TX 77389

DEPARTMENT (XTO)
CONTACT: Benjamin Schneider
LOCATION: W46B.374
PHONE: 832 624-2768
SPRING, TX 77389

CERTIFIED MAIL						
LINE	ARTICLE NUMBER	NAME OF ADDRESSEE	Description	POSTAGE	Certified Fee/Registered Fee	Return Fee
1	7017 3380 0001 1262 1875	Bureau of Land Management 620 E. Greene St. Carlsbad, New Mexico, 88220-6292	Tiger Compressor Station Notification of NSR Permit Application			
2	7017 3380 0001 1262 1882	Eddy County Manager 101 W. Greene St. Suite 110 Carlsbad, New Mexico, 88220	Tiger Compressor Station Notification of NSR Permit Application			
3	7018 1130 0002 2476 2543	Lea County Manager 100 N. Main Avenue Suite 4 Lovington, New Mexico, 88260	Tiger Compressor Station Notification of NSR Permit Application			
4	7018 1130 0002 2476 4707	State of New Mexico Land Office 310 Old Santa Fe Trail Santa Fe, New Mexico, 87501	Tiger Compressor Station Notification of NSR Permit Application			

Mail Center: Please have this form stamped by the Post Office

Mail Center: Please have this form date stamped by the Post Office.

7017 3380 0001 1262 1875
U.S. Postal Service™
CERTIFIED MAIL® REC
Domestic Mail Only
OFFICIAL USE
For delivery information, visit our website at www.usps.com®
Certified Mail Fee
Certified Mail Return Receipt (hard copy) \$3.00
Certified Mail Restricted Delivery \$4.00
Adult Signature Required \$3.00
Certified Mail Restricted Delivery \$4.00
Signature Restricted Delivery \$3.00
Postage
Total Payment
Bureau of Land Management
620 E. Greene St.
Carlsbad, New Mexico, 88220
PS Form 3800, October 2012

7017 3380 0001 1262 1882
U.S. Postal Service™
CERTIFIED MAIL® REC
Domestic Mail Only
OFFICIAL USE
For delivery information, visit our website at www.usps.com®
Certified Mail Fee
Certified Mail Return Receipt (hard copy) \$3.00
Certified Mail Restricted Delivery \$4.00
Adult Signature Required \$3.00
Certified Mail Restricted Delivery \$4.00
Signature Restricted Delivery \$3.00
Postage
Total Payment
Eddy County Manager
101 W. Greene St.
Suite 110
Carlsbad, New Mexico, 88220
PS Form 3800, October 2012

7018 1130 0002 2476 2543
U.S. Postal Service™
CERTIFIED MAIL® REC
Domestic Mail Only
OFFICIAL USE
For delivery information, visit our website at www.usps.com®
Certified Mail Fee
Certified Mail Return Receipt (hard copy) \$3.00
Certified Mail Restricted Delivery \$4.00
Adult Signature Required \$3.00
Certified Mail Restricted Delivery \$4.00
Signature Restricted Delivery \$3.00
Postage
Total Payment
Lea County Manager
100 N. Main Avenue
Suite 4
Lovington, New Mexico, 88260
PS Form 3800, October 2012

7018 1130 0002 2476 4707
U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
OFFICIAL USE
For delivery information, visit our website at www.usps.com®
Certified Mail Fee
Certified Mail Return Receipt (hard copy) \$3.00
Certified Mail Restricted Delivery \$4.00
Adult Signature Required \$3.00
Certified Mail Restricted Delivery \$4.00
Signature Restricted Delivery \$3.00
Postage
Total Payment
State of New Mexico Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico, 87501
PS Form 3800, October 2012

Item 2.

List of Places Posted

Site Location

Carlsbad Post Office

Hobbs Wal-Mart

Hobbs Lowe's

Item 3.

Property Tax Records



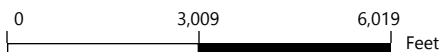
Legend

Cartography

- <all other values>
- Govt Lot Lines
- Dimension Tic
- Leader Lines
- Misc Carto
- Owner Hooks
- Sub Corners
- Roads
- Railroads
- Water
- Geographic
- Section
- Subdivision
- Parcel

Tiger Compressor Station Property
 Web Print: 09/20/2020

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.





OBJECTID_12_13_14: 19791
UPC: 4-176-148-262-266
UPC_join: 4176148262266
ACCOUNTNUMBER: R091625
LEGALSUMMARY: Quarter: NE S: 20 T: 25S
R: 30E Quarter: NW S: 20 T: 25S R: 30E
Quarter: SW S: 20 T: 25S R: 30E Quarter: SE S:
20 T: 25S R: 30E ALL MAP# 385-20 LOC
EXEMPT
OWNERNAME: BUREAU OF LAND
MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 61777
TAXYEAR_1: 2020
ACCOUNTNUMBER_1: R091625
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160020093.145163160000
DOCUMENT_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160020093
OBJECTID_12: 52708
TAXYEAR_12: 2020
ACCOUNTNUMBER_12: R091625
SEQUENCE_R_1: 0
INTERNALID_1:
R091625.LAND2768104.1511265345169
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R091625
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: CO_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511265345169

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



OBJECTID_12_13_14: 19761
UPC: 4-175-147-335-265
UPC_join: 4175147335265
ACCOUNTNUMBER: R091623
LEGALSUMMARY: Quarter: NE S: 18 T: 25S
R: 30E Quarter: NW S: 18 T: 25S R: 30E
Quarter: SW S: 18 T: 25S R: 30E Quarter: SE S:
18 T: 25S R: 30E ALL MAP# 385-18 LOC
EXEMPT
OWNERNAME: BUREAU OF LAND
MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 61624
TAXYEAR_1: 2020
ACCOUNTNUMBER_1: R091623
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160020093.1451631600000
DOCUMENT_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160020093
OBJECTID_12: 52706
TAXYEAR_12: 2020
ACCOUNTNUMBER_12: R091623
SEQUENCE_R_1: 0
INTERNALID_1:
R091623.LAND2768102.1511265343865
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R091623
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: CO_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511265343865

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



OBJECTID_12_13_14: 19790
UPC: 4-176-147-266-266
UPC_join: 4176147266266
ACCOUNTNUMBER: R091622
LEGALSUMMARY: Quarter: NE S: 17 T: 25S
R: 30E Quarter: NW S: 17 T: 25S R: 30E
Quarter: SW S: 17 T: 25S R: 30E Quarter: SE S:
17 T: 25S R: 30E ALL MAP# 385-17 LOC
EXEMPT
OWNERNAME: BUREAU OF LAND
MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 61623
TAXYEAR_1: 2020
ACCOUNTNUMBER_1: R091622
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160020093.1451631600000
DOCUMENT_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160020093
OBJECTID_12: 52705
TAXYEAR_12: 2020
ACCOUNTNUMBER_12: R091622
SEQUENCE_R_1: 0
INTERNALID_1:
R091622.LAND2768101.1511265343379
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R091622
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: CO_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511265343379

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



OBJECTID_12_13_14: 19762
UPC: 4-175-148-335-265
UPC_join: 4175148335265
ACCOUNTNUMBER: R091624
LEGALSUMMARY: Quarter: NE S: 19 T: 25S
R: 30E Quarter: NW S: 19 T: 25S R: 30E
Quarter: SW S: 19 T: 25S R: 30E Quarter: SE S:
19 T: 25S R: 30E ALL MAP# 385-19 LOC
EXEMPT
OWNERNAME: BUREAU OF LAND
MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 61776
TAXYEAR_1: 2020
ACCOUNTNUMBER_1: R091624
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160020093.1451631600000
DOCUMENT_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160020093
OBJECTID_12: 52707
TAXYEAR_12: 2020
ACCOUNTNUMBER_12: R091624
SEQUENCE_R_1: 0
INTERNALID_1:
R091624.LAND2768103.1511265344365
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R091624
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: CO_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511265344365

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Items 4 & 5.

**Letters to Owners of Record and Applicable
Counties, Municipalities, and Tribes**



22777 Springwoods Village Parkway
Spring, Texas 77389
(832) 625-0104

October 14, 2020

Certified Mail No. 7017 3380 0001 1262 1875

Bureau of Land Management
620 E. Greene St.
Carlsbad, New Mexico, 88220-6292

RE: NSR Permit Application
Tiger Compressor Station
XTO Energy Inc.

Dear Federal Official,

In accordance with the application requirements of 20.2.72 NMAC, XTO Energy Inc. is providing notification of the planned modification of the Tiger Compressor Station on your property in Eddy County, NM. A public notice will be published in the Artesia Daily Press newspaper, at the proposed site location, two other locations in Carlsbad, NM and one location in Hobbs, NM. A copy of the notice is attached. Please contact me at (832) 624-2768 should you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Ben Schneider".

Benjamin Schneider
Environmental Engineer

Attachment: Public Notice



22777 Springwoods Village Parkway
Spring, Texas 77389
(832) 625-0104

October 14, 2020

Certified Mail No. 7017 3380 0001 1262 1882

Eddy County Manager
101 W. Greene St.
Suite 110
Carlsbad, New Mexico, 88220

RE: NSR Permit Application
Tiger Compressor Station
XTO Energy Inc.

Dear County Manager,

In accordance with the application requirements of 20.2.72 NMAC, XTO Energy Inc. is providing notification of the planned modification of the Tiger Compressor Station in Eddy County, NM. A public notice will be published in the Artesia Daily Press newspaper, at the proposed site location, two other locations in Carlsbad, NM and one location in Hobbs, NM. A copy of the notice is attached. Please contact me at (832) 624-2768 should you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Ben Schneider'.

Benjamin Schneider
Environmental Engineer

Attachment: Public Notice



22777 Springwoods Village Parkway
Spring, Texas 77389
(832) 625-0104

October 14, 2020

Certified Mail No. 7018 1130 0002 2476 2543

Lea County Manager
100 N. Main Avenue
Suite 4
Lovington, New Mexico, 88260

RE: NSR Permit Application
Tiger Compressor Station
XTO Energy Inc.

Dear County Manager,

In accordance with the application requirements of 20.2.72 NMAC, XTO Energy Inc. is providing notification of the planned modification of the Tiger Compressor Station in Eddy County, NM. The proposed site is within 10 miles of Lea County. A public notice will be published in the Artesia Daily Press newspaper, at the proposed site location, two other locations in Carlsbad, NM and one location in Hobbs, NM. A copy of the notice is attached. Please contact me at (832) 624-2768 should you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Ben Schneider'.

Benjamin Schneider
Environmental Engineer

Attachment: Public Notice



22777 Springwoods Village Parkway
Spring, Texas 77389
(832) 625-0104

October 14, 2020

Certified Mail No. 7018 1130 0002 2476 4707

State of New Mexico Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico, 87501

RE: NSR Permit Application
Tiger Compressor Station
XTO Energy Inc.

Dear Commissioner,

In accordance with the application requirements of 20.2.72 NMAC, XTO Energy Inc. is providing notification of the planned modification of the Tiger Compressor Station near your property in Eddy County, NM. A public notice will be published in the Artesia Daily Press newspaper, at the proposed site location, two other locations in Carlsbad, NM and one location in Hobbs, NM. A copy of the notice is attached. Please contact me at (832) 624-2768 should you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Ben Schneider'.

Benjamin Schneider
Environmental Engineer

Attachment: Public Notice

Item 6.

**Sample of Notice posted and
Verification of Postings**

NOTICE OF AIR QUALITY PERMIT APPLICATION

XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Tiger Compressor Station. The expected date of application submittal to the Air Quality Bureau is October 28, 2020.

The exact location for the facility known as the Tiger Compressor Station will be latitude 32 deg, 07 min, 06 sec and longitude -103 deg, 54 min, 23 sec. The approximate location of this facility is 12 miles SE of Malaga in Eddy County, NM.

The proposed modification consists removing two engines, updating engine emission rates, updating glycol recirculation rate, removing two heaters, adding additional flaring, and updating oil/water production rates.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	26 pph	18 tpy
PM ₁₀	26 pph	18 tpy
PM _{2.5}	26 pph	18 tpy
Sulfur Dioxide (SO ₂)	10 pph	22 tpy
Nitrogen Oxides (NO _x)	522 pph	220 tpy
Carbon Monoxide (CO)	997 pph	239 tpy
Volatile Organic Compounds (VOC)	961 pph	264 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	39 pph	27 tpy
Toxic Air Pollutant (TAP)	0 pph	0 tpy
Green House Gas Emissions as Total CO _{2e}	n/a	261,550 tpy

The standard and maximum operating schedule of the facility will be 24 hours per day, 7 days a week and a maximum of 52 weeks per year. The owner and/or operator of the Facility is: XTO Energy, Inc.; 22777 Springwoods Village Pkwy-W4.6B.347; Spring, Texas, 77389.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as 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; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet 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 can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

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 505-476-5557.

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: Kristine Yurdin, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. 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.


General Posting of Notices – Certification

Maverick Compressor Station
Spartan Compressor Station
Tiger Compressor Station

I, Brayden Hamlin, the undersigned, certify that on 11-9-20, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the **Hobbs and Carlsbad** of Eddy County, State of New Mexico on the following dates:

1. Facility entrance on this date: 11/9/20
2. Wal-Mart on this date: 11/9/20
3. Lowes on this date: 11/9/20
4. Post-Office on this date: 11/9/20

Signed this 9th day of November, 2020.


Signature

11/9/20
Date

Brayden Hamlin
Printed Name

Safety Environmental
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}



White sign on a post, text is illegible.

XTO PERMIAN OPERATING,
PLO ROSS RANCH 19 FEB
SEC. 19-T25S-R30E
API #30-015-37800
EDDY CO., NM NMLCO703

Item 7.

A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.

Noticed Citizens, Counties, Municipalities, and Tribes

Bureau Of Land Management: Carlsbad Field Office (Federal Official)

Eddy County: Eddy County Manager

Lea County: Lea County Manager

State of New Mexico Land Office: Commissioner

Item 8.

A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.

Transmission Report

Date/Time
Local ID 1

11-30-2020
8326252631

04:06:45 p.m.

Transmit Header Text
Local Name 1

This document : Confirmed
(reduced sample and details below)
Document size : 8.5"x11"

November 30, 2020

KATK 92.1 FM
(575) 887-7000

Re: Public Service Announcement

As part of the air quality permitting process in New Mexico, applicants for certain air permits must attempt to provide notice to the public of the proposed permit action via public service announcement (PSA). The announcement for Tiger Compressor Station is attached. Will you air the PSA?

Thank you.

Benjamin Schneider
XTO Energy Inc.
(832) 624-2768

Total Pages Scanned : 1

Total Pages Confirmed : 1

No.	Job	Remote Station	Start Time	Duration	Pages	Line	Mode	Job Type	Results
001	465	VFD213M6N23	04:05:41 p.m. 11-30-2020	00:00:40	1/1	1	G3	HS	CP14400

Abbreviations:

HS: Host send
HR: Host receive
WS: Waiting send

PL: Polled local
PR: Polled remote
MS: Mailbox save

MP: Mailbox print
RP: Report
FF: Fax Forward

CP: Completed
FA: Fail
TU: Terminated by user

TS: Terminated by system
G3: Group 3
EC: Error Correct

Transmission Report

Date/Time 11-30-2020
Local ID 1 8326252631

04:15:48 p.m.

Transmit Header Text
Local Name 1

This document : Confirmed
(reduced sample and details below)
Document size : 8.5"x11"

NOTICE OF AIR QUALITY PERMIT APPLICATION

XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Tiger Compressor Station. The expected date of application submittal to the Air Quality Bureau is December 10, 2020. XTO Energy Inc. is planning to remove two engines, update engine emission rates, update glycol recirculation rate, remove two heaters, add additional flaring, and update oil/water production rates.

The exact location for the facility known as the Tiger Compressor Station will be latitude 32 deg, 07 min, 06 sec and longitude -103 deg, 54 min, 23 sec. The approximate location of this facility is 12 miles SE of Malaga in Eddy County, NM.

The notice was posted at the facility and three other public locations: The Carlsbad post office, the Hobbs Wal-Mart, and the Hobbs Lowes stores. If you have any comments about the construction or operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to the address below:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505-1816
(505) 476-4300

Total Pages Scanned : 1

Total Pages Confirmed : 1

No.	Job	Remote Station	Start Time	Duration	Pages	Line	Mode	Job Type	Results
001	469	VFD212M6N22	04:14:34 p.m. 11-30-2020	00:00:49	1/1	1	G3	HS	CP14400

Abbreviations:

HS: Host send
HR: Host receive
WS: Waiting send

PL: Polled local
PR: Polled remote
MS: Mailbox save

MP: Mailbox print
RP: Report
FF: Fax Forward

CP: Completed
FA: Fail
TU: Terminated by user

TS: Terminated by system.
G3: Group 3
EC: Error Correct

November 30, 2020

KATK 92.1 FM
(575) 887-7000

Re: Public Service Announcement

As part of the air quality permitting process in New Mexico, applicants for certain air permits must attempt to provide notice to the public of the proposed permit action via public service announcement (PSA). The announcement for Tiger Compressor Station is attached. Will you air the PSA?

Thank you.

Benjamin Schneider
XTO Energy Inc.
(832) 624-2768

NOTICE OF AIR QUALITY PERMIT APPLICATION

XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Tiger Compressor Station. The expected date of application submittal to the Air Quality Bureau is December 10, 2020. XTO Energy Inc. is planning to remove two engines, update engine emission rates, update glycol recirculation rate, remove two heaters, add additional flaring, and update oil/water production rates.

The exact location for the facility known as the Tiger Compressor Station will be latitude 32 deg, 07 min, 06 sec and longitude -103 deg, 54 min, 23 sec. The approximate location of this facility is 12 miles SE of Malaga in Eddy County, NM.

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Santa Fe, New Mexico 87505-1816
(505) 476-4300

Item 9.

A copy of the classified or legal ad including the page header (date and newspaper title)

Affidavit of Publication

No. 25576

State of New Mexico Publisher

County of Eddy:

Danny Scott



being duly sworn, says that he is the Publisher

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Display Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily 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 October 22, 2020

Second Publication _____

Third Publication _____

Fourth Publication _____

Fifth Publication _____

Sixth Publication _____

Seventh Publication _____

Subscribed and sworn before me this

22nd day of October 2020



OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2023



Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

Legal Notice

NOTICE OF AIR QUALITY PERMIT APPLICATION
XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Tiger Compressor Station. The expected date of application submittal to the Air Quality Bureau is October 28, 2020.

The exact location for the facility known as the Tiger Compressor Station will be latitude 32 deg, 07 min, 06 sec and longitude -103 deg, 54 min, 23 sec. The approximate location of this facility is 12 miles SE of Malaga in Eddy County, NM.

The proposed modification consists removing two engines, updating engine emission rates, updating glycol recirculation rate, removing two heaters, adding additional flaring, and updating oil/water production rates.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	26 pph	18 tpy
PM 10	26 pph	18 tpy
PM 2.5	26 pph	18 tpy
Sulfur Dioxide (SO ₂)	10 pph	22 tpy
Nitrogen Oxides (NO _x)	522 pph	220 tpy
Carbon Monoxide (CO)	997 pph	239 tpy
Volatile Organic Compounds (VOC)	961 pph	264 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	39 pph	27 tpy
Toxic Air Pollutant (TAP)	0 pph	0 tpy
Green House Gas Emissions as Total CO _{2e}	n/a	261,550 tpy

The standard and maximum operating schedule of the facility will be 24 hours per day, 7 days a week and a maximum of 52 weeks per year. The owner and/or operator of the Facility is: XTO Energy, Inc.; 22777 Springwoods Village Pkwy-W4.6B.347; Spring, Texas, 77389.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as 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; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet 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 can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

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Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25576.

NMSU Carlsbad - Allied Health Case Mgmt Adv (Req#20003925). Minimum qualifications include a Bachelor's degree in a related field and three (3) years of professional experience related to the standard duties as outlined. Go to <https://jobs.nmsu.edu> to submit an application. For additional information please call HR Ops Unit Coordinator Judith Cox-Tindol at 575-234-9208. NMSU is an equal opportunity and affirmative action employer.

Legal Notice

NOTICE OF ACCEPTANCE OF COMMENT FOR PUBLIC MEETING

Eddy County Administration is providing notice to inform all interested parties that the Eddy County Community Services and Planning Department will hold a meeting on October 29, 2020 at 8:30pm in the Eddy County Planning Office at 101 W. Greene St. Carlsbad, NM. This meeting will be available via dial in only. Dial in information will be available at <http://www.eddycounty.org/182/Planning-Development>.

The purpose the meeting is for public comment, review and possible approval under the Eddy County Summary Review process for the Twin Wells Ranch Summary Subdivision as required under section 6.1.5 of Ordinance O-13-76.

A copy of the agenda is available online at <http://www.eddycounty.org/182/Planning-Development> and is available during normal business hours at the Eddy County Administration Building. Please send email comments to Steve McCroskey at smccroskey@co.eddy.nm.us. This notice is given pursuant to Section 10-15-1 NMSA 1978.

Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25578.

Legal Notice

NOTICE OF AIR QUALITY PERMIT APPLICATION XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Maverick Compressor Station. The expected date of application submittal to the Air Quality Bureau is October 28, 2020.

The exact location for the facility known as the Maverick Compressor Station will be latitude 32 deg, 06 min, 40 sec and longitude -103 deg, 48 min, 17 sec. The approximate location of this facility is 17 miles SE of Malaga in Eddy County, NM.

The proposed modification consists removing two engines, updating engine emission rates, updating glycol recirculation rate, removing two heaters, adding additional flaring, and updating oil/water production rates.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	26 pph	18 tpy
PM 10	26 pph	18 tpy
PM 2.5	26 pph	18 tpy
Sulfur Dioxide (SO2)	10 pph	22 tpy
Nitrogen Oxides (NOx)	522 pph	220 tpy
Carbon Monoxide (CO)	997 pph	239 tpy
Volatile Organic Compounds (VOC)	961 pph	264 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	39 pph	27 tpy
Toxic Air Pollutant (TAP)	0 pph	0 tpy
Green House Gas Emissions as Total CO2e	n/a	261,550 tpy

The standard and maximum operating schedule of the facility will be 24 hours per day, 7 days a week and a maximum of 52 weeks per year. The owner and/or operator of the Facility is: XTO Energy, Inc.; 22777 Springwoods Village Pkwy-W4.6B.347; Spring, Texas, 77389.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as 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; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet 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 can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

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Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25574.

NMSU Carlsbad is seeking an HR Operations Unit Coordinator (REQ# 20003705) minimum qualifications include a Bachelor's degree in a related field plus one (1) year of experience or any equivalent combination of education, training and/or experience as approved by Human Resources Services. To apply please visit <http://jobs.nmsu.edu/postings/39622> NMSU is an equal opportunity and an affirmative action employer.

Legal Notice

The City of Artesia Council meeting scheduled for Tuesday, October 27, 2020 will be held in the Council Chambers at City Hall, 511 W. Texas Avenue at 6:00 pm.

The Mayor, City Council, Department Heads and Assistant City Clerk will be present.

In compliance with the Governor's Orders, members of the public that wish to address the City Council will be asked to be available in a designated area at City Hall and will be called upon to address council.

The Governor's order requiring the use of face masks in public places will be enforced.

For additional information or questions, please contact the Mayor's office at (575)748-8282.

Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25577.

Legal Notice

NOTICE OF AIR QUALITY PERMIT APPLICATION XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Spartan Compressor Station. The expected date of application submittal to the Air Quality Bureau is October 28, 2020.

The exact location for the facility known as the Spartan Compressor Station will be latitude 32 deg, 12 min, 12 sec and longitude -103 deg, 50 min, 17 sec. The approximate location of this facility is 13.5 miles E of Malaga in Eddy County, NM.

The proposed modification consists removing two engines, updating engine emission rates, updating glycol recirculation rate, removing two heaters, adding additional flaring, and updating oil/water production rates.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	26 pph	18 tpy
PM 10	26 pph	18 tpy
PM 2.5	26 pph	18 tpy
Sulfur Dioxide (SO2)	10 pph	22 tpy
Nitrogen Oxides (NOx)	522 pph	220 tpy
Carbon Monoxide (CO)	997 pph	239 tpy
Volatile Organic Compounds (VOC)	961 pph	264 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	39 pph	27 tpy
Toxic Air Pollutant (TAP)	0 pph	0 tpy
Green House Gas Emissions as Total CO2e	n/a	261,550 tpy

The standard and maximum operating schedule of the facility will be 24 hours per day, 7 days a week and a maximum of 52 weeks per year. The owner and/or operator of the Facility is: XTO Energy, Inc.; 22777 Springwoods Village Pkwy-W4.6B.347; Spring, Texas, 77389.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as 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; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

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General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Atención

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Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25575.

Legal Notice

Artesia Special Hospital District PO Box 628, Artesia, NM 88210 Artesia Special Hospital District is issuing a request for proposal for the purchase & installation of a new Ultrasound Machine at Artesia General Hospital, in accordance with PROPOSAL: ULTRASOUND EQUIPMENT FOR THE ARTESIA SPECIAL HOSPITAL DISTRICT. A copy of the RFP PROPOSAL: ULTRASOUND Machine can be obtained by contacting Administrator of the Artesia General Hospital, 702 N. 13th Street, Artesia General Hospital, by calling (575)736-8290 or by emailing at cyates@artesiageneral.com, or from Roy Thomas, Radiology Director. Please Contact Roy Thomas at (575) 736-8155 or by e-mail rthomas@artesiageneral.com. To discuss the project. The name and address of all sealed proposals revived by the deadline, October 26th, 2020 11:30 am will be publicly recorded at the proposal opening set for 12:00 pm October 26th, 2020, in a meeting room at Artesia General Hospital. The Artesia Special Hospital district Board of Trustees will review all proposals at its regularly scheduled meeting on October 26, 2020, at 5:15PM, and reserves the right to request additional information: Artesia Special Hospital District reserves the right to reject any or all proposals and to waive any or all technicalities when it is in the best interest of the Hospital District, in Accordance with Section 13-1-131, Procurement Code, NMSA 1978, 1984 Supplement. Board of Trustees, Artesia Special Hospital District.

Published in the Artesia Daily Press, Artesia, N.M., Oct. 8, 15, 22 2020 Legal No. 25567.

Legal Notice

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Published in the Artesia Daily Press, Artesia, N.M., Oct. 22, 2020 Legal No. 25576.

Go for the Green in the Classifieds

Item 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.

Affidavit of Publication

No. _____

State of New Mexico

Publisher

County of Eddy:

Danny Scott

being duly sworn says that he is the

Publisher

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Display Ad

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day as follows:

First Publication October 22, 2020

Second Publication _____

Third Publication _____

Fourth Publication _____

Fifth Publication _____

Sixth Publication _____

Seventh Publication _____

Subscribed and sworn before me this

22nd day of October 2020



OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2023

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

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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: Kristine Yurdin, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. 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.

New Mexico tribes concerned about pitch to expand gambling

ALBUQUERQUE (AP) — Native American leaders in New Mexico are raising concerns about a proposal by non-tribal racetracks and casinos to overhaul the industry and open the state to Las Vegas-style gambling.

They testified during a legislative meeting Monday that allowing unlimited slot machines, table games, online gambling and sports wagering at the horse tracks and casinos would shift the market and violate exclusivity provisions outlined in existing revenue-sharing compacts that tribes have with the state. That would compromise the ability to bring in money for their communities, the tribal leaders said.

“This proposed legislation presents not only a renewed challenge to our economic security but a reckless attempt to expand private wealth at the expense of our ability to provide essential government services,” Sandia Pueblo Gov. Stuart Paisano said.

The pueblo’s resort and casino on the northern edge of Albuquerque have been closed for months because of the coronavirus pandemic. Calling the gambling operation the backbone of the pueblo’s economy, Paisano said there’s considerable uncertainty about how tribal operations will be affected going forward.

Monday’s meeting marked the first time tribal leaders have spoken publicly about the proposal to expand gambling.

They said they were not approached about the plan until days before representatives of the non-tribal tracks and casinos testified before another legislative panel earlier this month.

Track executives predict that expanded gambling would boost tourism and ensure the survival of the horse racing industry in New Mexico. They also have said that under the proposal, tribes would benefit by no longer having to share revenues with the state and could instead invest that money in tribal programs.

The tracks and casinos — also known as racinos — and tribal gambling operations all have revenues shrink in recent years, even before the pandemic. A 2019 report by legislative analysts showed a 10% decline from 2012-2018 in annual revenues shared by tribal casinos with the state, shrinking to \$62.8 million.

The legislative analysts noted at the time that the online gambling industry, which is not authorized in the state, may be drawing a share of the market away from New Mexico casinos.

Scott Scanland, a lobbyist for Sunland Park Racetrack and Casino in southern New Mexico, reiterated Monday that the proposal is simply an idea and that track executives are interested in starting a conversation about how to grow the industry into something that would attract a wider demographic and benefit restaurants and other venues.

He presented a 2019 study that looked at the potential of tapping into online gambling and sports betting.

Some lawmakers said more analysis would have to be done because the pandemic has upended casinos in New Mexico and elsewhere and that the most favorable revenue figures included in the report hinge

on opening a sixth racino in the state — a proposal that already has been mired by numerous political and legal challenges.

At least a dozen tribes have voiced their reservations about overhauling New Mexico’s gambling rules. Santa Clara Pueblo Gov. J. Michael Chavarria said Monday his tribe is among those that have outlined their concerns to New Mexico Gov. Michelle Lujan Grisham and state legislative leaders.

Nora Meyers Sackett, a spokeswoman for Lujan Grisham, said Monday that the governor’s office thoroughly reviews legislation as it makes its way through the Legislature and that would be the case if any measure related to gambling is introduced during the upcoming session in January.

“The governor has a very deep respect for the tribal gaming compacts and their importance to the sovereign nations within our state,” she told The Associated Press.

Lawmakers acknowledged the proposal could have significant effects on tax revenues and that more data is needed to better understand the implications for the state budget as well as tribal communities.

Democratic Rep. Antonio Maestas of Albuquerque, chair of the legislative economic and rural development committee, said the pandemic has forced the state’s hand with regard to tackling difficult issues and that gambling, tourism and the need to boost revenues are among them.

“This is definitely a topic that is deserving of a conversation,” he said.

State receives positive ratings for severance tax bond series

SANTA FE — The State of New Mexico received Aa2/Aa3 and AA-/A+ bond ratings from Moody’s Investors Service and S&P Global Rating.

Both rating agencies assigned stable ratings to New Mexico’s Severance Tax Bond Series 2020A providing confidence in the state to bond investors.

“These ratings are a positive sign to investors that New Mexico bonds remain strong despite the current economic landscape,” said Debbie Romero, acting secretary of the New Mexico Department of Finance and Administration. “We are actively navigating the financial fallout of the pandemic and global oil industry decline, and the ratings show we are moving in the right direction.”

Moody’s Investors Service assigns an Aa2 rating to New Mexico’s Severance Tax Bonds Series 2020A, with an estimated amount of \$96 million. Following this issuance, the state will have \$608 million of senior lien severance tax bonds outstanding, all rated Aa2, and \$40 million of subordinate lien severance tax bonds outstanding, all rated Aa3.

S&P Global Ratings assigns an AA- rating to the State of New Mexico’s Severance Tax Bonds Series 2020A and affirms an AA- rating on the state’s parity senior lien severance tax bonds. S&P Global Ratings also affirms its A+ rating on New Mexico’s subordinate supplemental severance tax bonds outstanding.

Rating agencies factor in the strength and stability of the pledged revenues, the entity’s general credit quality, and the security protections governing the collections and distribution of the pledged revenues.

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OxyContin maker Purdue Pharma to plead three criminal charges

WASHINGTON, D.C. (AP) — Drugmaker Purdue Pharma, the company behind the powerful prescription painkiller OxyContin that experts say helped touch off an opioid epidemic, will plead guilty to federal criminal charges as part of a settlement of more than \$8 billion, the Justice Department announced Wednesday.

The deal does not release any of the company’s executives or owners — members of the wealthy Sackler family — from criminal liability, and a criminal investigation is ongoing. Family members said they acted “ethically and lawfully,” but some state attorneys general said the agreement fails to hold the Sacklers accountable.

The company will plead guilty to three counts, including conspiracy to defraud the United States and violating federal anti-kickback laws, the officials said, and the agreement will be detailed in a bankruptcy court filing in federal court.

The Sacklers will lose all control over their company, a move already in the works, and Purdue will become a public benefit company, meaning it will be governed by a trust that has to balance the trust’s interests against those of the American public and public health, officials said.

The settlement is the highest-profile display yet of the federal government seeking to hold a major drugmaker responsible for an opioid addiction and overdose crisis linked to more than 470,000 deaths in the country since 2000.

It comes less than two weeks before a presidential election where the opioid epidemic has taken a political back seat to the coronavirus pandemic and other issues, and gives President Donald Trump’s administration an example of action on the addiction crisis, which he promised early on in his term.

Ed Bisch, who lost his 18-year-old son to an overdose nearly 20 years ago, said he wants to see people associated with Purdue prosecuted and was glad the Sackler family wasn’t granted immunity.

He blames the company and Sacklers for thousands of deaths. “If it was sold for severe pain only from the beginning, none of this would have happened,” said Bisch, who now lives in Westampton, New Jersey. “But they got greedy.”

Brooke Feldman, a 39-year-old Philadelphia resident who is in recovery from opioid use disorder and is a social worker, said she is glad to see Purdue admit wrongdoing. She said the company had acted for years as “a drug cartel.”

Democratic attorneys general criticized the agreement as a “mere mirage” of justice for victims.

“The federal government had the power here to put the Sacklers in jail, and they didn’t,” Connecticut Attorney General William Tong said in a statement. “Instead, they took fines and penalties that Purdue likely will never fully pay.”

But members of the Sackler family, once listed as one of the nation’s wealthiest by Forbes magazine, said they had acted “ethically and lawfully” and that company documents required under the settlement to be made public will show that.

“Purdue deeply regrets and accepts responsibility for the misconduct detailed by the Department of Justice ...

(See PHARMA, Page 9)

NOTICE OF AIR QUALITY PERMIT APPLICATION
XTO Energy, Inc. announces its application to the New Mexico Environment Department for an air quality permit for the modification of the Tiger Compressor Station. The expected date of application submittal to the Air Quality Bureau is October 28, 2020.

The exact location for the facility known as the Tiger Compressor Station will be latitude 32 deg, 07 min, 06 sec and longitude -103 deg, 54 min, 23 sec. The approximate location of this facility is 12 miles SE of Malaga in Eddy County, NM.

The proposed modification consists removing two engines, updating engine emission rates, updating glycol recirculation rate, removing two heaters, adding additional flaring, and updating oil/water production rates.

The estimated maximum quantities of any regulated air contaminants will be as follows in pound per hour (pph) and tons per year (tpy). These reported emissions could change slightly during the course of the Department’s review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	26 pph	18 tpy
PM 10	26 pph	18 tpy
PM 2.5	26 pph	18 tpy
Sulfur Dioxide (SO2)	10 pph	22 tpy
Nitrogen Oxides (NOx)	522 pph	220 tpy
Carbon Monoxide (CO)	997 pph	239 tpy
Volatile Organic Compounds (VOC)	961 pph	264 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	39 pph	27 tpy
Toxic Air Pollutant (TAP)	0 pph	0 tpy
Green House Gas Emissions as Total CO2e	n/a	261,550 tpy

The standard and maximum operating schedule of the facility will be 24 hours per day, 7 days a week and a maximum of 52 weeks per year. The owner and/or operator of the Facility is: XTO Energy, Inc.; 22777 Springwoods Village Pkwy-W4.6B.347; Spring, Texas, 77389.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as 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; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet 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 can be found at the Air Quality Bureau’s web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the “Permits” section of this web site.

Atención
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AARP
New Mexico

**Your Vote.
Your Voice.
Our Fight.**

As our nation battles a pandemic and economic downturn, the health and financial security of voters over 50 are on the line. That’s why AARP New Mexico is fighting for your voice to be heard.

AARP New Mexico wants to make sure that you know all of your voting options and that all Americans—from working parents to family caregivers to seniors in nursing homes—can vote safely whether they choose to vote from home or in-person.

For more information on how you can vote safely and make your voice heard, visit aarp.org/NMvotes

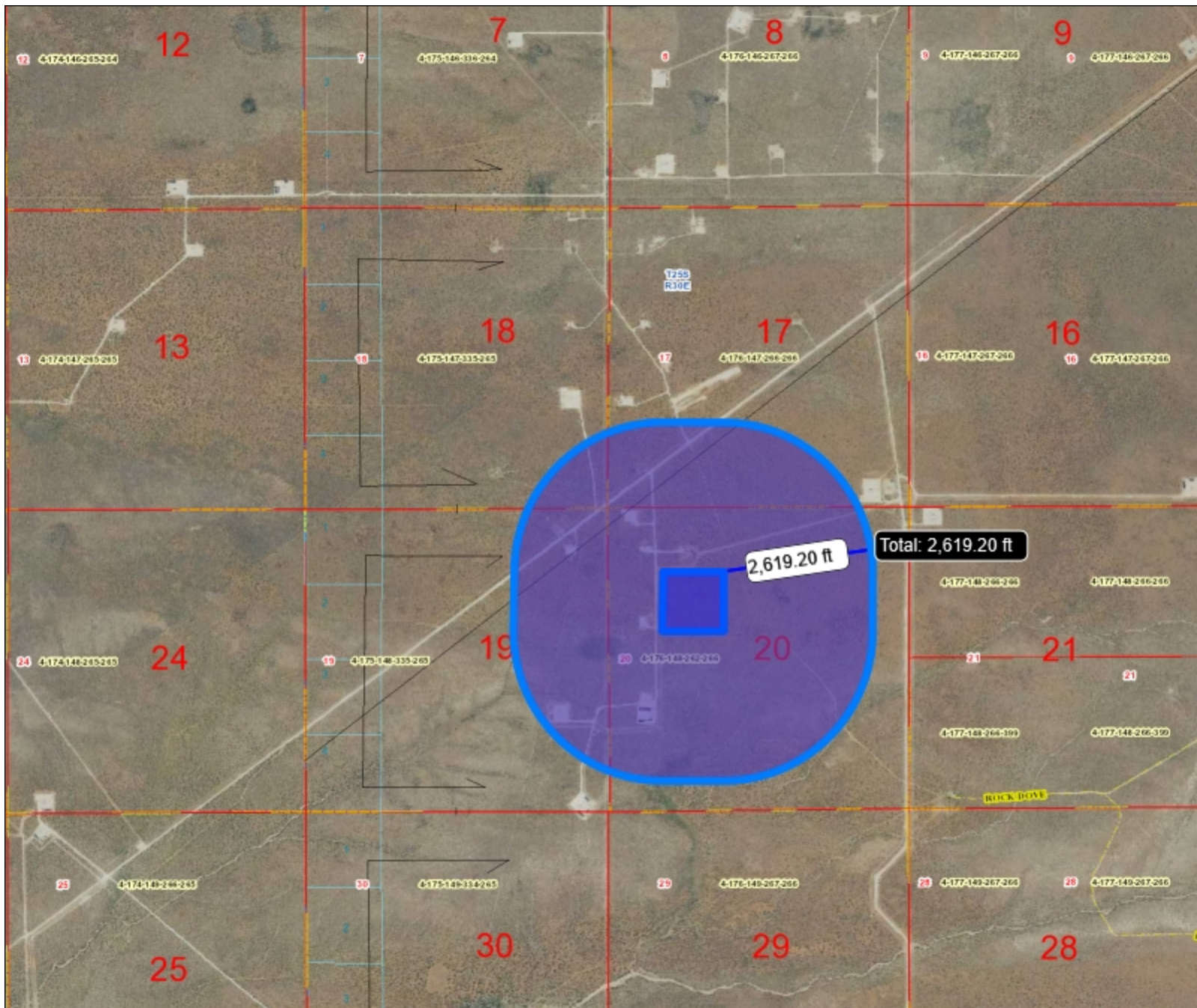
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**PROTECT
50+
VOTERS**

PAID POLITICAL AD BY AARP

Item 11.

A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail.



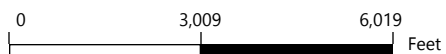
Legend

Cartography

- <all other values>
- Govt Lot Lines
- Dimension Tic
- Leader Lines
- Misc Carto
- Owner Hooks
- Sub Corners
- Roads
- Railroads
- Water
- Geographic
- Section
- Subdivision
- Parcel

Tiger Compressor Station 1/2 Miles Radius

Web Print: 09/20/2020



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



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.

Field gas flows into two inlet slug catchers. The site uses natural gas engines to compress the field gas to 1200-1300 psig, including nine (9) Caterpillar 3616TA engines (ENG1-ENG9) and two (2) Caterpillar 3516J engines (ENG11-ENG12). The Caterpillar engines are equipped with oxidation catalysts to reduce CO, VOC, and formaldehyde emissions.

The high-pressure gas is then dehydrated using triethylene glycol dehydration units (DEHY1-DEHY3), each handling up to 80 MMscfd each. The systems are equipped with flash tanks and condensers. Flash tank vapors are recycled in the dehydration system. The glycol still vent vapors are routed to condensers. Uncondensed vapors are controlled by the vapor combustor (VC1). Dehydrated gas is then transferred to a sales pipeline.

Low pressure liquids generated anywhere in the system are routed to a low pressure three phase separator (LPS). Vapors from the LPS are controlled by a VRU and routed to compression. When the LPS VRU is not operational, vapors from the LPS are routed to the flare system (FL1 – FL3). From the LPS, oil at approximately 15 psig is dumped to four (4) oil storage tanks (OT1-OT4), which are controlled by the flare system (FL1 – FL3). Water from the LPS flows to redundant skim tanks (SKT1/SKT2). The skim tanks are arranged as a redundant system in which one unit can be used if another is down for unforeseen circumstances. Water is then dumped to two (2) water tanks (WT1-WT2).

Any residual oil flows from the skim tanks into the oil storage tanks. The oil from the oil storage tanks are then pumped back into the high pressure three phase separator (HPS), to be transferred offsite via pipeline. Vapors from the water storage tanks and skim tanks are also controlled by the flare system (FL1 – FL3). Oil can be trucked offsite or pumped offsite via pipeline, water is transferred offsite via pipeline to saltwater disposal (SWD).

High pressure liquids generated anywhere in the system are routed to high pressure three phase separator (HPS). Vapors from the high pressure separator are routed back to the inlet slug catchers. From the HPS, liquid hydrocarbons at approximately 400 psig are transferred offsite via pipeline pipeline. Water from the HPS is transferred offsite via pipeline to SWD.

The flare system (FL1 – FL3) is also used to flare gas in the event of an emergency.

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):

See Table 2A

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.

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 RELEVANT 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/>

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
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	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC
20.2.7 NMAC	Excess Emissions	Yes	Facility	If subject, this would normally apply to the entire facility. If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies. This would not apply to Notices of Intent since these are not permits.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	None of the equipment has a rating greater than 1 MMBtu/hr.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	N/A	This facility has no oil burning equipment.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	The facility is not a gas processing plant.
20.2.38 NMAC	Hydrocarbon Storage Facility	Yes	OT1- OT4	The site uses a flare to comply with 20.2.38 NMAC.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	The facility does not operate a sulfur recovery plant.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	FL1-3, RB1-3, ENG1- 9, ENG11 -12, HTR1	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC).
20.2.70 NMAC	Operating Permits	Yes	Facility	The facility is a major source and will apply for a Title V Operating Permit.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	The facility is a major source and will apply for a Title V Operating Permit.
20.2.72 NMAC	Construction Permits	Yes	Facility	This application requests a NSR in accordance with 20.2.72.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	No	N/A	The site is subject to 20.2.72 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	The facility is not a major PSD site.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	A permit fee is included with this application.

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.77 NMAC	New Source Performance	Yes	Facility	See regulatory discussion in Federal Regulations Citation section.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	The facility does not fit into any of the source categories.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	The facility is not located in a nonattainment area.
20.2.80 NMAC	Stack Heights	No	N/A	There are no stacks to which this regulation would apply.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	DEHY1- 3, ENG1-9, ENG11- 12	See regulatory discussion in Federal Regulations Citation section.
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	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	Compliance with the requirements of the GCP indicates compliance with NAAQS.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Facility	See regulatory discussion below.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	The facility does not operate any electric utility steam generating units.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	The facility does not operate any electric utility steam generating units.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60, Subpart Ka	Storage Vessels for Petroleum Liquids Commenced After May 18, 1978, and Prior to July 23, 1984	No	N/A	The hydrocarbons are stored prior to custody transfer.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Commenced After July 23, 1984	No	N/A	The hydrocarbons are stored prior to custody transfer.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	There are no turbines.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	N/A	This is not a gas plant.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions	No	N/A	The facility does not operate a sweetening unit.
NSPS 40 CFR Part 60 Subpart OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution after August 23, 2011 and before September 18, 2015	No	N/A	The site will be constructed after 9/18/15. See NSPS OOOOa discussion below.
NSPS 40 CFR Part 60 Subpart OOOOa	Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	FUG	The storage tanks were constructed after the applicability date of the rule; however, XTO is requesting emissions be limited by permit to less than 6 tpy. The regulation is applicable to the storage tanks but the tanks are not affected sources. The site uses low-bleed pneumatic controllers. The site is subject to leak monitoring from fugitive components.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	The facility does not operate any affected sources.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	TBD	ENG1-9, ENG11- 12	All engines are subject to the limitations in Table 1 per 40 CFR 60.4233(e). A determination of applicability will be made for each engine to be used at the site.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60 Subpart TTTT	Greenhouse Gas Emissions for Electric Generating Units	No	N/A	The facility does not operate any affected sources.
NSPS 40 CFR 60 Subpart UUUU	Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	The facility does not operate any affected sources.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	The facility does not operate any affected sources.
NESHAP 40 CFR 61 Subpart A	General Provisions	See Below	See Below	See regulatory discussion below.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	The facility does not operate any affected sources.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	The facility does not operate any affected sources.
MACT 40 CFR 63, Subpart A	General Provisions	No	N/A	See regulatory discussion below.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	Yes	DEHY1- 3	As a major source of HAP, sources subject to HH include storage vessels with flash emissions, fugitive components, and compressors in VHAP service ((see §63.760(b)(1)(ii), (iii), and (iv)). Fugitives and compressors are exempt per §63.769(b) since they are subject to NSPS OOOO. Storage vessels use a closed vent system connected to a combustor to comply with §63.766(b). The dehydrators process more than 3 mmscfd; however, since benzene emissions are less than 1 tpy, there are no applicable requirements. (See §63.764(E)(1))
MACT 40 CFR 63 Subpart HHH	Natural Gas Transmission and Storage Facilities	No	N/A	This regulation does not apply as the plant is not a natural gas transmission and storage facility as defined by the subpart (§63.1270(a)).
MACT 40 CFR 63 Subpart DDDDD	Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	The facility is not a major source of HAP as defined in §63.7575 "Major source for oil and natural gas production facilities". Therefore, MACT 40 CFR 63 Subpart DDDDD does not apply.
MACT 40 CFR 63 Subpart JJJJJ	Boilers and Process Heaters	No	N/A	The units are exempt per §63.1195(e) since they burn natural gas.
MACT 40 CFR 63 Subpart UUUUU	NESHAP Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	The facility does not operate any affected sources.
MACT 40 CFR 63 Subpart ZZZZ	RICE MACT	TBD	ENG1-9, ENG11- 12	All engines comply with NSPS JJJJ to comply with NESHAP ZZZZ per 60.6590(c)(1). A determination of applicability will be made for each engine to be used at the site.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 64	Compliance Assurance Monitoring	No	N/A	The facility is not subject to CAM.
40 CFR 68	Chemical Accident Prevention	No	N/A	The facility does not store any chemicals above threshold quantities.
Acid Rain 40 CFR 72	Acid Rain	No	N/A	The facility does not have any units subject to the Acid Rain regulations.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	The facility does not have any units subject to the Acid Rain regulations.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	The facility does not have any units subject to the Acid Rain regulations.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	The facility does not have any units subject to the Acid Rain regulations.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	The facility does not service, maintain, or repair equipment containing 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.
-

Emissions during startup, shutdown, maintenance, and emergencies will be minimized through the site specific Startup, Shutdown, and Malfunction Plan (SSMP) as required by 40 CFR §63.6(e)(3), 20.2.70.300.D.5(g) NMAC, 20.2.72.203.A.5 NMAC, and 20.2.7.14.A NMAC.

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: https://www.env.nm.gov/aqb/permit/aqb_pol.html. 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).

XTO is not proposing 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:	Tiger Compressor Station
2	Name of company:	XTO Energy, Inc.
3	Current Permit number:	7623M1
4	Name of applicant's modeler:	Bruce Ferguson
5	Phone number of modeler:	(601) 824-1860
6	E-mail of modeler:	bferguson@fce-engineering.com

16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2	Why is the modeling being done?	Other (describe below)	
3	Describe the permit changes relevant to the modeling.		
	Revised emissions and stack parameters		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	indefinite	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	

16-B: Brief

8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2		3/16/1988
	SO2		7/28/1978
	PM10		2/20/1979
	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 at approximately 44 km		
10	Is the facility located in a non-attainment area? If so describe below	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
11	Describe any special modeling requirements, such as streamline permit requirements. None		

16-C: Modeling History of Facility

1	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
	CO	7623	5/2/2018	
	NO ₂	7623	5/2/2018	
	SO ₂	7623	5/2/2018	
	H ₂ S			
	PM2.5	7623	5/2/2018	
	PM10	7623	5/2/2018	
	Lead			
	Ozone (PSD only)			
NM Toxic Air Pollutants (20.2.72.402 NMAC)				

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NO ₂	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SO ₂	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	H ₂ S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM _{2.5}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM ₁₀	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Ozone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	State air toxic(s) (20.2.72.402 NMAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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. None					
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

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

16-G: Surrounding source modeling		
1	Date of surrounding source retrieval	March 11, 2020, MergeMaster File used for PM10 & PM2.5 modeling. Spoke with Eric Peters by phone 8/19/20, and Eric relayed that the 3/11/20 was the best available data and could be used. Texas sources received August 4, 2020.
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
	Various	Sources numbered less than 10,000 and greater than 10 km from the proposed site were removed from the PM ₁₀ and PM _{2.5} surrounding source inventories
	TCEQ Sources	The majority of the Texas sources were provided with emission rates but without stack parameters. The sources consisted of engines and heaters. Engines were modeled using height of 7.62 m, diameter of 0.45 m, velocity of 90 m/s and temp of 705 K. Heaters were modeled using height of 4.5 m, diameter of 0.23 m, velocity of 2.2 m/s and temp of 700 K. MSS emissions from Texas inventory were not included.
	39044E3	The effective diameter was adjusted to 12.86 m based on the emissions of 19.65 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	38064E1	The effective diameter was adjusted to 12.86 m based on the emissions of 19.65 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	28618E7	The effective diameter was adjusted to 6.32 m based on the emissions of 4.75 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	39068C1	The effective diameter was adjusted to 12.86 m based on the emissions of 19.65 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	39273C1	The effective diameter was adjusted to 12.72 m based on the emissions of 19.24 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	38111E31	The effective diameter was adjusted to 8.95 m based on the emissions of 9.51 lb/hr, emission factor of 7.6 lb/MMscf, MW of 21.64 and btu of 1176 btu/scf.
	38205R2	SSM emissions adjusted to 0.377 lb/hr for PM _{2.5} and 3.77 lb/hr for PM ₁₀ based on application RS20922_Application (7616M1).pdf
	38871R2	SSM emissions adjusted to 0.377 lb/hr for PM _{2.5} and 3.77 lb/hr for PM ₁₀ based on application RS21274_Application (8229).pdf

16-H: Building and structure downwash			
1	How many buildings are present at the facility?	None	
2	How many above ground storage tanks are present at the facility?	8	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Building comments		

16-I: Receptors and modeled property boundary

1	<p>“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.</p>					
	<p>Describe the fence or other physical barrier at the facility that defines the restricted area.</p> <p>Fence encompasses the facility.</p>					
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
3	Are restricted area boundary coordinates included in the modeling files?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
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
	Cartesian	Circular	50 m	0	1 km	
	Cartesian	Circular	100 m	1 km	3 km	
	Cartesian	Circular	250 m	3 km	6 km	
	Cartesian	Circular	500 m	6 km	10 km	
	Cartesian	Circular	1000 m	10 km	50 km	
5	Describe receptor spacing along the fence line.					
	50-meter spacing was used on the fence line					
6	Describe the PSD Class I area receptors.					
	Receptors posted at National Park Service https://irma.nps.gov/DataStore/Reference/Profile/2249830 . Additionally, receptors were placed along the boundary of the Class 1 area at 750 meter spacing.					

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>

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).										
	Three scenarios were modeled based on the flaring emission. The scenario "Normal" included the emissions as presented on tab 2-E. The scenario "SSM" included the emissions as presented on tab 2-E and includes the emissions on tab 2-F. The scenario "Even" evenly distributed the flare emissions on tab 2-E and 2-F across all three flares.										
2	Which scenario produces the highest concentrations? Why? There was no significant difference in the scenarios, indicating that the maximum impacts are not controlled by the flares. Distributing the emissions evenly across the three flares results in the lowest plume rise for the same emissions. Because the flares are in the same general area, this results in the highest ground level impacts from flaring.										
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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>								
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.										
	N/A										
6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>								

16-L: NO₂ Modeling			
1	Which types of NO ₂ modeling were used? Check all that apply.		
	<input type="checkbox"/>	ARM2	
	<input checked="" type="checkbox"/>	100% NO _x to NO ₂ conversion	
	<input type="checkbox"/>	PVMRM	
	<input type="checkbox"/>	OLM	
	<input type="checkbox"/>	Other:	
2	Describe the NO ₂ modeling.		
	The initial modeling was performed assuming full conversion of NO _x to NO ₂ . Impacts inclusive of monitored background were below standards, so ratio methods were not used.		
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 <input checked="" type="checkbox"/>
	Default values allowed by NMED guideline		No <input type="checkbox"/>
4	Describe the design value used for each averaging period modeled.		
	1-hour: High first high Annual: One Year Annual Average		

16-M: Particulate Matter Modeling			
1	Select the pollutants for which plume depletion modeling was used.		
	<input type="checkbox"/>	PM2.5	
	<input type="checkbox"/>	PM10	
	<input checked="" type="checkbox"/>	None	
2	Describe the particle size distributions used. Include the source of information.		
	None		
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 <input checked="" type="checkbox"/>
4	Was secondary PM modeled for PM2.5?		No <input checked="" type="checkbox"/>
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}
	199.31	21.64	0.004
	[PM2.5] _{24-hour}		
	0.078		
Southwest Climate Zone Lowest MERPs			
	State	County	Metric
	Colorado	Weld Co	Annual PM _{2.5}
	Colorado	Weld Co	Annual PM _{2.5}
	Colorado	Weld Co	Daily PM _{2.5}
	Colorado	Weld Co	Daily PM _{2.5}
			Precursor
			Emissions
			Stack
			MERP
			1000
			10
			10530
			1000
			10
			7359
			1000
			10
			5215
			1000
			10
			814

16-M: Particulate Matter Modeling	
	$[PM2.5]_{\text{annual}} = SIL \times [NO_x \text{ Annual Emissions}/10530 + SO_2 \text{ Annual Emissions}/7359]$ $= (0.2 \text{ ug}/m^3)[(199.31/10530) + (21.64/7359)]$ $= 0.004 \text{ ug}/m^3$
	$[PM2.5]_{24\text{-hour}} = SIL \times [NO_x \text{ Annual Emissions}/5215 + SO_2 \text{ Annual Emissions}/814]$ $= (1.2 \text{ ug}/m^3)[(199.31/5215) + (21.64/814)]$ $= 0.078 \text{ ug}/m^3$

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. N/A
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. N/A

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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Unit Number in UA-2	Unit Number in Modeling Files			
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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Which units consume increment for which pollutants? Constructed after minor source baseline date, so all sources at the facility consume increment				
	Unit ID	NO ₂	SO ₂	PM10	PM2.5
	ENG1 – ENG12	X	X	X	X
	RB1-RB3	X	X	X	X
	DEHY1-DEHY3	X	X	X	X
	FL1-FL3	X	X	X	X
	ROAD			X	X
5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).			None	
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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>

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)
	<u>Scenario "Normal"</u>			
	FL1	51.20	1,457,286	0.978
	FL2	20.51	239,505	0.433
	FL3	0	0	0
	<u>Scenario "SSM"</u>			
	FL3_SSM	21.70	242,851,977	13.731
	<u>Scenario "Even"</u>			
	FL1_Even	21.78	81,516,256	7.953
	FL2_Even	21.78	81,516,256	7.953
	FL3_Even	21.78	81,516,256	7.953

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?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2	Describe the determination of sigma-Y and sigma-Z for fugitive sources. As presented in NMED guideline for a large truck		
3	Describe how the volume sources are related to unit numbers. Or say they are the same. Haul road represented by volume sources L0000001 to L0000023		
4	Describe any open pits. N/A		
5	Describe emission units included in each open pit. N/A		

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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	CO: Del Norte High School (350010023)			
	NO ₂ : Outside Carlsbad (350151005)			
	PM _{2.5} : Hobbs-Jefferson (350450019)			
	PM ₁₀ : Hobbs-Jefferson (350250008)			
	SO ₂ : Amarillo (483751025)			
	Other:			
	Comments:	Values obtained from NMED Air Dispersion Modeling Guidelines, Revised June 6, 2019.		
2	Were background concentrations refined to monthly or hourly values? If so describe below.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so, select the station used.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Artesia Year 2015 downloaded from NMED website			
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.			
	Met data used as downloaded from the NMED website.			

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	N/A			
2	What was the source of the terrain data?			
	NED data from http://www.webgis.com/ , downloaded through the Lakes Environmental GUI			

16-U: Modeling Files

Describe the modeling files:		
File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
SIA\CO.zip	CO	ROI
SIA\NOx.zip	NO2	ROI & Cumulative
SIA\PM10.zip	PM10 & PM2.5	ROI
SIA\SO2.zip	SO2	ROI & Cumulative
CIA\PM10.zip	PM10	Cumulative
CIA\PM25.zip	PM2.5	Cumulative
CL1\NOx.zip	NO2	Class 1 significance
CL1\PM10.zip	PM10 & PM2.5	Class 1 significance
CL1\SO2.zip	SO2	Class 1 significance
Surrounding Sources\	Surrounding source files generated by MergeMaster	
Surrounding Sources\RS20922_Application (7616M1).pdf	PM10/PM2.5	Correction to PM10/PM2.5 emissions for 38205R2 of surrounding source inventory
Surrounding Sources\RS21274_Application (8229).pdf	PM10/PM2.5	Correction to effective diameter for 38871R2 of surrounding source inventory
Surrounding Sources\TCEQ\	Texas Surrounding Sources	
MERPs table_export.xlsx	MERPs downloaded from EPA for Southwest Climate Zone	
[Pollutant].ADI	AERMOD input file	
[Pollutant].ADO	AERMOD output file	
[Pollutant].sum	AERMOD output summary file	
[Pollutant].bpi	BPIP input file	
\[Pollutant].AD\	Plot File Directory	
[Avg Period][Rank]G[xxx].PLT	Plot file naming convention. Where facility source groups were used G001 denotes normal operation, G002 denotes SSM operations and G003 denotes flaring evenly distributed between flares. For PM10 & PM2.5 cumulative G001 denotes NAAQS modeling and G002 denotes PSD increment modeling.	
Tiger.jpg & .jgw	Georeferenced facility layout	

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 <input type="checkbox"/>	No <input type="checkbox"/>
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption. N/A		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC. N/A		
5	If required, have ozone and secondary PM _{2.5} ambient impacts analyses been completed? If so describe below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	As a minor source ozone was not evaluated. MERPs were used to estimate secondary formation of PM _{2.5}		

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
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	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)	
CO 1hr SIL	132.40993	N/A	N/A	N/A	132.40993	2,000	6.6%	603350.00	3554050.00	976.93	
CO 8hr SIL	72.85600	N/A	N/A	N/A	72.85600	500	14.6%	603350.00	3554100.00	977.23	
NO ₂ 1hr NAAQS	132.60031	N/A	N/A	38.7	170.30031	188.03	90.6%	603350.00	3554050.00	976.93	
NO ₂ Annual NMAAQs	10.01983	N/A	N/A	8.1	18.11983	94.02	19.3%	603000.00	3554250.00	975.22	
NO ₂ Annual	10.01983	N/A	N/A	8.1	18.11983	25	72.5%	603000.00	3554250.00	975.22	
SO ₂ 1hr NAAQS	19.03491	N/A	N/A	47.0	62.13311	196.4	31.6%	603350.00	3554050.00	976.93	
SO ₂ Annual NMAAQs	1.04248	N/A	N/A	0.670	1.71248	52.4	3.3%	603000.00	3554250.00	975.22	
SO ₂ 3-hr SIL	10.78797	N/A	N/A	N/A	10.78797	25	43.2%	603350.00	3554100.00	977.23	
SO ₂ 24-hr PSD*	5.67733	N/A	N/A	<47.0	52.67733	91	57.9%	603150.00	3553850.00	973.03	
SO ₂ Annual PSD*	1.04248	N/A	N/A	0.670	1.71248	20	8.6%	603000.00	3554250.00	975.22	
PM ₁₀ 24hr NAAQS	6.99158	11.41173	N/A	37.3	48.71173	150	32.5%	603058.76	3553916.02	972.66	
PM ₁₀ 24hr PSD	6.99158	9.11916	N/A	N/A	9.11916	30	30.4%	603058.76	3553916.02	972.66	
PM ₁₀ Annual PSD	1.47445	2.89215	N/A	N/A	2.89215	17	17%	603148.62	3553917.38	973.80	
PM _{2.5} 24hr NAAQS	6.99158	7.79603	0.064	13.4	21.26003	35	60.7%	603148.62	3553917.38	973.80	
PM _{2.5} Annual NAAQS	1.47445	2.68769	0.005	5.9	8.59269	12	71.6%	603148.62	3553917.38	973.80	
PM _{2.5} 24hr PSD	6.99158	8.62585	0.064	N/A	8.68985	9	96.6%	603148.62	3553917.38	973.80	
PM _{2.5} Annual PSD	1.47445	2.54414	0.005	N/A	2.54914	4	63.7%	603148.62	3553917.38	973.80	
NO ₂ Class I Annual SIL	0.02303	N/A	N/A	N/A	0.02303	0.1	23%	558887.51	3560690.55	1178.75	
PM _{2.5} Class I Annual SIL	0.00116	N/A	0.005	N/A	0.00616	0.05	12.3%	558887.51	3560690.55	1178.75	
PM _{2.5} Class I 24-hr SIL	0.04269	N/A	0.064	N/A	0.10669	0.27	39.5%	557742.83	3560271.36	1185.36	
SO ₂ Class I Annual SIL	0.00046	N/A	N/A	N/A	0.0005	0.1	0.5%	557737.57	3561195.07	1129.39	
SO ₂ Class I 24-hr SIL	0.01253	N/A	N/A	N/A	0.01253	0.2	6.2%	558117.09	3559951.02	1122.20	
SO ₂ Class I 3-hr SIL	0.06743	N/A	N/A	N/A	0.06743	1.0	6.7%	550905.65	3552996.04	1105.27	
*Monitoring data was used as conservative estimate of surrounding source increment consumption											

16-X: Summary/conclusions

1	<p>A statement that modeling requirements have been satisfied and that the permit can be issued.</p> <p>The facility sources were modeled and found to have impacts below the modeling significance level for CO and 3-hr SO₂. Surrounding source impacts for NO₂ and SO₂ were accounted for using existing monitored data as published in the NMED Air Dispersion Modeling Guidelines, Revised June 6, 2019. Surrounding source impacts for PM₁₀ and PM_{2.5} were accounted for by explicitly modeling NAAQS sources within 10 km, PSD increment sources within 25 km and including the published monitored data. Only receptors found to have an impact above the modeling significance level were included in the cumulative analysis. Significant receptors were within 100-meter spacing.</p> <p>Modeled impacts in the Class 1 area for NO₂, SO₂ and PM₁₀/PM_{2.5} were found to be below the modeling significance level.</p> <p>The modeled impacts were found to be compliant with the NAAQS, NMAAQs and PSD increments. The facility will, therefore, not cause or contribute to an exceedance of the ambient air quality standards and the permit can be issued.</p>
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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.

Unit Serial No.	Test Description	Test Date
ENG11, ENG12	Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO	10/6/20
ENG1, ENG2, ENG5, ENG6, ENG4, ENG3	Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO	11/30/20 – 12/1/20

Section 18

Addendum for Streamline Applications

Do not print this section unless this is a streamline application.

Streamline Applications do not require a complete application. Submit Sections 1-A, 1-B, 1-D, 1-F, 1-G, 2-A, 2-C thru L, Sections 3 thru 8, Section 13, Section 18, Section 22, and Section 23 (Certification). Other sections may be required at the discretion of the Department. 20.2.72.202 NMAC Exemptions do not apply to Streamline sources. 20.2.72.219 NMAC revisions and modifications do not apply to Streamline sources, thus 20.2.72.219 type actions require a complete new application submittal. Please do not print sections of a streamline application that are not required.

This section is not applicable since this is not a Streamline Permit Application.

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

- * Any major source as defined in 20.2.70 NMAC.
 - * Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
 - * Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See <http://www.env.nm.gov/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
 - * Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.
-

This is not a Title V application.

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.

No other relevant information is provided.

Section 21

Addendum for Landfill Applications

Do not print this section unless this is a landfill application.

Landfill Applications are not required to complete Sections 1-C Input Capacity and Production Rate, 1-E Operating Schedule, 17 Compliance Test History, and 18 Streamline Applications. Section 12 – PSD Applicability is required only for Landfills with Gas Collection and Control Systems and/or landfills with other non-fugitive stationary sources of air emissions such as engines, turbines, boilers, heaters. All other Sections of the Universal Application Form are required.

EPA Background Information for MSW Landfill Air Quality Regulations:

<https://www3.epa.gov/airtoxics/landfill/landflpg.html>

NM Solid Waste Bureau Website: <https://www.env.nm.gov/swb/>

This is not a landfill.

Section 22: Certification

Company Name: XTO Energy Inc.

I, T.J. Tole, 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 ____ day of _____, 2021, upon my oath or affirmation, before a notary of the State of Illinois.

*Signature

Date

T.J. Tole
Printed Name

Environmental Engineer
Title

Scribed and sworn before me on this ____ day of _____, 2021.

My authorization as a notary of the State of _____ expires on the ____ day of _____, _____.

Notary's Signature

Date

Notary's Printed Name

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

Section 22: Certification

Company Name: XTO Energy Inc.

I, T.J. Tole, 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 3 day of March, 2021, upon my oath or affirmation, before a notary of the State of Texas.

[Signature]
*Signature

March 3, 2021
Date

T.J. Tole
Printed Name

Environmental Engineer
Title

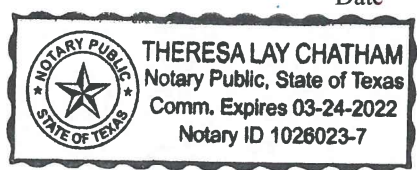
Scribed and sworn before me on this 3rd day of March, 2021.

My authorization as a notary of the State of Texas expires on the 24 day of March, 2022.

[Signature]
Notary's Signature

March 2, 2021
Date

Theresa Lay Chatham
Notary's Printed Name



*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.