



June 30, 2022

UPS Tracking #1Z1AE0570218716111

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: **Initial Title V Operating Permit Application (Update)**
Tiger Compressor Station
Agency Interest No. 38215
XTO Energy Inc.

Dear Ms. Olson,

XTO Energy Inc. is submitting this updated initial Title V Operating Permit application for the Tiger Compressor Station. The Tiger Compressor Station is currently authorized under NSR Permit No. 7623-M2. The electronic files will be provided via email or secure file transfer.

If you have any questions concerning this application, please contact me at 346-259-5873 or at james.barron@exxonmobil.com.

Sincerely,

A handwritten signature in black ink that reads "Brett Zogas".

Brett Zogas on behalf of James Barron
Environmental & Regulatory Advisor
XTO Energy Inc.

cc: James Barron, Environmental & Regulatory Advisor—Air Quality, XTO Energy, Inc.
Brett Zogas, Managing Consultant, Trinity Consultants, Inc.

Enclosures

TIGER COMPRESSOR STATION
Eddy County, NM
Initial Title V Operating Permit Application (Update)



PREPARED BY:
JAMES BARRON
ENVIRONMENTAL & REGULATORY ADVISOR
XTO ENERGY INC.
6/29/2022

TIGER COMPRESSOR STATION
Initial Title V Operating Permit Application (Update)

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Tab 1

UA1 Form - Company and Facility Information

| | | |
|---|--|--|
| b | Plant Operator's New Mexico Corporate ID or Tax ID: 1522747 | |
| 3 | Plant Owner(s) name(s): XTO Energy Inc. | Phone/Fax: (346) 259-5873 |
| a | Plant Owner(s) Mailing Address(s): 22777 Springwoods Village Parkway, Spring, TX 77389 | |
| 4 | Bill To (Company): XTO Energy Inc. | Phone/Fax: (346) 259-5873 |
| a | Mailing Address: 22777 Springwoods Village Parkway, Spring, TX 77389 | E-mail: james.barron@exxonmobil.com |
| 5 | <input checked="" type="checkbox"/> Preparer: Brett Zogas <input checked="" type="checkbox"/> Consultant: Trinity Consultants, Inc. | Phone/Fax: (512) 826-6435 |
| a | Mailing Address: 1800 W Loop S, Ste. 1000, Houston, TX 77027 | E-mail: brett.zogas@trinityconsultants.com |
| 6 | Plant Operator Contact: James Barron | Phone/Fax: (346) 259-5873 |
| a | Address: 22777 Springwoods Village Parkway, Spring, TX 77389 | E-mail: james.barron@exxonmobil.com |
| 7 | Air Permit Contact: James Barron | Title: Environmental & Regulatory Advisor |
| a | E-mail: james.barron@exxonmobil.com | Phone/Fax: (346) 259-5873 |
| b | Mailing Address: 22777 Springwoods Village Parkway, 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-M2 |
| 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: 76.2 barrels; 10 MMscf | Daily: 1,829 barrels; 240 MMscf | Annually: 667,432 barrels; 87.6 Bscf |
| b | Proposed | Hourly: 76.2 barrels; 10 MMscf | Daily: 1,829 barrels; 240 MMscf | Annually: 667,432 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: 76.2 barrels; 10 MMscf | Daily: 1,829 barrels; 240 MMscf | Annually: 667,432 barrels; 87.6 Bscf |

| | | | | |
|---|----------|--------------------------------|---------------------------------|--------------------------------------|
| b | Proposed | Hourly: 76.2 barrels; 10 MMscf | Daily: 1,829 barrels; 240 MMscf | Annually: 667,432 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 (attach a road map if necessary): 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 (distance) miles SE (direction) of Malaga (nearest town). | | | | |
| 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 type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: | | | | |
| 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 | ($\frac{\text{hours}}{\text{year}}$): 8,760 |
| 2 | Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start: | | <input type="checkbox"/> AM <input type="checkbox"/> 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 type="checkbox"/> Yes <input checked="" 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.) |
|---|--|

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): David Scott | Phone: (832) 625-8746 |
| a | R.O. Title: General Manager Permian Delaware BU | R.O. e-mail: david.r.scott@exxonmobil.com |
| b | R. O. Address: 22777 Springwoods Village Parkway, Spring, TX 77389 | |
| 2 | Alternate Responsible Official (20.2.70.300.D.2 NMAC): Rick Cannon | Phone: (575) 988-7138 |
| a | A. R.O. Title: Production Manager, Delaware Basin BU | A. R.O. e-mail: rick.e.cannon@exxonmobil.com |
| b | A. R. O. Address: 3194 E Greene St., Carlsbad, NM 88220 | |
| 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.): ExxonMobil | |
| a | Address of Parent Company: 22777 Springwoods Village Parkway, Spring, TX 77389 | |
| 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.): XTO Energy, Inc. | |
| 6 | Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: See Section 1-A.6 and 7 | |
| 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: Texas (13 km) | |

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 James Barron

Email james.barron@exxonmobil.com

Phone number (346) 259-5873

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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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 (C1, 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 |
| | | | N/A | N/A | 20.2.72.202.B.5 | N/A | <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-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-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).

Tab 3
Section 3 - Application Summary

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. (XTO) is submitting this updated initial Title V Operating permit application to the New Mexico Environmental Department (NMED) for the Tiger Compressor Station. This application is submitted under section 20.2.70.200.A of the New Mexico Administrative Code (NMAC).

The Tiger Compressor Station is a typical compressor station with natural gas engines, dehydration, storage tanks, and flares. The facility is currently authorized under New Source Review (NSR) Permit 7623-M2, issued on February 11, 2022. XTO is submitting this updated application to reflect the current issuance of NSR Permit 7623-M2.

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. Pneumatic controllers onsite are powered by instrument air.

Tab 4
Section 4 - Process Flow Sheet

Section 4

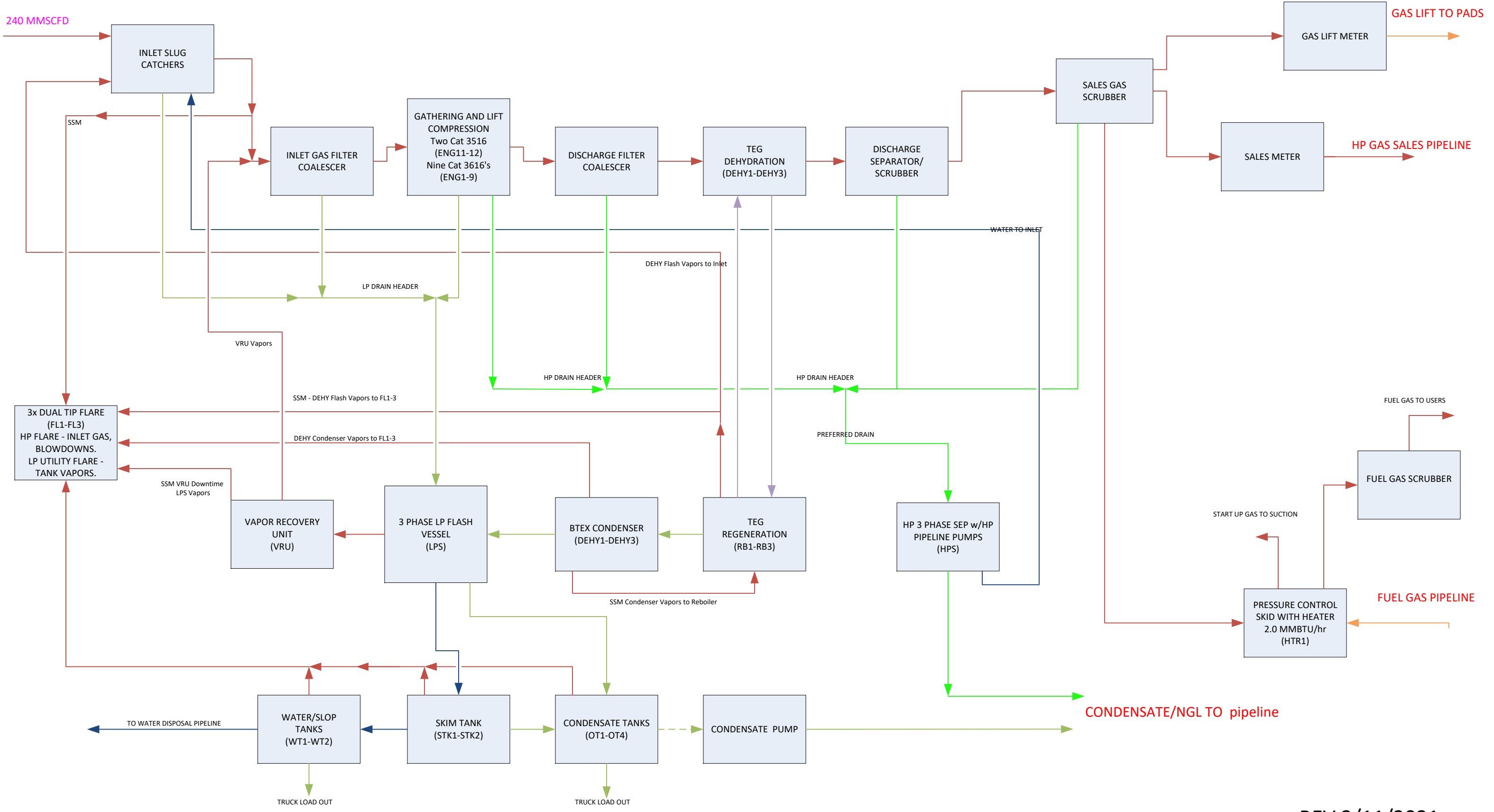
Process Flow Sheet

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



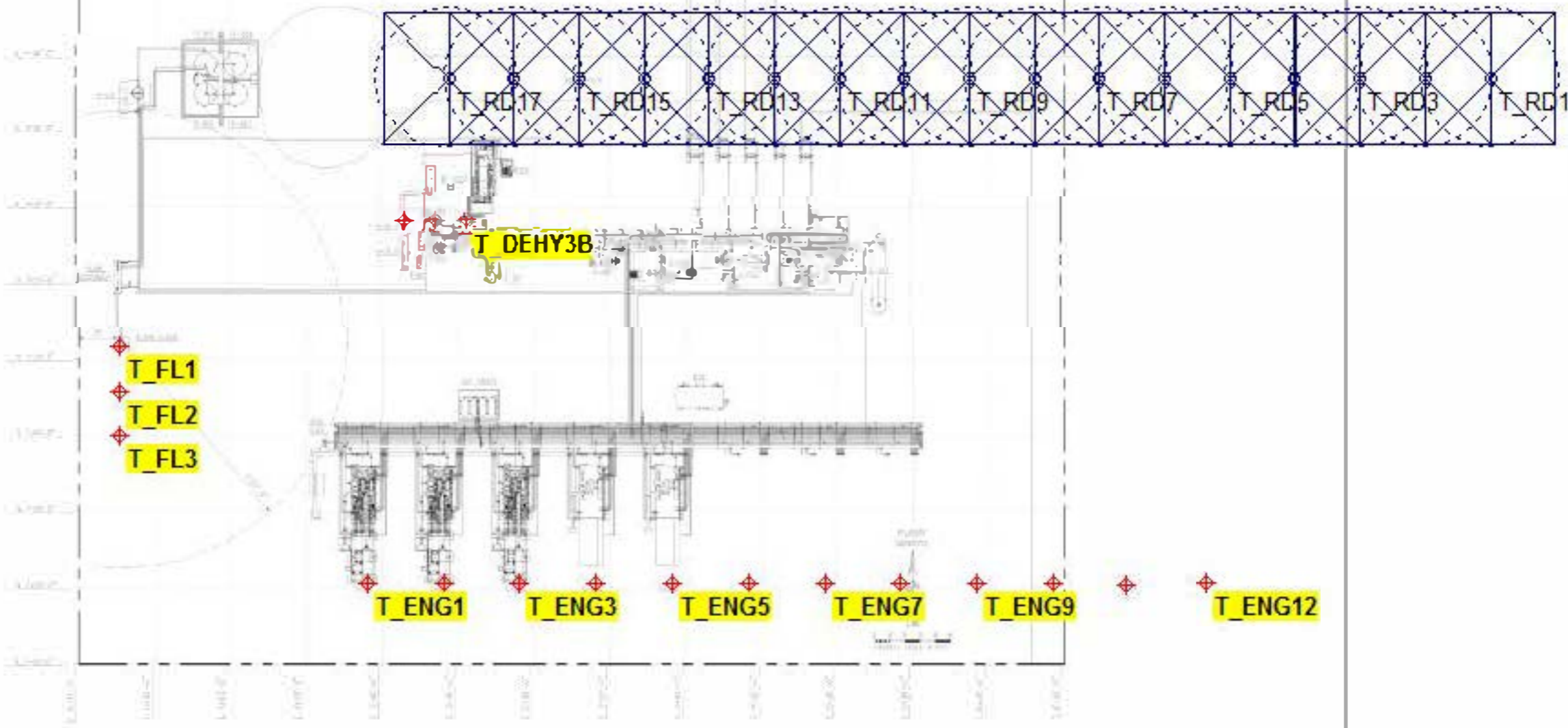
Tab 5
Section 5 - Plot Plan Drawn To Scale

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 plot plan of the facility is presented on the following page.



T_RD17 T_RD15 T_RD13 T_RD11 T_RD9 T_RD7 T_RD5 T_RD3 T_RD1

T_DEHY3B

T_FL1
T_FL2
T_FL3

T_ENG1 T_ENG3 T_ENG5 T_ENG7 T_ENG9 T_ENG12

L1000 L1001 L1002 L1003 L1004 L1005 L1006 L1007 L1008 L1009 L1010 L1011 L1012
10000 10001 10002 10003 10004 10005 10006 10007 10008 10009 10010 10011 10012

Tab 6
Section 6 - All Calculations

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 | | | | AP-42 Factors | | | lb/hr ^{5,6} | | | | | | tpy ^{5,6} | | | | | | | |
|-----------|--|-------------|--------------|----------|--------------------------------|----------------------|------|------|------|-------------------------|----------------------------|--------------|----------------------|-------|-------|------|-----------------|----------------------------|--------------------|-------|--------|-------|------|-----------------|----------------------------|--------------|
| | | | | | | g/hp-hr ² | | | | lb/MMBtu ^{3,4} | | | 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 | 167.53 | 49.17 | 8.69 | 2.09 | 1.65 | 1.37 |
| 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 |
|----------------------------------|-------------|

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
FLARE 1-3 HOURLY EMISSIONS WINTER SEASON - NORMAL OPERATIONS

FLARE 1-3 HOURLY - NORMAL OPERATIONS

| Stream | Uncaptured Maximum Hourly Emission Rates and Composition to Flare ^{a,b} | | | | | | | | | | | | | Total Vapors to Flare (Uncontrolled Max Hourly) | Destruction Efficiency (%) | Total Flare Exhaust (controlled) (lb/hr) | Criteria Pollutant Emissions from Flare ^c | | | | |
|-----------------------------|--|---|------------------------|--------------------------------|-------------------------|-------------------------|----------------------------------|-------------------------|-------------------------------|------------------|-----------------------------|-------------------|------------------------|---|----------------------------|--|--|-----------------------|-----------------------|-----------------|----------------|
| | SSM | | | | HP Flare | | LP Flare | | Oil Tank Vapors (OTI-4) | | Skim Tank Vapors (SKT1-2) | | PW Tank Vapors (WTI-2) | | | | Low Pres Sep ^d Flash (VRU On) 98% Col Eff | Emission Rate (lb/hr) | Emission Factor | Emission Units | |
| | HP Flare Blowdowns ^e | Low Pres Sep ^d Flash (VRU Off) | Dehy Flash Tank Vapors | Inlet Gas Flaring ^f | 15. HPF Pilot/Purge Gas | 16. LPF Pilot/Purge Gas | 22. Condensate Flash Losses Hrly | 10. Condensate Tank W&B | 26. Skim Flashing Losses Hrly | 8. Skim Tank W&B | 27. WT Flashing Losses Hrly | 9. Water Tank W&B | 1. LP Separator Gas | | | | | | | | |
| Promax Stream Name | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (%) | (lb/hr) | Component | Emission Rate (lb/hr) | Emission Factor | Emission Units |
| Triethylene Glycol | 0.00 | 0.00 | 0.05 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.18752E-12 | 0.00 | 0.00 | 0.88 | 98% | 0.02 | NO _x | 481.55 | 0.138 | lb/MMBtu | |
| Water | 0.00 | 11.64 | 2.26 | 3.57 | 0.01 | 0.01 | 0.00 | 0.00 | 0.19 | 0.21 | 0.00 | 0.20 | 0.23 | 20.33 | 0% | 20.33 | CO | 961.36 | 0.2755 | lb/MMBtu | |
| Hydrogen Sulfide | 0.00 | 0.03 | 0.07 | 2.40 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.72 | 98% | 0.05 | SO ₂ | 5.11 | -- | -- | |
| Carbon Dioxide | 0.17 | 2.53 | 6.81 | 515.93 | 0.90 | 0.75 | 0.12 | 0.04 | 0.02 | 0.00 | 0.00 | 0.01 | 0.05 | 527.33 | 0% | 527.33 | PM ₁₀ | 22.43 | 7.60 | lb/MMscf | |
| Nitrogen | 0.45 | 1.12 | 0.78 | 1399.00 | 2.48 | 2.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 1405.92 | 0% | 1405.92 | PM _{2.5} | 22.43 | 7.60 | lb/MMscf | |
| Methane | 30.99 | 215.83 | 176.28 | 96245.45 | 169.52 | 141.27 | 1.30 | 0.35 | 0.22 | 0.03 | 0.00 | 0.01 | 4.52 | 96985.58 | 98% | 1939.71 | N ₂ O | 0.77 | 0.00022 | lb/MMBtu | |
| Ethane | 8.48 | 213.20 | 106.18 | 26194.83 | 44.60 | 37.16 | 43.26 | 7.45 | 0.68 | 0.31 | 0.01 | 0.05 | 4.26 | 26660.49 | 98% | 533.21 | H ₂ S | 0.05 | -- | -- | |
| Propane | 5.64 | 242.30 | 90.65 | 17203.84 | 27.28 | 22.73 | 147.74 | 12.65 | 1.56 | 1.85 | 0.01 | 0.07 | 4.85 | 17761.18 | 98% | 355.22 | | | | | |
| Isobutane | 1.30 | 65.79 | 17.71 | 3893.04 | 5.53 | 4.61 | 49.43 | 3.63 | 0.61 | 1.09 | 0.00 | 0.01 | 1.32 | 4044.07 | 98% | 80.88 | | | | | |
| n-Butane | 2.71 | 140.67 | 46.26 | 7959.00 | 10.50 | 8.75 | 155.84 | 8.06 | 1.47 | 2.47 | 0.01 | 0.04 | 2.81 | 8338.59 | 98% | 166.77 | | | | | |
| Isopentane | 0.99 | 48.73 | 15.95 | 2754.39 | 2.92 | 2.43 | 51.58 | 2.76 | 0.61 | 0.92 | 0.00 | 0.01 | 0.97 | 2882.27 | 98% | 57.65 | | | | | |
| n-Pentane | 1.18 | 56.52 | 21.22 | 3184.48 | 3.06 | 2.55 | 61.39 | 3.18 | 0.73 | 1.08 | 0.00 | 0.01 | 1.15 | 3336.53 | 98% | 66.73 | | | | | |
| i-C6 | 1.32 | 54.90 | 20.09 | 3037.95 | 1.93 | 1.61 | 24.81 | 1.10 | 0.21 | 1.07 | 0.00 | 0.01 | 1.10 | 3148.76 | 98% | 62.98 | | | | | |
| i-C7 | 1.32 | 39.90 | 12.84 | 2072.37 | 0.69 | 0.57 | 27.16 | 2.21 | 0.60 | 0.76 | 0.00 | 0.00 | 0.80 | 2159.22 | 98% | 43.18 | | | | | |
| Octane | 0.60 | 8.71 | 1.50 | 299.14 | 0.04 | 0.03 | 0.04 | 0.43 | 0.14 | 0.16 | 0.00 | 0.00 | 0.17 | 315.94 | 98% | 6.32 | | | | | |
| Nonane | 0.28 | 1.73 | 0.10 | 25.94 | 0.00 | 0.00 | 0.55 | 0.07 | 0.03 | 0.03 | 0.00 | 0.00 | 0.03 | 28.77 | 98% | 0.58 | | | | | |
| Benzene | 0.03 | 1.74 | 1.27 | 55.81 | 0.03 | 0.03 | 1.88 | 0.07 | 0.02 | 0.03 | 0.00 | 0.03 | 0.03 | 60.98 | 98% | 1.22 | | | | | |
| Toluene | 0.09 | 2.69 | 1.64 | 87.00 | 0.02 | 0.02 | 1.55 | 0.10 | 0.04 | 0.05 | 0.00 | 0.05 | 0.05 | 93.32 | 98% | 1.87 | | | | | |
| Ethylbenzene | 0.01 | 0.08 | 0.02 | 2.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.16 | 98% | 0.04 | | | | | |
| o-Xylene | 0.07 | 0.92 | 0.25 | 19.05 | 0.00 | 0.00 | 0.31 | 0.03 | 0.01 | 0.02 | 0.00 | 0.02 | 0.02 | 20.69 | 98% | 0.41 | | | | | |
| n-Hexane | 0.67 | 25.20 | 9.29 | 1400.59 | 0.72 | 0.60 | 17.62 | 1.52 | 0.37 | 0.49 | 0.00 | 0.00 | 0.50 | 1457.57 | 98% | 29.15 | | | | | |
| 2,2,4-Trimethylpentane | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 98% | 0.02 | | | | | |
| Decanes Plus | 0.13 | 0.14 | 0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 98% | 0.01 | | | | | |
| Decanes Plus Sat | 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 | 98% | 0.00 | | | | | |
| Total | 56.43 | 1134.37 | 531.22 | 166359.01 | 270.23 | 225.19 | 590.68 | 45.77 | 8.09 | 10.61 | 0.06 | 0.53 | 22.69 | 169254.88 | -- | 5299.60 | | | | | |
| Total VOC | 16.34 | 690.02 | 238.79 | 41994.79 | 52.72 | 43.93 | 546.01 | 37.93 | 6.98 | 10.03 | 0.04 | 0.25 | 13.80 | 43637.83 | -- | 872.76 | | | | | |
| Total HAP | 0.87 | 30.63 | 12.48 | 1564.45 | 0.78 | 0.65 | 22.49 | 1.72 | 0.45 | 0.59 | 0.00 | 0.10 | 0.61 | 1635.81 | -- | 32.72 | | | | | |
| Heating Value (Btu/scf) | 1,219.10 | 1,785.40 | 1,475.46 | 1,176.53 | 1,119.76 | 1,119.76 | 2826.67 | 2577.13 | 2574.25 | 2906.65 | 2216.45 | 893.31 | 1,785.40 | 1,182.29 | | | | | | | |
| Molecular Weight (lb/lbmol) | 22.50 | 34.09 | 27.93 | 21.64 | 20.51 | 20.51 | 54.51 | 49.50 | 50.92 | 57.60 | 43.68 | 29.56 | 34.09 | -- | | | | | | | |
| Operating Hours (hr/yr) | 1,000 | 876 | 438 | 53 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 7884 | -- | | | | | | | |
| Mass Flow (lb/hr) | 56.43 | 1,134.37 | 531.22 | 166,359.01 | 270.23 | 225.19 | 590.68 | 45.77 | 8.09 | 10.61 | 0.06 | 0.53 | 22.69 | 169,254.88 | | | | | | | |
| Volumetric Flow (scf/hr) | 952 | 12,627 | 7,218 | 2,916,667 | 5,000 | 4,167 | 4,112 | 350.90 | 60.27 | 69.87 | 0.49 | 6.81 | 252.54 | 295,148.71 | | | | | | | |
| Heat Release (MMBtu/hr) | 1.16 | 22.54 | 10.65 | 3,431.54 | 5.60 | 4.67 | 11.62 | 0.90 | 0.16 | 0.20 | 0.00 | 0.01 | 0.45 | 3489.50 | | | | | | | |

| Combustion Emissions from Flare | | | | | | | | | | | | | | |
|---------------------------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|
| | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| Total NO _x | 0.16 | 3.11 | 1.47 | 473.55 | 0.77 | 0.64 | 1.60 | 0.12 | 0.02 | 0.03 | 0.00 | 0.00 | 0.06 | 481.55 |
| Total CO | 0.32 | 6.21 | 2.93 | 945.39 | 1.54 | 1.29 | 3.20 | 0.25 | 0.04 | 0.06 | 0.00 | 0.00 | 0.12 | 961.36 |
| Total SO ₂ | 0.00 | 0.06 | 0.14 | 4.89 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.11 |
| Total PM ₁₀ | 0.01 | 0.10 | 0.05 | 22.17 | 0.04 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.43 |
| Total PM _{2.5} | 0.01 | 0.10 | 0.05 | 22.17 | 0.04 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.43 |
| Total VOC after comb. | 0.33 | 13.80 | 4.78 | 839.90 | 1.05 | 0.88 | 10.92 | 0.76 | 0.14 | 0.20 | 0.00 | 0.01 | 0.28 | 873.03 |
| Total HAP after comb. | 0.02 | 0.61 | 0.25 | 31.29 | 0.02 | 0.01 | 0.45 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 32.72 |
| Total n-Hexane after comb. | 0.01 | 0.50 | 0.19 | 28.01 | 0.01 | 0.01 | 0.35 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 29.15 |
| Total Benzene after comb. | 0.00 | 0.03 | 0.03 | 1.12 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.22 |
| Total CH ₄ | 0.44 | 2.03 | 2.03 | 1428.52 | 2.66 | 2.21 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 1437.94 |
| Total N ₂ O | 0.000 | 0.01 | 0.01 | 1.67 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.70 |
| Total CO ₂ | 219.49 | 4305.83 | 2075.83 | 623388.15 | 551.77 | 795.15 | 1833.16 | 146.31 | 26.49 | 32.61 | 0.19 | 1.75 | 86.12 | 633,860.85 |
| Total CO ₂ e | 230.62 | 4359.94 | 2128.07 | 659598.15 | 1018.97 | 849.14 | 1833.03 | 146.50 | 26.55 | 32.64 | 0.19 | 1.76 | 87.20 | 670,314.77 |

Footnotes:
^aUncontrolled stream properties determined via ProMax.
^bTank emissions determined in ProMax are calculated at the maximum daily liquid surface temperature.
^cPilot fuel gas emissions are conservatively calculated based on observed flowrates
^dControlled Emissions Were Calculated by the Following: Uncontrolled Emissions * (1 - VRU Efficiency) * (1 - Flare Destruction Efficiency)
^eFlare 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.
^fBlowdowns are estimated to be @ 952 SCF per blowdown. XTO conservatively estimates 1000 blowdowns per year and 1 blowdown per hour
^gXTO conservatively estimates 155 MMscf of inlet gas flaring per year @ 2.92 MMscf/hr max rate
^hGHG 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
FLARE 1-3 ANNUAL EMISSIONS WINTER SEASON - NORMAL OPERATIONS

FLARE ANNUAL - NORMAL OPERATIONS

| Stream | SSM | | | | HP Flare Pilot/Purge ^e | | Oil Tank Vapors (OTI-4) | | Skim Tank Vapors (SKTI-2) | | PW Tank Vapors (PWTI-2) | | Low Pres Sep ^d | Total Vapors to Flare (uncontrolled) | Destruction Efficiency (%) | Total Flare Exhaust (controlled) |
|-----------------------------|---------------------------------|---|----------------------------|--------------------------------|-----------------------------------|-----------------------------------|------------------------------|-------------------------|---------------------------|------------------|-------------------------|-------------------|----------------------------|--------------------------------------|----------------------------|----------------------------------|
| | HP Flare Blowdowns ^f | Low Pres Sep ^d Flash (VRU Off) | Flash Tank Vapors | Inlet Gas Flaring ^g | HP Flare Pilot/Purge ^e | LP Flare Pilot/Purge ^e | Flash | W&B | Flash | W&B | Flash | W&B | Flash (VRU On) 98% Col Eff | | | |
| Promax Stream Name | 17. HPF Blowdowns | 1. LP Separator Gas | 29. Dehy Flash Tank Vapors | 19. Inlet Flaring | 15. HPF Pilot/Purge Gas | 16. LPF Pilot/Purge Gas | 7. Condensate Tank Flash Gas | 10. Condensate Tank W&B | 6. Skim Tank Flash Gas | 8. Skim Tank W&B | 5. Water Tank Flash Gas | 9. Water Tank W&B | 1. LP Separator Gas | (ton/yr) | (%) | (ton/yr) |
| Component | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (%) | (ton/yr) |
| Triethylene Glycol | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 98% | 0.00 |
| Water | 0.00 | 5.10 | 0.49 | 0.15 | 0.04 | 0.04 | 6.79 | 0.00 | 0.27 | 0.94 | 0.01 | 0.88 | 0.92 | 15.62 | 0% | 15.62 |
| Hydrogen Sulfide | 0.00 | 0.01 | 0.02 | 0.07 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 98% | 0.00 | 0.00 |
| Carbon Dioxide | 0.08 | 1.11 | 1.49 | 13.69 | 3.93 | 3.28 | 1.23 | 0.16 | 0.04 | 0.09 | 0.00 | 0.06 | 0.20 | 25.36 | 0% | 25.36 |
| Nitrogen | 0.23 | 0.49 | 0.17 | 37.13 | 10.86 | 9.05 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 58.09 | 0% | 58.09 | 0.00 |
| Methane | 15.50 | 94.53 | 38.61 | 2554.15 | 742.51 | 618.76 | 45.83 | 1.54 | 0.90 | 0.13 | 0.01 | 0.06 | 17.02 | 4129.55 | 98% | 82.59 |
| Ethane | 4.24 | 93.38 | 23.25 | 695.16 | 195.33 | 162.78 | 169.68 | 32.65 | 2.33 | 1.38 | 0.04 | 0.22 | 16.81 | 1397.24 | 98% | 27.94 |
| Propane | 2.82 | 106.13 | 19.85 | 456.55 | 119.48 | 99.57 | 305.11 | 55.43 | 4.26 | 8.12 | 0.07 | 0.29 | 19.10 | 1196.77 | 98% | 23.94 |
| Isobutane | 0.65 | 28.81 | 3.88 | 103.31 | 24.22 | 20.19 | 95.46 | 15.91 | 1.40 | 4.75 | 0.02 | 0.06 | 5.19 | 303.86 | 98% | 6.08 |
| n-Butane | 1.36 | 61.61 | 10.13 | 211.21 | 45.97 | 38.31 | 210.72 | 35.30 | 3.14 | 10.82 | 0.05 | 0.19 | 11.09 | 639.90 | 98% | 12.80 |
| Isopentane | 0.50 | 21.35 | 3.49 | 73.10 | 12.79 | 10.66 | 75.65 | 12.11 | 1.15 | 4.04 | 0.02 | 0.05 | 3.84 | 218.73 | 98% | 4.37 |
| n-Pentane | 0.59 | 24.76 | 4.65 | 84.51 | 13.41 | 11.17 | 88.10 | 13.92 | 1.35 | 4.73 | 0.01 | 0.02 | 4.46 | 251.68 | 98% | 5.03 |
| i-C6 | 0.66 | 24.05 | 4.40 | 80.62 | 8.44 | 7.04 | 85.98 | 14.05 | 1.33 | 4.67 | 0.02 | 0.03 | 4.33 | 235.61 | 98% | 4.71 |
| i-C7 | 0.66 | 17.47 | 2.81 | 55.00 | 3.02 | 2.52 | 61.87 | 9.68 | 0.96 | 3.35 | 0.01 | 0.01 | 3.15 | 160.51 | 98% | 3.21 |
| Octane | 0.30 | 3.82 | 0.33 | 7.94 | 0.16 | 0.13 | 13.22 | 1.87 | 0.20 | 0.70 | 0.00 | 0.00 | 0.69 | 29.35 | 98% | 0.59 |
| Nonane | 0.14 | 0.76 | 0.02 | 0.69 | 0.00 | 0.00 | 2.59 | 0.31 | 0.04 | 0.14 | 0.00 | 0.00 | 0.14 | 4.83 | 98% | 0.10 |
| Benzene | 0.02 | 0.76 | 0.28 | 1.48 | 0.14 | 0.11 | 2.72 | 0.29 | 0.04 | 0.15 | 0.00 | 0.14 | 0.14 | 6.26 | 98% | 0.13 |
| Toluene | 0.05 | 1.18 | 0.36 | 2.31 | 0.10 | 0.08 | 4.15 | 0.45 | 0.06 | 0.22 | 0.00 | 0.22 | 0.21 | 9.39 | 98% | 0.19 |
| Ethylbenzene | 0.00 | 0.03 | 0.01 | 0.05 | 0.00 | 0.00 | 0.12 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.25 | 98% | 0.01 |
| o-Xylene | 0.04 | 0.40 | 0.05 | 0.51 | 0.01 | 0.01 | 1.39 | 0.13 | 0.02 | 0.07 | 0.00 | 0.07 | 0.07 | 2.77 | 98% | 0.06 |
| n-Hexane | 0.33 | 11.04 | 2.03 | 37.17 | 3.17 | 2.64 | 39.33 | 6.64 | 0.61 | 2.13 | 0.01 | 0.01 | 1.99 | 107.09 | 98% | 2.14 |
| 2,2,4-Trimethylpentane | 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 | 98% | 0.00 |
| Decanes Plus | 0.07 | 0.06 | 0.00 | 0.01 | 0.00 | 0.00 | 0.21 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.39 | 98% | 0.01 |
| Decanes Plus Sat | 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 | 98% | 0.00 |
| Total | 28.22 | 496.86 | 116.34 | 4414.81 | 1183.61 | 986.34 | 1210.22 | 200.49 | 18.11 | 46.45 | 0.29 | 2.32 | 89.43 | 8793.49 | -- | 272.96 |
| Total VOC | 8.17 | 302.23 | 52.30 | 1114.45 | 230.90 | 192.42 | 986.60 | 166.13 | 14.56 | 43.92 | 0.22 | 1.10 | 54.40 | 3167.41 | -- | 63.35 |
| Total HAP | 0.43 | 13.41 | 2.73 | 41.52 | 3.41 | 2.84 | 47.71 | 7.53 | 0.74 | 2.58 | 0.01 | 0.44 | 2.41 | 125.77 | -- | 2.52 |
| Heating Value (Btu/scf) | 1219.10 | 1785.40 | 1475.46 | 1176.53 | 1119.76 | 1119.76 | 2443.31 | 2577.13 | 2352.33 | 2906.65 | 2187.56 | 893.31 | 1785.40 | 1367.86 | | |
| Molecular Weight (lb/lbmol) | 22.50 | 34.09 | 27.93 | 21.64 | 20.51 | 20.51 | 47.15 | 49.50 | 45.89 | 57.60 | 43.29 | 29.56 | 34.09 | -- | | |
| Operating Hours (hr/yr) | 1000 | 876 | 438 | 53 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 8760 | 7884 | -- | | |
| Mass Flow (ton/yr) | 28.22 | 496.86 | 116.34 | 4414.81 | 1183.61 | 986.34 | 1210.22 | 200.49 | 18.11 | 46.45 | 0.29 | 2.32 | 89.43 | 8793.49 | | |
| Volumetric Flow (MMscf/yr) | 0.95 | 11.06 | 3.16 | 154.80 | 43.80 | 36.50 | 36.02 | 3.07 | 0.53 | 0.61 | 0.00 | 0.06 | 1.99 | 292.57 | | |
| Heat Release (MMBtu/yr) | 1160.05 | 19748.55 | 4664.79 | 182131.44 | 49045.56 | 40871.30 | 88008.36 | 7921.85 | 1241.88 | 1779.08 | 9.33 | 53.33 | 3554.74 | 400190.27 | | |

| Criteria Pollutant Emissions from Flare * | | | |
|---|------------------------|-----------------|-----------------------|
| Component | Emission Rate (ton/yr) | Emission Factor | Emission Factor Units |
| NO _x | 27.61 | 0.138 | lb/MMBtu |
| CO | 55.13 | 0.2755 | lb/MMBtu |
| SO ₂ | 0.32 | -- | -- |
| PM ₁₀ | 1.11 | 7.60 | lb/Mscf |
| PM _{2.5} | 1.11 | 7.60 | lb/Mscf |
| N ₂ O | 0.04 | 0.00022 | lb/MMBtu |
| H ₂ S | 0.00 | -- | -- |

| LPS Vapor Controls / Flare DRE | |
|---|-------|
| LPS VRU Collection Efficiency (Normal Operations) | 98.0% |
| LPS VRU Downtime (MSS Operations) | 10.0% |
| Flare Destruction Efficiency C4+ | 98% |
| Flare Destruction Efficiency C3 | 98% |

| | |
|--------------------------|---------|
| H2S molecular weight | 34.08 |
| SO2 molecular weight | 64.06 |
| Molar Volume (scf/lbmol) | 379.484 |
| Flare Operating Hours | 8760 |

(876 hrs)

| Combustion Emissions from Flare | | | | | | | | | | | | | | |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) | (ton/yr) |
| Total NO _x | 0.08 | 1.36 | 0.32 | 12.57 | 3.38 | 2.82 | 6.07 | 0.55 | 0.09 | 0.12 | 0.00 | 0.00 | 0.25 | 27.61 |
| Total CO | 0.16 | 2.72 | 0.64 | 25.09 | 6.76 | 5.63 | 12.12 | 1.09 | 0.17 | 0.25 | 0.00 | 0.01 | 0.49 | 55.13 |
| Total SO ₂ | 0.00 | 0.02 | 0.03 | 0.13 | 0.04 | 0.03 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 |
| Total PM ₁₀ | 0.00 | 0.04 | 0.01 | 0.59 | 0.17 | 0.14 | 0.14 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.11 |
| Total PM _{2.5} | 0.00 | 0.04 | 0.01 | 0.59 | 0.17 | 0.14 | 0.14 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.11 |
| Total VOC after comb. | 0.16 | 6.04 | 1.05 | 22.29 | 4.62 | 3.85 | 19.73 | 3.32 | 0.29 | 0.88 | 0.00 | 0.02 | 1.09 | 63.35 |
| Total HAP after comb. | 0.01 | 0.27 | 0.05 | 0.83 | 0.07 | 0.06 | 0.95 | 0.15 | 0.01 | 0.05 | 0.00 | 0.01 | 0.05 | 2.52 |
| Total n-Hexane after comb. | 0.01 | 0.22 | 0.04 | 0.74 | 0.06 | 0.05 | 0.79 | 0.13 | 0.01 | 0.04 | 0.00 | 0.00 | 0.04 | 2.14 |
| Total Benzene after comb. | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.00 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 |
| Total CH ₄ | 0.22 | 0.89 | 0.44 | 37.91 | 11.63 | 9.69 | 0.58 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.16 | 61.55 |
| Total N ₂ O | 0.000 | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 |
| Total CO ₂ | 106.54 | 1816.14 | 438.90 | 16173.11 | 4135.47 | 3446.22 | 7113.89 | 611.94 | 103.23 | 134.84 | 0.81 | 7.62 | 326.91 | 34415.61 |
| Total CO _{2e} | 112.11 | 1839.06 | 450.15 | 17126.84 | 4427.85 | 3689.87 | 7131.22 | 612.45 | 103.55 | 134.91 | 0.81 | 7.63 | 331.03 | 35,967.49 |

Footnotes:
^f Uncontrolled stream properties determined via ProMax.
^g Tank emissions determined in ProMax are calculated at the maximum daily liquid surface temperature.
^e Pilot fuel gas emissions are conservatively calculated based on observed flowrates
^d Controlled Emissions Were Calculated by the Following: Uncontrolled Emissions * (1 - VRU Efficiency) * (1 - Flare Destruction Efficiency)
^f 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.
^f Blowdowns are estimated to be @ 952 SCF per blowdown. XTO conservatively estimates 1000 blowdowns per year and 1 blowdown per hour
^g XTO conservatively estimates 155 Mscf of inlet gas flaring per year @ 2.92 Mscf/hr max rate
^h 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
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 | | | | | | | |
|---|--------------------------------|--------------------------------|---|---------------|----------------------------|---|--------------|
| Stream | DEHY1-3 Still Column Emissions | | Total Vapors to Combustion Device(s) (Uncontrolled) | | Destruction Efficiency (%) | Total Combustion Device(s) Exhaust (controlled) | |
| | Promax Stream Name | 25. DEHY1-3 Max Hourly (lb/hr) | 13. BTEX Cond Vapors to Combustion (ton/yr) | (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 | 0.00 | 0.00 |
| Water | | 10.18 | 5.65 | 10.18 | 5.65 | 10.18 | 5.65 |
| Hydrogen Sulfide | | 0.13 | 0.54 | 0.13 | 0.54 | 0.00 | 0.01 |
| Carbon Dioxide | | 2.44 | 10.57 | 2.44 | 10.57 | 2.44 | 10.57 |
| Nitrogen | | 0.01 | 0.04 | 0.01 | 0.04 | 0.01 | 0.04 |
| Methane | | 8.05 | 35.16 | 8.05 | 35.16 | 0.16 | 0.70 |
| Ethane | | 16.08 | 68.89 | 16.08 | 68.89 | 0.32 | 1.38 |
| Propane | | 25.68 | 104.22 | 25.68 | 104.22 | 0.51 | 2.08 |
| Isobutane | | 6.04 | 21.88 | 6.04 | 21.88 | 0.12 | 0.44 |
| n-Butane | | 22.16 | 73.38 | 22.16 | 73.38 | 0.44 | 1.47 |
| Isopentane | | 12.68 | 31.36 | 12.68 | 31.36 | 0.25 | 0.63 |
| n-Pentane | | 19.50 | 42.40 | 19.50 | 42.40 | 0.39 | 0.85 |
| i-C6 | | 23.31 | 32.03 | 23.31 | 32.03 | 0.47 | 0.64 |
| i-C7 | | 18.73 | 13.33 | 18.73 | 13.33 | 0.37 | 0.27 |
| Octane | | 1.75 | 0.65 | 1.75 | 0.65 | 0.04 | 0.01 |
| Nonane | | 0.09 | 0.02 | 0.09 | 0.02 | 0.00 | 0.00 |
| Benzene | | 18.85 | 17.98 | 18.85 | 17.98 | 0.38 | 0.36 |
| Toluene | | 22.73 | 12.42 | 22.73 | 12.42 | 0.45 | 0.25 |
| Ethylbenzene | | 0.21 | 0.08 | 0.21 | 0.08 | 0.00 | 0.00 |
| o-Xylene | | 2.57 | 0.94 | 2.57 | 0.94 | 0.05 | 0.02 |
| n-Hexane | | 12.13 | 13.38 | 12.13 | 13.38 | 0.24 | 0.27 |
| 2,2,4-Trimethylpentane | | 0.00 | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Decanes Plus | | 0.00 | 1.61E-04 | 0.00 | 0.00 | 0.00 | 0.00 |
| Decanes Plus Sat | | 0.00 | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | | 223.33 | 978.17 | 223.33 | 484.92 | -- | 16.84 |
| Total VOC | | 186.44 | 364.08 | 186.44 | 364.08 | -- | 7.28 |
| Total HAP | | 56.50 | 44.80 | 56.50 | 44.80 | -- | 1.13 |
| 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 | | |

| 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 | 0.00022 | lb/MMBtu |
| H ₂ S | 0.00 | -- | -- |

| | |
|--|-----|
| Combustion Device Destruction Efficiency C4+ | 98% |
| Combustion Device Efficiency C3 | 98% |

| | |
|---------------------------|---------|
| H2S molecular weight | 34.08 |
| SO2 molecular weight | 64.06 |
| Molar Volume (scf/lbmol) | 379.484 |
| Combustor Operating Hours | 8760 |

| 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

$V_a = 951,570.00$

$X_{CH_4} = 0.54923328$

$N = 0.98$

$Z_L = 1.00$

$Z_U = 0.00$

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

2) $E_{s,CO_2} \text{ (uncombusted)} = V_a * X_{CO_2}$ = 2,809.89 SCF/Yr

$V_a = 951,570.00$

$X_{CO_2} = 0.0030$

3) $E_{s,CO_2} \text{ (combusted)} = \sum (\eta * V_a * Y_j * R_j * Z_L)$

$N = 0.98$

$V_a = 951,570.00$

$Y_j = \text{Methane } 0.5492$

$\text{Ethane } 0.1502$

$\text{Propane } 0.0999$

$\text{Butane } 0.0712$

$\text{Pentane + } 0.1067$

$Z_L = 1.00$

$R_j =$

1

2

3

4

5

$E_{a,CO_2} =$

512,181.23

280,195.87

279,562.05

265,408.58

497,387.03

1,834,734.76 SCF/Yr

4) $Mass_{s,i} = E_{s,i} * \rho_i * 10^3$

$E_{s,i} \text{ (CH}_4\text{)} = 10,452.68$

$E_{s,i} \text{ (CO}_2\text{)} = 1,837,544.65$

$\rho_i \text{ (CH}_4\text{)} = 0.0192 \text{ kg/ft}^3$

$\rho_i \text{ (CO}_2\text{)} = 0.0526 \text{ kg/ft}^3$

= 0.20 metric tons

= 96.65 metric tons

5) $CO_2e = CO_2 + (CH_4 * GWP)$

$CO_2 = 96.65 = 106.54 \text{ short tons } CO_2e$

$CH_4 = 0.20 = 0.22 \text{ short tons } CO_2e$

$CH_4 \text{ GWP} = 25 = 112.07 \text{ short tons } CO_2e$

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)

Tab 7
Section 7 - Information Used To Determine
Emissions

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

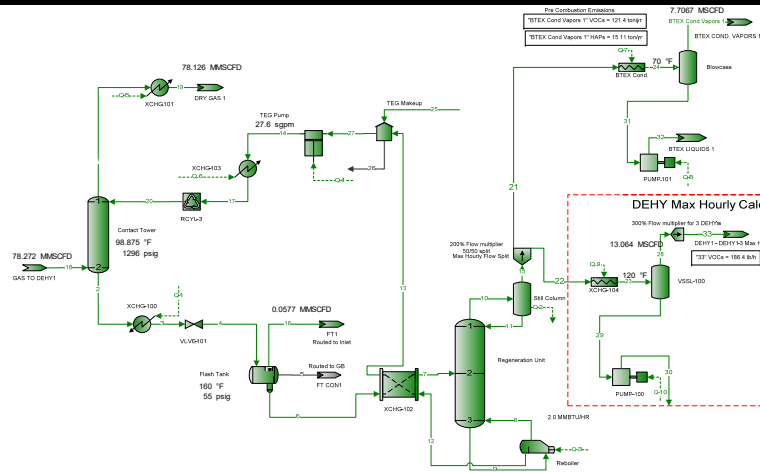
- If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect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

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

| | | |
|--------------|--------------------------|------|
| 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

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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 | 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

| | | |
|--|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | | |
|--|--|--|

| | | |
|--------------|--------------------------|------|
| 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

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

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 |

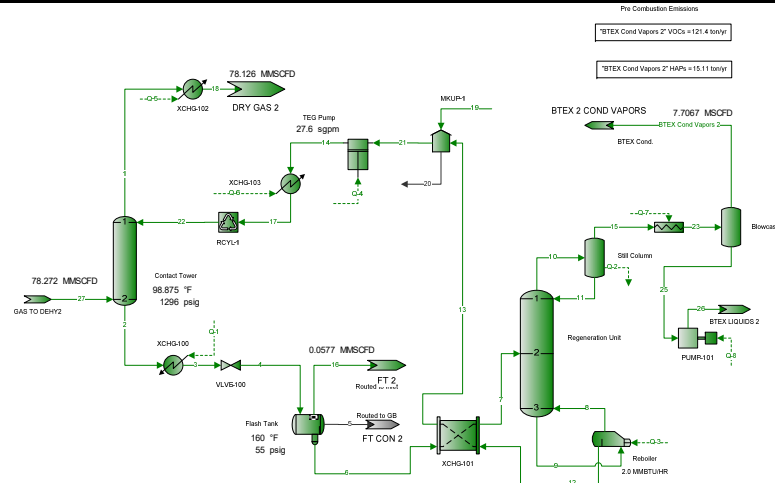
Stream Properties

| 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

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

Connections

| | 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

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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 | |

| | BTEX Cond Vapors 2 | 1 | 2 | 3 | 4 |
|------------------|--------------------|---|---|---|---|
| Mole Fraction | % | % | % | % | % |
| Decanes Plus Sat | 0 | 0 | 0 | 0 | 0 |

| | BTEX Cond Vapors 2 | 1 | 2 | 3 | 4 |
|------------------------|--------------------|-------------|-------------|-------------|-------------|
| Mass Fraction | % | % | % | % | % |
| 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

| | |
|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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

| | | |
|--------------|--------------------------|------|
| 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 | | | |

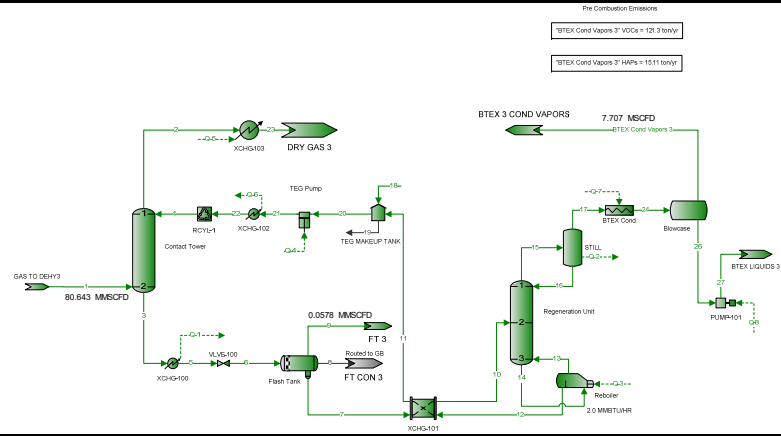
Stream Properties

| 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 | 1 | 2 | 3 | 4 |
|------------------------|--------------------|-------------|----------|-----------|-------------|
| Mass Flow | lb/h | lb/h | lb/h | lb/h | 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 |
|------------------------|--------------------|-------------|-------------|------------|-------------|
| Mole Fraction | % | % | % | % | % |
| 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 | |

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

| | BTEX Cond Vapors 3 % | 1 % | 2 % | 3 % | 4 % |
|------------------------|----------------------------|-------------|-------------|-------------|-------------|
| Mass Fraction | | | | | |
| 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

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> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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

Process Streams Report
All Streams
 Tabulated by Total Phase

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

Connections

| | 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

| 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 |

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 | | | |

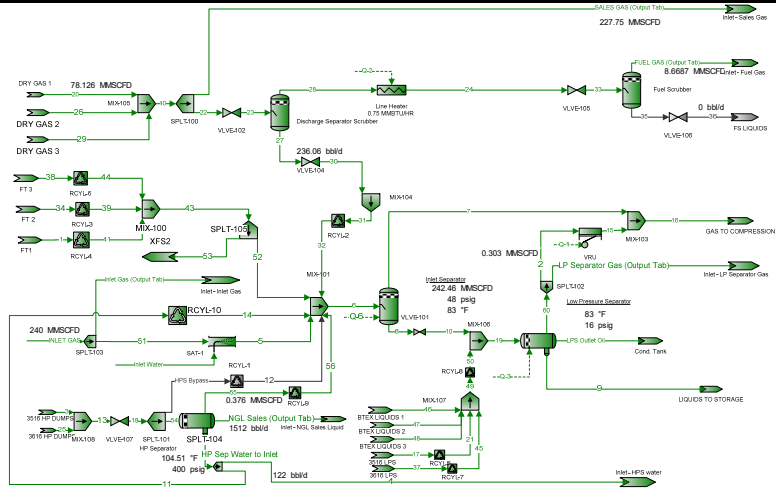
Stream Properties

| 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 | | | | | |
|--------------------|--|--|--|--|--|
|--------------------|--|--|--|--|--|

| | 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 |

| | 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

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

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

| | |
|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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

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

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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 | 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

Process Streams Report
All Streams
Tabulated by Total Phase

| | | |
|--------------|--------------------------|------|
| 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 |

| 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

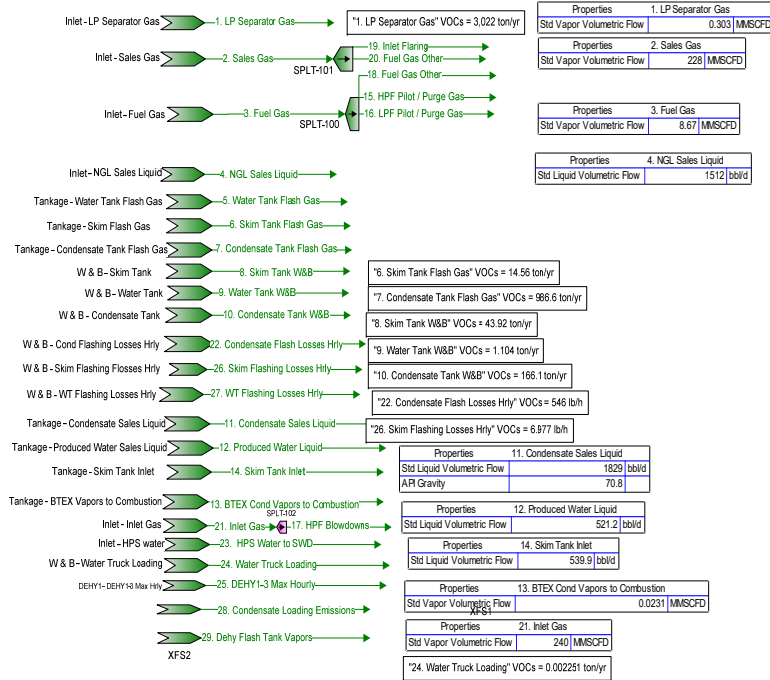
| Mass Flow | 60 lb/h | | | |
|------------------------|-------------|--|--|--|
| Triethylene Glycol | 3.38434E-08 | | | |
| Water | 11.6448 | | | |
| Hydrogen Sulfide | 0.0300098 | | | |
| Carbon Dioxide | 2.52953 | | | |
| Nitrogen | 1.11555 | | | |
| Methane | 215.829 | | | |
| Ethane | 213.201 | | | |
| 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

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| | | |
|-------------------------------|--|--|
| Process Streams Report | | |
| All Streams | | |
| Tabulated by Total Phase | | |

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

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

| Mass Fraction | 1. LP Separator Gas % | 2. Sales Gas % | 3. Fuel Gas % | 4. NGL Sales Liquid % | 5. Water Tank Flash Gas % |
|------------------------|-----------------------|----------------|---------------|-----------------------|---------------------------|
| 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

* 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 | | | | | |
|-------------|--------------------------|-------------------------------------|-------------------|--------------------|-------------------------|
| | 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

* User Specified Values
 ? Extrapolated or Approximate Values

| | |
|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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

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> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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

| | |
|-------------------------------|--|
| Process Streams Report | |
| All Streams | |
| Tabulated by Total Phase | |

| | | |
|--------------|--------------------------|------|
| 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

| | | |
|--|---|--|
| | 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 Flosses 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

| | |
|-------------------------------|--|
| 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 | | | | | |
|-------------------|--|--|--|--|--|
|-------------------|--|--|--|--|--|

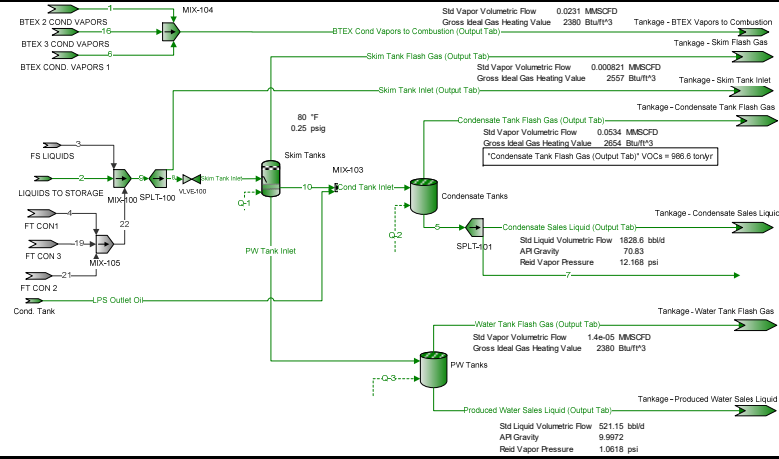
| Property | Units | 26. Skim Flashing Losses Hrlly | 27. WT Flashing Losses Hrlly | 28. Condensate Loading Emissions | 29. Dehy Flash Tank Vapors |
|-----------------------------|----------|--------------------------------------|------------------------------------|---|----------------------------------|
| 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) | Cond Tank Inlet | Condensate Sales Liquid (Output Tab) | Condensate Tank Flash Gas (Output Tab) | LPS Outlet Oil |
|------------------------|---|-----------------|--------------------------------------|--|----------------|
| Mass Flow | lb/h | lb/h | lb/h | lb/h | 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 |
|--------------------|---|-----------------|--------------------------------------|--|----------------|
| Mole Fraction | % | % | % | % | % |
| 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

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 | | |

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

| |
|--------------------|
| Connections |
|--------------------|

| | 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 |
|---------------------------|

| | 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 | |

| Mole Fraction | Produced Water Sales Liquid (Output Tab) % | PW Tank Inlet % | Skim Tank Flash Gas (Output Tab) % | Skim Tank Inlet % | Skim Tank Inlet (Output Tab) % |
|------------------------|---|--------------------|---------------------------------------|----------------------|-----------------------------------|
| 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 |

| Mass Fraction | Produced Water Sales Liquid (Output Tab) % | PW Tank Inlet % | Skim Tank Flash Gas (Output Tab) % | Skim Tank Inlet % | Skim Tank Inlet (Output Tab) % |
|------------------------|---|--------------------|---------------------------------------|----------------------|-----------------------------------|
| 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

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 | | | |

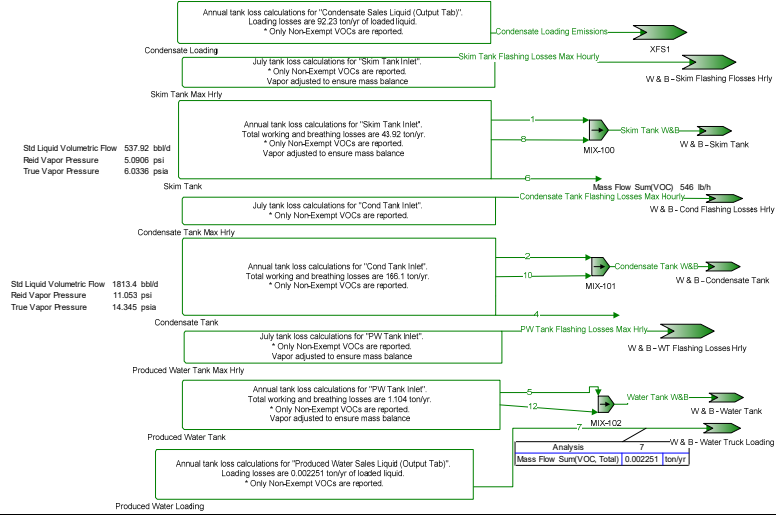
Stream Properties

| 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 Hrly | W & B - Condensate Tank | W & B - WT Flashing Losses Hrly | W & B - Skim Flashing Flosses Hrly |

| | | | | | |
|---------------------------|--|--|--|--|--|
| 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 Hrly 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 Hrly % | 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
 ? 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

| | | |
|--|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | | |
|--|--|--|

| | | |
|--------------|--------------------------|------|
| 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

| | | | | | |
|-------------------------------|--|--|--|--|--|
| 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

* User Specified Values
 ? Extrapolated or Approximate Values

| | |
|--|--|
| <h2 style="margin:0;">Process Streams Report</h2> <h3 style="margin:0;">All Streams</h3> <p style="margin:0;">Tabulated by Total Phase</p> | |
|--|--|

| | | |
|--------------|--------------------------|------|
| 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 | | | |

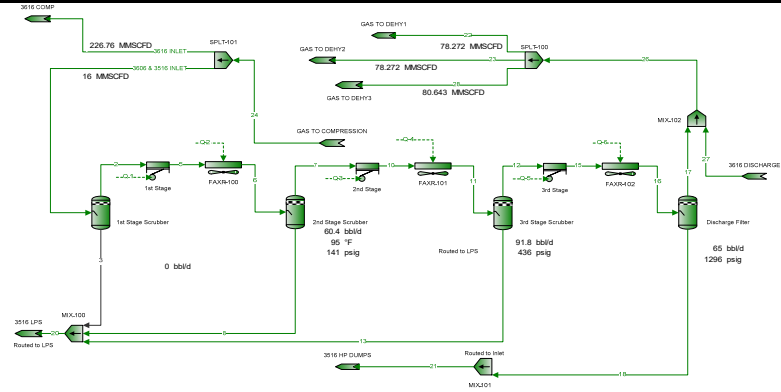
Stream Properties

| 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 | | 2.9253 | 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 |

* 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 | | | | | |
| 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
? Extrapolated or Approximate Values

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 |

* 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 | |

| 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

| | |
|-------------------------------|--|
| 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

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

| | |
|-------------------------------|--|
| Process Streams Report | |
| All Streams | |
| Tabulated by Total Phase | |

| | | |
|--------------|--------------------------|------|
| 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 | |

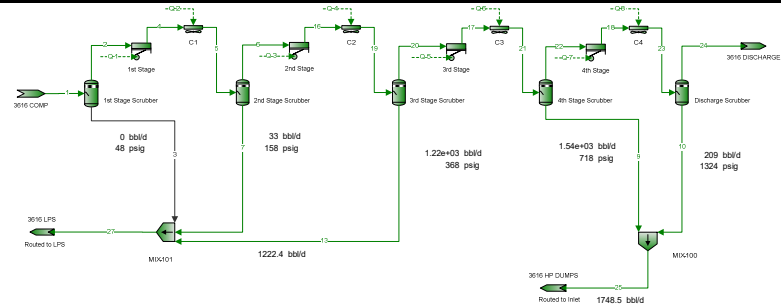
Stream Properties

| 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

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

Connections

| | 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

| 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 |

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

| | 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

| 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 |

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

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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 |
| 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 |
| Temperature | °F |
| Pressure | psig |
| Molecular Weight | lb/lbmol |
| Mass Flow | lb/h |
| Std Vapor Volumetric Flow | MMSCFD |
| Std Liquid Volumetric Flow | sgpm |
| API Gravity | |
| Net Ideal Gas Heating Value | Btu/ft ³ |
| 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 | MAXIMUM RATING | 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 |

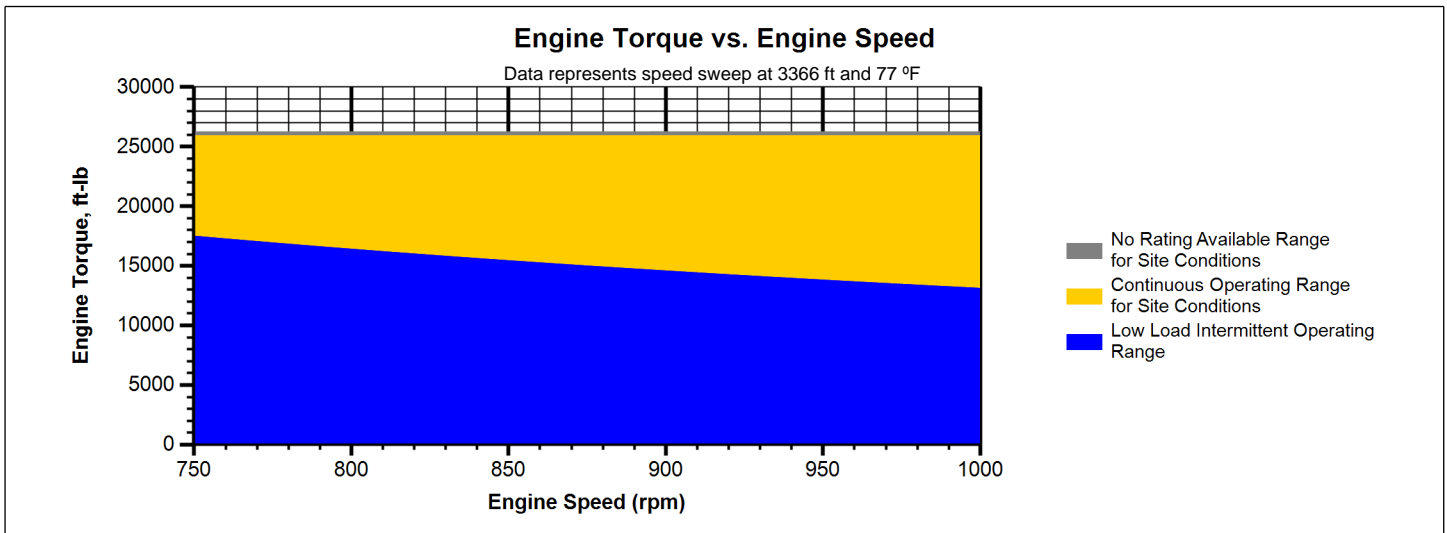
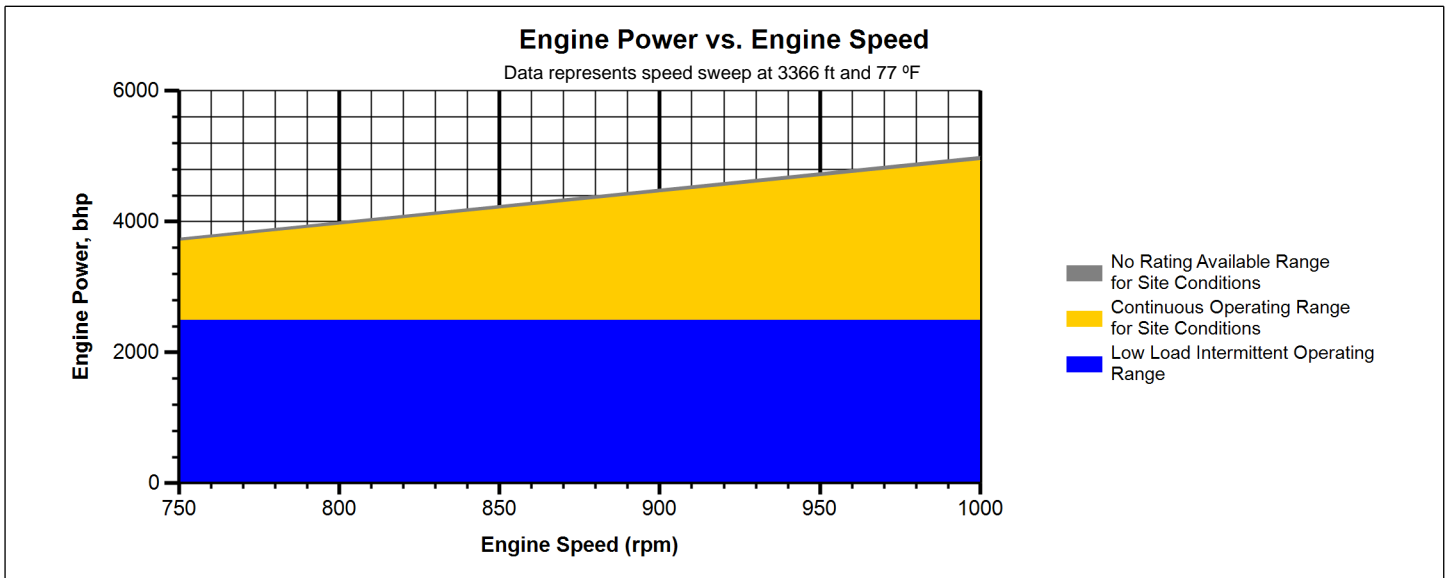
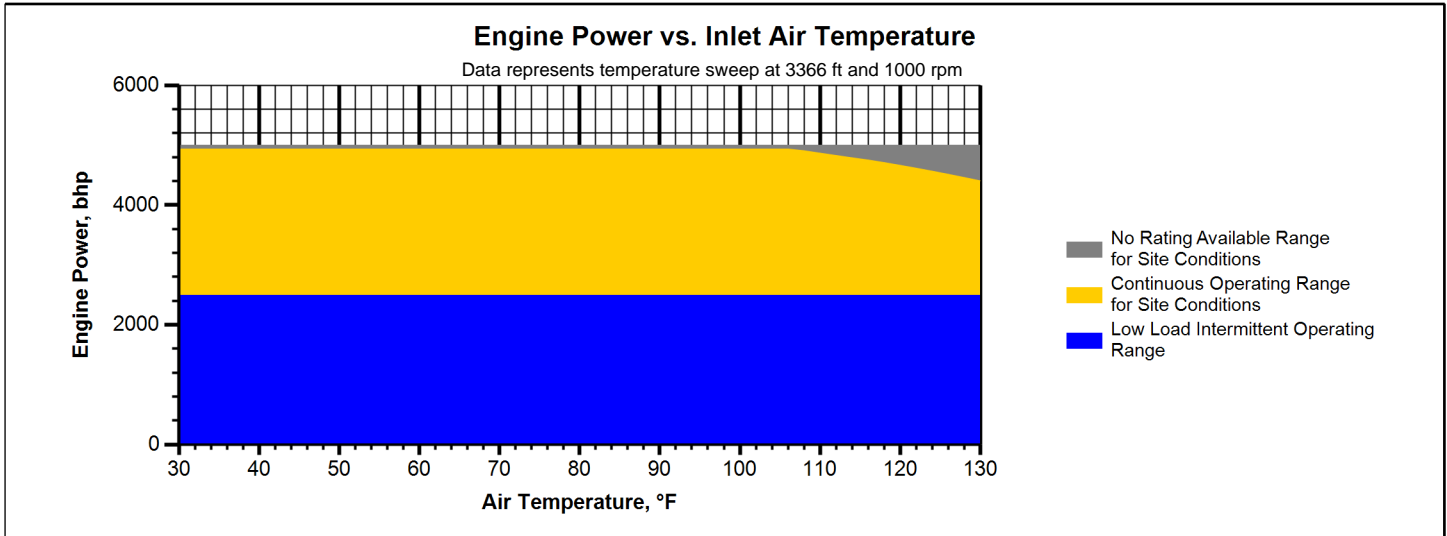
| HEAT REJECTION | | | | | | | |
|----------------------------------|--|----------|---------|-------|-------|-------|-------|
| HEAT REJ. TO JACKET WATER (JW) | | (13) | Btu/min | 51385 | 51385 | 40587 | 35052 |
| HEAT REJ. TO ATMOSPHERE | | (13) | Btu/min | 20454 | 20454 | 18807 | 17049 |
| HEAT REJ. 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:
Unit of Measure:

Nat Gas
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 | | WITH AIR FUEL RATIO CONTROL |
| AFTERCOOLER - STAGE 2 INLET (°F): | 130 | SITE CONDITIONS: | |
| AFTERCOOLER - STAGE 1 INLET (°F): | 201 | FUEL: | Maverick |
| JACKET WATER OUTLET (°F): | 210 | FUEL PRESSURE RANGE (psig): (See note 1) | 7.0-40.0 |
| ASPIRATION: | TA | FUEL METHANE NUMBER: | 29.5 |
| COOLING SYSTEM: | JW+OC+1AC, 2AC | FUEL LHV (Btu/scf): | 1223 |
| CONTROL SYSTEM: | ADEM3 | ALTITUDE(ft): | 3366 |
| EXHAUST MANIFOLD: | ASWC | INLET AIR TEMPERATURE(°F): | 77 |
| COMBUSTION: | LOW EMISSION | STANDARD RATED POWER: | 1380 bhp@1400rpm |
| 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 |

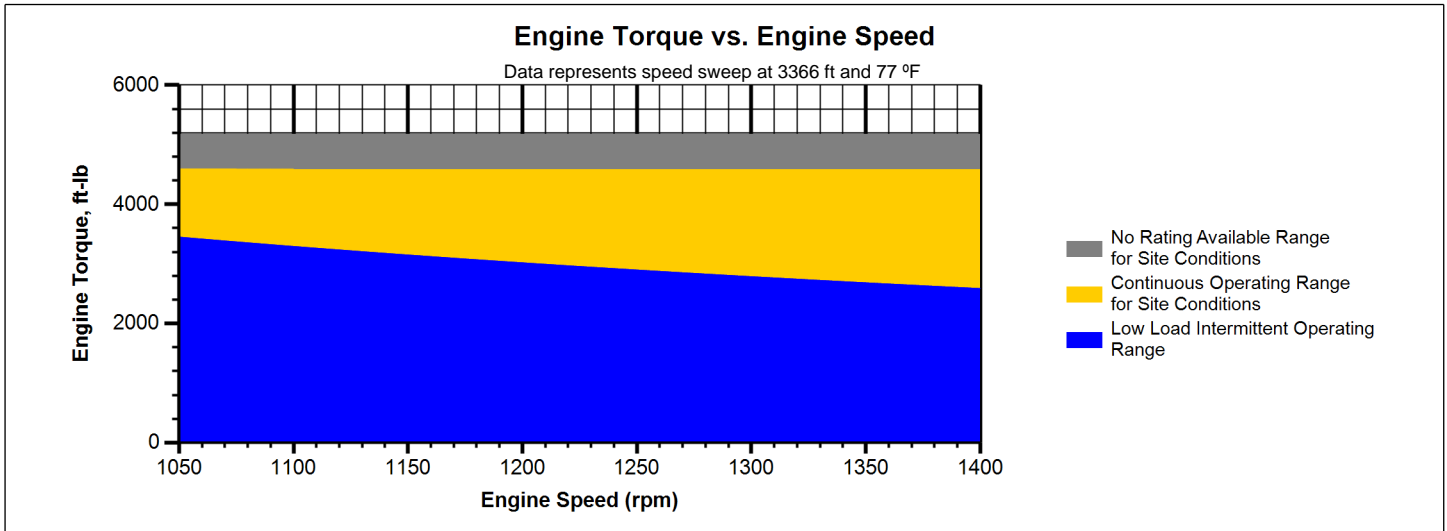
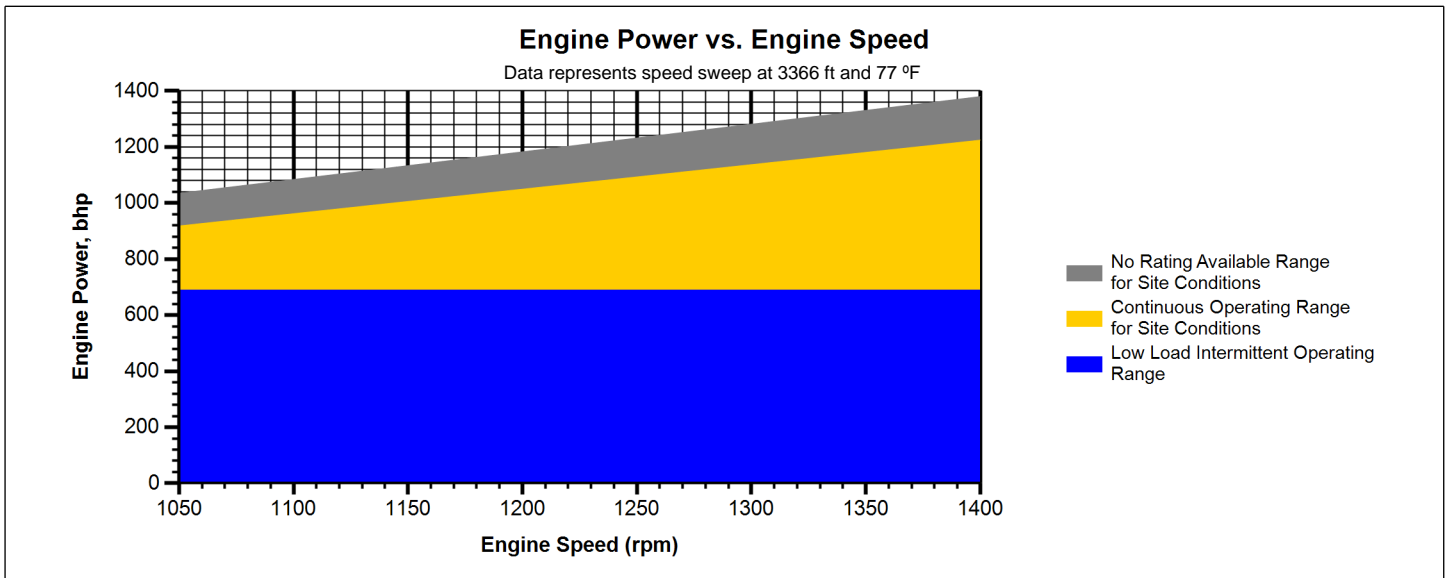
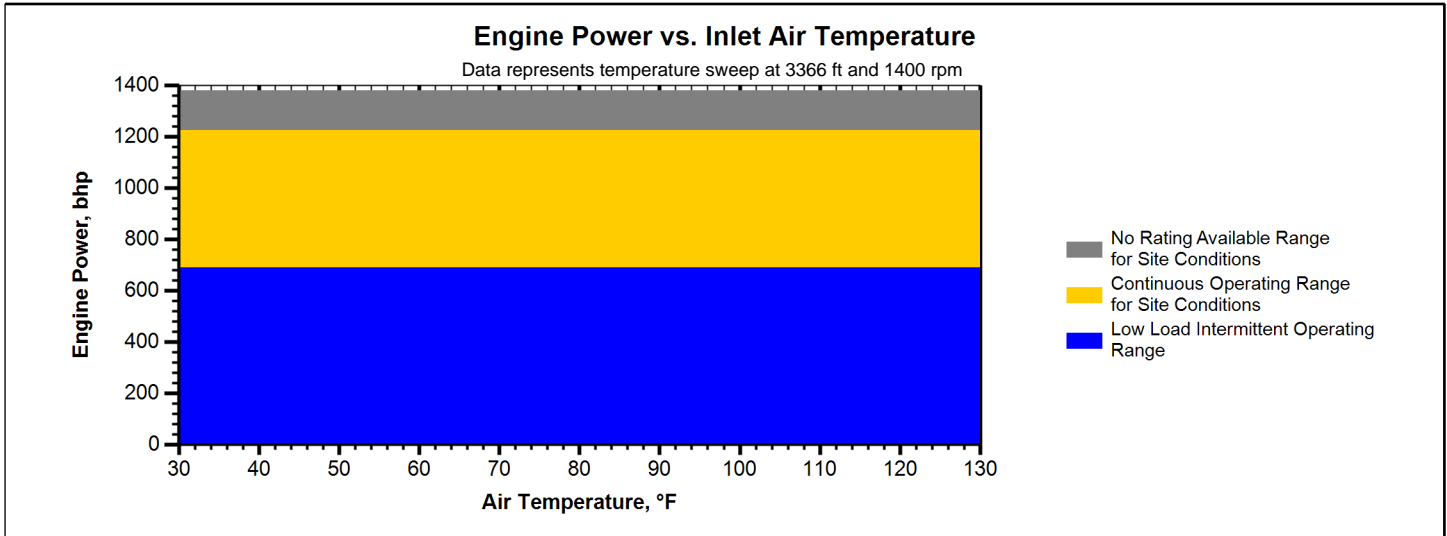
| HEAT REJECTION | | | | | | | |
|----------------------------------|--|----------|---------|-------|-------|-------|-------|
| HEAT REJ. TO JACKET WATER (JW) | | (13) | Btu/min | 31012 | 31012 | 26712 | 23889 |
| HEAT REJ. TO ATMOSPHERE | | (13) | Btu/min | 4914 | 4914 | 4129 | 3543 |
| HEAT REJ. TO 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 |
| Norpentane | 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:
Unit of Measure:

Nat Gas
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.

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO)
FROM NATURAL GAS COMBUSTION^a

| Combustor Type (MMBtu/hr Heat Input) [SCC] | NO _x ^b | | CO | |
|---|---|------------------------------|---|------------------------------|
| | Emission Factor (lb/10 ⁶ scf) | Emission Factor Rating | Emission Factor (lb/10 ⁶ scf) | Emission Factor Rating |
| Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01] | | | | |
| Uncontrolled (Pre-NSPS) ^c | 280 | A | 84 | B |
| Uncontrolled (Post-NSPS) ^c | 190 | A | 84 | B |
| Controlled - Low NO _x burners | 140 | A | 84 | B |
| Controlled - Flue gas recirculation | 100 | D | 84 | B |
| Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03] | | | | |
| Uncontrolled | 100 | B | 84 | B |
| Controlled - Low NO _x burners | 50 | D | 84 | B |
| Controlled - Low NO _x burners/Flue gas recirculation | 32 | C | 84 | B |
| Tangential-Fired Boilers (All Sizes) [1-01-006-04] | | | | |
| Uncontrolled | 170 | A | 24 | C |
| Controlled - Flue gas recirculation | 76 | D | 98 | D |
| Residential Furnaces (<0.3) [No SCC] | | | | |
| Uncontrolled | 94 | B | 40 | B |

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

^b Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_x emission factor. For tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO_x emission factor.

^c NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION^a

| Pollutant | Emission Factor (lb/10 ⁶ scf) | Emission Factor Rating |
|--|--|------------------------|
| CO ₂ ^b | 120,000 | A |
| Lead | 0.0005 | D |
| N ₂ O (Uncontrolled) | 2.2 | E |
| N ₂ O (Controlled-low-NO _x burner) | 0.64 | E |
| PM (Total) ^c | 7.6 | D |
| PM (Condensable) ^c | 5.7 | D |
| PM (Filterable) ^c | 1.9 | B |
| SO ₂ ^d | 0.6 | A |
| TOC | 11 | B |
| Methane | 2.3 | B |
| VOC | 5.5 | C |

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds.

VOC = Volatile Organic Compounds.

^b Based on approximately 100% conversion of fuel carbon to CO₂. CO₂[lb/10⁶ scf] = (3.67) (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10⁴ lb/10⁶ scf.

^c All PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensable PM. Condensable PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

^d Based on 100% conversion of fuel sulfur to SO₂. Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION^a

| CAS No. | Pollutant | Emission Factor (lb/10 ⁶ scf) | Emission Factor Rating |
|------------|---|---|------------------------|
| 91-57-6 | 2-Methylnaphthalene ^{b,c} | 2.4E-05 | D |
| 56-49-5 | 3-Methylchloranthrene ^{b,c} | <1.8E-06 | E |
| | 7,12-Dimethylbenz(a)anthracene ^{b,c} | <1.6E-05 | E |
| 83-32-9 | Acenaphthene ^{b,c} | <1.8E-06 | E |
| 203-96-8 | Acenaphthylene ^{b,c} | <1.8E-06 | E |
| 120-12-7 | Anthracene ^{b,c} | <2.4E-06 | E |
| 56-55-3 | Benz(a)anthracene ^{b,c} | <1.8E-06 | E |
| 71-43-2 | Benzene ^b | 2.1E-03 | B |
| 50-32-8 | Benzo(a)pyrene ^{b,c} | <1.2E-06 | E |
| 205-99-2 | Benzo(b)fluoranthene ^{b,c} | <1.8E-06 | E |
| 191-24-2 | Benzo(g,h,i)perylene ^{b,c} | <1.2E-06 | E |
| 205-82-3 | Benzo(k)fluoranthene ^{b,c} | <1.8E-06 | E |
| 106-97-8 | Butane | 2.1E+00 | E |
| 218-01-9 | Chrysene ^{b,c} | <1.8E-06 | E |
| 53-70-3 | Dibenzo(a,h)anthracene ^{b,c} | <1.2E-06 | E |
| 25321-22-6 | Dichlorobenzene ^b | 1.2E-03 | E |
| 74-84-0 | Ethane | 3.1E+00 | E |
| 206-44-0 | Fluoranthene ^{b,c} | 3.0E-06 | E |
| 86-73-7 | Fluorene ^{b,c} | 2.8E-06 | E |
| 50-00-0 | Formaldehyde ^b | 7.5E-02 | B |
| 110-54-3 | Hexane ^b | 1.8E+00 | E |
| 193-39-5 | Indeno(1,2,3-cd)pyrene ^{b,c} | <1.8E-06 | E |
| 91-20-3 | Naphthalene ^b | 6.1E-04 | E |
| 109-66-0 | Pentane | 2.6E+00 | E |
| 85-01-8 | Phenanathrene ^{b,c} | 1.7E-05 | D |

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION (Continued)

| CAS No. | Pollutant | Emission Factor (lb/10 ⁶ scf) | Emission Factor Rating |
|----------|------------------------|---|------------------------|
| 74-98-6 | Propane | 1.6E+00 | E |
| 129-00-0 | Pyrene ^{b, c} | 5.0E-06 | E |
| 108-88-3 | Toluene ^b | 3.4E-03 | C |

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. Emission Factors preceded with a less-than symbol are based on method detection limits.

^b Hazardous Air Pollutant (HAP) as defined by Section 112(b) of the Clean Air Act.

^c HAP because it is Polycyclic Organic Matter (POM). POM is a HAP as defined by Section 112(b) of the Clean Air Act.

^d The sum of individual organic compounds may exceed the VOC and TOC emission factors due to differences in test methods and the availability of test data for each pollutant.

Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES^a
(SCC 2-02-002-54)

| Pollutant | Emission Factor (lb/MMBtu) ^b (fuel input) | Emission Factor Rating |
|---|--|---------------------------|
| Criteria Pollutants and Greenhouse Gases | | |
| NO _x ^c 90 - 105% Load | 4.08 E+00 | B |
| NO _x ^c <90% Load | 8.47 E-01 | B |
| CO ^c 90 - 105% Load | 3.17 E-01 | C |
| CO ^c <90% Load | 5.57 E-01 | B |
| CO ₂ ^d | 1.10 E+02 | A |
| SO ₂ ^e | 5.88 E-04 | A |
| TOC ^f | 1.47 E+00 | A |
| Methane ^g | 1.25 E+00 | C |
| VOC ^h | 1.18 E-01 | C |
| PM10 (filterable) ⁱ | 7.71 E-05 | D |
| PM2.5 (filterable) ⁱ | 7.71 E-05 | D |
| PM Condensable ^j | 9.91 E-03 | D |
| Trace Organic Compounds | | |
| 1,1,2,2-Tetrachloroethane ^k | <4.00 E-05 | E |
| 1,1,2-Trichloroethane ^k | <3.18 E-05 | E |
| 1,1-Dichloroethane | <2.36 E-05 | E |
| 1,2,3-Trimethylbenzene | 2.30 E-05 | D |
| 1,2,4-Trimethylbenzene | 1.43 E-05 | C |
| 1,2-Dichloroethane | <2.36 E-05 | E |
| 1,2-Dichloropropane | <2.69 E-05 | E |
| 1,3,5-Trimethylbenzene | 3.38 E-05 | D |
| 1,3-Butadiene ^k | 2.67E-04 | D |
| 1,3-Dichloropropene ^k | <2.64 E-05 | E |
| 2-Methylnaphthalene ^k | 3.32 E-05 | C |
| 2,2,4-Trimethylpentane ^k | 2.50 E-04 | C |
| Acenaphthene ^k | 1.25 E-06 | C |

Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES
(Continued)

| Pollutant | Emission Factor (lb/MMBtu) ^b (fuel input) | Emission Factor Rating |
|-----------------------------------|--|---------------------------|
| Acenaphthylene ^k | 5.53 E-06 | C |
| Acetaldehyde ^{k,l} | 8.36 E-03 | A |
| Acrolein ^{k,l} | 5.14 E-03 | A |
| Benzene ^k | 4.40 E-04 | A |
| Benzo(b)fluoranthene ^k | 1.66 E-07 | D |
| Benzo(e)pyrene ^k | 4.15 E-07 | D |
| Benzo(g,h,i)perylene ^k | 4.14 E-07 | D |
| Biphenyl ^k | 2.12 E-04 | D |
| Butane | 5.41 E-04 | D |
| Butyr/Isobutyraldehyde | 1.01 E-04 | C |
| Carbon Tetrachloride ^k | <3.67 E-05 | E |
| Chlorobenzene ^k | <3.04 E-05 | E |
| Chloroethane | 1.87 E-06 | D |
| Chloroform ^k | <2.85 E-05 | E |
| Chrysene ^k | 6.93 E-07 | C |
| Cyclopentane | 2.27 E-04 | C |
| Ethane | 1.05 E-01 | C |
| Ethylbenzene ^k | 3.97 E-05 | B |
| Ethylene Dibromide ^k | <4.43 E-05 | E |
| Fluoranthene ^k | 1.11 E-06 | C |
| Fluorene ^k | 5.67 E-06 | C |
| Formaldehyde ^{k,l} | 5.28 E-02 | A |
| Methanol ^k | 2.50 E-03 | B |
| Methylcyclohexane | 1.23 E-03 | C |
| Methylene Chloride ^k | 2.00 E-05 | C |
| n-Hexane ^k | 1.11 E-03 | C |
| n-Nonane | 1.10 E-04 | C |

Tab 8
Section 8 - Map(s)

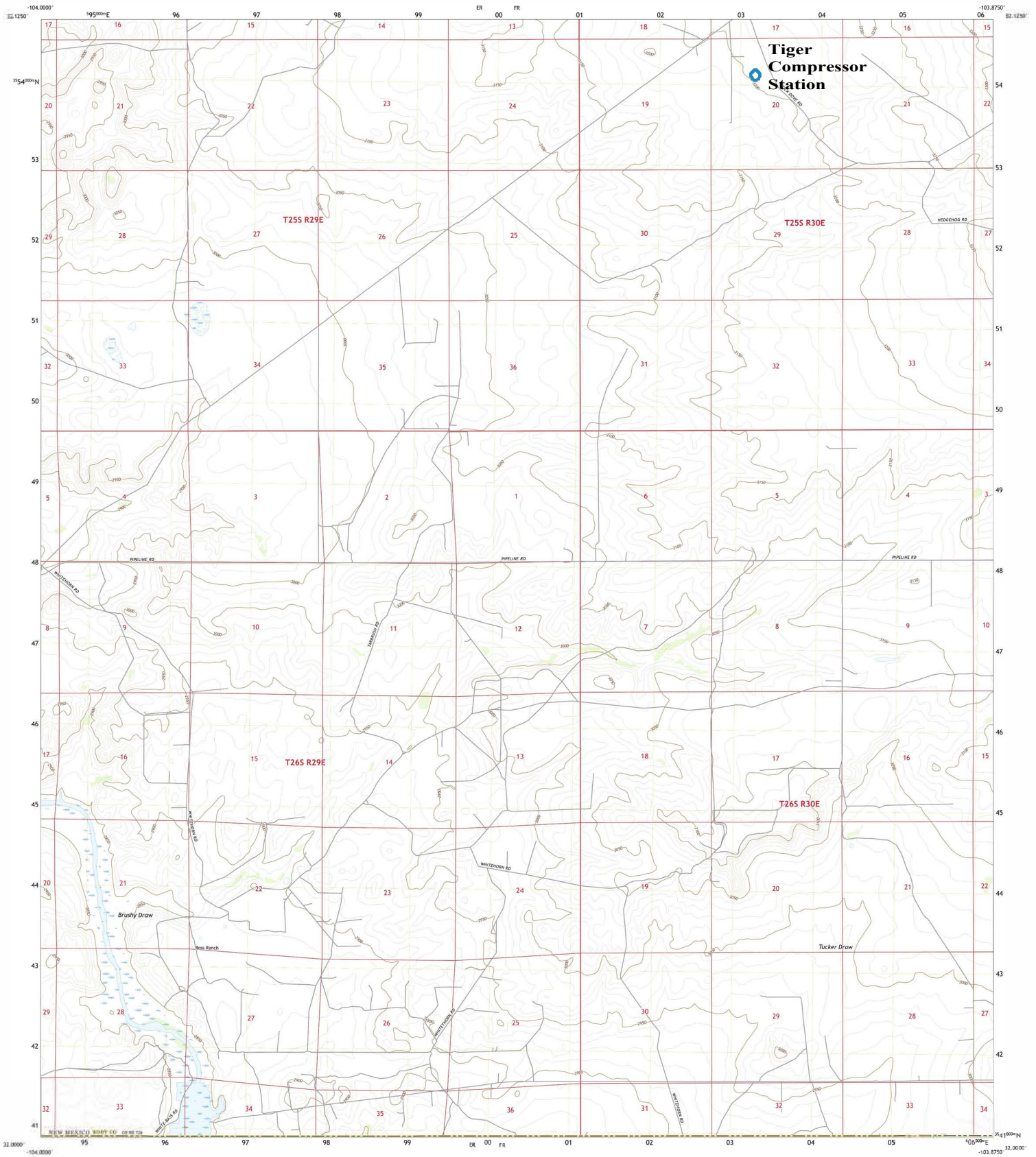
Section 8

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:

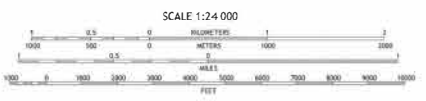
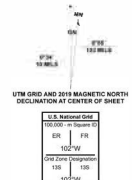
| | |
|--|--|
| The UTM or Longitudinal coordinate system on both axes | An indicator showing which direction is north |
| A minimum radius around the plant of 0.8km (0.5 miles) | Access and haul roads |
| Topographic features of the area | Facility property boundaries |
| The name of the map | The area 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.



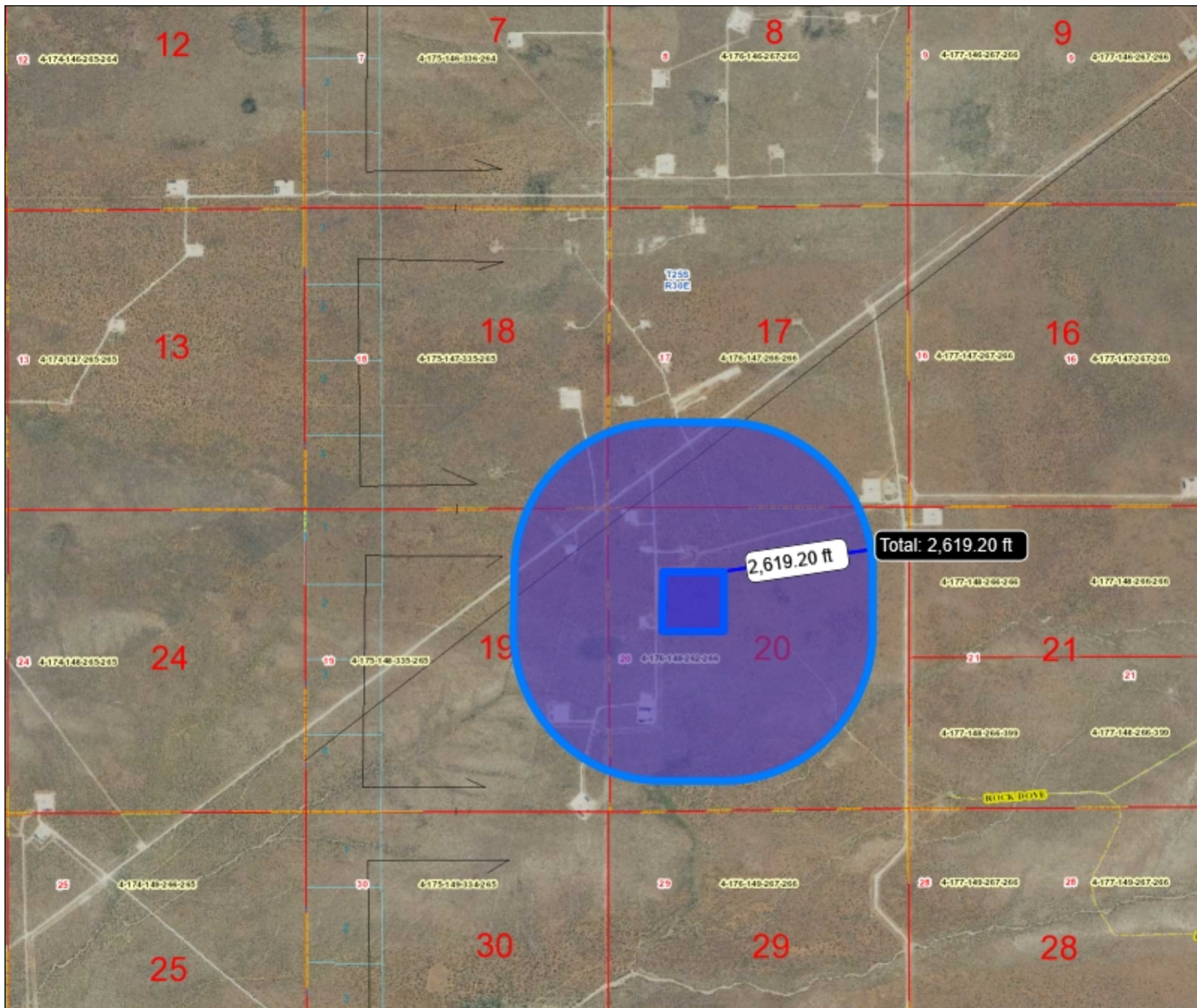
Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid derived from Transverse Mercator, Zone 12N (11N)
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within govern-
ment-owned lands are shown in light green.

Source:
Bureau of Land Management: 2010 - November 2010
U.S. Census Bureau: 2010
National Wetlands Inventory: 2002
National Hydrography Dataset: 2000 - 2010
National Wetlands Inventory: 2002
Roads: Multiple sources; see metadata file 2017_2015
Public Land Survey: 1800s - 1850s
Metals: FWS National Wetlands Inventory 2002 - 2014



| | | | |
|---|---|----------------------|----------------------|
| 1 | 2 | 3 | 1 Malaga |
| 4 | 5 | 4 Red Bluff | 2 Pierce Canyon |
| 6 | 7 | 6 Screw Bean Draw NE | 3 Big Oaks |
| 8 | 8 | 8 Oita NE | 4 Red Bluff |
| | | | 5 Phantom Banks |
| | | | 6 Screw Bean Draw NE |
| | | | 7 Red Bluff |
| | | | 8 Oita NE |

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



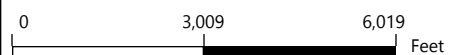
Legend

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.



Tab 9
Section 9 - Proof of Public Notice

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.
-

Public Notice is not required for Title V permit applications.

Tab 10
**Section 10 - Written Description of the Routine
Operations of the Facility**

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.

Tab 11
Section 11 -Source Determination

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):

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):

Tab 12
Section 12 - PSD Applicability Determination for
All Sources

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

This application is not for a NSR application submitted under 20.2.72 or 20.2.74 NMAC.

Tab 13
**Section 13 - Determination of State & Federal Air
Quality Regulations**

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/>

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

Example of a Table for STATE REGULATIONS:

| <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. |
| 20.2.23 NMAC | Fugitive Dust Control | No | Facility | This regulation may apply if, this is an application for a notice of intent (NOI) per 20.2.73 NMAC, if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC, and if the activity or facility is located in an area subject to a mitigation plan pursuant to 40 CFR 51.930. http://164.64.110.134/parts/title20/20.002.0023.html As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties. Sources exempt from 20.2.23 NMAC are activities and facilities subject to a permit issued pursuant to the NM Air Quality Control Act, the Mining Act, or the Surface Mining Act (20.2.23.108.B NMAC). 20.2.23.108 APPLICABILITY: A. This part shall apply to persons owning or operating the following fugitive dust sources in areas requiring a mitigation plan in accordance with 40 CFR Part 51.930: (1) disturbed surface areas or inactive disturbed surface areas, or a combination thereof, encompassing an area equal to or greater than one acre; (2) any commercial or industrial bulk material processing, handling, transport or storage operations. B. The following fugitive dust sources are exempt from this part: (1) agricultural facilities, as defined in this part; (2) roadways, as defined in this part; (3) operations issued permits pursuant to the state of New Mexico Air Quality Control Act, Mining Act or Surface Mining Act; and (4) lands used for state or federal military activities. [20.2.23.108 NMAC - N, 01/01/2019] |
| 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. |
| 20.2.37 and 20.2.36 NMAC | Petroleum Processing Facilities and Petroleum Refineries | N/A | N/A | These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC. |
| <u>20.2.38</u> NMAC | Hydrocarbon Storage Facility | Yes | OT1-OT4 | The site uses a flare to comply with 20.2.38 NMAC. |

| <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.) |
|---|---|---|--|---|
| 20.2.39 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. |
| 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. |

| <u>STATE REGULATIONS 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.) |
|-----------------------------------|--|--------------------------|---------------------------|--|
| 20.2.82 NMAC | MACT Standards for source categories of HAPS | Yes | DEHY1-3, ENG1-9, ENG11-12 | See regulatory discussion in Federal Regulations Citation section. |

Example of a Table for Applicable FEDERAL REGULATIONS (Note: This is not an exhaustive list):

| <u>FEDERAL REGULATIONS 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. |
| 40 CFR 60.40c, Subpart Dc | Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units | No | N/A | The facility does not operate any electric utility steam generating units. |

| <u>FEDERAL REGU- LATIONS CITATION</u> | Title | Applies? Enter Yes or No | Unit(s) or Facility | JUSTIFICATION: |
|---|--|---|------------------------------------|--|
| NSPS 40 CFR 60, Subpart Ka | Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 | No | N/A | The hydrocarbons are stored prior to custody transfer. |
| NSPS 40 CFR 60, Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 | No | N/A | 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 | Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015 | No | N/A | The site will be constructed after 9/18/15. See NSPS OOOOa discussion below. |
| NSPS 40 CFR Part 60 Subpart OOOOa | Standards of Performance for Crude Oil and Natural Gas Facilities for which | 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. |

| <u>FEDERAL REGU- LATIONS CITATION</u> | Title | Applies? Enter Yes or No | Unit(s) or Facility | JUSTIFICATION: |
|--|--|---|------------------------------------|--|
| | Construction, Modification or Reconstruction Commenced After September 18, 2015 | | | |
| 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 JJJ | 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. |
| NSPS 40 CFR 60 Subpart TTTT | Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units | No | N/A | The facility does not operate any affected sources. |
| NSPS 40 CFR 60 Subpart UUUU | Emissions Guidelines for 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. |

| <u>FEDERAL REGU- LATIONS CITATION</u> | Title | Applies? Enter Yes or No | Unit(s) or Facility | JUSTIFICATION: |
|---|--|---|------------------------------------|--|
| 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 | | 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 | National Emission Standards for Hazardous Air Pollutants for 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 UUUUU | National Emission Standards for Hazardous Air Pollutants 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 | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (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. |
| 40 CFR 64 | Compliance Assurance Monitoring | No | N/A | The facility is not subject to CAM. |

| <u>FEDERAL REGU- LATIONS CITATION</u> | Title | Applies? Enter Yes or No | Unit(s) or Facility | JUSTIFICATION: |
|---|---|---|------------------------------------|---|
| 40 CFR 68 | Chemical Accident Prevention | No | N/A | The facility does not store any chemicals above threshold quantities. |
| Title IV – 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. |

Tab 14
Section 14 - Operational Plan to Mitigate Emissions

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.

Tab 15
Section 15 - Alternative Operating Scenarios

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.

Tab 16
Section 16 - Air Dispersion Modeling

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. | |
| 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. | X |
| 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. Modeling was approved as part of issuance of NSR Permit 7263-M2 (issued February 11, 2022).

Tab 17
Section 17 - Compliance Test History

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

Compliance Test History

| Unit No. | Test Description | Test Date |
|----------|--|--------------------------------------|
| ENG1 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 12/2/2020 3/31/2021 11/30/2021 |
| ENG2 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 12/1/2020 3/31/2021 12/2/2021 |
| ENG3 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 12/1/2020 3/30/2021 11/30/2021 |
| ENG4 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 12/2/2020 3/30/2021 12/1/2021 |
| ENG5 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 11/30/2020 3/29/2021 12/1/2021 |
| ENG6 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 11/30/2020 3/29/2021 12/2/2021 |
| ENG11 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 10/6/2020 3/31/2021 11/29/2021 |
| ENG12 | Tested as required by 40 CFR 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ for NOx, CO, VOC, and HCHO | 10/6/2020 3/31/2021 12/3/2021 |

Tab 18
Section 18 - Addendum for Streamline Applications
(Not Applicable)

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.

Tab 19
Section 19 - Requirements for Title V Program

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.
-

19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

The Tiger Compressor Station is not subject to 40 CFR, Part 64, Compliance Assurance Monitoring (CAM); therefore, a monitoring protocol is not required with this application.

19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

The sources operated at the Tiger Compressor Station currently meet the applicable requirements as detailed in Section 13 of this Title V application.

19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

The Tiger Compressor Station will continue to be in compliance with applicable requirements for which it is in compliance at the time of this permit application. In addition, the station will, in a timely manner or consistent with such schedule expressly required by the applicable requirement, comply with other applicable requirements as they come into effect during the permit term.

19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

XTO Energy Inc. requests the Department schedule compliance reporting to start either July 1 or January 1 in order to align with other federal reporting programs. Annual compliance certification is requested to be completed annually for the period January 1 through December 31. If this is not possible, please schedule compliance reporting to match that of NSR Permit 7623-M2.

19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

-
1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? Yes No
 2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? Yes No
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? Yes No
 4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)
-

The station does not produce, manufacture, transform, destroy, import, or export any stratospheric ozone-depleting substances (CFCs, HCFCs); does not maintain or service motor vehicle air conditioning units or refrigeration equipment; and does not sell, distribute, or offer for sale any product that may contain stratospheric ozone-depleting substances.

XTO Energy Inc. shall continue to maintain compliance with the conditions stipulated in 40 CFR 82, Subparts A-G of the Stratospheric Ozone Protection Program (Title VI of the Clean Air Act Amendments).

19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)

A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. Compliance schedule: (20.2.70.300D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

NOTE: 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**.

The Tiger Compressor Station is in compliance with all applicable requirements; consequently, a compliance plan, a compliance schedule, and a schedule of certified progress reports is not required.

The Tiger Compressor Station is not equipped with any acid rain sources; consequently, compliance with the acid rain provisions is not required as a part of this permit application.

19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

The Tiger Compressor Station is not subject to 40 CFR 68, Chemical Accident Prevention Provisions; consequently, a Risk Management Plan (RMP) is not required.

19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

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 NMAC)?

(If the answer is yes, state which apply and provide the distances.)

Texas (13 km)

19.9 - Responsible Official

See Section 1-H of this permit application.

Tab 20
Section 20 - Other Relevant Information

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.

Tab 21
Section 21 - Addendum for Landfill Applications
(Not Applicable)

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 section is not applicable.

Tab 22
Section 22 - Certification

Section 22: Certification

Company Name: XTO Energy Inc.

I, David Scott, 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 30 day of June, 2022, upon my oath or affirmation, before a notary of the State of

Texas

[Signature]
*Signature

6/30/2022
Date

David Scott
Printed Name

General Manager Permian Delaware BU
Title

Scribed and sworn before me on this 30 day of June, 2022

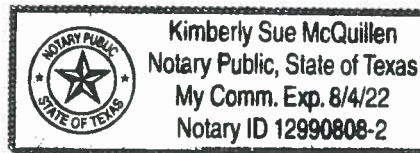
My authorization as a notary of the State of Texas expires on the

4 day of August, 2022

[Signature]
Notary's Signature

6/30/2022
Date

Kimberly McQuillen
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.

Tab 23
Section 23 - UA4
(Not Applicable)