Trinity Consultants
9737 Great Hills Trl, Ste 340, Austin, TX 78759 / P 512.349.5800 / **trinityconsultants.com**

August 7, 2025

Permit Programs Manager
NMED Air Quality Bureau
525 Camino de los Marquez Suite 1
Santa Fe, NM 87505-1816

RE: Application for Minor Source NSR
Frontier Field Services, LLC; Kings Landing Gas Plant
Agency ID 40919

To Whom It May Concern:

On behalf of Frontier Field Services, LLC, Trinity Consultants is submitting an application for the Kings Landing Gas Plant, currently authorized to operate under GCP-O&G Permit No. 9868. With this application, Frontier seeks to authorize several changes at the site, detailed in Section 3 of the attached application. These changes will require the site to be authorized under a minor source new source review (NSR) construction permit under 20.2.72 NMAC (Part 72 Permit).

The format and content of this application are consistent with the Bureau's current policy regarding NSR significant modification applications. Enclosed are two hard copies of the application, including the original certification. Electronic files will be provided upon request via secure electronic file transfer, as described in the application.

Please feel free to contact me by email at dawna.allen@trinityconsultants.com if you have any questions regarding this application. You may also contact Molly Greer with Frontier Field Services, LLC at mgreer@kinetik.com.

Sincerely,

TRINITY CONSULTANTS



Dawna Allen
Managing Consultant

Cc: Molly Greer (Frontier Field Services, LLC)
Rebecca Moore (Frontier Field Services, LLC)

Trinity Project File: 244404.0648

Minor Source NSR Construction Permit

Frontier Field Services, LLC \ Kings Landing Gas Plant

Prepared By:

TRINITY CONSULTANTS INC

9327 Great Hills Trl, Ste 340
Austin, TX 78759
(512) 238-2336
trinityconsultants.com

Project 244404.0648

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

Universal Air Quality Permit Application

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

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

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

Acknowledgements:

☑ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.
☑ $500 NSR application Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
☑ Check No.: 42001257 in the amount of $500
☑ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
☑ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.
☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full $500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: www.env.nm.gov/air-quality/small-biz-eap-2/.)

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.2.72.200.A NMAC**
(e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known (see 1st 3 to 5 #s of permit IDEA ID No.): 40919	Updating Permit/NOI #: 9868
1	Facility Name: Kings Landing Gas Plant	Plant primary SIC Code (4 digits): 1311	
		Plant NAIC code (6 digits): 21113	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark):		
2	Plant Operator Company Name: Frontier Field Services LLC	Phone/Fax: 432-789-1333	
a	Plant Operator Address: 303 Veterans Airpark Lane, Suite 2000, Midland, TX 79705		

b	Plant Operator's New Mexico Corporate ID or Tax ID: 2343077	
3	Plant Owner(s) name(s): Frontier Field Services LLC	Phone/Fax: 432-789-1333
a	Plant Owner(s) Mailing Address(s): 303 Veterans Airpark Lane, Suite 2000, Midland, TX 79705	
4	Bill To (Company): Frontier Field Services LLC	Phone/Fax: 432-789-1333
a	Mailing Address: 303 Veterans Airpark Lane, Suite 2000, Midland, TX 79705	E-mail:
5	☑ Preparer: Dawna L. Allen ☑Consultant: Trinity Consultants - Austin	Phone/Fax: 512-484-4478
a	Mailing Address: 9737 Great Hills Trail, Suite 340, Austin, TX 78759	E-mail: dawna.allen@trinityconsultants.com
6	Plant Operator Contact: Gary Minatra	Phone/Fax: 432-789-1333
a	Address: 303 Veterans Airpark Ln, Suite 2000, Midland, TX 79705	E-mail: gminatra@kinetik.com
7	Air Permit Contact: Molly Greer	Title: Environmental Manager
a	E-mail: mgreer@kinetik.com	Phone/Fax: 432-236-0033
b	Mailing Address: 303 Veterans Airpark Lane, Suite 2000, Midland, TX 79705	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☑ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☑ Yes ☐ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes ☑ No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? ☑ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☑ No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☑ No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? ☐Yes ☐No ☐N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes ☑No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☑ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☑ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☑ Yes ☐ No	If yes, the permit No. is: 9868
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☑ Yes ☐ No	If yes, the register No. is: 9868

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: 9.17 MMSCF	Daily: 220 MMSCF	Annually: 80,300 MMSCF
b	Proposed	Hourly: 9.17 MMSCF	Daily: 220 MMSCF	Annually: 80,300 MMSCF
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: 9.17 MMSCF	Daily: 220 MMSCF	Annually: 80,300 MMSCF

b	Proposed	Hourly: 9.17 MMSCF	Daily: 220 MMSCF	Annually: 80,300 MMSCF

Section 1-D: Facility Location Information

1	Section: 16	Range: 31E	Township: 19S	County: Eddy	Elevation (ft): 3515
2	UTM Zone: ☐ 12 or ☑ 13			Datum: ☐ NAD 27 ☑ NAD 83 ☐ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 606110			UTM N (in meters, to nearest 10 meters): 3614550	
b	**AND** Latitude (deg., min., sec.): 32.663476			Longitude (deg., min., sec.): -103.868425	
3	Name and zip code of nearest New Mexico town: Loco Hills 88255				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Loco Hills go east on US-82 E 5.7 mi; Turn right onto Shugart Rd 10.6 mi; Turn right onto lease road 0.5 mi to site on left				
5	The facility is 12.6 (distance) miles S (direction) of Loco Hills (nearest town).				
6	Status of land at facility (check one): ☐ Private ☐ Indian/Pueblo ☑ Federal BLM ☐ Federal Forest Service ☐ 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, Lea County				
8	**20.2.72** NMAC applications **only**: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/air-quality/modeling-publications/ http://www.nmenv.state.nm.us/aqb/modeling/class1areas.html)? ☐ Yes ☑ 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 National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 70.7				
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: >10,000m				
12	Method(s) used to delineate the Restricted Area: "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ Yes ☑ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility?				

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

1	Facility **maximum** operating ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8760		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:		☐AM ☐PM	End:		☐AM ☐PM
3	Month and year of anticipated start of construction:					
4	Month and year of anticipated construction completion:					
5	Month and year of anticipated startup of new or modified facility:					
6	Will this facility operate at this site for more than one year? ☑ Yes ☐ No					

Section 1-F: Other Facility Information

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

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

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

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

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Bryan Graham		Phone: (832)444-7239
a	R.O. Title: Vice President of Operations	R.O. e-mail: bgraham@kinetik.com	
b	R. O. Address: 303 Veterans Airpark Ln, Suite 2000, Midland, TX 79705		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): N/A		Phone: N/A
a	A. R.O. Title: N/A	A. R.O. e-mail: N/A	
b	A. R. O. Address: N/A		
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): N/A		
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.): Kinetik Holdings, LLC		
a	Address of Parent Company: 2700 Post Oak Blvd, Suite 300, Houston, TX 77056		
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.): N/A		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Rebecca Moore (713)540-2081 Gary Minatra (432)789-1333		

7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

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

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

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

Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☑ secure electronic transfer. Air Permit Contact Name__Dawna L. Allen___, Email_ dawna.allen@trinityconsultants.com____ Phone number _____(512)484-4478___.

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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Table 2-A: Regulated Emission Sources

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

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
AMINE-1	Amine Treating System	Interstate Treaters	TBD	TBD	220 MMscf/d	220 MMscf/d	TBD / TBD	FL-1317 / FL-1317	31000305	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
C-1a	Stabilizer Overheads Compressor	Ariel	TBD	TBD	500 HP	500 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-1b	Stabilizer Overheads Compressor	Ariel	TBD	TBD	500 HP	500 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-2	Propane Refrigeration Compressor	GEA FES	TBD	TBD	1600 HP	1600 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-3	Propane Refrigeration Compressor	GEA FES	TBD	TBD	1600 HP	1600 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-4	Propane Refrigeration Compressor	GEA FES	TBD	TBD	2250 HP	2250 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-5	Residue Gas Compressor	Ariel KBU	TBD	TBD	7800 HP	7800 HP	2017 / 2017	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-6	Residue Gas Compressor	Ariel KBU	TBD	TBD	7800 HP	7800 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-7	Residue Gas Compressor	Ariel KBU	TBD	TBD	7800 HP	7800 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-8	Residue Gas Compressor	Ariel KBU	TBD	TBD	7800 HP	7800 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
C-9	Residue Gas Compressor	Ariel KBU	TBD	TBD	7800 HP	7800 HP	TBD / TBD	NA / NA	31000313	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
CRYO-1	Cryogenic Gas Processing Plant	Valerus	TBD	TBD	220 MMscf/d	220 MMscf/d	TBD / TBD	NA / NA	31000404	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
DEHY-1	TEG Dehydration System	Interstate Treaters	TBD	TBD	220 MMscf/d	220 MMscf/d	TBD / TBD	FL-3042 / FL-3042	31000404	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
FL-3030	Tanks and Loading Flare	Cimarron	DU-06	TBD	500 Mscf/d	500 Mscf/d	TBD / TBD	NA / FL-3030	31000404	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
FL-3042	BTEX Combustor	Encore	TBD	IVF-100	500 Mscf/d	500 Mscf/d	TBD / TBD	NA / FL-3042	31000404	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
FL-3015	Plant Flare	Cimarron	TBD	23315F-001	220 MMscf/d	220 MMscf/d	TBD / TBD	NA / FL-3015	31000205	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
FL-3015 SSM	Plant Flare (SSM)	Cimarron	TBD	23315F-001	220 MMscf/d	220 MMscf/d	TBD / TBD	FL-3015 / FL-3015	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
FL-1317	Thermal Oxidizer	Zeeco	TBD	TBD	220 MMscf/d	220 MMscf/d	TBD / TBD	NA / FL-1317	31000205	☐ Existing (unchanged) ☐ To be Removed ☑ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
FL-1318	Amine Flare (Pilot)	Hero	TBD	F6OU20	220 MMscf/d	220 MMscf/d	TBD / TBD	NA / FL-1318	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
FL-1318 SSM	Amine Flare (SSM)	Hero	TBD	F6OU20	220 MMscf/d	220 MMscf/d	TBD / TBD	NA / FL-1318	31000205	☐ Existing (unchanged) ☐ To be Removed ☑ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
FUG-1	Fugitives	NA	NA	NA			TBD / TBD	NA / FUG-1	31088811	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
H-1400	Stabilizer and Amine Hot Oil Heater	Devco	TBD	31737-002	74.02 MMBtu/hr	74.02 MMBtu/hr	12/1/2024 / 1/1/2025	NA / H-1	31000404	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
H-741	Mole Sieve Regen Heater	Heatec	TBD	HI24-054	10.4 MMBtu/hr	10.4 MMBtu/hr	TBD / 1/1/2025	NA / H-2	31000404	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
H-1300	TEG Reboiler	Maxon	TBD	TBD	5 MMBtu/hr	5 MMBtu/hr	TBD / 1/1/2025	NA / H-3	31000228	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
H-781	Trim Reboiler Heater	Astec	TBD	HI12-201	27.9 MMBtu/hr	27.9 MMBtu/hr	TBD / 1/1/2025	NA / H-4	31000404	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
HAUL	Unpaved Haul Roads	NA	NA	NA			TBD / TBD	NA / HAUL	31088811	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
L-1	Condensate Loading	NA	NA	NA	455184 bbl/yr	455184 bbl/yr	TBD / TBD	FL-3030 / FL-3030	40400250	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
SSM	SSM	NA	NA	NA			TBD / TBD	FL-3015 / FL-3015	31000205	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
STBL-1	Condensate Stabilizer	Interstate Treaters	TBD	TBD	10000 bbl/d	10000 bbl/d	TBD / TBD	C-4 / Plant Inlet	31000404	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
TK 3012A	Condensate Storage Tank	BAT	TBD	TBD	1,000 bbl	1,000 bbl	TBD / 1/1/2025	FL-3030 / FL-3030	40400311	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
TK 3020A	Condensate Storage Tank	BAT	TBD	TBD	1,000 bbl	1,000 bbl	TBD / 1/1/2025	FL-3030 / FL-3030	40400311	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
TK 3020B	Condensate Storage Tank	BAT	TBD	TBD	1,000 bbl	1,000 bbl	TBD / 1/1/2025	FL-3030 / FL-3030	40400311	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
TK 3020C	Condensate Storage Tank	BAT	TBD	TBD	1,000 bbl	1,000 bbl	TBD / 1/1/2025	FL-3030 / FL-3030	40400311	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	NA	NA
ENG-1	Engine	Waukesha	L7044	5283704174	1680.00 hp	1680.00 hp	7/1/2010 / TBD	NSCR-1 / ENG-1	20200253	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	NA
ENG-2	Engine	Waukesha	L7044	5283704176	1680.00 hp	1680.00 hp	12/1/2014 / TBD	NSCR-2 / ENG-2	20200253	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	NA
MALF	Malfunction Emissions	NA	NA	NA			NA / NA	NA / MALF	31088811	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
TURB-1	Combustion Turbine Generator	Solar	Taurus 60	TBD	5.7 MW	5.7 MW	TBD / TBD	NA / TURB-1	20100201	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA
TURB-2	Combustion Turbine Generator	Solar	Taurus 60	TBD	5.7 MW	5.7 MW	TBD / TBD	NA / TURB-2	20100201	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	NA	NA

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

[2] Specify dates required to determine regulatory applicability.

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

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

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

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

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.2) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
TK-15	Compressor Lube Oil Tank	TBD	NA NA	25 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-16	Compressor Lube Oil Tank	TBD	NA NA	25 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-17	Compressor Lube Oil Tank	TBD	NA NA	25 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-18	Compressor Lube Oil Tank	TBD	NA NA	25 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-19	Compressor Lube Oil Tank	TBD	NA NA	25 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-20	Refrigeration Comp. Lube Oil Tank	TBD	NA NA	500 gallons	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-21	Refrigeration Comp. Waste Oil Tank	TBD	NA NA	500 gallons	20.2.72.202.B.5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-22	HMO Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-23	Amine Storage Tank	TBD	NA NA	500 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-24	RO Water Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
TK-25	RO Waste Water Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.2		☐ Existing (unchanged) ☐ To be Removed ☑ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-26	TEG Glyocol Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-27	Methanol Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.2) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
T-28	Waste Oil Storage Tank	TBD	NA NA	210 bbl	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
L-2	Produced Water Loading Emissions	TBD	NA NA	182,500 bbl/yr bbl/yr	20.2.72.202.B.2		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
HAUL	Haul Road Emissions	TBD	NA NA	NA NA	20.2.72.202.B.5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

1 Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 12, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

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

Table 2-C: Emissions Control Equipment

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(2)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
FL-1317	Thermal Oxidizer (Incinerator)		VOC, HAP	AMINE-1	99%	Manufacturer Specification
FL-1318	Flare		VOC, HAP	AMINE-1 (SSM)	98%	Manufacturer Specification
FL-3030	Flare		VOC, HAP	TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1	98%	Manufacturer Specification
FL-3042	Enclosed Combustion Device		VOC, HAP	DEHY-1 (Still Vent)	98%	Manufacturer Specification
FL-3015	Flare		VOC, HAP	DEHY-1 (Flash Tank), FL-1 SSM	98%	Manufacturer Specification
NSCR-1	Non-Selective Catalytic Reduction		CO	ENG-1	97%	Manufacturer Specification
NSCR-1	Non-Selective Catalytic Reduction		NOx	ENG-1	97%	Manufacturer Specification
NSCR-1	Non-Selective Catalytic Reduction		VOC	ENG-1	98%	Manufacturer Specification
NSCR-1	Non-Selective Catalytic Reduction		Formaldehyde	ENG-1	88%	Manufacturer Specification
NSCR-2	Non-Selective Catalytic Reduction		CO	ENG-2	97%	Manufacturer Specification
NSCR-2	Non-Selective Catalytic Reduction		NOx	ENG-2	97%	Manufacturer Specification
NSCR-2	Non-Selective Catalytic Reduction		VOC	ENG-2	98%	Manufacturer Specification
NSCR-2	Non-Selective Catalytic Reduction		Formaldehyde	ENG-2	88%	Manufacturer Specification

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

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
AMINE-1	-	-	-	-	89.69	392.85	-	-	-	-	-	-	-	-	-	-	-	-
C-1a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRYO-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-1	-	-	-	-	218.60	957.47	-	-	-	-	-	-	-	-	-	-	-	-
FL-3030	0.02	0.09	0.04	0.18	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
FL-3042	0.02	0.09	0.04	0.18	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
FL-3015	0.02	0.09	0.04	0.18	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
FL-3015 SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1317	1.28	5.62	10.99	48.14	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
FL-1318	0.02	0.11	0.05	0.22	4.39E-05	0.00	-	-	-	-	-	-	-	-	-	-	-	-
FL-1318 SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1	-	-	-	-	5.71	25.02	-	-	-	-	-	-	-	-	-	-	-	-
H-1400	2.70	11.81	5.47	23.97	0.40	1.75	0.04	0.19	0.55	2.42	0.55	2.42	0.55	2.42	-	-	-	-
H-741	0.51	2.21	0.86	3.75	0.06	0.25	0.01	0.03	0.08	0.34	0.08	0.34	0.08	0.34	-	-	-	-
H-1300	0.49	2.15	0.41	1.80	0.03	0.12	0.00	0.01	0.04	0.16	0.04	0.16	0.04	0.16	-	-	-	-
H-781	1.02	4.45	1.03	4.52	0.15	0.66	0.02	0.07	0.21	0.91	0.21	0.91	0.21	0.91	-	-	-	-
HAUL	-	-	-	-	-	-	-	-	0.39	0.24	0.08	0.05	0.02	0.01	-	-	-	-
L-1	-	-	-	-	70.50	74.76	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STBL-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK 3012A	-	-	-	-	79.13	158.99	-	-	-	-	-	-	-	-	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
TK 3020A	-	-	-	-	79.13	158.99	-	-	-	-	-	-	-	-	-	-	-	-
TK 3020B	-	-	-	-	79.13	158.99	-	-	-	-	-	-	-	-	-	-	-	-
TK 3020C	-	-	-	-	79.13	158.99	-	-	-	-	-	-	-	-	-	-	-	-
ENG-1	46.59	204.08	44.26	193.86	1.85	8.11	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28	-	-	-	-
ENG-2	46.59	204.08	44.26	193.86	1.85	8.11	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28	-	-	-	-
MALF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TURB-1	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61	-	-	-	-
TURB-2	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61	-	-	-	-
Totals	**103.03**	**451.27**	**107.97**	**472.90**	**700.50**	**2083.57**	**0.71**	**0.72**	**2.59**	**9.86**	**2.27**	**9.67**	**2.22**	**9.63**	**-**	**-**	**-**	**-**

1Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.2 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.2. Particulate matter (PM) is not subject to an ambient air quality standard, but PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Table 2-E: Requested Allowable Emissions

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
AMINE-1	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
C-1a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRYO-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-1	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
FL-3030	1.10	2.08	2.20	4.15	7.72	14.19	6.91E-05	3.03E-04	-	-	-	-	-	-	7.35E-07	2.18E-06	-	-
FL-3042	0.31	1.35	0.61	2.69	1.87	8.18	2.14E-04	9.38E-04	-	-	-	-	-	-	2.33E-06	1.02E-05	-	-
FL-3015	0.69	3.00	1.37	6.00	2.51	10.97	1.13E-04	4.97E-04	-	-	-	-	-	-	1.23E-06	5.39E-06	-	-
FL-3015 SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1317	1.28	5.62	10.99	48.14	0.90	3.93	50.06	219.27	-	-	-	-	-	-	0.27	1.17	-	-
FL-1318	0.02	0.11	0.05	0.22	0.000	0.00	6.94E-08	3.04E-07	-	-	-	-	-	-	7.39E-10	3.24E-09	-	-
FL-1318 SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1	-	-	-	-	5.71	25.02	-	-	-	-	-	-	-	-	8.03E-04	3.52E-03	-	-
H-1400	2.70	11.81	5.47	23.97	0.40	1.75	0.04	0.19	0.55	2.42	0.55	2.42	0.55	2.42	-	-	-	-
H-741	0.51	2.21	0.86	3.75	0.06	0.25	0.01	0.03	0.08	0.34	0.08	0.34	0.08	0.34	-	-	-	-
H-1300	0.49	2.15	0.41	1.80	0.03	0.12	0.00	0.01	0.04	0.16	0.04	0.16	0.04	0.16	-	-	-	-
H-781	1.02	4.45	1.03	4.52	0.15	0.66	0.02	0.07	0.21	0.91	0.21	0.91	0.21	0.91	-	-	-	-
HAUL	-	-	-	-	-	-	-	-	0.39	0.24	0.08	0.05	0.02	0.01	-	-	-	-
L-1	-	-	-	-	0.92	0.97	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STBL-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK 3012A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK 3020A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK 3020B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK 3020C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENG-1	1.33	5.84	1.48	6.49	0.04	0.16	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28	-	-	-	-
ENG-2	1.33	5.84	1.48	6.49	0.04	0.16	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28	-	-	-	-
MALF	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	-	-	-
TURB-1	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
TURB-2	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61	-	-	-	-
Totals	**14.54**	**60.95**	**26.47**	**110.44**	**21.13**	**79.86**	**50.78**	**220.00**	**2.59**	**9.86**	**2.27**	**9.67**	**2.22**	**9.63**	**0.27**	**1.17**	**-**	**-**

1 Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.2 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.2. 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).

"*" denotes that an hourly emission rate is not requested.

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM^2		$PM10^2$		$PM2.5^2$		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-
FL-3015 SSM	328.08	59.05	654.97	117.89	567.50	102.15	35.13	6.32	-	-	-	-	-	-	0.37	0.07	-	-
FL-1318 SSM	3.02	1.32	25.89	11.34	1.80	0.79	50.06	21.93	-	-	-	-	-	-	0.53	0.23	-	-
Totals	331.10	60.38	680.86	129.23	569.30	112.94	85.19	28.25	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.30	0.00	0.00

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

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

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

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

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

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.2		☑ H_2S or ☐ Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Totals:																	

Table 2-H: Stack Exit Conditions

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

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H-Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
FL-3030	TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1	V	No	30.50	1,850	205.75	37	10	1047.90	0.50
FL-3042	DEHY-1 (Still Vent)	V	No	41.58	1,700	53.55	10	10	2.06	5.75
FL-3015	DEHY-1 (Flash Tank), FL-1 SSM	V	No	150.00	1832	127.87	23	10	8.04	4.50
FL-1317	AMINE-1	V	No	75.00	1,600	458.97	93	10	259.72	1.50
FL-1318	AMINE-1 (SSM)	V	No	60.00	1,850	1212.20	219	10	557.41	1.67
FUG-1	FUG-1	Fugitive	No	10.00						
H-1400	H-1400	V	No	24.83	650	915.29		10	95.13	3.50
H-741	H-741	V	No	20.00	650	123.65		10	17.49	3.00
H-1300	H-1300	V	No	25.00	450	38.02		10	12.10	2.00
H-781	H-781	V	No	20.25	450	304.12		10	31.61	3.50
HAUL	HAUL	Fugitive	No	10.00						
L-1	L-1	Fugitive	No	10.00						
SSM	SSM	Fugitive	No	10.00						
ENG-1	ENG-1	V	No	21.60	1209	148.45		10	138.07	1.17
ENG-2	ENG-2	V	No	21.60	1209	148.45		10	138.07	1.17
MALF	MALF	Fugitive	No	10.00						
TURB-1	TURB-1	V	No	13.00	965	886.76		10	34.65	5.71
TURB-2	TURB-2	V	No	13.00	965	886.76		10	34.65	5.71

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 20.2.72.202 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 20.2.72.202 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde ☑ HAP or ☐ TAP		Benzene ☑ HAP or ☐ TAP		Acetaldehyde ☑ HAP or ☐ TAP		Acrolein ☑ HAP or ☐ TAP		Ethylbenzene ☑ HAP or ☐ TAP		n-Hexane ☑ HAP or ☐ TAP		Toluene ☑ HAP or ☐ TAP		Xylene ☑ HAP or ☐ TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
FL-3030	TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1	0.3395	0.5702	-	-	0.0969	0.1621	-	-	-	-	0.0028	0.0048	0.1928	0.3233	0.0395	0.0669	0.0076	0.0132
FL-3042	DEHY-1 (Still Vent)	0.6184	2.7085	-	-	0.3840	1.6819	-	-	-	-	0.0071	0.0312	0.0439	0.1923	0.1635	0.7160	0.0199	0.0871
FL-3015	DEHY-1 (Flash Tank), FL-1 SSM	16.9657	3.8795	-	-	4.5765	1.1693	-	-	-	-	0.2703	0.0668	8.3870	1.7094	2.9765	0.7506	0.7554	0.1833
FL-1317	AMINE-1	0.0069	0.0303	-	-	0.0044	0.0194	-	-	-	-	0.0009	0.0040	-	-	0.0015	0.0067	0.0001	0.0003
FL-1318	AMINE-1 (SSM)	0.8822	0.3864	-	-	0.5245	0.2297	-	-	-	-	0.0177	0.0078	0.0047	0.0021	0.2713	0.1188	0.0640	0.0280
FUG-1	FUG-1	0.4361	1.9103	-	-	0.0907	0.3972	-	-	-	-	0.0197	0.0864	0.1634	0.7156	0.1028	0.4505	0.0595	0.2607
H-1400	H-1400	0.0058	0.0256	0.0054	0.0238	0.0002	0.0007	-	-	-	-	-	-	-	-	0.0002	0.0011	-	-
H-741	H-741	0.0008	0.0036	0.0008	0.0033	0.0000	0.0001	-	-	-	-	-	-	-	-	3.47E-05	0.0002	-	-
H-1300	H-1300	0.0004	0.0017	0.0004	0.0016	0.0000	0.0000	-	-	-	-	-	-	-	-	1.67E-05	0.0001	-	-
H-781	H-781	0.0022	0.0096	0.0021	0.0090	0.0001	0.0003	-	-	-	-	-	-	-	-	0.0001	0.0004	-	-
L-1	L-1	0.0384	0.0407	-	-	0.0089	0.0094	-	-	-	-	0.0003	0.0003	0.0248	0.0263	0.0037	0.0039	0.0007	0.0008
ENG-1	ENG-1	0.1853	0.8118	0.0222	0.0973	0.0238	0.1042	0.0420	0.1839	0.0396	0.1734	0.0004	0.0016	0.0461	0.2017	0.0084	0.0368	0.0029	0.0129
ENG-2	ENG-2	0.1853	0.8118	0.0222	0.0973	0.0238	0.1042	0.0420	0.1839	0.0396	0.1734	0.0004	0.0016	0.0461	0.2017	0.0084	0.0368	0.0029	0.0129
TURB-1	TURB-1	0.0403	0.1766	0.0397	0.1737	0.0007	0.0029	-	-	-	-	-	-	-	-	-	-	-	-
TURB-2	TURB-2	0.0403	0.1766	0.0397	0.1737	0.0007	0.0029	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		19.75	11.54	0.13	0.58	5.74	3.88	0.08	0.37	0.08	0.35	0.32	0.20	8.91	3.37	3.58	2.19	0.91	0.60

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/hr	Annual Usage MMscf/yr	Sulfur gr/dscf	% Ash
FL-3030	Natural Gas	Pipeline Quality Natural Gas	905	150	1.3	0	0
FL-3042	Natural Gas	Pipeline Quality Natural Gas	905	150	1.3	0	0
FL-3015	Natural Gas	Pipeline Quality Natural Gas	905	150	1.3	0	0
FL-1317	Natural Gas	Pipeline Quality Natural Gas	905	13,058	114.4	0	0
FL-1318	Natural Gas	Pipeline Quality Natural Gas	905	200	1.8	0	0
H-1400	Natural Gas	Pipeline Quality Natural Gas	905	72,569	635.7	0	0
H-741	Natural Gas	Pipeline Quality Natural Gas	905	10,196	89.3	0	0
H-1300	Natural Gas	Pipeline Quality Natural Gas	905	4,902	42.9	0	0
H-781	Natural Gas	Pipeline Quality Natural Gas	905	27,353	239.6	0	0
ENG-1	Natural Gas	Pipeline Quality Natural Gas	905	14,756	129.3	0	0
ENG-2	Natural Gas	Pipeline Quality Natural Gas	905	14,756	129.3	0	0
TURB-1	Natural Gas	Pipeline Quality Natural Gas	905	54,765	479.7	0	0
TURB-2	Natural Gas	Pipeline Quality Natural Gas	905	54,765	479.7	0	0

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

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

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
TK 3012A	40400311	Condensate	Mixed Hydrocarbons		64.39	68.91	8.59	79.44	10.44
TK 3020A	40400311	Condensate	Mixed Hydrocarbons		64.39	68.91	8.59	79.44	10.44
TK 3020B	40400311	Condensate	Mixed Hydrocarbons		64.39	68.91	8.59	79.44	10.44
TK 3020C	40400311	Condensate	Mixed Hydrocarbons		64.39	68.91	8.59	79.44	10.44

Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M^3)			Roof	Shell			
TK 3012A	1/1/2025	Condensate	Welded, Mechanical Shoe Seal	Vertical - Fixed Roof	1,000	10,159	6.40	9.2	MG	MG	Good	3,186,286	76
TK 3020A	1/1/2025	Condensate	Welded, Mechanical Shoe Seal	Vertical - Fixed Roof	1,000	10,159	6.40	9.2	MG	MG	Good	3,186,286	76
TK 3020B	1/1/2025	Condensate	Welded, Mechanical Shoe Seal	Vertical - Fixed Roof	1,000	10,159	6.40	9.2	MG	MG	Good	3,186,286	76
TK 3020C	1/1/2025	Condensate	Welded, Mechanical Shoe Seal	Vertical - Fixed Roof	1,000	10,159	6.40	9.2	MG	MG	Good	3,186,286	76

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

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

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

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

Material Processed				Material Produced			
Description	**Chemical Composition**	**Phase (Gas, Liquid, or Solid)**	**Quantity (specify units)**	**Description**	**Chemical Composition**	**Phase**	**Quantity (specify units)**
Natural Gas	Natural Gas	Gas	220 MMSCFD	Natural Gas	Natural Gas	Gas	220 MMSCFD
				Condensate	Condensate	Liquid	455184 bbl/yr

Table 2-N: CEM Equipment

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

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
Not Applicable									

Table 2-O: Parametric Emissions Measurement Equipment

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

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
Not Applicable								

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	CH_4 ton/yr	N_2O ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									Total GHG Mass Basis ton/yr[4]	Total CO_2e ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**25**	**298**	**22,800**	**footnote 3**										
FL-3030	**mass GHG**	1,762.89	0.03	0.003											1,763	
	CO_2e	1,762.89	0.83	0.99												1,765
FL-3042	**mass GHG**	1,140.27	0.44	0.002											1,141	
	CO_2e	1,140.27	11.07	0.64												1,152
FL-3015	**mass GHG**	2,545.88	5.69	0.005											2,552	
	CO_2e	2,545.88	142.21	1.43												2,690
FL-3015 SSM	**mass GHG**	50,931.88	237.15	0.094											51,169	
	CO_2e	50,931.88	5,928.82	28.11												56,889
FL-1317	**mass GHG**	14,444.95	87,310.72	0.027											101,756	
	CO_2e	14,444.95	2,182,768.04	8.11												2,197,221
FL-1318	**mass GHG**	92.77	0.002	0.0002											93	
	CO_2e	92.77	0.04	0.05												93
FL-1318 SSM	**mass GHG**	2,413.50	0.05	0.005											2,414	
	CO_2e	2,413.50	1.14	1.36												2,416
H-1400	**mass GHG**	37,924.53	0.71	0.071											37,925	
	CO_2e	37,924.53	17.87	21.30												37,964
H-741	**mass GHG**	5,328.49	0.10	0.010											5,329	
	CO_2e	5,328.49	2.51	2.99												5,334
H-1300	**mass GHG**	2,561.78	0.05	0.005											2,562	
	CO_2e	2,561.78	1.21	1.44												2,564
H-781	**mass GHG**	14,294.71	0.27	0.027											14,295	
	CO_2e	14,294.71	6.74	8.03												14,309
ENG-1	**mass GHG**	7,711.52	0.15	0.015											7,712	
	CO_2e	7,711.52	3.63	4.33												7,719
ENG-2	**mass GHG**	7,711.52	0.15	0.015											7,712	
	CO_2e	7,711.52	3.63	4.33												7,719
TURB-1	**mass GHG**	26,913.35	0.54	0.054											26,914	
	CO_2e	26,913.35	13.48	16.07												26,943
TURB-2	**mass GHG**	26,913.35	0.54	0.054											26,914	
	CO_2e	26,913.35	13.48	16.07												26,943
Total	**mass GHG**	202,598.62	87,556.59	0.39											290,248	
	CO_2e	202,598.62	2,188,914.66	115.21												**2,391,721**

[1] **GWP** (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

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

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

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

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

Section 3

Application Summary

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

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

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

Application Summary: Frontier Field Services, LLC (Frontier) owns and operates the Kings Landing Gas Plant (KLGP) located near Loco Hills in Eddy County, NM. KLGP is currently authorized under GCP-O&G permit number 9868. The site processes approximately 220 MMSCFD of natural gas.

The gas plant consists of a dehydration system, amine sweetening system, a hot oil heater, a trim heater, a regen heater, multiple electric compressors, two Waukesha L7044 compressor engines, two Solar Taurus 60 turbines, a condensate stabilizer, four condensate storage tanks, and miscellaneous storage tanks, a flare for controlling amine system emissions, a flare to control tank and loading emissions, a combustor to control the dehydrator emissions, and a flare for control of SSM and upsets.

This application is to authorize changes at the site which will require the site to be authorized under a new source review (NSR) construction permit under 20.2.72 NMAC (Part 72 Permit). Site changes in this application compared to the existing GCP-O&G include:

- Addition of a thermal oxidizer (FL-1317) for routine control of the amine system instead of the amine flare (FL-1318). The thermal oxidizer achieves greater control of the amine system. FL-1318 will remain on-site and will control the amine system in the event the FL-1317 is unavailable. This change must be authorized under a Part 72 permit as it does not meet the requirements of GCP-O&G condition A208.A.
- Addition of increased SSM flaring hours/annual volumes.
- Change to the inlet gas representation and process modeling, resulting in changes in emissions for the process flare/amine system control.
- Reduce the number of condensate tanks at the site and remove the produced water tanks at the site to reflect as-built conditions
- Change the tanks and loading ECD to a flare (FL-3030)
- Updates in emissions source unit numbers to match equipment numbers at the site, and update to equipment make/model/serial numbers
- There are no changes requested at this time to site throughputs of natural gas or liquids.

This project will not trigger Prevention of Significant Deterioration (PSD) review, as the facility is currently a minor source and the proposed emission changes are less than 250 tons per year (tpy) for each criteria pollutant and will remain an area source of hazardous air pollutants (HAP).

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.

Amine Still SSM
Amine Flash SSM
Amine Flare (backup) FL-1318
Thermal Oxidizer FL-1317
Amine Still
Amine Flash
TEG Still
BTEX Combustor FL-3042
Plant Flare FL-3015
SSM
C-2 Through C-4
TEG Regen Heater H-1300
Amine Flash Tank
TEG Flash Tank
P-31
Inlet Separator
High Pressure Inlet
Condensate
Stabilizer Over-Heads
Amine Contactor Amine-1
TEG Contactor Dehy-1
P-52
Mole Sieve
Mole Sieve
P-43
Propane Refrig Comp
P-49
Propane Refrig Comp
P-41
P-41
Propane Refrig Comp
Demethanizer Tower Cryo-1
P-51
Residue Gas Compressor
P-33
P-34
Residue Gas Compressor
P-32
P-35
P-35
Residue Gas Compressor
To Residue Gas Sales Line
P-36
Residue Gas Compressor
P-48
P-45
Stabilizer and Amine Hot Oil Heater H-1400
Condensate Stabilizer
Mole Sieve Regen Heater H-741
Trim Reboiler H-781
NGL Product
NGL Pipeline Pumps
To NGL Sales Pipeline
P-37
Residue Gas Compressors C-5 Through C-9
Turbines TURB-1 and TURB-2
P-56
Residue Gas Compressor Engines ENG-1 and ENG-2
Stabilized Condensate
Condensate Tanks TK 3012A, TK 3020A TK 3020B, TK 3020C
Vapor Balanced
Tanks and Loading Flare FL-3030
P-54
Condensate Loading L-1

Frontier Field Services LLC	Kings Landing Gas Plant			
	Simplified Process Flow Diagram			
	SIZE	FSCM NO	DWG NO	REV
	SCALE 1 : 1		SHEET 1 OF 1	

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.

TRUE NORTH

REFRIGERATION AREA #1

ENG1

ENG2

FLARE AREA

FL3015

CRYO HEATER AREA

H781

H741

MCC

CONTROL ROOM

RESIDUE COMPRESSION #1

FACILITY ENTRANCE

CRYO AREA #1

TEG AREA

FL3042

AMINE REGEN AREA

H1300

FL1317

BENCHMARK
606109.39 m E
3614546.42 m N
LAT 32.663476°
LONG -103.868425°
ZONE 13S NAD83 DATUM

H1400

FL1318

GAS TRAIN AREA

AMINE/STABILIZER HMO AREA

STABILIZER AREA

RESIDUE GATHERING AREA

INLET PIG RECEIVER AREA

SLUG CATCHER

TURB1

TURB2

FLARE AREA

FL3030

STORAGE AREA

L-1

SUB STATION

TRUCK LOADING AREA

PROPERTY BOUNDARY

SCALE
100'-0" GRID

0 50 100 150 200 250 300

Trinity Consultants

FRONTIER FIELD SERVICES, LLC
KINGS LANDING GAS PLANT

Drawn By	Start Date	Rev. Date	DWG Name	Rev. No.
AMV	08/07/25	08/07/25	PLOT	1

KINETIK\TX MIDLAND\KINGS LANDING\244404.0648

Section 6

All Calculations

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

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

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

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

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

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

Significant Figures:

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

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

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

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

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

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

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

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the

application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Heaters and Boilers (H-1400, H-741, H-1300, and H-781)

KLGP includes four heaters and boilers with the following heat input capacities:

- Stabilizer and Amine Hot Oil Heater (H-1400): 74.02 MMBtu/hr
- Regen Heater (H-741): 10.4 MMBtu/hr
- TEG Reboiler (H-1300): 5 MMBtu/hr
- Trim Reboiler Heater (H-781): 27.9 MMBtu/hr

For Units H-1400 and H-781, nitrogen oxide (NO_x) and carbon monoxide (CO) emissions are based on manufacturer specifications. Volatile organic compounds (VOC), particulate matter (PM), sulfur dioxide (SO_2), and HAP are based on emission factors from AP-42 Chapter 1.4 *Natural Gas Combustion*. For Unit H-741, NO_x emissions are based on manufacturer specifications and remaining contaminants (CO, VOC, PM, SO_2, and HAP) are based on emission factors from AP-42 Chapter 1.4, *Natural Gas Combustion*. For Unit H-1300, all contaminants (NO_x, CO, VOC, PM, SO_2, and HAP) are based on emission factors from AP-42 Chapter 1.4, *Natural Gas Combustion*.

Greenhouse gas (GHG) emissions from all heaters and boilers are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Engines (ENG-1, ENG-2)

There are two engines at KLGP, Units ENG-1 and ENG-2. Both are 1,680 horsepower (hp) Waukesha L7044 engines controlled with non-selective catalytic reduction (NSCR). Emissions of NO_x, CO, VOC, and formaldehyde are based on engine manufacturer or catalyst specifications. Remaining pollutants (PM, SO_2, and remaining HAP) are based on emission factors from AP-42 Chapter 3.2, *Natural Gas-fired Reciprocating Engines*, Table 3.2-3 for 4-stroke rich burn engines. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Turbines (TURB-1, TURB-2)

There are two turbines at KLGP, Units TURB-1 and TURB-2. Both are 5.7 megawatt (MW) Solar Taurus 60 turbine generators. Emissions of NO_x, CO, and VOC are based on turbine manufacturer specifications. Remaining pollutants (PM, SO_2, and HAP) are based on emission factors from AP-42 Chapter 3.1 *Stationary Gas Turbines*, Tables 3.1-2a and 3.1-3. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Condensate Storage Tanks (TK 3012A, TK 3020A, TK 3020B, TK 3020C)

There are four 1,000-barrel (bbl) condensate storage tanks (Units TK 3012A, TK 3020A, TK3020B, and TK 3020C). Emissions from the condensate storage tanks were determined using BR&E ProMax. Emissions from the condensate tanks are controlled by a combustor (FL-3030) with 98% destruction efficiency.

Condensate Loading (L-1)

Condensate loading emissions (Unit L-1) are calculated using the loading loss equation and variables from AP-42 Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*. True vapor pressure of the liquds loaded, molecular weight of the vapors, temperatures of the bulk liquids, and mass composition of the vapors were determined with BR&E ProMax. Condensate loading is vapor balanced with the condensate tanks with 98.7% capture efficiency and ultimately routed to FL-3030 with 98% destruction efficiency.

Tanks and Loading Flare (FL-3030)

FL-3030 controls emissions from the condensate tanks (Units TK 3012A, TK 3020A, TK3020B, and TK 3020C) and condensate loading (Unit L-1). FL-3030 operates with a destruction efficiency of 98%. Emissions of NO_x and CO are based on TCEQ guidance for waste streams with >1000 BTU/scf heating value. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

TEG Glycol Dehydrator (DEHY-1)

BR&E ProMax was used to determine emissions from the glycol still vent and flash tank. The regenerator vent is routed to a BTEX condenser before being routed to an enclosed combustion device (FL-3042). The flash tank emissions are routed to the plant flare (FL-3015). Both FL-3042 and FL-3015 have destruction efficiencies of 98%.

BTEX Combustor (FL-3042)
FL-3042 controls emissions from the dehydration unit regeneration vent (Unit DEHY-1). FL-3042 operates with a destruction efficiency of 98%. Emissions of NO_x and CO are based on TCEQ guidance for waste streams with >1000 BTU/scf heating value. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Plant Flare (FL-3015)
FL-3015 controls emissions from the dehydrator flash tank (Unit DEHY-1) and SSM. FL-3015 operates with a destruction efficiency of 98%. Emissions of NO_x and CO are based on TCEQ guidance for waste streams with >1000 BTU/scf heating value. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Amine Unit (AMINE-1)
BR&E ProMax was used to determine emissions from the amine unit (AMINE-1). Emissions from still vent and flash tank are routed to the thermal oxidizer (FL-1317) with a 99% destruction efficiency. During periods of thermal oxidizer downtime, emissions from the still vent and flash tank will be routed to the amine flare (FL-1318) with a destruction efficiency of 98%.

Thermal Oxidizer (FL-1317)
FL-1317 controls emissions from the amine unit (AMINE-1). FL-1317 operates with a destruction efficiency of 99%. Emissions of NO_x and CO are based on TCEQ guidance for waste streams with <1000 BTU/scf heating value. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Amine Flare (FL-1318)
During times of FL-1317 downtime, FL-1318 controls emissions from the amine unit (AMINE-1). FL-1318 operates with a destruction efficiency of 98%. Emissions of NO_x and CO are based on TCEQ guidance for waste streams with <1000 BTU/scf heating value. In order to ensure proper combustion, assist gas will be utilized during amine flaring. GHG emissions are calculated using factors from 40 CFR 98 Subpart C Table C-1 and Table C-2.

Fugitives (FUG-1)
The emissions from fugitive components associated with this site are calculated using emission factors from Table 2-4 of the EPA Protocol for Equipment Leak Emission Estimates, November 1995.

Haul Road Emissions (HAUL)
Unpaved haul road emissions are calculated using constants from AP-42, Table 13.2.2-2 and methodology outlined in AP-42 Chapter 13.2.2, *Unpaved Roads*.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

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

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

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

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

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

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

Greenhouse gas emissions are included in this application.

Frontier Field Services LLC
Kings Landing Gas Plant
Emissions Summary - Controlled Emissions

Unit #	Source Description	NO_X		CO		VOC		SO_2		PM		PM10		PM2.5		H_2S	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
ENG-1	1680 hp Waukesha L7044	1.33	5.84	1.48	6.49	0.04	0.16	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28		
ENG-2	1680 hp Waukesha L7044	1.33	5.84	1.48	6.49	0.04	0.16	0.01	0.04	0.29	1.28	0.29	1.28	0.29	1.28		
TURB-1	5.7 MW Solar Taurus 60	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61		
TURB-2	5.7 MW Solar Taurus 60	1.88	8.25	0.25	1.12	0.40	1.75	0.31	0.17	0.37	1.61	0.37	1.61	0.37	1.61		
H-1400	Stabilizer and Amine Hot Oil Heater	2.70	11.81	5.47	23.97	0.40	1.75	0.04	0.19	0.55	2.42	0.55	2.42	0.55	2.42		
H-741	Mole Sieve Regen Heater	0.51	2.21	0.86	3.75	0.06	0.25	0.01	0.03	0.08	0.34	0.08	0.34	0.08	0.34		
H-1300	TEG Reboiler	0.49	2.15	0.41	1.80	0.03	0.12	0.003	0.01	0.04	0.16	0.04	0.16	0.04	0.16		
H-781	Trim Reboiler Heater	1.02	4.45	1.03	4.52	0.15	0.66	0.02	0.07	0.21	0.91	0.21	0.91	0.21	0.91		
TK 3012A	Condensate Storage Tank																
TK 3020A	Condensate Storage Tank																
TK 3020B	Condensate Storage Tank																
TK 3020C	Condensate Storage Tank																
L-1	Condensate Loading					0.92	0.97										
FL-3030	Tanks and Loading Flare	1.10	2.08	2.20	4.15	7.72	14.19	6.91E-05	3.03E-04							7.35E-07	2.18E-06
FL-3042	BTEX Combustor	0.31	1.35	0.61	2.69	1.87	8.18	2.14E-04	0.00							2.33E-06	1.02E-05
FL-1317	Thermal Oxidizer	1.28	5.62	10.99	48.14	0.90	3.93	50.06	219.27							0.27	1.17
FL-1318	Amine Flare (Pilot)	0.02	0.11	0.05	0.22	4.39E-05	1.92E-04	6.94E-08	3.04E-07							7.39E-10	3.24E-09
FL-3015	Plant Flare	0.69	3.00	1.37	6.00	2.51	10.97	1.13E-04	4.97E-04							1.23E-06	5.39E-06
FUG-1	Fugitives					5.71	25.02									8.03E-04	3.52E-03
HAUL	Haul Roads									0.39	0.24	0.08	0.05	0.02	0.01		
MALF	Malfunction Emissions						10.00										
SSM	SSM						10.00										
FL-3015 SSM	Plant Flare (SSM)	328.08	59.05	654.97	117.89	567.50	102.15	35.13	6.32							0.37	0.07
FL-1318 SSM	Amine Flare (SSM)	3.02	1.32	25.89	11.34	1.80	0.79	50.06	21.93							0.53	0.23

	NO_X		CO		VOC		SO_2		PM		PM10		PM2.5		H_2S	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
SITEWIDE TOTALS	**345.64**	**121.32**	**707.33**	**239.68**	**590.43**	**192.80**	**135.97**	**248.25**	**2.59**	**9.86**	**2.27**	**9.67**	**2.22**	**9.63**	**1.17**	**1.47**
SITEWIDE TOTALS (minus Fugitives)	345.64	121.32	707.33	239.68	584.72	167.79	135.97	248.25	2.59	9.86	2.27	9.67	2.22	9.63	1.17	1.47
PSD Major Source Thresholds		250		250		250		250		250						250
Less than Threshold?		Yes		Yes		Yes		Yes		Yes						Yes

Frontier Field Services LLC
Kings Landing Gas Plant
Emissions Summary - Controlled Emissions

Unit #	Source Description	Formaldehyde		Benzene		Acetaldehyde		Acrolein		Ethylbenzene		n-Hexane		Toluene		Xylene		Total HAPs	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
ENG-1	1680 hp Waukesha L7044	0.02	0.10	0.02	0.10	0.04	0.18	0.04	0.17	0.00	0.00	0.05	0.20	0.01	0.04	0.00	0.01	0.19	0.81
ENG-2	1680 hp Waukesha L7044	0.02	0.10	0.02	0.10	0.04	0.18	0.04	0.17	0.00	0.00	0.05	0.20	0.01	0.04	0.00	0.01	0.19	0.81
TURB-1	5.7 MW Solar Taurus 60	0.04	0.17	6.70E-04	2.94E-03													0.04	0.18
TURB-2	5.7 MW Solar Taurus 60	0.04	0.17	6.70E-04	2.94E-03													0.04	0.18
H-1400	Stabilizer and Amine Hot Oil Heater	0.01	0.02	1.52E-04	6.67E-04									2.47E-04	1.08E-03			0.01	0.03
H-741	Mole Sieve Regen Heater	7.65E-04	3.35E-03	2.14E-05	9.38E-05									3.47E-05	1.52E-04			0.001	0.004
H-1300	TEG Reboiler	3.68E-04	1.61E-03	1.03E-05	4.51E-05									1.67E-05	7.30E-05			3.95E-04	1.73E-03
H-781	Trim Reboiler Heater	0.002	0.01	5.74E-05	2.52E-04									9.30E-05	4.07E-04			0.002	0.01
TK 3012A	Condensate Storage Tank																		
TK 3020A	Condensate Storage Tank																		
TK 3020B	Condensate Storage Tank																		
TK 3020C	Condensate Storage Tank																		
L-1	Condensate Loading			0.01	0.01					2.68E-04	2.84E-04	0.02	0.03	0.004	0.004	7.14E-04	7.57E-04	0.04	0.04
FL-3030	Tanks and Loading Flare			0.10	0.16					2.77E-03	0.00	0.19	0.32	0.04	0.07	0.01	0.01	0.34	0.57
FL-3042	BTEX Combustor			0.38	1.68					0.01	0.03	0.04	0.19	0.16	0.72	0.02	0.09	0.62	2.71
FL-1317	Thermal Oxidizer			0.00	0.02					0.00	0.00			0.00	0.01	0.00	0.00	0.01	0.03
FL-1318	Amine Flare (Pilot)																		
FL-3015	Plant Flare			0.08	0.36					0.00	0.02	0.048	0.208	0.05	0.22	0.01	0.05	0.20	0.86
FUG-1	Fugitives			0.09	0.40					0.02	0.09	0.16	0.72	0.10	0.45	0.06	0.26	0.44	1.91
HAUL	Haul Roads																		
MALF	Malfunction Emissions																		
SSM	SSM																		
FL-3015 SSM	Plant Flare (SSM)			4.49	0.81					0.27	0.05	8.34	1.50	2.93	0.53	0.74	0.13	16.77	3.02
FL-1318 SSM	Amine Flare (SSM)			0.52	0.23					0.02	0.01	0.00	0.002	0.27	0.12	0.06	0.03	0.88	0.39

	Formaldehyde		Benzene		Acetaldehyde		Acrolein		Ethylbenzene		n-Hexane		Toluene		Xylene		Total HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
SITEWIDE TOTALS	**0.13**	**0.58**	**5.74**	**3.88**	**0.08**	**0.37**	**0.08**	**0.35**	**0.32**	**0.20**	**8.91**	**3.37**	**3.58**	**2.19**	**0.91**	**0.60**	**19.75**	**11.54**
SITEWIDE TOTALS (minus Fugitives)	0.13	0.58	5.64	3.49	0.08	0.37	0.08	0.35	0.30	0.12	8.75	2.66	3.47	1.74	0.85	0.34	19.31	9.63
PSD Major Source Thresholds																		
Less than Threshold?																		

Frontier Field Services LLC
Kings Landing Gas Plant
Heaters/Boilers

Emission Unit: **H-1400**
Description: Stabilizer and Amine Hot Oil Heater

Heater/Boiler rating (MMBtu/hr):	74.02
Exhaust Flow Rate (dscfm):	12546.11
Rating above is:	*below 100 MMBtu/hr, uncontrolled*
Operating hours/year:	8,760
Fuel Heat Value, LHV (Btu/SCF):	1020.0

(assume uncontrolled, unless specifically stated otherwise)

pollutant	emission factor (lb/MMCF)	emission factor (ppmv)	lb/hr	tpy
VOC	5.5		0.40	1.75
NOx[1]		30	2.70	11.81
CO[1]		100	5.47	23.97
PM	7.6		0.55	2.42
Benzene	2.10E-03		1.52E-04	6.67E-04
Toluene	3.40E-03		2.47E-04	1.08E-03
Formaldehyde	7.50E-02		5.44E-03	0.02
SO_2	0.6		0.04	0.19

1 Manufacturer specific emission factors corrected for 3% O2.
2 Factor per 40 CFR 40 Appx A Method 19 Table 19-2.

Stack Parameters:		
Height:	25	feet
Diameter:	3.50	feet
Temperature:	650	°F
Flow:	54,918	ft^3/min
Velocity:	95.1	ft/sec

assumptions:

VOC MW	44.1	lb/lb-mole
NO2 MW	46	lb/lb-mole
CO MW	28	lb/lb-mole
Ideal Gas Law	385.22	SCF/lb-mole
Stack O2	3	%
F_d[2]	8710	dscf/MMBtu

GHG Emissions	emission factor (kg/MMBtu)	lb/hr	tpy
CO2	53.06	8,658.57	37,924.53
N2O	0.0001	0.02	0.07
Methane	0.001	0.16	0.71

GHG Emissions Factors from 40 CFR Part 98, Subpart C

Emission Unit: **H-741**
Description: Mole Sieve Regen Heater

Heater/Boiler rating (MMBtu/hr):	10.4
Flow Rate (dscfm):	1762.76
Rating above is:	*below 100 MMBtu/hr, uncontrolled*
Operating hours/year:	8,760
Fuel Heat Value, LHV (Btu/SCF):	1020.0

(assume uncontrolled, unless specifically stated otherwise)

pollutant	emission factor (lb/MMCF)	emission factor (ppmv)	lb/hr	tpy
VOC	5.5		0.06	0.25
NOx[1]		40	0.51	2.21
CO	84		0.86	3.75
PM	7.6		0.08	0.34
Benzene	2.10E-03		2.14E-05	9.38E-05
Toluene	3.40E-03		3.47E-05	1.52E-04
Formaldehyde	7.50E-02		7.65E-04	3.35E-03
SO_2	0.6		0.01	0.03

1 Manufacturer specific emission factors corrected for 3% O2.
2 Factor per 40 CFR 40 Appx A Method 19 Table 19-2.

Stack Parameters:		
Height:	20	feet
Diameter:	3.00	feet
Temperature:	650	°F
Flow:	7,419	ft^3/min
Velocity:	17.5	ft/sec

assumptions:

NO2 MW	46	lb/lb-mole
CO MW	28	lb/lb-mole
Ideal Gas Law	385.22	SCF/lb-mole
Stack O2	3	%
F_d[2]	8710	dscf/MMBtu

GHG Emissions	emission factor (kg/MMBtu)	lb/hr	tpy
CO2	53.06	1,216.55	5,328.49
N2O	0.0001	0.002	0.01
Methane	0.001	0.02	0.10

GHG Emissions Factors from 40 CFR Part 98, Subpart C

Frontier Field Services LLC
Kings Landing Gas Plant
Heaters/Boilers

Emission Unit: **H-1300**
Description: TEG Reboiler

Heater/Boiler rating (MMBtu/hr):	5
Flow Rate (dscfm):	847.48
Rating above is:	*below 100 MMBtu/hr, uncontrolled*
Operating hours/year:	8,760
Fuel Heat Value, LHV (Btu/SCF):	1020.0

(assume uncontrolled, unless specifically stated otherwise)

pollutant	emission factor (lb/MMCF)	lb/hr	tpy
VOC	5.5	0.03	0.12
NOx	100	0.49	2.15
CO	84	0.41	1.80
PM	7.6	0.04	0.16
Benzene	2.10E-03	1.03E-05	4.51E-05
Toluene	3.40E-03	1.67E-05	7.30E-05
Formaldehyde	7.50E-02	3.68E-04	1.61E-03
SO_2	0.6	2.94E-03	0.01

1 External combustion emissions are calculated in accordance with AP-42 Section 1.4 (July 1998).

2 Factor per 40 CFR 40 Appx A Method 19 Table 19-2.

Stack Parameters:		
Height:	25	feet
Diameter:	2.00	feet
Temperature:	450	°F
Flow:	2,281	ft^3/min
Velocity:	12.1	ft/sec

GHG Emissions	emission factor (kg/MMBtu)	lb/hr	tpy
CO2	53.06	584.88	2,561.78
N2O	0.0001	0.001	0.005
Methane	0.001	0.01	0.05

GHG Emissions Factors from 40 CFR Part 98, Subpart C

assumptions:

NO2 MW	46	lb/lb-mole
CO MW	28	lb/lb-mole
Ideal Gas Law	385.22	SCF/lb-mole
Stack O2	3	%
F_d^2	8710	dscf/MMBtu

Emission Unit: **H-781**
Description: Trim Reboiler Heater

Heater/Boiler rating (MMBtu/hr):	27.9
Flow Rate (dscfm):	4728.95
Rating above is:	*below 100 MMBtu/hr, uncontrolled*
Operating hours/year:	8,760
Fuel Heat Value, LHV (Btu/SCF):	1020.0

(assume uncontrolled, unless specifically stated otherwise)

pollutant	emission factor (lb/MMCF)	emission factor (ppmv)	lb/hr	tpy
VOC	5.5		0.15	0.66
NOx[1]		30	1.02	4.45
CO[1]		50	1.03	4.52
PM	7.6		0.21	0.91
Benzene	2.10E-03		5.74E-05	2.52E-04
Toluene	3.40E-03		9.30E-05	4.07E-04
Formaldehyde	7.50E-02		2.05E-03	8.99E-03
SO_2	0.6		0.02	0.07

1 Manufacturer specific emission factors corrected for 3% O2.

2 Factor per 40 CFR 40 Appx A Method 19 Table 19-2.

Stack Parameters:		
Height:	20	feet
Diameter:	3.50	feet
Temperature:	450	°F
Flow:	18,247	ft^3/min
Velocity:	31.6	ft/sec

GHG Emissions	emission factor (kg/MMBtu)	lb/hr	tpy
CO2	53.06	3,263.63	14,294.71
N2O	0.0001	0.01	0.03
Methane	0.001	0.06	0.27

GHG Emissions Factors from 40 CFR Part 98, Subpart C

assumptions:

SO2 MW	64.06	lb/lb-mole
NO2 MW	46	lb/lb-mole
CO MW	28	lb/lb-mole
Ideal Gas Law	385.22	SCF/lb-mole
Stack O2	3	%
F_d^2	8710	dscf/MMBtu

Frontier Field Services LLC
Kings Landing Gas Plant
Compressor Engines

Emission unit number(s):	ENG-1, ENG-2
Source description:	Waukesha L7044
Manufacturer:	Waukesha
Model:	L7044
Type:	4SRB
Emission Control:	NSCR
Number of Engines:	2
Horsepower (HP):	1680
Max Engine RPM:	1200
Fuel Consumption (Btu/hp-hr):	8959
Annual Operating Hours:	8760

Stack Parameters:	**ENG-1**	**ENG-2**
Height (ft):	21.6	21.6
Diameter (ft):	1.17	1.17
Temperature (^{o}F):	1,209	1,209
Flow (ACFM):	8,907	8,907
Velocity (ft/s):	138.07	138.07

Fuel Parameters	**All Engines**	
Fuel Type:	Natural Gas	
Fuel LHV:	1020	Btu/scf
Fuel Sulfur Content:	0.002	grains/dscf
Hourly Fuel Flow Rate:	0.015	MMSCF/hr
Annual Fuel Flow Rate:	129.26	MMSCF/yr

Emissions	**NOx**		**CO**		**VOC**		**TSP/PM10/PM2.5**		**SO2**	
Uncontrolled Emission Factor:	12.58	g/hp-hr	11.95	g/hp-hr	0.5	g/hp-hr	0.01941	lb/MMBtu	0.000588	lb/MMBtu
Uncontrolled Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	46.59	204.08	44.26	193.86	1.85	8.11	0.29	1.28	0.01	0.04
Control Efficiency:	97%		97%		98%		0%		0%	
Controlled Emission Factor:	0.36	g/hp-hr	0.4	g/hp-hr	0.01	g/hp-hr	0.01941	lb/MMBtu	0.000588	lb/MMBtu
Controlled Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	1.33	5.84	1.48	6.49	0.04	0.16	0.29	1.28	0.01	0.04

	Hazardous Air Pollutants																	
Emissions	**Formaldehyde**		**Benzene**		**Acetaldehyde**		**Acrolein**		**Ethylbenzene**		**Methanol**		**Toluene**		**Xylene**		**Total HAPs**	
Uncontrolled Emission Factor:	0.05	g/hp-hr	0.00158	lb/MMBtu	0.00279	lb/MMBtu	0.00263	lb/MMBtu	2.48E-05	lb/MMBtu	0.00306	lb/MMBtu	0.000558	lb/MMBtu	0.000195	lb/MMBtu	Uncontrolled	
Uncontrolled Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	0.19	0.81	0.02	0.10	0.04	0.18	0.04	0.17	0.000	0.00	0.05	0.20	0.01	0.04	0.00	0.01	0.35	1.53
Control Efficiency:	88%		0%		0%		0%		0%		0%		0%		0%			
Controlled Emission Factor:	0.006	g/hp-hr	0.00158	lb/MMBtu	0.00279	lb/MMBtu	0.00263	lb/MMBtu	2.48E-05	lb/MMBtu	0.00306	lb/MMBtu	0.000558	lb/MMBtu	0.000195	lb/MMBtu	Controlled	
Controlled Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	0.02	0.10	0.02	0.10	0.04	0.18	0.04	0.17	0.000	0.00	0.05	0.20	0.01	0.04	0.00	0.01	0.19	0.81

GHG Emissions Calculations	**CO2**		**N2O**		**Methane**	
Emission Factor:	53.06	kg/MMBtu	0.0001	kg/MMBtu	0.001	kg/MMBtu
Calculated Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	1760.62	7711.52	0.00	0.01	0.03	0.15

GHG Emissions Factors from 40 CFR Part 98, Subpart C

Frontier Field Services LLC
Kings Landing Gas Plant
Turbines

Emission unit number(s):	TURB-1, TURB-2
Source description:	Combustion Turbine Generator
Manufacturer:	Solar
Model:	Taurus 60
Number of Turbines:	2
Power Output (MW(e)):	5.7
Heat Rate (Btu/kWh):	9,800
Fd (dscf/MMBtu)*:	8,710
Annual Operating Hours:	8760

*natural gas F-factor from 40 CFR Part 60 Appendix A-7 Table 19-2

Stack Parameters:	
Height (ft):	13
Diameter (ft):	5.71
Temperature (^{o}F):	965
Flow (ACFM):	53,205
Velocity (ft/s):	34.65

Emission Factors

Pollutant	Emission Specification	Emission Factor	Comment
NOX	9 ppmvd (15% O2)		Manufacturer Specs
CO	2 ppmvd (15% O2)		Manufacturer Specs
VOC	2 ppmvd (15% O2)		Manufacturer Specs
SO2	2 gr/100 scf		TCEQ Memo Dated 5/5/2017
Particulate		0.0066 lb/MMBtu	AP-42 Table 3.1-2a
Formaldehyde		0.00071 lb/MMBtu	AP-42 Table 3.1-3
Benzene		0.000012 lb/MMBtu	AP-42 Table 3.1-3
CO2		110 lb/MMBtu	AP-42 Table 3.1-2a
CH4		0.0022 lb/MMBtu	40 CFR Pt. 98 Tbl. C-2
N2O		0.00022 lb/MMBtu	40 CFR Pt. 98 Tbl. C-2

Emissions Per Unit

	lb/hr	tpy
NOx	1.88	8.25
CO	0.25	1.12
VOC	0.40	1.75
SO2	0.31	0.17
Particulate	0.37	1.61
Formaldehyde	0.04	0.17
Benzene	0.001	0.003
GHG Emissions	**lb/hr**	**tpy**
CO2	6,144.60	26,913.35
CH4	0.12	0.54
N2O	0.01	0.05

Frontier Field Services LLC
Kings Landing Gas Plant
Turbines

Emission Calculation Methodology:

For NOx, CO, and VOC, the following equation was used to calculate short-term (lb/hr) emission rates:

$$\text{ER (lb/hr)} = \text{Power Output} \times \text{Heat Rate} \times \frac{\text{1 kW x MMBtu}}{\text{1000 MW x Btu}} \times \frac{\text{8710 dscf}}{\text{MMBTU}} \times \frac{\text{1 lb-mol}}{\text{379 dscf}} \times \text{Concentration} \times \frac{\text{20.9 - 0}}{\text{20.9-15}} \times \text{MW}$$

Example (NOx):

$$\text{ER} = 5.7\ \text{MW} \times \frac{\text{9,800 Btu}}{\text{kWh}} \times \frac{\text{1 kW x MMBtu}}{\text{1000 MW x Btu}} \times \frac{\text{8710 dscf}}{\text{MMBTU}} \times \frac{\text{1 lb-mol}}{\text{379 dscf}} \times 9 \times 10^{-6} \times \frac{\text{20.9 - 0}}{\text{20.9-15}} \times \frac{\text{46 lb}}{\text{lb-mol}} = 1.88\ \text{lb/hr}$$

For SO2, the following equation was used to calculate short-term (lb/hr) emission rates:

$$\text{ER (lb/hr)} = \frac{\text{1000 kW}}{\text{MW}} \times \frac{\text{Power Output x Heat Rate}}{\text{Fuel Heating Value}} \times \frac{\text{2 gr S}}{\text{100 scf}} \times \frac{\text{1 lb}}{\text{7000 gr}} \times \frac{64\ \text{lb } SO_2}{\text{32 lb S}}$$

$$\text{ER (lb/hr)} = \frac{\text{1000 kW}}{\text{MW}} \times \frac{\text{5.7 MW x 9,800 Btu/kWh}}{\text{1,020 Btu/scf}} \times \frac{\text{2 gr S}}{\text{100 scf}} \times \frac{\text{1 lb}}{\text{7000 gr}} \times \frac{64\ \text{lb } SO_2}{\text{32 lb S}} = 0.31\ \text{lb/hr}$$

For Particulate, Benzene, and Formaldehyde, the following equation was used to calculate short-term (lb/hr) emission rates:

$$\text{ER (lb/hr)} = \text{Emission Factor} \times \frac{\text{1000 kW}}{\text{MW}} \times \frac{\text{1 MMBtu}}{10^6\ \text{Btu}} \times \text{Power Output} \times \text{Heat Rate}$$

Example (Particulate):

$$\text{ER (lb/hr)} = \frac{\text{0.0066 lb}}{\text{MMBtu}} \times \frac{\text{1000 kW}}{\text{MW}} \times \frac{\text{1 MMBtu}}{10^6\ \text{Btu}} \times 5.7\ \text{MW} \times \frac{\text{9,800 Btu}}{\text{kWh}} = 0.37\ \text{lb/hr}$$

Short-term rates are then multiplied by hours per year and divided by 2000 to estimate tons per year (tpy).

Example (NOx):

$$\text{ER} = 1.88\ \text{lb/hr} \times 8760\ \text{hrs/yr} \times \frac{\text{1 ton}}{\text{2,000 lbs}} = 8.25\ \text{tpy}$$

Frontier Field Services LLC
Kings Landing Gas Plant
Condensate Storage Tanks

Emission unit number(s): TK 3012A, TK 3020A, TK 3020B, TK 3020C
Source description: Condensate Tanks

Annual Operating Hours:	8,760	
Control Efficiency:	98%	
Number of Tanks:	4	
Capacity of Tanks:	1,000	bbl
Hourly Throughout:	51.96	bbl/hr
Daily Throughput:	1247.08	bbl/d
Annual Throughput:	455,184	bbl/yr
Hourly Throughout per Tank:	52	bbl/hr
Daily Throughput per Tank:	312	bbl/d
Annual Throughput per Tank:	75,864	bbl/yr

Condensate Tank Emissions[1,2]

Component	Uncontrolled Emissions (hourly basis)			Uncontrolled Emissions (annual basis)			Controlled Emissions	
	Total Flash (lb/hr)	Total Working and Breathing (lb/hr)	Total per Tank (lb/hr)	Total Flash (lb/hr)	Total Working and Breathing (lb/hr)	Total Emissions Per Tank (tpy)	Total Emissions per Tank (lb/hr)	Total Emissions Per Tank (tpy)
Hydrogen Sulfide	3.16E-05	2.03E-06	8.40E-06	1.56E-05	8.50E-06	2.64E-05	8.40E-06	2.64E-05
Nitrogen	1.60E-08	3.63E-11	4.01E-09	1.10E-08	3.21E-09	1.56E-08	4.01E-09	1.56E-08
Methane	3.87E-05	4.22E-07	9.78E-06	2.54E-05	1.27E-05	4.17E-05	1.96E-07	8.34E-07
Carbon Dioxide	2.54E-05	1.31E-06	6.67E-06	1.49E-05	1.36E-05	3.11E-05	6.67E-06	3.11E-05
Ethane	0.03	0.003	0.01	0.02	0.02	0.04	1.77E-04	7.02E-04
Propane	3.69	0.42	1.03	1.58	0.89	2.70	0.02	0.05
Isobutane	22.15	3.23	6.35	8.83	4.02	14.07	0.13	0.28
Butane	106.07	16.72	30.70	41.32	17.83	64.76	0.61	1.30
Isopentane	50.37	8.87	14.81	18.98	7.15	28.61	0.30	0.57
Pentane	45.85	8.19	13.51	17.21	6.19	25.62	0.27	0.51
i-Hexane	13.38	2.41	3.95	5.00	1.61	7.24	0.08	0.14
Hexane	6.54	1.21	1.94	2.45	0.78	3.54	0.04	0.07
Benzene	3.74	0.43	1.04	1.41	0.27	1.85	0.02	0.04
Cyclohexane	5.52	0.85	1.59	2.10	0.53	2.88	0.03	0.06
i-Heptane	6.31	1.14	1.86	2.41	0.69	3.39	0.04	0.07
n-Heptane	1.12	0.20	0.33	0.43	0.12	0.61	0.01	0.01
Toluene	1.51	0.18	0.42	0.59	0.11	0.76	0.01	0.02
i-Octane	4.45	0.82	1.32	1.71	0.50	2.42	0.03	0.05
n-Octane	0.19	0.03	0.05	0.07	0.02	0.10	0.001	0.002
Ethylbenzene	0.11	0.01	0.03	0.04	0.01	0.05	5.91E-04	0.001
m-Xylene	0.29	0.03	0.08	0.12	0.02	0.15	0.002	0.003
o-Xylene								
p-Xylene								
Nonane	0.28	0.04	0.08	0.12	0.02	0.15	0.00	0.00
Decane	0.16	0.01	0.04	0.07	0.01	0.08	0.00	0.00
Sulfur Dioxide								
Water	7.67E-06	3.29E-10	1.92E-06	4.38E-06	1.84E-09	4.80E-06	3.84E-08	9.60E-08
Piperazine								
TEG								
Oxygen								
VOC	**271.72**	**44.81**	**79.13**	**104.43**	**40.76**	**158.99**	**1.58**	**3.18**
Total HAPS	**17.88**	**3.25**	**5.28**	**6.81**	**2.01**	**9.66**	**0.11**	**0.19**
H_2S	**1.60E-08**	**3.63E-11**	**4.01E-09**	**1.10E-08**	**3.21E-09**	**1.56E-08**	**4.01E-09**	**1.56E-08**

[1] Emissions from the condensate tanks are controlled by the combustor (ECD-1) with an assumed 98% DRE.
[2] Emissions are calculated using BR&E ProMax. Hourly loading emissions are based on the maximum hourly throughput of the facility. Annual emissions are based on the average daily throughput of the facility.

Frontier Field Services LLC
Kings Landing Gas Plant
Condensate Loading

Emission unit number: L-1
Source description: Condensate Loading

Condensate Production: 1247.08 bbl/day
Condensate Production: 455,184 bbl/yr
Max Loading Rate: 7560 gallons/hr

Equation[1]:

$$L_L = \frac{12.46 * SPM}{T}$$

Variables[1]:

L_L - Loading Loss (lbs/1000 gal loaded)
S - Saturation Factor (From Table 5.2-1 of AP-42, Section 5.2)
P - True Vapor Pressure of Loaded Liquid (psia)
M - Molecular Weight of Vapor (lb/lb mol)
T- Temperature of Bulk Liquid (°R = [°F + 460])

Maximum Hourly Emission Estimate

Condensate Loading	Saturation Factor S	True Vapor Pressure psia	Mole Weight lb/lb-mol	Maximum Temperature		Loading Loss lb/1000 gallon	Hourly Loading Rate gallons/hr	Total Emissions lb/hr	Capture Efficiency %	Emissions To Atmosphere lbs/hr
				Deg F	Deg R					
Submerged loading: dedicated normal service	0.6	10.443	64.39	79.44	539.01	9.33	7,560	70.51	98.7%	0.92

Average Annual Emission Estimate

Condensate Loading	Saturation Factor S	True Vapor Pressure psia	Mole Weight lb/lb-mol	Average Temperature		Loading Loss lb/1000 gallon	Annual Loading Rate gallons/year	Total Emissions tons/year	Capture Efficiency %	Emissions To Atmosphere tons/year
				Deg F	Deg R					
Submerged loading: dedicated normal service	0.6	8.587	64.39	68.91	528.48	7.82	19,117,719	74.77	98.7%	0.97

Component	Oil W&B	Total Speciated Vapors Captured During Loading and sent to ECD		Total Speciated Vapors Uncaptured During Loading	
	Wt%	lb/hour	tons/year	lb/hour	tons/year
Hydrogen Sulfide	4.53E-06	3.15E-06	3.34E-06	4.15E-08	4.40E-08
Nitrogen	8.09E-11	5.63E-11	5.97E-11	7.42E-13	7.87E-13
Methane	9.43E-07	6.56E-07	6.96E-07	8.64E-09	9.16E-09
Carbon Dioxide	2.92E-06	2.03E-06	2.15E-06	2.67E-08	2.83E-08
Ethane	0.01	0.004	0.00	5.82E-05	6.17E-05
Propane	0.93	0.65	0.69	0.009	0.01
Isobutane	7.21	5.02	5.32	0.07	0.07
Butane	37.32	25.97	27.54	0.34	0.36
Isopentane	19.80	13.78	14.61	0.18	0.19
Pentane	18.27	12.71	13.48	0.17	0.18
i-Hexane	5.37	3.74	3.96	0.05	0.05
Hexane	2.71	1.88	2.00	0.02	0.03
Benzene	0.97	0.67	0.72	0.009	0.01
Cyclohexane	1.89	1.32	1.40	0.017	0.02
i-Heptane	2.54	1.76	1.87	0.02	0.02
n-Heptane	0.45	0.32	0.34	0.004	0.004
Toluene	0.41	0.28	0.30	0.004	0.004
i-Octane	1.84	1.28	1.36	0.017	0.02
n-Octane	0.07	0.05	0.05	6.28E-04	6.66E-04
Ethylbenzene	0.03	0.02	0.02	2.68E-04	2.84E-04
m-Xylene	0.08	0.05	0.06	7.14E-04	7.57E-04
o-Xylene					
p-Xylene					
Nonane	0.08	0.05	0.06	7.22E-04	7.66E-04
Decane	0.03	0.02	0.02	2.86E-04	3.03E-04
Sulfur Dioxide					
Water	7.35E-10	5.12E-10	5.43E-10	6.74E-12	7.15E-12
Piperazine					
TEG					
Oxygen					
TOTAL	100.00	69.59	73.80	0.92	0.97
Total VOC	99.99	69.59	73.79	0.92	0.97
Total HAPs	4.19	2.92	3.09	0.04	0.04

Frontier Field Services LLC
Kings Landing Gas Plant
Tanks and Loading Flare

Emission unit number: FL-3030
Source description: Tanks and Loading Flare
Sources Controlled: TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1

Waste Streams to FL-3030

Component	Uncontrolled Condensate Tank Emissions				Control Efficiency	Controlled Emissions							
	Cond Flash	Cond W&B	Cond Loading	TOTAL		Cond Flash		Cond W&B		Cond Loading		TOTAL	
	lb/hr	lb/hr	lb/hr	lb/hr		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Hydrogen Sulfide	3.16E-05	2.03E-06	3.15E-06	3.68E-05	98%	6.32E-07	1.36E-06	4.06E-08	7.45E-07	6.30E-08	6.68E-08	7.35E-07	2.18E-06
Nitrogen	1.60E-08	3.63E-11	5.63E-11	1.61E-08		1.60E-08	4.82E-08	3.63E-11	1.40E-08	5.63E-11	5.97E-11	1.61E-08	6.23E-08
Methane	3.87E-05	4.22E-07	6.56E-07	3.98E-05	98%	7.74E-07	2.22E-06	8.45E-09	1.11E-06	1.31E-08	1.39E-08	7.95E-07	3.35E-06
Carbon Dioxide	2.54E-05	1.31E-06	2.03E-06	2.87E-05		2.54E-05	6.51E-05	1.31E-06	5.94E-05	2.03E-06	2.15E-06	2.87E-05	1.27E-04
Ethane	0.03	0.003	0.004	0.04	98%	6.52E-04	1.46E-03	5.69E-05	1.35E-03	8.84E-05	9.37E-05	7.98E-04	2.90E-03
Propane	3.69	0.42	0.65	4.76	98%	0.07	0.14	0.008	0.08	0.013	0.01	9.53E-02	2.30E-01
Isobutane	22.15	3.23	5.02	30.40	98%	0.44	0.77	0.06	0.35	0.10	0.11	6.08E-01	1.23E+00
Butane	106.07	16.72	25.97	148.76	98%	2.12	3.62	0.33	1.56	0.52	0.55	2.98E+00	5.73E+00
Isopentane	50.37	8.87	13.78	73.03	98%	1.01	1.66	0.18	0.63	0.28	0.29	1.46E+00	2.58E+00
Pentane	45.85	8.19	12.71	66.75	98%	0.92	1.51	0.16	0.54	0.25	0.27	1.33E+00	2.32E+00
i-Hexane	13.38	2.41	3.74	19.52	98%	0.27	0.44	0.05	0.14	0.07	0.08	3.90E-01	6.58E-01
Hexane	6.54	1.21	1.88	9.64	98%	0.13	0.21	0.02	0.07	0.04	0.04	1.93E-01	3.23E-01
Benzene	3.74	0.43	0.67	4.84	98%	0.07	0.12	0.009	0.02	0.013	0.01	9.69E-02	1.62E-01
Cyclohexane	5.52	0.85	1.32	7.69	98%	0.11	0.18	0.02	0.05	0.03	0.03	1.54E-01	2.58E-01
i-Heptane	6.31	1.14	1.76	9.21	98%	0.13	0.21	0.02	0.06	0.04	0.04	1.84E-01	3.09E-01
n-Heptane	1.12	0.20	0.32	1.64	98%	0.02	0.04	0.004	0.01	0.006	0.01	3.28E-02	5.52E-02
Toluene	1.51	0.18	0.28	1.98	98%	0.03	0.05	0.004	0.01	0.006	0.01	3.95E-02	6.69E-02
i-Octane	4.45	0.82	1.28	6.56	98%	0.09	0.15	0.02	0.04	0.03	0.03	1.31E-01	2.21E-01
n-Octane	0.19	0.03	0.05	0.26	98%	0.004	0.01	6.14E-04	0.002	9.53E-04	0.001	5.29E-03	9.06E-03
Ethylbenzene	0.11	0.01	0.02	0.14	98%	0.002	0.00	2.62E-04	6.45E-04	4.07E-04	0.000	2.77E-03	4.79E-03
m-Xylene	0.29	0.03	0.05	0.38	98%	0.01	0.01	6.98E-04	0.002	1.08E-03	0.001	7.60E-03	1.32E-02
Nonane	0.28	0.04	0.05	0.37	98%	0.01	0.01	7.06E-04	0.002	1.10E-03	1.16E-03	7.38E-03	1.31E-02
Decane	0.16	0.01	0.02	0.19	98%	0.00	0.01	2.80E-04	7.81E-04	4.34E-04	4.60E-04	3.84E-03	7.04E-03
Water	7.67E-06	3.29E-10	5.12E-10	0.00		7.67E-06	1.92E-05	3.29E-10	8.07E-09	5.12E-10	5.43E-10	7.67E-06	1.92E-05
TOTAL	**271.75**	**44.81**	**69.59**	**386.15**		**5.44**	**9.15**	**0.90**	**3.57**	**1.39**	**1.48**	**7.72**	**14.20**
Total VOC	**271.72**	**44.81**	**69.59**	**386.11**		**5.43**	**9.15**	**0.90**	**3.57**	**1.39**	**1.48**	**7.72**	**14.19**
Total HAPs	**12.18**	**1.88**	**2.92**	**16.98**		**0.24**	**0.40**	**0.04**	**0.10**	**0.06**	**0.06**	**0.34**	**0.57**

Frontier Field Services LLC
Kings Landing Gas Plant
Tanks and Loading Flare

Emission unit number: FL-3030
Source description: Tanks and Loading Flare
Sources Controlled: TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1

Products of Combustion

Component	Net Heat Value	Total to FL-3030		Heat Release	
	Btu/lb	lb/hr	lb/yr	MMBtu/hr	MMBtu/yr
Methane	21504	3.98E-05	0.33	8.55E-07	0.01
Ethane	20551	0.04	290.29	8.20E-04	5.97
Propane	19934	4.76	23,010.04	0.09	458.68
Isobutane	19673	30.40	123,190.66	0.60	2,423.53
n-Butane	19673	148.76	573,195.66	2.93	11,276.48
Isopentane	21706	73.03	258,096.50	1.59	5,602.24
n-Pentane	21706	66.75	231,935.32	1.45	5,034.39
Cyclopentane	19193				
n-Hexane	19504	9.64	32,325.52	0.19	630.48
Cyclohexane	18684	7.69	25,825.87	0.14	482.53
iC6	19504	19.52	65,837.72	0.38	1,284.10
n-Heptane	19163	10.85	36,392.77	0.21	697.39
Methylcyclohexane	18653				
2,2,4-Trimethylpentane	19053				
Benzene	17256	4.84	16,210.86	0.08	279.73
Toluene	17422	1.98	6,687.28	0.03	116.51
Ethylbenzene	17594	0.14	478.95	0.002	8.43
m-Xylene	17541	0.38	1,315.25	0.01	23.07
n-Octane	19097	6.82	22,978.69	0.13	438.82
n-Nonane	19054	0.37	1,309.03	0.01	24.94
n-Decane	19018	0.19	703.71	0.004	13.38
			TOTAL	**7.84**	**28,800.68**

Pilot Gas Flow Rate	150.00	scf/hr
Pilot Gas Heating Value	1,020	Btu/scf
Pilot Gas Heat Rate	**0.15**	**MMBtu/hr**
Pilot Gas Heat Rate	**1340.28**	**MMBtu/yr**

Total Heat Release	
MMBtu/hr	MMBtu/yr
8.00	**30,140.96**

Pollutant	Emission Factor	Emissions	
	lb/MMBtu	lb/hr	TPY
NOX	0.138	**1.10**	**2.08**
CO	0.2755	**2.20**	**4.15**
SO2	--	**6.91E-05**	**3.03E-04**

Stack Parameters:	
Height (ft):	31
Diameter (ft):	0.50
Temperature (^{o}F):	1,850
Flow (ACFM):	12,345
Velocity (ft/s):	1047.90

GHG Emissions	Emission Factor	Emissions	
	kg/MMBtu	lb/hr	TPY
CO2	53.06	935.29	1,762.89
N2O	0.0001	0.002	0.003
Methane	0.001	0.02	0.03

GHG Emissions Factors from 40 CFR Part 98, Subpart C

Frontier Field Services LLC
Kings Landing Gas Plant
Tanks and Loading Flare

Emission unit number: FL-3030
Source description: Tanks and Loading Flare
Sources Controlled: TK 3012A, TK 3020A, TK 3020B, TK 3020C, L-1

40 CFR 60.18 Flare Compliance

Parameter	Units	Value
Type of Flare	--	Non-assisted
Flare/burner tip diameter	inches	6
Gas Flow Rate	scf/hr	2,360.49
Exit Velocity	m/sec	1.02
Net Heating Value	Btu/scf	3387.26
Net Heating Value (HT)	MJ/scm	126.21
Vmax1	m/sec	77,583.96
Vmax2	m/sec	98.11

Equations used:

A. *(Exit velocity, m/sec) = (Gas Flow Rate, scf/hr) / (3,600 sec/hr) / [[(Diameter, in.) / (1 foot/12 in.) / (2 radii/diameter)]^2 * (pi)] / (3.28084 ft/m)*
B. (*Net Heating Value, MJ/scm) = (Net Heating Value, Btu/scf) x (35.3147 scf/scm) / (947.81712 Btu/MJ)*
C. *Vmax1 = 10 ^ [(H_T + 28.8) / 31.7]* according to 40 CFR 60.18(f)(5), for non-assisted and steam-assisted flares.
D. *Vmax2 = 8.706 + (0.7084 x H_T)* according to 40 CFR 60.18(f)(6), for air-assisted flares.

Non-assisted flare requirements: Must meet A and B below[1]

Rule Reference	Requirements	Individual Requirements Met?	All Requirements Met?
A. **60.18(c)(3)(ii):**	Net Heating Value ≥ 7.45 MJ/scm (200 Btu/scf)	Yes	Yes
B. **60.18(c)(4)(i) - (iii):**	Exit velocity < 18.3 m/sec (60 ft/sec)	Yes	
	OR: Exit Velocity ≥ 18.3 m/sec (60 ft/sec) AND Exit Velocity < 122 m/sec (400 ft/sec) AND Net Heating Value > 37.3 MJ/scm	No	
	OR: Exit Velocity < 122 m/sec (400 ft/sec) AND Exit Velocity < Vmax1	Yes	

Frontier Field Services LLC
Kings Landing Gas Plant
Glycol Dehydrator

Emission unit number: DEHY-1 (Still Vent)
Source description: TEG Dehydration System
Control unit number: FL-3042
Control source description: BTEX Combustor
Control efficiency: 98%
Operating Hours: 8760 hrs/yr

Component	DEHY-1 Waste Stream			Control Efficiency	Controlled Emissions	
	Flash Tank lb/hr	Still Vent lb/hr	Combined lb/hr		lb/hr	TPY
Hydrogen Sulfide		1.16E-04	1.16E-04	98%	2.33E-06	1.02E-05
Nitrogen		0.02	0.02	0%	0.02	0.08
Methane		4.81	4.81	98%	0.10	0.42
Carbon Dioxide		0.00	0.00	0%	0.00	0.00
Ethane		9.93	9.93	98%	0.20	0.87
Propane		16.40	16.40	98%	0.33	1.44
Isobutane		3.65	3.65	98%	0.07	0.32
Butane		14.82	14.82	98%	0.30	1.30
Isopentane		5.69	5.69	98%	0.11	0.50
Pentane		7.15	7.15	98%	0.14	0.63
i-Hexane		4.13	4.13	98%	0.08	0.36
n-Hexane		2.19	2.19	98%	0.04	0.19
Benzene		19.20	19.20	98%	0.38	1.68
Cyclohexane		5.16	5.16	98%	0.10	0.45
i-Heptane		3.06	3.06	98%	0.06	0.27
n-Heptane		0.43	0.43	98%	0.01	0.04
Toluene		8.17	8.17	98%	0.163	0.72
i-Octane		1.72	1.72	98%	0.034	0.15
n-Octane		0.07	0.07	98%	0.001	0.01
Ethylbenzene		0.36	0.36	98%	0.01	0.03
m-Xylene		0.99	0.99	98%	0.02	0.09
o-Xylene				98%		
p-Xylene				98%		
Nonane		0.09	0.09	98%	0.002	0.008
Decane		0.03	0.03	98%	0.001	0.003
Sulfur Dioxide				98%		
Water		4.69	4.69	0%	4.691	20.55
Piperazine				0%		
TEG		5.70E-08	5.70E-08	0%	5.70E-08	2.50E-07
UCARSOL™ AP-814		4.44E-04	4.44E-04	0%	4.44E-04	1.95E-03
Oxygen				0%		
TOTAL	**0.00**	**112.80**	**112.80**		**6.87**	**30.10**
Total VOC	**0.00**	**93.34**	**93.34**		**1.87**	**8.18**
Total HAPs	**0.00**	**28.72**	**28.72**		**0.57**	**2.52**

Frontier Field Services LLC
Kings Landing Gas Plant
Glycol Dehydrator

Emission unit number: DEHY-1 (Still Vent)
Source description: TEG Dehydration System
Control unit number: FL-3042
Control source description: BTEX Combustor
Control efficiency: 98%
Operating Hours: 8760 hrs/yr

Products of Combustion

Pilot Gas Flow Rate	150.00	scf/hr
Pilot Gas Heating Value	1,020	Btu/scf
Pilot Gas Heat Rate	**0.15**	**MMBtu/hr**
Pilot Gas Heat Rate	**1340.28**	**MMBtu/yr**

Waste Gas Flow Rate	870.04	scf/hr
Waste Gas Heating Value	2,382.128	Btu/scf
Waste Gas Heat Rate	**2.0725**	**MMBtu/hr**
Waste Gas Heat Rate	**18155.53**	**MMBtu/yr**

Stack Parameters:	
Height (ft):	42
Diameter (ft):	5.75
Temperature (^{o}F):	1,700
Flow (ACFM):	3,213
Velocity (ft/s):	2.06

	Emission Factor	**Emissions**	
Pollutant	**lb/MMBtu**	**lb/hr**	**TPY**
NOX	0.138	**0.31**	**1.35**
CO	0.2755	**0.61**	**2.69**
SO2	--	**2.14E-04**	**9.38E-04**

GHG Emissions	**Emission Factor**	**Emissions**	
	kg/MMBtu	**lb/hr**	**TPY**
CO2	53.06	260.34	1,140.27
N2O	0.0001	0.000	0.002
Methane	0.001	0.10	0.44

GHG Emissions Factors from 40 CFR Part 98, Subpart C

*CO2 and methane emissions from waste stream added to emissio

Frontier Field Services LLC
Kings Landing Gas Plant
Plant Emergency Flare

Emission unit number: DEHY-1 (Flash Tank)
Source description: Plant Flare
Control efficiency: 98%
Operating Hours: 8760 hrs/yr

Component	DEHY-1 Waste Stream			Control Efficiency	Controlled Emissions	
	Flash Tank lb/hr	Still Vent lb/hr	Combined lb/hr		lb/hr	TPY
Hydrogen Sulfide	6.16E-05		6.16E-05	98%	1.23E-06	5.39E-06
Nitrogen	0.78		0.78	0%	0.78	3.42
Methane	64.39		64.39	98%	1.29	5.64
Carbon Dioxide	3.35E-04		3.35E-04	0%	3.35E-04	1.47E-03
Ethane	48.13		48.13	98%	0.96	4.22
Propane	47.20		47.20	98%	0.94	4.13
Isobutane	8.60		8.60	98%	0.17	0.75
Butane	26.26		26.26	98%	0.53	2.30
Isopentane	8.22		8.22	98%	0.16	0.72
Pentane	9.60		9.60	98%	0.19	0.84
i-Hexane	4.04		4.04	98%	0.08	0.35
n-Hexane	2.38		2.38	98%	0.05	0.21
Benzene	4.11		4.11	98%	0.08	0.36
Cyclohexane	3.34		3.34	98%	0.07	0.29
i-Heptane	3.83		3.83	98%	0.08	0.34
n-Heptane	0.75		0.75	98%	0.02	0.07
Toluene	2.56		2.56	98%	0.051	0.22
i-Octane	2.88		2.88	98%	0.058	0.25
n-Octane	0.19		0.19	98%	0.00	0.02
Ethylbenzene	0.22		0.22	98%	0.00	0.02
m-Xylene	0.56		0.56	98%	0.01	0.05
Nonane	0.31		0.31	98%	0.006	0.03
Decane	0.20		0.20	98%	0.004	0.02
Water	5.72		5.72	0%	5.721	25.06
TEG	0.07		0.07	98%	1.38E-03	6.03E-03
UCARSOL™ AP-814	0.01		0.01	98%	2.20E-04	9.64E-04
TOTAL	**244.36**	**0.00**	**244.36**		**11.26**	**49.32**
Total VOC	**130.98**	**0.00**	**125.26**		**2.51**	**10.97**
Total HAPs	**9.83**	**0.00**	**7.45**		**0.15**	**0.65**

Products of Combustion

Pilot Gas Flow Rate	150.00	scf/hr
Pilot Gas Heating Value	1,020	Btu/scf
Pilot Gas Heat Rate	**0.15**	**MMBtu/hr**
Pilot Gas Heat Rate	**1340.28**	**MMBtu/yr**

Waste Gas Flow Rate	3095.02	scf/hr
Waste Gas Heating Value	1,556	Btu/scf
Waste Gas Heat Rate	**4.8160**	**MMBtu/hr**
Waste Gas Heat Rate	**42187.94**	**MMBtu/yr**

Pollutant	Emission Factor lb/MMBtu	Emissions lb/hr	Emissions TPY
NOX	0.138	**0.69**	**3.00**
CO	0.2755	**1.37**	**6.00**
SO2	--	**1.13E-04**	**4.97E-04**

GHG Emissions	Emission Factor kg/MMBtu	Emissions lb/hr	Emissions TPY
CO2	53.06	581.25	2,545.88
N2O	0.0001	0.001	0.005
Methane	0.001	1.30	5.69

GHG Emissions Factors from 40 CFR Part 98, Subpart C
*CO2 and methane emissions from waste stream added to emissions

40 CFR 60.18 Flare Compliance

Parameter	Units	Value
Type of Flare	--	Non-assisted
Flare/burner tip diameter	inches	54
Gas Flow Rate	scf/hr	3,245.02
Exit Velocity	m/sec	0.02
Net Heating Value	Btu/scf	1531.26
Net Heating Value (HT)	MJ/scm	57.05
Vmax1	m/sec	510.86
Vmax2	m/sec	49.12

Equations used:

A. *(Exit velocity, m/sec) = (Gas Flow Rate, scf/hr) / (3,600 sec/hr) / [[(Diameter, in.) / (1 foot/12 in.) / (2 radii/diameter)]^2 * (pi)] / (3.28084 ft/m)*
B. *(Net Heating Value, MJ/scm) = (Net Heating Value, Btu/scf) x (35.3147 scf/scm) / (947.81712 Btu/MJ)*
C. *Vmax1 = 10 ^ [(H_T + 28.8) / 31.7]* according to 40 CFR 60.18(f)(5), for non-assisted and steam-assisted flares.
D. *Vmax2 = 8.706 + (0.7084 x H_T)* according to 40 CFR 60.18(f)(6), for air-assisted flares.

Non-assisted flare requirements: Must meet A and B below[1]

Rule Reference	Requirements	Individual Requirements Met?	All Requirements Met?
A. **60.18(c)(3)(ii):**	Net Heating Value ≥ 7.45 MJ/scm (200 Btu/scf)	Yes	Yes
B. **60.18(c)(4)(i) - (iii):**	Exit velocity < 18.3 m/sec (60 ft/sec)	Yes	
	OR: Exit Velocity ≥ 18.3 m/sec (60 ft/sec) AND Exit Velocity < 122 m/sec (400 ft/sec) AND Net Heating Value > 37.3 MJ/scm	No	
	OR: Exit Velocity < 122 m/sec (400 ft/sec) AND Exit Velocity < Vmax1	Yes	

Frontier Field Services LLC
Kings Landing Gas Plant
SSM

Emission unit number:	SSM
Source description:	SSM
Control unit number:	FL-3015
Control source description:	Plant Flare
Control efficiency:	98%
Total SSM Flaring Hours at Avg Rate:	1000
Max Flared Volume:	2,083,333 scfh
Avg Flared Volume:	750,000 scfh

SSM Waste Stream

Component	MW	Mol %	SSM Waste Stream Flow						Control Efficiency	Controlled Emissions		BTU/SCF (LHV)	Net Heat Release		
			lb/hr	tpy	scf/hr	MMscf/yr	mol/hr	mol/yr		lb/hr	tpy		BTU/scf	BTU/hr	MMBTU/yr
Nitrogen	28.01	1.69%	2,600.18	468.03	35,229.14	12.68	92.83	33,418.95	0%	2,600.18	468.03		0	0	0
CO2	44.01	2.02%	4,876.22	877.72	42,047.86	15.14	110.80	39,887.30	0%	4,876.22	877.72		0	0	0
H2S	34.08	0.01%	18.71	3.37	208.33	0.08	0.55	197.63	98%	0.37	0.07		0	0	0
Methane	16.04	74.51%	65,613.71	11,810.47	1,552,394.26	558.86	4090.63	1,472,627.21	98%	1,312.27	236.21	909.4	677.64	1,411,747,343	508,229
Ethane	30.07	12.06%	19,900.55	3,582.10	251,155.87	90.42	661.81	238,250.67	98%	398.01	71.64	1618.7	195.14	406,546,010	146,357
Propane	44.09	5.73%	13,872.96	2,497.13	119,410.03	42.99	314.65	113,274.35	98%	277.46	49.94	2314.9	132.68	276,422,270	99,512
i-Butane	58.12	0.74%	2,374.06	427.33	15,501.67	5.58	40.85	14,705.14	98%	47.48	8.55	3000.4	22.33	46,511,210	16,744
n-Butane	58.12	1.76%	5,625.10	1,012.52	36,729.60	13.22	96.78	34,842.31	98%	112.50	20.25	3010.8	53.08	110,585,468	39,811
i-Pentane	72.15	0.42%	1,661.08	298.99	8,737.06	3.15	23.02	8,288.12	98%	33.22	5.98	3699	15.51	32,318,370	11,635
n-Pentane	72.15	0.44%	1,723.34	310.20	9,064.54	3.26	23.89	8,598.77	98%	34.47	6.20	3706.9	16.13	33,601,338	12,096
Benzene	78.11	0.05%	224.71	40.45	1,091.76	0.39	2.88	1,035.67	98%	4.49	0.81	3601	1.89	3,931,445	1,415
n-Hexane	86.17	0.09%	416.97	75.06	1,836.39	0.66	4.84	1,742.03	98%	8.34	1.50	4403.8	3.88	8,087,101	2,911
Other Hexanes	86.18	0.23%	1,084.27	195.17	4,774.68	1.72	12.58	4,529.34	98%	21.69	3.90	4415	10.12	21,080,191	7,589
Toluene	92.13	0.03%	146.27	26.33	602.50	0.22	1.59	571.54	98%	2.93	0.53	4285	1.24	2,581,696	929
Other Heptanes	100.2	0.12%	653.80	117.68	2,476.23	0.89	6.52	2,348.99	98%	13.08	2.35	5100	6.06	12,628,751	4,546
Ethylbenzene	106.17	0.00%	13.30	2.39	47.53	0.02	0.13	45.08	98%	0.27	0.05	4970	0.11	236,206	85
Xylenes	106.17	0.01%	37.21	6.70	133.00	0.05	0.35	126.16	98%	0.74	0.13	4980	0.32	662,329	238
Other Octanes	114.23	0.07%	466.73	84.01	1,550.59	0.56	4.09	1,470.92	98%	9.33	1.68	5796	4.31	8,987,221	3,235
Nonanes	128.26	0.01%	44.94	8.09	132.96	0.05	0.35	126.13	98%	0.90	0.16	6493.2	0.41	863,315	311
Decanes plus (C10+)	142.28	0.00%	30.36	5.46	80.97	0.03	0.21	76.81	98%	0.61	0.11	7189.5	0.28	582,113	210
	TOTAL	**99.99%**	**121,384.45**	**21,849.20**	**2,083,204.94**	**749.95**	**5,489.34**	**1,976,163.10**		**lb/hr**	**tpy**		1,141	2,377,372,377	855,854
									VOC	**567.50**	**102.15**				
									SO2	**35.134**	**6.32**				
									H2S	**0.37**	**0.07**				

Net Heat Release		
	lb/hr	**tpy**
NOx	**328.08**	**59.05**
CO	**654.97**	**117.89**

Total Heat Release	
MMBtu/hr	**MMBtu/yr**
2,377.23	**855,801.58**

GHG Emissions Calculations	CO2		N2O		Methane	
Emission Factor:	53.06	kg/MMBtu	0.0001	kg/MMBtu	0.001	kg/MMBtu
Calculated Emissions:	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	282,954.82	50,931.88	0.52	0.09	1317.52	237.15

GHG Emissions Factors from 40 CFR Part 98, Subpart C

*CO2 and methane emissions from waste stream added to emissions

Frontier Field Services LLC
Kings Landing Gas Plant
SSM

Emission unit number:	SSM	
Source description:	SSM	
Control unit number:	FL-3015	
Control source description:	Plant Flare	
Control efficiency:	98%	
Total SSM Flaring Hours at Avg Rate:	1000	
Max Flared Volume:	2,083,333	scfh
Avg Flared Volume:	750,000	scfh

40 CFR 60.18 Flare Compliance

Parameter	Units	Value
Type of Flare	--	Non-assisted
Flare/burner tip diameter	inches	54
Gas Flow Rate	scf/hr	2,083,204.94
Exit Velocity	m/sec	11.09
Net Heating Value	Btu/scf	1141.14
Net Heating Value (HT)	MJ/scm	42.52
Vmax1	m/sec	177.73
Vmax2	m/sec	38.83

Equations used:

A. *(Exit velocity, m/sec) = (Gas Flow Rate, scf/hr) / (3,600 sec/hr) / [[(Diameter, in.) / (1 foot/12 in.) / (2 radii/diameter)]^2 * (pi)] / (3.28084 ft/m)*

B. (*Net Heating Value, MJ/scm) = (Net Heating Value, Btu/scf) x (35.3147 scf/scm) / (947.81712 Btu/MJ)*

C. *Vmax1 = 10 ^ [(H_T + 28.8) / 31.7]* according to 40 CFR 60.18(f)(5), for non-assisted and steam-assisted flares.

D. *Vmax2 = 8.706 + (0.7084 x H_T)* according to 40 CFR 60.18(f)(6), for air-assisted flares.

Non-assisted flare requirements: Must meet A and B below[1]

Rule Reference	Requirements	Individual Requirements Met?	All Requirements Met?
A. **60.18(c)(3)(ii):**	Net Heating Value ≥ 7.45 MJ/scm (200 Btu/scf)	Yes	Yes
B. **60.18(c)(4)(i) - (iii):**	Exit velocity < 18.3 m/sec (60 ft/sec)	Yes	
	OR: Exit Velocity ≥ 18.3 m/sec (60 ft/sec) AND Exit Velocity < 122 m/sec (400 ft/sec) AND Net Heating Value > 37.3 MJ/scm (1,000	No	
	OR: Exit Velocity < 122 m/sec (400 ft/sec) AND Exit Velocity < Vmax1	Yes	

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Gas Treatment - Train 1

Emission unit number: AMINE-1
Source description: Amine Treating System
Amine System Inlet: 191.92 MSCFH
Control unit number: TO-1
Control source description: Thermal Oxidizer
Control efficiency: 99%
Operating Hours: 8760 hrs/yr

Component	Emissions to Thermal Oxidizer			Control Efficiency	Controlled Emissions	
	Amine Flash Tank	Amine Still Vent	Total			
	lb/hr	lb/hr	lb/hr		lb/hr	TPY
Hydrogen Sulfide	0.07	26.56	26.63	99%	0.27	1.17
Nitrogen	2.51	0.10	2.61	0%	2.61	11.44
Carbon Dioxide	36.93	19896.96	19933.89	0%	19,933.89	87,310.45
Methane	154.89	18.36	173.25	99%	1.73	7.59
Ethane	51.21	9.04	60.26	99%	0.60	2.64
Propane	24.15	3.47	27.61	99%	0.28	1.21
Isobutane	2.70	0.30	3.00	99%	0.03	0.13
Butane	8.75	1.40	10.15	99%	0.10	0.44
Isopentane	1.10	0.09	1.18	99%	0.01	0.05
Pentane	1.45	0.15	1.60	99%	0.02	0.07
Neohexane	0.00E+00	0.00E+00	0.00E+00	99%	0.00E+00	0.00E+00
Cyclopentane	0.00E+00	0.00E+00	0.00E+00	99%	0.00E+00	0.00E+00
2,3-Dimethylbutane	0.41	0.03	0.44	99%	4.42E-03	0.02
n-Hexane	0.22	0.02	0.23	99%	2.35E-03	0.01
Benzene	1.88	24.34	26.23	99%	0.26	1.15
Cyclohexane	0.88	0.43	1.31	99%	0.01	0.06
3,3-Dimethylpentane	0.15	6.05E-03	0.15	99%	1.52E-03	6.65E-03
Heptane	0.03	1.07E-03	0.03	99%	2.70E-04	1.18E-03
Toluene	1.01	12.56	13.56	99%	0.14	0.59
i-Octane	0.09	3.23E-03	0.09	99%	9.06E-04	3.97E-03
n-Octane	5.89E-03	2.75E-04	6.16E-03	99%	6.16E-05	2.70E-04
Ethylbenzene	0.08	0.81	0.88	99%	8.85E-03	0.04
m-Xylene	0.20	3.00	3.20	99%	0.03	0.14
Nonane	3.53E-03	7.26E-05	3.61E-03	99%	3.61E-05	1.58E-04
Decane	6.39E-04	4.20E-06	6.43E-04	99%	6.43E-06	2.82E-05
Water	8.88	669.85	678.73	0%	678.73	2,972.83
TEG	5.57E-08	0.00E+00	5.57E-08	0%	5.57E-08	2.44E-07
UCARSOL™ AP-814	6.14E-03	1.22E-10	6.14E-03	0%	6.14E-03	0.03
Oxygen	0.00E+00	0.00E+00	0.00E+00	0%	0.00E+00	0.00E+00
TOTAL	297.60	20667.47	20965.07	**TOTAL**	**20,618.74**	**90,310.07**
Total VOC	43.09	46.60	89.69	**Total VOC**	**0.90**	**3.93**
Total HAPs	0.93	3.85	4.78	**Total HAPs**	**0.05**	**0.21**

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Gas Treatment - Train 1

Emission unit number:	AMINE-1	
Source description:	Amine Treating System	
Amine System Inlet:	191.92	MSCFH
Control unit number:	TO-1	
Control source description:	Thermal Oxidizer	
Control efficiency:	99%	
Operating Hours:	8760	hrs/yr

Products of Combustion

Maximum Burner Firing Rate	**20**	**MMBtu/hr**
Annual Burner Firing Rate	**175,200**	**MMBtu/yr**

Waste Gas Flow Rate	191,919.16	scf/hr
Waste Gas Heating Value	42.61	Btu/scf
Waste Gas Heat Rate	**8.18**	**MMBtu/hr**
Waste Gas Heat Rate	**71,643.04**	**MMBtu/yr**

Stack Parameters:	
Height (ft):	75
Diameter (ft):	1.50
Temperature (^{o}F):	1,600
Flow (ACFM):	27,538
Velocity (ft/s):	259.72

Pollutant	**Emission Factor**	**Emissions**	
	lb/MMBtu	**lb/hr**	**TPY**
NOX	0.0641	**1.28**	**5.62**
CO	0.5496	**10.99**	**48.14**
SO2	--	**50.06**	**219.27**

GHG Emissions	**Emission Factor**	**Emissions**	
	kg/MMBtu	**lb/hr**	**TPY**
CO2	53.06	3,297.93	14,444.95
N2O	0.0001	0.006	0.027
Methane	0.001	19,933.95	87,310.72

GHG Emissions Factors from 40 CFR Part 98, Subpart C

*CO2 and methane emissions from waste stream added to emissions

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Flare (Pilot Gas Only)

Emission unit number:	FL-1318
Source description:	Amine Flare (Pilot)
Pilot flow rate	200 scf/hr
Control unit number:	FL-1318
Control source description:	Amine Flare (Pilot)
Control efficiency:	98%
Operating Hours:	8760 hrs/yr

Component	Pilot Emissions to the Flare		Control Efficiency	Controlled Emissions	
	Pilot lb/hr	Pilot TPY		lb/hr	TPY
Hydrogen Sulfide	3.69E-08	1.62E-07	98%	7.39E-10	3.24E-09
Nitrogen	0.19	0.83	0%	0.19	0.83
Carbon Dioxide	1.61E-06	7.07E-06	0%	1.61E-06	7.07E-06
Methane	8.38	36.70	98%	0.17	0.73
Ethane	0.19	0.83	98%	3.78E-03	0.02
Propane	2.15E-03	0.01	98%	4.29E-05	1.88E-04
Isobutane	1.86E-05	8.16E-05	98%	3.73E-07	1.63E-06
Butane	2.76E-05	1.21E-04	98%	5.52E-07	2.42E-06
Isopentane	2.51E-07	1.10E-06	98%	5.02E-09	2.20E-08
Pentane	2.46E-07	1.08E-06	98%	4.92E-09	2.16E-08
Neohexane	0.00E+00	0.00E+00	98%	0.00E+00	0.00E+00
Cyclopentane	0.00E+00	0.00E+00	98%	0.00E+00	0.00E+00
2,3-Dimethylbutane	1.09E-08	4.79E-08	98%	2.19E-10	9.58E-10
n-Hexane	1.32E-09	5.79E-09	98%	2.64E-11	1.16E-10
Benzene	3.83E-09	1.68E-08	98%	7.66E-11	3.36E-10
Cyclohexane	5.06E-10	2.22E-09	98%	1.01E-11	4.43E-11
3,3-Dimethylpentane	7.59E-10	3.33E-09	98%	1.52E-11	6.65E-11
Heptane	1.98E-11	8.69E-11	98%	3.97E-13	1.74E-12
Toluene	9.21E-11	4.04E-10	98%	1.84E-12	8.07E-12
i-Octane	7.14E-11	3.13E-10	98%	1.43E-12	6.26E-12
n-Octane	1.56E-13	6.82E-13	98%	3.12E-15	1.36E-14
Ethylbenzene	2.29E-13	1.00E-12	98%	4.58E-15	2.01E-14
m-Xylene	4.49E-13	1.97E-12	98%	8.99E-15	3.94E-14
Nonane	8.70E-15	3.81E-14	98%	1.74E-16	7.62E-16
Decane	0.00E+00	0.00E+00	98%	0.00E+00	0.00E+00
TOTAL	8.76	38.37	**TOTAL**	**0.36**	**1.58**
Total VOC	0.002	0.01	**Total VOC**	**4.39E-05**	**1.92E-04**
Total HAPs	1.18E-08	5.15E-08	**Total HAPs**	**2.35E-10**	**1.03E-09**

Net Heating Value (LHV) (Btu/scf)	905.29
Molecular Weight	16.61
Operating Hours	8,760
Mass Flow (lb/hr)	8.76
Volumetric Flow (scf/hr)	200
Heat Release (MMBtu/hr)	0.18

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Flare (Pilot Gas Only)

Emission unit number:	FL-1318	
Source description:	Amine Flare (Pilot)	
Pilot flow rate	200	scf/hr
Control unit number:	FL-1318	
Control source description:	Amine Flare (Pilot)	
Control efficiency:	98%	
Operating Hours:	8760	hrs/yr

Products of Combustion

Pollutant	Emission Factor	Emission Factor Units	Emissions	
			lb/hr	TPY
NOX	0.138	lb/MMBtu	**0.02**	**0.11**
CO	0.2755	lb/MMBtu	**0.05**	**0.22**
SO2	--	--	**6.94E-08**	**3.04E-07**

Criteria Pollutants

Pollutant	Emissions	
	lb/hr	TPY
NOX	**0.02**	**0.11**
CO	**0.05**	**0.22**
VOC	**4.39E-05**	**1.92E-04**
H2S	**7.39E-10**	**3.24E-09**
SO2	**6.94E-08**	**3.04E-07**

GHG Emissions	Emission Factor	Emissions	
	kg/MMBtu	lb/hr	TPY
CO2	53.06	21.18	92.77
N2O	0.0001	3.99E-05	1.75E-04
Methane	0.001	3.99E-04	1.75E-03

GHG Emissions Factors from 40 CFR Part 98, Subpart C

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Gas Flaring - SSM

Emission unit number: AMINE-1 (SSM)
Source description: Amine Treating System
Amine System Inlet: 220 MMSCFD
Control unit number: FL-1318
Control source description: Amine Flare (SSM)
Control efficiency: 98%
Operating Hours: 876 hrs/yr

Component	Hourly Emissions to the Flare				Annual Emissions to the Flare				Control Efficiency	Controlled Emissions	
	Assist	Amine Flash Tank	Amine Still Vent	Total	Assist	Amine Flash Tank	Amine Still Vent	Total			
	lb/hr	lb/hr	lb/hr	lb/hr	TPY	TPY	TPY	TPY		lb/hr	TPY
Hydrogen Sulfide	7.94E-06	0.073	26.558	26.63	3.48E-06	3.21E-02	11.63	11.66	98%	0.53	0.23
Nitrogen	40.95	2.514	0.097	43.56	17.94	1.10	0.04	19.08	0%	43.56	19.08
Methane	1801.25	154.891	18.359	1974.50	788.95	67.84	8.04	864.83	98%	39.49	17.30
Carbon Dioxide	3.47E-04	36.934	19896.958	19,933.89	1.52E-04	16.18	8,714.87	8,731.05	0%	19,933.89	8,731.05
Ethane	40.64	51.213	9.044	100.90	17.80	22.43	3.96	44.19	98%	2.02	0.88
Propane	0.46	24.148	3.467	28.08	0.20	10.58	1.52	12.30	98%	0.56	0.25
Isobutane	4.01E-03	2.703	0.297	3.00	1.75E-03	1.18	0.13	1.32	98%	0.06	0.03
Butane	0.01	8.746	1.403	10.16	2.60E-03	3.83	0.61	4.45	98%	0.20	0.09
Isopentane	5.40E-05	1.098	0.086	1.18	2.36E-05	0.48	0.04	0.52	98%	0.02	0.01
Pentane	5.29E-05	1.450	0.147	1.60	2.32E-05	0.64	0.06	0.70	98%	0.03	0.01
i-Hexane	2.35E-06	0.411	0.031	0.44	1.03E-06	0.18	0.01	0.19	98%	0.01	0.004
n-Hexane	2.84E-07	0.218	0.016	0.23	1.24E-07	0.10	0.01	0.10	98%	0.00	0.002
Benzene	8.24E-07	1.881	24.345	26.23	3.61E-07	0.82	10.66	11.49	98%	0.52	0.23
Cyclohexane	1.09E-07	0.879	0.432	1.31	4.77E-08	0.39	0.19	0.57	98%	0.03	0.01
i-Heptane	1.63E-07	0.146	0.006	0.15	7.15E-08	0.06	0.00	0.07	98%	0.00	0.001
n-Heptane	4.27E-09	0.026	0.001	0.03	1.87E-09	0.01	0.00	0.01	98%	0.001	2.37E-04
Toluene	1.98E-08	1.008	12.557	13.56	8.68E-09	0.44	5.50	5.94	98%	0.27	0.12
i-Octane	1.54E-08	0.087	0.003	0.09	6.73E-09	0.04	0.00	0.04	98%	0.002	7.94E-04
n-Octane	3.35E-11	0.006	0.000	0.01	1.47E-11	0.00	0.00	0.00	98%	1.23E-04	5.40E-05
Ethylbenzene	4.92E-11	0.076	0.809	0.88	2.16E-11	0.03	0.35	0.39	98%	0.02	0.01
m-Xylene	9.66E-11	0.204	2.997	3.20	4.23E-11	0.09	1.31	1.40	98%	0.06	0.03
Nonane	0.00E+00	0.004	0.000	0.00	0.00E+00	0.00	0.000	0.00	98%	7.21E-05	3.16E-05
Decane	0.00E+00	0.001	0.000	0.00	0.00E+00	0.00	0.000	0.00	98%	1.29E-05	5.63E-06
Water	0.00E+00	8.876	669.853	678.73	0.00E+00	3.89	293.40	297.28	0%	678.73	297.28
UCARSOL™ AP-814	0.00E+00	0.006	0.000	0.01	0.00E+00	0.00	5.35E-11	0.00	0%	0.01	0.00
TOTAL	1883.31	297.60	20,667.47	**22,848.38**	824.89	130.35	9,052.35	**10,007.59**	**TOTAL**	**20,700.04**	**9,066.62**
Total VOC	0.471	43.09	46.60	**90.16**	0.21	18.87	20.41	**39.49**	**Total VOC**	**1.80**	**0.79**
Total HAPs	1.13E-06	3.39	40.72	**44.11**	4.94E-07	1.48	17.84	**19.32**	**Total HAPs**	**0.88**	**0.39**
Net Heating Value (LHV) (Btu/scf)	905.29	1,116.19	12.90	**200.52**							
Molecular Weight	16.61	21.85	42.00	**36.91**							
Operating Hours	876	876	876	**876**							
Mass Flow (lb/hr)	1,883.31	297.60	20,667.47	**22,848**							
Volumetric Flow (scf/hr)	43,000	5,168.56	186,750.60	**234,919**							
Heat Release (MMBtu/hr)	38.93	5.77	2.41	**47.11**							

Frontier Field Services LLC
Kings Landing Gas Plant
Amine Gas Flaring - SSM

Emission unit number: AMINE-1 (SSM)
Source description: Amine Treating System
Amine System Inlet: 220 MMSCFD
Control unit number: FL-1318
Control source description: Amine Flare (SSM)
Control efficiency: 98%
Operating Hours: 876 hrs/yr

Products of Combustion

Pollutant	Emission Factor	Emission Factor Units	Emissions	
			lb/hr	TPY
NOX	0.0641	lb/MMBtu	**3.02**	**1.32**
CO	0.5496	lb/MMBtu	**25.89**	**11.34**
SO2	--	--	**50.06**	**21.93**

Criteria Pollutants

Pollutant	Emissions	
	lb/hr	TPY
NOX	**3.02**	**1.32**
CO	**25.89**	**11.34**
VOC	**1.803**	**0.79**
H2S	**0.53**	**0.23**
SO2	**50.06**	**21.93**

GHG Emissions	Emission Factor	Emissions	
	kg/MMBtu	lb/hr	TPY
CO2	53.06	5,510.27	2,413.50
N2O	0.0001	0.01	0.005
Methane	0.001	0.10	0.05

GHG Emissions Factors from 40 CFR Part 98, Subpart C

40 CFR 60.18 Flare Compliance

Parameter	Units	Value
Type of Flare	--	Non-assisted
Flare/burner tip diameter	inches	21.6
Gas Flow Rate	scf/hr	234,919.16
Exit Velocity	m/sec	7.82
Net Heating Value	Btu/scf	200.52
Net Heating Value (HT)	MJ/scm	7.47
Vmax1	m/sec	13.94
Vmax2	m/sec	14.00

Equations used:

A. *(Exit velocity, m/sec) = (Gas Flow Rate, scf/hr) / (3,600 sec/hr) / [[(Diameter, in.) / (1 foot/12 in.) / (2 radii/diameter)]^2 * (pi)] / (3.28084 ft/m)*
B. *(Net Heating Value, MJ/scm) = (Net Heating Value, Btu/scf) x (35.3147 scf/scm) / (947.81712 Btu/MJ)*
C. *Vmax1 = 10 ^ [(H_T + 28.8) / 31.7]* according to 40 CFR 60.18(f)(5), for non-assisted and steam-assisted flares.
D. *Vmax2 = 8.706 + (0.7084 x H_T)* according to 40 CFR 60.18(f)(6), for air-assisted flares.

Non-assisted flare requirements: Must meet A and B below[1]

Rule Reference	Requirements	Individual Requirements Met?	All Requirements Met?
A. **60.18(c)(3)(ii):**	Net Heating Value ≥ 7.45 MJ/scm (200 Btu/scf)	Yes	Yes
B. **60.18(c)(4)(i) - (iii):**	Exit velocity < 18.3 m/sec (60 ft/sec)	Yes	
	OR: Exit Velocity ≥ 18.3 m/sec (60 ft/sec) AND Exit Velocity < 122 m/sec (400 ft/sec) AND Net Heating Value > 37.3	No	
	OR: Exit Velocity < 122 m/sec (400 ft/sec) AND Exit Velocity < Vmax1	Yes	

Frontier Field Services LLC
Kings Landing Gas Plant
Fugitives

Emission unit number: FUG-1
Source description: Fugitives

Component	Service	Count	Emission Factor lb/hr-source	Uncontrolled Losses		Control Factor	Controlled Losses	
				lb/hr	tpy		lb/hr	tpy
Valves	Gas	900	0.00992	8.93	39.10	0.00%	8.93	39.10
	Light Liquid	300	0.0055	1.65	7.23	0.00%	1.65	7.23
Flanges	Gas	4,500	0.00086	3.87	16.95	0.00%	3.87	16.95
	Light Liquid	500	0.000243	0.12	0.53	0.00%	0.12	0.532
Connectors	Gas	1,000	0.00044	0.44	1.93	0.00%	0.44	1.93
	Light Liquid	500	0.000463	0.23	1.01	0.00%	0.23	1.01
Pumps	Light Liquid	8	0.02866	0.23	1.00	0.00%	0.23	1.00
Other	Gas	85	0.0194	1.65	7.22	0.00%	1.65	7.22
Totals		**7,793**		**17.12**	**74.98**		**17.12**	**74.98**
						Gas Service:	**14.89**	**65.21**
						Liquid Service:	**2.23**	**9.78**

Component	Inlet Gas wt%	Gas Service Emission Rate		Condensate wt%	Liquid Service Emission Rate		Total Emission Rate	
		lb/hr	tpy		lb/hr	tpy	lb/hr	tpy
Hydrogen Sulfide	0.005%	8.03E-04	3.52E-03	0.000%	1.1234E-08	4.92054E-08	**8.03E-04**	**3.52E-03**
Nitrogen	2.142%	0.319	1.397	0.000%	2.2463E-12	9.83888E-12	**0.32**	**1.40**
Carbon Dioxide	4.017%	0.598	2.619	0.000%	5.573E-09	2.44096E-08	**0.60**	**2.62**
Methane	54.061%	8.048	35.251	0.000%	6.5646E-09	2.87529E-08	**8.05**	**35.25**
Ethane	16.394%	2.441	10.689	0.000%	1.0177E-05	4.45749E-05	**2.44**	**10.69**
Propane	11.430%	1.702	7.453	0.109%	0.002	0.011	**1.70**	**7.46**
Isobutane	1.956%	0.291	1.275	1.399%	0.031	0.137	**0.32**	**1.41**
Butane	4.634%	0.690	3.022	9.168%	0.205	0.896	**0.89**	**3.92**
Isopentane	1.368%	0.204	0.892	9.763%	0.218	0.955	**0.42**	**1.85**
Pentane	1.420%	0.211	0.926	11.465%	0.256	1.121	**0.47**	**2.05**
i-Hexane				7.346%	0.164	0.718	**0.16**	**0.72**
Cyclohexane								
2,3-Dimethylbutane	0.604%	0.090	0.394				**0.09**	**0.39**
n-Hexane	0.344%	0.051	0.224	5.028%	0.112	0.492	**0.16**	**0.72**
Benzene	0.185%	0.028	0.121	2.828%	0.063	0.276	**0.09**	**0.40**
Cyclohexane	0.283%	0.042	0.184	5.383%	0.120	0.526	**0.16**	**0.71**
3,3-Dimethylpentane	0.450%	0.067	0.293				**0.07**	**0.29**
Heptanes	0.089%	0.013	0.058	13.067%	0.292	1.278	**0.30**	**1.34**
Toluene	0.121%	0.018	0.079	3.804%	0.085	0.372	**0.10**	**0.45**
i-Octane	0.362%	0.054	0.236	10.076%	0.225	0.985	**0.28**	**1.22**
n-Octane	0.022%	0.003	0.014	1.383%	0.031	0.135	**0.03**	**0.15**
Ethylbenzene	0.011%	0.002	0.007	0.811%	0.018	0.079	**0.02**	**0.09**
m-Xylene	0.031%	0.005	0.020	2.461%	0.055	0.241	**0.06**	**0.26**
Nonane	0.037%	0.006	0.024	6.125%	0.137	0.599	**0.14**	**0.62**
Decane	0.025%	0.004	0.016	9.784%	0.218	0.957	**0.22**	**0.97**
Water	0.010%	0.002	0.007	0.000%	1.82E-09	7.97E-09	**0.002**	**0.007**
TEG	0.000%	1.85E-05	8.10E-05				**1.8E-05**	**8.1E-05**
UCARSOL™ AP-814								
Oxygen								
						TOTAL	**17.12**	**74.98**
						Total VOC	**5.71**	**25.02**
						Total H2S	**0.0008**	**0.004**
						Total HAPs	**0.44**	**1.91**

Frontier Field Services LLC
Kings Landing Gas Plant
Haul Roads

Emission unit number: HAUL
Source description: Haul Road Emissions

Parameter	Value	Unit
Empty Vehicle Weight[1]	16	ton
Load Size [2]	21.2	ton
Loaded Vehicle Weight[3]	37.2	ton
Mean Vehicle Weight[4]	26.6	ton
Vehicles Per Day [5]	14	VPD
Vehicles Per Year	5069	VPY
Segment Length	0.25	mile
Trips per Segment	2	-
Effective Segment Length[6]	0.5	mile
Trips per Hour[7]	4	-
Wet Days[8]	60	day
Surface Silt Content	0.6	g/m^2
Vehicle miles traveled[9]	2	mile/hr
Control Efficiency	0	%

[1] Empty vehicle weight includes driver and occupants and full fuel load.
[2] Include cargo, transported materials, etc. (5.6 lb/gal RVP10 *7560 gal truck/ 2000lb/ton)
[3] Loaded vehicle weight = Empty + Load Size
[4] Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2
[5] Vehicles per day = (Turnovers/year) / (365 days/year)
[6] Effective segment length = trips per segment * segment length
[7] Trips per hour = Vehicles per day * Segments per trip ÷ Hours of Operation per Day
[8] Wet days is the NM default allowed by NMED without additional justification
[9] VMT/hr = Vehicle Miles Traveled per hour= Trips per hour * Segment Length

Emission Factors and Constants			
Parameter	**PM**	**PM_{10}**	**$PM_{2.5}$**
k, lb/VMT[10]	0.011	0.0022	0.00054
Hourly EF, lb/VMT[11]	0.20	0.04	0.01
Annual EF, lb/VMT[12]	0.19	0.04	0.01

Haul Road Emission Calculations				
Emission Rate	**PM**	**PM_{10}**	**$PM_{2.5}$**	**Calculation basis**
Hourly (lb/hr)	0.39	0.08	0.02	lb/hr = Hourly EF (lb/VMT) * VMT (mile/hr)
Annual (ton/year)	0.24	0.05	0.01	ton/yr =Annual EF (lb/VMT) * VMT (mile/Trip) * Trips per year (Trip/yr) / 2000 (lb/tpy)

[10] Table 13.2.1-1, Particle Size Multipliers for Paved Road Equation
[11] AP-42 13.2.1, Equation 1

$E = k\,(sL)^{0.91} \times (W)^{1.02}$

where: E = particulate emission factor (having units matching the units of k),
k = particle size multiplier for particle size range and units of interest,
sL = road surface silt loading (grams per square meter) (g/m^2), and
W = average weight (tons) of the vehicles traveling the road.

[12] AP-42 13.2.1, Equation 2

$E_{ext} = [\,k\,(sL)^{0.91} \times (W)^{1.02}\,]\,(1 - P/4N)$

where k , sL , W, and S are as defined in Equation 1 and
E ext = annual or other long-term average emission factor in the same units as k,
P = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly).

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.

3.0 DESIGN BASIS

3.1 Site Conditions

Barometric Pressure, psia	14.7
Temperature, °F	0 / 110
Design Relative Humidity, %	90
Wind Design	ASCE/SEI 7-16
Seismic Design	ASCE/SEI 7-16

3.2 Waste and Fuel Stream Summary

Case 1 – Considering each waste stream introduced individually.

Composition	Fuel Gas	901	902	903	904
H2S	0*	0.000654662	5.34533E-07	5.96431E-05	7.84022E-08
N2	0.0221098*	7.20738E-06	0.000297360	0.00675192	0.00341599
CO2	2.99997E-05*	0.919691	1.38347E-06	0.0497921	8.31592E-07
C1	0.970400*	0.00233289	0.133175	0.719356	0.493826
C2	0.00727993*	0.000605414	0.147211	0.126086	0.197646
C3	0.000179998*	0.000157871	0.165786	0.0404943	0.132317
iC4	0*	1.03097E-05	0.0279524	0.00345651	0.0184060
nC4	0*	4.82376E-05	0.112657	0.0110979	0.0558776
iC5	0*	2.39578E-06	0.0349934	0.00112606	0.0141349
nC5	0*	4.09042E-06	0.0437589	0.00148776	0.0165460
nC6	0*	3.68413E-07	0.0112806	0.000181661	0.00333181
Benzene	0*	0.000602696	0.110881	0.00172193	0.00644458
Cyclohexane	0*	1.02940E-05	0.0286057	0.000776505	0.00498024
3,3-Dimethylpentane	0*	1.19875E-07	0.0140301	0.000107274	0.00483945
C7	0*	2.11754E-08	0.00204035	1.91451E-05	0.000938360
Toluene	0*	0.000252051	0.0385869	0.000752100	0.00327654
i-Octane	0*	5.77773E-08	0.00678654	5.79318E-05	0.00324253
C8	0*	4.89031E-09	0.000258358	3.85781E-06	0.000208050
Ethylbenzene	0*	1.30124E-05	0.00133153	4.55651E-05	0.000223132
m-Xylene	0*	5.14348E-05	0.00399890	0.000130201	0.000618721
C9	0*	4.21828E-10	0.000249754	1.24798E-06	0.000301902
C10	0*	5.71140E-11	8.49075E-05	3.25239E-07	0.000173588
H2O	0*	0.0755560	0.116030	0.0364902	0.0391761
TEG	0*	0	1.68439E-10	2.08060E-11	5.65624E-05
UCARSOL™ AP-814	0*	2.44001E-15	1.85492E-06	3.91993E-06	1.71267E-05
Flowrate (lb/h)	-	20,600.10	103.93	284.62	229.97
Temperature (F)	85	119.90	120.48	148.08	209.01

Case 2 – Acid Gas (901) only.

Composition	Fuel Gas	901	902	903	904
H2S	0*	0.000654662	-	-	-
N2	0.0221098*	7.20738E-06	-	-	-
CO2	2.99997E-05*	0.919691	-	-	-
C1	0.970400*	0.00233289	-	-	-
C2	0.00727993*	0.000605414	-	-	-
C3	0.000179998*	0.000157871	-	-	-
iC4	0*	1.03097E-05	-	-	-
nC4	0*	4.82376E-05	-	-	-
iC5	0*	2.39578E-06	-	-	-
nC5	0*	4.09042E-06	-	-	-
nC6	0*	3.68413E-07	-	-	-
Benzene	0*	0.000602696	-	-	-
Cyclohexane	0*	1.02940E-05	-	-	-
3,3-Dimethylpentane	0*	1.19875E-07	-	-	-
C7	0*	2.11754E-08	-	-	-
Toluene	0*	0.000252051	-	-	-
i-Octane	0*	5.77773E-08	-	-	-
C8	0*	4.89031E-09	-	-	-
Ethylbenzene	0*	1.30124E-05	-	-	-
m-Xylene	0*	5.14348E-05	-	-	-
C9	0*	4.21828E-10	-	-	-
C10	0*	5.71140E-11	-	-	-
H2O	0*	0.0755560	-	-	-
TEG	0*	0	-	-	-
UCARSOL™ AP-814	0*	2.44001E-15	-	-	-
Flowrate (lb/h)	-	20,600.10	-	-	-
Temperature (F)	85	119.90	-	-	-

3.3 Operating Conditions

Thermal Oxidizer Temperature	1,600 °F
Thermal Oxidizer Residence Time	1.0 s minimum
Excess Air, O2 % Vol Wet	3.0 minimum

3.4 Design Summary

Waste Stream Flow		Case 1	Case 2
	lb/hr	21,218.6	20,600.1
Flue Gas Composition	wet vol %		
Argon		0.00	0.00
Carbon Dioxide		39.38	38.56
Water Vapor		14.93	15.57
Nitrogen		42.65	42.85
Hydrogen Chloride		0.00	0.00
Sulfur Dioxide		0.02	0.02
Oxygen		3.00	3.00
Total	%	100.00	100.00
Flue Gas Temperature	°F	1,600	1,600
Flue Gas Flow	lb/hr	42,756.6	43,058.2
Flue Gas MW	lb/lb-mol	32.95	32.75
Flue Gas Flow	ACFS	542.1	549.2
Fuel Gas Flow	lb/hr	277.4	846.4
Fuel Gas Heat Release	MM Btu/hr	5.73	17.50
Waste Stream Heat Release	MM Btu/hr	12.98	1.43
Total Heat Release	MM Btu/hr	18.71	18.92
Combustion Air Flow	lb/hr	21,260.6	21,611.7

3.5 Preliminary Utilities

Electrical Power	460V / 3 Phase / 60 Hz
Connected CAB Power Blower, HP	~ 10
Instrument Air, SCFH	2000 – 4000
Fuel Gas Required, MMBtu/hr	*see above design summary

3.6 System Performance

Stack Emission	Expected Performance	Units
Destruction Efficiency, H2S / VOC	99.0	%

These values are understood to apply only when the system is operated in accordance with the operating conditions stipulated in the design summary and for the waste stipulated in the design basis sections of this proposal. VOC is defined as non-methane non-ethane hydrocarbons. Every mol of H2S is expected to convert into SO2 in the flue gas.

4.0 EQUIPMENT DESCRIPTION

4.1 Thermal Oxidizer

One (1) standard vertical thermal oxidizer is offered. Zeeco standard units are designed and constructed using Zeeco standard materials and manufacturers. It is designed to operate at 1600°F with excess air to ensure complete combustion of the waste gas combustible components. The thermal oxidizer has the following features:

- Nominal 5'-0" OD to 34'-0" elevation with a 3—6" stack to 70'- 0" elevation
- Shell Material: SA-36
- Zeeco Standard Paint System
- Rainshield (ship loose for field installation)
- See commercial Option 1 for Ladders and Platforms

4.2 Burner

One (1) Forced Draft Zeeco GB Burner is offered with the following features:

- 20 MMBtu/hr maximum release rating
- AR/GS Pilot Ignitor Assembly
- A-36 Carbon Steel Construction
- 10:1 Fuel Gas Turndown
- Zeeco Standard Paint System

4.3 Combustion Air Blowers

One (1) Combustion Air Fan is offered and has the following features:

- Preliminary Design Rate: 4,675 ACFM
- Preliminary Discharge Pressure: 6 in W.C.
- TEFC Motor HP: ~10
- Manufacturer's standard design
- Zeeco Standard Paint System
- VFD by others

4.4 Refractory

The thermal oxidizer chamber and stack are lined with hard castable material supplied by Zeeco standard suppliers. Refractory will be shop installed by Zeeco. Partial Shop Dryout has not been included but can be offered as optional price.

4.5 Instrumentation and Controls

Zeeco's Standard Burner Management System and Instrumentation scope is offered by Zeeco Standard Suppliers. **Zeeco Standard AVL** has been quoted in the proposal for all instrumentation and controls.

- Pre-assembled fuel gas and instrument air control rack, field mounting by others
- Fuel rack mounted local control panel with BMS PLC
- The BMS complies with NFPA 86; the proposal offers a Zeeco Standard SIL-2 PLC
- Factory Functionality Acceptance Test included
- Oxygen Analyzer included
- Instrument/piping connections from rack to field instruments and other field equipment by others

Zeeco has not offered process control, waste gas piping or isolation valves. These items can be offered as an optional price.

2.Technical

FL-3030

FLARE - Utility - DU-06x30ft	Self-Supported

DU-06 Utility Flare Tip

- 4 feet x 6 inch Tip
- 6 inch x 150# RFSO Flange Connection to Riser
- Flame Retention Ring
- **Tip Material** - 304 Stainless Steel
- Flame Retention Ring Material: CK 20

Main Flare Riser

- 26 feet x 6 inch (30 feet Total Height)
- 6 inch x 150# RF Inlet Nozzle
- 6 inch Nominal Diameter Gas Riser with Enlargement to 10 inch Nominal Diameter (preliminary) for Self-Supported Design
- Self-Supported Design
- Inlet at Standard Height: 9'-0"
- Base Plate Assembly
- **Material** – A-105, A-53B and A-36 Carbon Steel or Equivalent
- Cimarron Standard Flare Paint System See Clarifications – Color Sherwin Williams Tower Gray SW4018

Duraspark Pilot (QTY 1):

- **Model XD-1000 Pilot**
- Continuous High Energy Spark & Constant Flame Pilot
- Fully Retractable to Grade for Ease of Maintenance
- Type K Thermocouple (Dual Element)
- **Materials of construction:**
  - Ignitor Head – 310 Stainless Steel/ Body – 316 Stainless Steel

ARControl™ Burner Management System

- NEMA 4X Weatherproof Controls Enclosure
- 24 VDC
- Auto Ignition, Advanced Datalogging, Temperature Monitoring
- Customer PLC compatibility via Modbus RS-485/SCADA Communication
- Self-Supporting Control Panel Pole Stand for Weatherproof Enclosure

Retractability Package for 30 ft Flare (QTY 1):

- Allows Pilot to be Maintained from Grade Level
- Electrical Wiring Harness
- Track Assembly, Manual Winch, Winch Cable and Pulley Assembly

Flares Accessories (Optional)

Opti Link 1000

Pilot Gas Valve Train
• Aluminum Body Regulator • Ball Valve and Strainer • Pressure Gauge

6” Detonation Arrestor
• Carbon Steel Housing/Stainless Steel Internals • Eccentric design • To be installed at inlet nozzle • Any detonation arrestor pressure drop shall be additive to the flare system pressure drop

Utilities

Pilot Gas:	45,000 BTU/Hr required per pilot If Natural Gas is used: 45 SCFH @ 8 - 10 psig (per ignitor)
Purge Gas:	29 SCFH (6" Tip)
Electrical:	24 VDC (Controls)

Optional Spare Parts Kits (Other Voltages available as custom kit)

Model XD-1000 "DURASPARK" Pilot with ARControl™ Burner Management System				
BMS Module	1960-170	0	1	18 lbs.
Spark Rod Assembly	158646	1	2	2 lbs.
Thermocouple, Type K, Dual Element	160451	1	1	4 lbs.
1" Pilot Inspirator	156766	0	1	4 lbs.

Process Conditions

Process Conditions	Parameter
Gas Flow Rate (MMSCFD)	1.214
Required Pressure	See Flow vs Pressure Curve
Gas Molecular Weight	16.61
Process guarantee applies only to conditions listed.	

Optilink 1000	PN: 1960-176

A Smart Flare or Combustor with Integrated Continuous Monitoring

- The Cimarron Smart Flare or Combustor is a standalone system that can eliminate fugitive emissions while continuously monitoring its performance.
- Cimarron Smart Flares and Combustors were designed with a control efficiency of 98%+.
- The Cimarron Smart Flare or Combustor is equipped with continuous pilot with pilot auto-reignition (BMS).
- The Cimarron Smart Flare or Combustor is equipped with a thermocouple for flame detection and it monitors the pilot status with digital records saved every 5 minutes or less
- The Cimarron Smart Flare or Combustor is flowmeter ready. An inlet gas flowmeter can be installed, and flow rates monitored and recorded through the Smart Flare. Alerts can be sent for out-of-range flow rates.
- The Cimarron Smart Air-Assisted Flare can use the information of the flowmeters to automatically adjust the VFD frequency and adjust the amount of air mixed with the inlet gas to prevent smoking and venting through overaeration.
- The Cimarron Smart Smart Flare or Combustor can monitor and send alerts to company control room and/or to the cloud for performance monitoring with actionable intelligence.
- Optilink 1000 units have 8 4-20mAmp analog and digital inputs, 2 RS485 Ports, and flexible programmable behavior environments that allow interoperability with boundless applications.
- All monitored data saved on secured Cimarron data cloud storage solution (redundant data storage).
- Performance guarantee requires Preventive Maintenance (PM monthly or quarterly).

Remote Management When You Need It

- Operational and maintenance alerts sent to mobile device or emails giving you latest status when you need it. Temperature and run time status reports sent in a periodicity you can set.
- If you need additional help with any technical matters, rest assured that our advanced remote monitoring and diagnostics capabilities enable us to identify and resolve any problems you may be experiencing quickly. This often eliminates the need for an on-site technician visit.
- Our experienced support team has the ability to monitor your connected devices, identify any that may be malfunctioning, and guide you through a speedy resolution process. We also perform a wide range of diagnostics to ensure you receive optimal service.

OOOOb and OOOOc compliance guarantee

- For emissions control and reduction to become an integral component of a sustainability strategy, it is crucial that your combustor and other emissions control equipment consistently operate at the intended level of performance and compliance, with credible supporting data.
- Cimarron's Sytelink360® Real Time Data Monitoring solution combines software, hardware, and field services support and provides customers with data feeds that enable equipment optimization, data quantification, performance guarantees, and emissions remote monitoring and management.
- Sytelink360® can operate on a standalone basis or as a complement to customers' systems, regulatory compliance, and sustainability programs to provide accurate and reliable data sets that increase production, reduce labor time, lower incident risk, and mitigate hazardous gas emissions.

	
Feature	**Optilink 1000**
Operating voltage operation	12 or 24VDC
External ON/OFF switch	Yes
Status indicator	RGB LED
Enclosure	Polycarbonate, Door
Mounting	Pole or wall mount
Thermocouple input	1 dedicated k-type thermocouple
Analog input channels	8 galvanically isolated 4-20mA
Digital input channels	8 galvanically isolated digital input
Digital output	1 galvanically isolated
RS485 ports (MODBUS client)	2 Galvanically isolated
Self-monitoring input voltage and current draw	Yes
Onboard datalogging	Yes
Multicarrier support for cellular network	Yes
Online dashboard	Yes
Programmable behavior/ application	Flexible programmble behavior allows interoperability with boundless applications

1.0 TECHNICAL PROPOSAL

1.1 DESIGN CONSIDERATIONS

WASTE GAS CASE(S)				
GAS COMPOSITION	**MOLE%**			**LP**
OXYGEN	O2			
NITROGEN	N2			
AIR	N2 + O2			
CARBON DIOXIDE	CO2			
WATER	H20			
HYDROGEN	H2			
AMMONIA	NH3			
CARBON MONOXIDE	CO			
METHANOL	CH4O			
HYDROGEN SULFIDE	H2S			
METHANE	CH4			
ETHANE	C2H6			
PROPANE	C3H8			
I BUTANE	C4H10			
N BUTANE	C4H10			
I PENTANE	C5H12			
N PENTANE	C5H12			
HEXANE	C6H14			
HEPTANE	C7H16			
OCTANE	C8H18			
N-NONANE	C9H20			
N-DECANE	C10H22			
ETHYLENE	C2H4			
PROPYLENE	C3H6			
BUTENE	iC4H8			
BUTYLENE	nC4H8			
PENTENE	C5H10			
CYCLOPENTANE	C5H10			
METHYLCYCLOPENTANE	C6H12			
CYCLOHEXANE	C6H12			
METHYLCYCLOHEXANE	C6H6			
CYCLOHEPTANE	C7H14			
ACETYLENE	C2H2			
1,2 BUTADIENE	C4H6			
BENZENE	C6H6			
TOLUENE	C7H8			
STYRENE	C8H8			
ETHYLBENZENE	C8H10			
XYLENE	C8H10			
MAXIMUM FLOW RATE	MSCFD			45
GAS TEMPERATURE	° F			80-120
SUPPLY PRESSURE	psig			0.25 - 1
MOLECULAR WEIGHT				49
LOWER HEATING VALUE	BTU/SCF			2430
SMOKELESS FLOW RATE	% / R			R 0

ENVIRONMENTAL CONDITIONS	
DESTRUCTION EFFICIENCY REQD.	99% +
TEMPERATURE	-20 – 120 °F
40 CFR 60.18 VELOCITY LIMITS	COMPLIANT
WIND SPEED FOR RADIATION	20 MPH
WIND SPEED FOR STRUCTURE	120 MPH
SITE CONDITIONS	
ELEVATION ABOVE MSL	0 - 3500 FT
SEISMIC CLASIFICATION	UBC
EXP. / IMPORTANCE FACTOR	1.25
UTILITIES AVAILABLE / REQUIRED	
ELECTRICITY	460V / 3 PHASE / 60 HZ
	120V / 1 PHASE / 60 HZ
STEAM	NOT APPLICABLE
FUEL GAS (PILOT)	65 SCFH @ 15-150 PSIG
FUEL GAS (PURGE)	N/A
RADIATION	
MAXIMUM RADIATION AT GRADE	N/A Btu / ft²-hr
SOLAR RADIATION INCLUDED	300 Btu / ft²-hr
FLARE TYPE & STRUCTURE	
☐ ELEVATED	☒ VCU COMBUSTOR
☐ MULTI-POINT GROUND FLARE	☐ PIT FLARE
☐ BIO-GAS COMBUSTION	☐ PORTABLE
☐ GUYWIRE SUPPORTED (MX)	☐ SELF-SUPPORTED
☐ DERRICK SUPPORTED	☐ BOOM SUPPORTED
SMOKE SUPPRESSION METHOD	
☐ NONE / NOT APPLICABLE	☒ AIR ASSISTED
☐ ASSIST GAS DILUTION	☐ STEAM ASSISTED
IGNITION SYSTEM TYPE & FEATURES	
☒ AUTOMATIC	☐ MANUAL
☒ ELECTRIC SPARK	☐ FLAME FRONT
☐ RETRACTABLE TO GRADE	☐ CONTINUOUS SPARK
☒ THERMOCOUPLE MONITOR	☒ IONIZATION ROD
☐ UV / IR FLAME MONITOR	☐ PLC CONTROLLER
ACCESORIES	
☐ KNOCK-OUT DRUM	☐ LIQUID SEAL DRUM
☐ MOLECULAR SEAL UPGRADE	☒ FLAME ARRESTOR
☐ LADDERS AND PLATFORMS	☐ AIRCRAFT WARNING

1.2 SCOPE OF SUPPLY

ITEM	QTY	DESCRIPTION
		INVISIFIRE VCU-500 ENCLOSED COMBUSTOR COMPLETE WITH:
1	1	COMBUSTION CHAMBER • 72 INCH DIAMETER X 38 FOOT OVERALL HEIGHT • NATURAL DRAFT DESIGN • CHAMBER MATERIAL – CARBON STEEL • CERAMIC FIBER INTERNAL INSULATION PACKAGE • 2 INCH TOTAL THICKNESS WITH TWO LAYERS EACH 1 INCH THICK • RATED 2300° F WITH EXPECTED SURFACE TEMPERATURE ON CHAMBER EXTERIOR TO BE LESS THAN 500° F • **310 SS PINS AND KEEPERS** • ANNULAR RAIN GUARD IN 316 SS TO PROTECT INSULATION FROM RAIN • SIGHT GLASS • **PAINT SYSTEM: HIGH TEMPERATURE GREEN** • LIFTING LUGS • (2) TEST PORTS NEAR TOP OF STACK
2	1	SPITFIRE VAPOR BURNER SYSTEM • VERTICALLY FIRED WASTE GAS BURNER(S) • INVERTED DIFFUSER CONE TO ENSURE INCREASED AIR TO FUEL BOUNDARY • BURNER MATERIAL – 316 STAINLESS STEEL • WASTE GAS DISTRIBUTION MANIFOLD • MANIFOLD MATERIAL – 304 STAINLESS STEEL
3	1	COMBUSTION AIR SYSTEM • (3) DAMPERS • 36 X 36 INCHES
4	1	PROFIRE BURNER MANAGEMENT AND CONTROL SYSTEM • NEMA 4X • IN-LINE PILOT – 37 INCHES LONG • HIGH ENERGY SPARK TYPE PILOT • TYPE K THERMOCOUPLE (DUAL ELEMENT) • PILOT MATERIAL: • PILOT NOZZLE – 316 STAINLESS STEEL • PILOT BODY – 316 STAINLESS STEEL
5	2	OPERATION / MAINTENANCE MANUAL:

1.3 TECHNICAL PROPOSAL CLARIFICATIONS

THE PROPOSED EQUIPMENT IS BASED UPON ENCORE'S STANDARD METHODS OF CONSTRUCTION.

NOTE: Updated based on KL1Summer (7-29-25)

Process Streams		6
Composition	Status:	Solved
Phase: Total	From Block:	MIX-102
	To Block:	INLET GAS SCRUBBER
Mole Fraction		**%**
H2S		0.00349947
N2		1.69100
CO2		2.01830
C1		74.5149
C2		12.0555
C3		5.73168
iC4		0.744080
nC4		1.76302
iC5		0.419379
nC5		0.435098
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		0.154882
nC6		0.0881468
Benzene		0.0524047
Cyclohexane		0.0743020
3,3-Dimethylpentane		0.0992779
C7		0.0195810
Toluene		0.0289198
i-Octane		0.0701479
C8		0.00428040
Ethylbenzene		0.00228127
m-Xylene		0.00638390
C9		0.00638193
C10		0.00388642
H2O		0.0126291
TEG		1.82909E-05
UCARSOL™ AP-814		0
Oxygen		0
Molar Flow		**lbmol/h**
H2S		0.785355
N2		379.496
CO2		452.949
C1		16722.7
C2		2705.51
C3		1286.31
iC4		166.988
nC4		395.660
iC5		94.1176
nC5		97.6453
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		34.7589
nC6		19.7820
Benzene		11.7607
Cyclohexane		16.6750

Process Streams	6
Composition	**Status:** Solved
Phase: **Total**	**From Block:** MIX-102
	To Block: INLET GAS SCRUBBER
3,3-Dimethylpentane	22.2801
C7	4.39439
Toluene	6.49022
i-Octane	15.7427
C8	0.960612
Ethylbenzene	0.511965
m-Xylene	1.43268
C9	1.43224
C10	0.872196
H2O	2.83425
TEG	0.00410488
UCARSOL™ AP-814	0
Oxygen	0
Mass Fraction	**%**
H2S	0.00539365
N2	2.14229
CO2	4.01700
C1	54.0610
C2	16.3936
C3	11.4300
iC4	1.95583
nC4	4.63414
iC5	1.36838
nC5	1.41966
Neohexane	0
Cyclopentane	0
2,3-Dimethylbutane	0.603608
nC6	0.343526
Benzene	0.185122
Cyclohexane	0.282796
3,3-Dimethylpentane	0.449882
C7	0.0887320
Toluene	0.120505
i-Octane	0.362376
C8	0.0221120
Ethylbenzene	0.0109529
m-Xylene	0.0306505
C9	0.0370166
C10	0.0250074
H2O	0.0102893
TEG	0.000124222
UCARSOL™ AP-814	0
Oxygen	0
Mass Flow	**lb/h**
H2S	26.7656
N2	10631.0
CO2	19934.1
C1	268274

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
C2		81352.0
C3		56720.7
iC4		9705.68
nC4		22996.6
iC5		6790.47
nC5		7044.99
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		2995.36
nC6		1704.72
Benzene		918.653
Cyclohexane		1403.36
3,3-Dimethylpentane		2232.51
C7		440.326
Toluene		597.999
i-Octane		1798.27
C8		109.729
Ethylbenzene		54.3528
m-Xylene		152.101
C9		183.692
C10		124.098
H2O		51.0598
TEG		0.616441
UCARSOL™ AP-814		0
Oxygen		0

Process Streams		6
Properties	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Property	**Units**	
Temperature	°F	101.347
Pressure	psia	928.696
Mole Fraction Vapor	%	100
Mole Fraction Light Liquid	%	0
Mole Fraction Heavy Liquid	%	0
Phase Mole Fraction	%	100
Molecular Weight	lb/lbmol	22.1121
Mass Density	lb/ft^3	4.23111
Molar Flow	lbmol/h	22442.1
Mass Flow	lb/h	496243
Vapor Volumetric Flow	ft^3/h	117284
Liquid Volumetric Flow	gpm	14622.5
Std Vapor Volumetric Flow	MMSCFD	204.394
Std Liquid Volumetric Flow	sgpm	2736.63
Compressibility		0.806140
Specific Gravity		0.763474

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
API Gravity		
Enthalpy	Btu/h	-8.33834E+08
Mass Enthalpy	Btu/lb	-1680.29
Mass Cp	Btu/(lb*°F)	0.624155
Ideal Gas CpCv Ratio		1.23529
Dynamic Viscosity	cP	0.0132507
Kinematic Viscosity	cSt	0.195508
Thermal Conductivity	Btu/(h*ft*°F)	0.0219459
Surface Tension	lbf/ft	
Net Ideal Gas Heating Value	Btu/ft^3	1140.92
Net Liquid Heating Value	Btu/lb	19515.7
Gross Ideal Gas Heating Value	Btu/ft^3	1256.58
Gross Liquid Heating Value	Btu/lb	21501.0

Process Streams		6
Composition	**Status:**	Solved
Phase: **Vapor**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Mole Fraction		**%**
H2S		0.00349947
N2		1.69100
CO2		2.01830
C1		74.5149
C2		12.0555
C3		5.73168
iC4		0.744080
nC4		1.76302
iC5		0.419379
nC5		0.435098
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		0.154882
nC6		0.0881468
Benzene		0.0524047
Cyclohexane		0.0743020
3,3-Dimethylpentane		0.0992779
C7		0.0195810
Toluene		0.0289198
i-Octane		0.0701479
C8		0.00428040
Ethylbenzene		0.00228127
m-Xylene		0.00638390
C9		0.00638193
C10		0.00388642
H2O		0.0126291
TEG		1.82909E-05
UCARSOL™ AP-814		0

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Oxygen		0
Molar Flow		**lbmol/h**
H2S		0.785355
N2		379.496
CO2		452.949
C1		16722.7
C2		2705.51
C3		1286.31
iC4		166.988
nC4		395.660
iC5		94.1176
nC5		97.6453
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		34.7589
nC6		19.7820
Benzene		11.7607
Cyclohexane		16.6750
3,3-Dimethylpentane		22.2801
C7		4.39439
Toluene		6.49022
i-Octane		15.7427
C8		0.960612
Ethylbenzene		0.511965
m-Xylene		1.43268
C9		1.43224
C10		0.872196
H2O		2.83425
TEG		0.00410488
UCARSOL™ AP-814		0
Oxygen		0
Mass Fraction		**%**
H2S		0.00539365
N2		2.14229
CO2		4.01700
C1		54.0610
C2		16.3936
C3		11.4300
iC4		1.95583
nC4		4.63414
iC5		1.36838
nC5		1.41966
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		0.603608
nC6		0.343526
Benzene		0.185122
Cyclohexane		0.282796

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
3,3-Dimethylpentane		0.449882
C7		0.0887320
Toluene		0.120505
i-Octane		0.362376
C8		0.0221120
Ethylbenzene		0.0109529
m-Xylene		0.0306505
C9		0.0370166
C10		0.0250074
H2O		0.0102893
TEG		0.000124222
UCARSOL™ AP-814		0
Oxygen		0
Mass Flow		**lb/h**
H2S		26.7656
N2		10631.0
CO2		19934.1
C1		268274
C2		81352.0
C3		56720.7
iC4		9705.68
nC4		22996.6
iC5		6790.47
nC5		7044.99
Neohexane		0
Cyclopentane		0
2,3-Dimethylbutane		2995.36
nC6		1704.72
Benzene		918.653
Cyclohexane		1403.36
3,3-Dimethylpentane		2232.51
C7		440.326
Toluene		597.999
i-Octane		1798.27
C8		109.729
Ethylbenzene		54.3528
m-Xylene		152.101
C9		183.692
C10		124.098
H2O		51.0598
TEG		0.616441
UCARSOL™ AP-814		0
Oxygen		0

Process Streams		6
Properties	**Status:**	Solved
Phase: **Vapor**	**From Block:**	**MIX-102**

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
	To Block:	**INLET GAS SCRUBBER**
Property	**Units**	
Temperature	°F	101.347
Pressure	psia	928.696
Mole Fraction Vapor	%	100
Mole Fraction Light Liquid	%	0
Mole Fraction Heavy Liquid	%	0
Phase Mole Fraction	%	100
Molecular Weight	lb/lbmol	22.1121
Mass Density	lb/ft^3	4.23111
Molar Flow	lbmol/h	22442.1
Mass Flow	lb/h	496243
Vapor Volumetric Flow	ft^3/h	117284
Liquid Volumetric Flow	gpm	14622.5
Std Vapor Volumetric Flow	MMSCFD	204.394
Std Liquid Volumetric Flow	sgpm	2736.63
Compressibility		0.806140
Specific Gravity		0.763474
API Gravity		
Enthalpy	Btu/h	-8.33834E+08
Mass Enthalpy	Btu/lb	-1680.29
Mass Cp	Btu/(lb*°F)	0.624155
Ideal Gas CpCv Ratio		1.23529
Dynamic Viscosity	cP	0.0132507
Kinematic Viscosity	cSt	0.195508
Thermal Conductivity	Btu/(h*ft*°F)	0.0219459
Surface Tension	lbf/ft	
Net Ideal Gas Heating Value	Btu/ft^3	1140.92
Net Liquid Heating Value	Btu/lb	19515.7
Gross Ideal Gas Heating Value	Btu/ft^3	1256.58
Gross Liquid Heating Value	Btu/lb	21501.0

Process Streams		6
Composition	**Status:**	Solved
Phase: **Nonspecific Liquid**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Mole Fraction		
H2S		
N2		
CO2		
C1		
C2		
C3		
iC4		
nC4		
iC5		
nC5		

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Neohexane		
Cyclopentane		
2,3-Dimethylbutane		
nC6		
Benzene		
Cyclohexane		
3,3-Dimethylpentane		
C7		
Toluene		
i-Octane		
C8		
Ethylbenzene		
m-Xylene		
C9		
C10		
H2O		
TEG		
UCARSOL™ AP-814		
Oxygen		
Molar Flow		
H2S		
N2		
CO2		
C1		
C2		
C3		
iC4		
nC4		
iC5		
nC5		
Neohexane		
Cyclopentane		
2,3-Dimethylbutane		
nC6		
Benzene		
Cyclohexane		
3,3-Dimethylpentane		
C7		
Toluene		
i-Octane		
C8		
Ethylbenzene		
m-Xylene		
C9		
C10		
H2O		
TEG		
UCARSOL™ AP-814		

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**
Oxygen		
Mass Fraction		
H2S		
N2		
CO2		
C1		
C2		
C3		
iC4		
nC4		
iC5		
nC5		
Neohexane		
Cyclopentane		
2,3-Dimethylbutane		
nC6		
Benzene		
Cyclohexane		
3,3-Dimethylpentane		
C7		
Toluene		
i-Octane		
C8		
Ethylbenzene		
m-Xylene		
C9		
C10		
H2O		
TEG		
UCARSOL™ AP-814		
Oxygen		
Mass Flow		
H2S		
N2		
CO2		
C1		
C2		
C3		
iC4		
nC4		
iC5		
nC5		
Neohexane		
Cyclopentane		
2,3-Dimethylbutane		
nC6		
Benzene		
Cyclohexane		

Process Streams		6
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**

3,3-Dimethylpentane
C7
Toluene
i-Octane
C8
Ethylbenzene
m-Xylene
C9
C10
H2O
TEG
UCARSOL™ AP-814
Oxygen

Process Streams		6
Properties	**Status:**	Solved
Phase: **Nonspecific Liquid**	**From Block:**	**MIX-102**
	To Block:	**INLET GAS SCRUBBER**

Property	Units
Temperature	°F
Pressure	psia
Mole Fraction Vapor	%
Mole Fraction Light Liquid	%
Mole Fraction Heavy Liquid	%
Phase Mole Fraction	%
Molecular Weight	lb/lbmol
Mass Density	lb/ft^3
Molar Flow	lbmol/h
Mass Flow	lb/h
Vapor Volumetric Flow	ft^3/h
Liquid Volumetric Flow	gpm
Std Vapor Volumetric Flow	MMSCFD
Std Liquid Volumetric Flow	sgpm
Compressibility	
Specific Gravity	
API Gravity	
Enthalpy	Btu/h
Mass Enthalpy	Btu/lb
Mass Cp	Btu/(lb*°F)
Ideal Gas CpCv Ratio	
Dynamic Viscosity	cP
Kinematic Viscosity	cSt
Thermal Conductivity	Btu/(h*ft*°F)
Surface Tension	lbf/ft
Net Ideal Gas Heating Value	Btu/ft^3
Net Liquid Heating Value	Btu/lb
Gross Ideal Gas Heating Value	Btu/ft^3

Condensate PStreams AVG

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100
	To Block:	MIX-100	--	--	--	Combustion Air	--
Mole Fraction		%	%	%	%	%	%
Hydrogen Sulfide		3.94053E-05*	7.33256E-07	3.94053E-05*	0.00497327	2.88516E-05	0.0109714
N2		1.80701E-08*	72.0386	1.80701E-08*	1.87153	2.48096E-08	0.408160
C1		0.000124731*	2.22959	0.000124731*	76.4473	9.99613E-05	39.8362
CO2		4.86576E-05*	12.2830	4.86576E-05*	0.345263	2.13345E-05	0.352884
C2		0.0806558*	0.000106543	0.0806558*	11.7738	0.0350954	21.6077
C3		3.17622*	0.00115192	3.17622*	5.62383	2.26624	23.8396
iC4		10.9277*	0.00487466	10.9277*	0.740462	9.59023	4.56306
C4		48.4431*	0.0228181	48.4431*	1.78039	44.8914	9.11547
iC5		15.6450*	0.0212145	15.6450*	0.435096	16.6123	0.102543
nC5		13.5514*	0.00765572	13.5514*	0.414036	15.0616	0.0464208
i-Hexane		2.94654*	0.00186344	2.94654*	0.122411	3.66605	0.00150967
Hexane		1.42875*	0.000914219	1.42875*	0.0654365	1.79860	0.000455589
Benzene		0.550841*	0.000581417	0.550841*	0.0401584	1.14385	0.000504287
Cyclohexane		1.00160*	0.000799238	1.00160*	0.0589223	1.57239	0.000353641
i-Heptane		1.08635*	0.000771488	1.08635*	0.0709328	1.51780	0.000191050
n-Heptane		0.190524*	0.000138452	0.190524*	0.0139182	0.272385	2.42382E-05
Toluene		0.182821*	0.000204966	0.182821*	0.0198609	0.403242	4.37685E-05
i-Octane		0.689862*	0.000480741	0.689862*	0.0492130	0.945793	7.99989E-05
n-Octane		0.0236926*	2.09975E-05	0.0236926*	0.00287296	0.0413097	1.50464E-06
Ethylbenzene		0.0109509*	1.28163E-05	0.0109509*	0.00167503	0.0252142	1.29240E-06
m-Xylene		0.0290352*	3.55294E-05	0.0290352*	0.00481903	0.0698991	3.24057E-06
o-Xylene		0*	0	0*	0	0	0
p-Xylene		0*	0	0*	0	0	0
Nonane		0.0248425*	2.90278E-05	0.0248425*	0.00496157	0.0571082	1.01088E-06
Decane		0.00989838*	1.49263E-05	0.00989838*	0.00360019	0.0293655	4.38474E-07
Sulfur Dioxide		0*	0	0*	0	0	0
H2O		1.61567E-08*	13.0022	1.61567E-08*	0.104568	1.53583E-05	0.113882
Piperazine		0*	0	0*	0	0	0
TEG		0*	0	0*	0	0	0
Oxygen		0*	0.382990	0*	0	0	0
Mass Fraction		%	%	%	%	%	%
Hydrogen Sulfide		2.08560E-05	8.78336E-07	2.08560E-05	0.00788973	1.49067E-05	0.0117752
N2		7.86125E-09	70.9293	7.86125E-09	2.44047	1.05362E-08	0.360073
C1		3.10751E-05	1.25716	3.10751E-05	57.0877	2.43110E-05	20.1254
CO2		3.32554E-05	18.9997	3.32554E-05	0.707305	1.42341E-05	0.489072
C2		0.0376635	0.000112600	0.0376635	16.4796	0.0159981	20.4608
C3		2.17506	0.00178531	2.17506	11.5435	1.51496	33.1046
iC4		9.86365	0.00995821	9.86365	2.00334	8.45027	8.35204
C4		43.7260	0.0466139	43.7260	4.81689	39.5553	16.6846
iC5		17.5295	0.0537969	17.5295	1.46125	18.1701	0.232985
nC5		15.1837	0.0194138	15.1837	1.39052	16.4740	0.105472
i-Hexane		3.94331	0.00564407	3.94331	0.491036	4.78940	0.00409694
Hexane		1.91208	0.00276903	1.91208	0.262490	2.34973	0.00123638
Benzene		0.668204	0.00159624	0.668204	0.146017	1.35452	0.00124048
Cyclohexane		1.30908	0.00236414	1.30908	0.230830	2.00615	0.000937260
i-Heptane		1.69049	0.00271706	1.69049	0.330851	2.30563	0.000602863
n-Heptane		0.296477	0.000487606	0.296477	0.0649188	0.413769	7.64842E-05
Toluene		0.261597	0.000663769	0.261597	0.0851825	0.563257	0.000126998
i-Octane		1.22378	0.00193010	1.22378	0.261676	1.63783	0.000287775
n-Octane		0.0420294	8.43019E-05	0.0420294	0.0152761	0.0715363	5.41254E-06
Ethylbenzene		0.0180550	4.78231E-05	0.0180550	0.00827779	0.0405814	4.32089E-06
m-Xylene		0.0478709	0.000132575	0.0478709	0.0238150	0.112500	1.08342E-05
o-Xylene		0	0	0	0	0	0
p-Xylene		0	0	0	0	0	0
Nonane		0.0494807	0.000130853	0.0494807	0.0296213	0.111038	4.08292E-06
Decane		0.0218715	7.46442E-05	0.0218715	0.0238443	0.0633411	1.96466E-06
Sulfur Dioxide		0	0	0	0	0	0
H2O		4.52021E-09	8.23286	4.52021E-09	0.0876896	4.19453E-06	0.0646087
Piperazine		0	0	0	0	0	0
TEG		0	0	0	0	0	0
Oxygen		0	0.430740	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		2.62815E-06*	1.55699E-05	5.91983E-06*	40.3979	1.55699E-05	0.764188
N2		9.90630E-10*	1257.33	2.23136E-09*	12496.0	1.10050E-08	23.3681
C1		3.91591E-06*	22.2851	8.82044E-06*	292307	2.53926E-05	1306.10
CO2		4.19066E-06*	336.798	9.43932E-06*	3621.63	1.48674E-05	31.7400
C2		0.00474615*	0.00199601	0.0106905*	84380.7	0.0167099	1327.87
C3		0.274089*	0.0316473	0.617377*	59106.4	1.58236	2148.44
iC4		1.24296*	0.176525	2.79973*	10257.7	8.82623	542.034

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100
	To Block:	MIX-100	--	--	--	Combustion Air	--
C4		5.51010*	0.826303	12.4113*	24664.0	41.3152	1082.80
iC5		2.20897*	0.953633	4.97563*	7482.05	18.9785	15.1204
nC5		1.91336*	0.344139	4.30979*	7119.89	17.2069	6.84495
i-Hexane		0.496913*	0.100050	1.11928*	2514.26	5.00249	0.265885
Hexane		0.240950*	0.0490854	0.542731*	1344.03	2.45427	0.0802387
Benzene		0.0842032*	0.0282959	0.189665*	747.653	1.41478	0.0805050
Cyclohexane		0.164962*	0.0419081	0.371572*	1181.92	2.09540	0.0608266
i-Heptane		0.213026*	0.0481641	0.479833*	1694.06	2.40821	0.0391248
n-Heptane		0.0373604*	0.00864356	0.0841529*	332.405	0.432178	0.00496370
Toluene		0.0329650*	0.0117663	0.0742524*	436.161	0.588317	0.00824196
i-Octane		0.154213*	0.0342141	0.347360*	1339.87	1.71070	0.0186761
n-Octane		0.00529631*	0.00149438	0.0119297*	78.2187	0.0747191	0.000351265
Ethylbenzene		0.00227519*	0.000847738	0.00512480*	42.3849	0.0423869	0.000280419
m-Xylene		0.00603242*	0.00235011	0.0135878*	121.940	0.117505	0.000703122
o-Xylene		0*	0	0*	0	0	0
p-Xylene		0*	0	0*	0	0	0
Nonane		0.00623527*	0.00231957	0.0140447*	151.670	0.115978	0.000264975
Decane		0.00275612*	0.00132318	0.00620807*	122.090	0.0661592	0.000127503
Sulfur Dioxide		0*	0	0*	0	0	0
H2O		5.69611E-10*	145.940	1.28303E-09*	448.998	4.38115E-06	4.19300
Piperazine		0*	0	0*	0	0	0
TEG		0*	0	0*	0	0	0
Oxygen		0*	7.63554	0*	0	0	0

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100
	To Block:	MIX-100	--	--	--	Combustion Air	--
Property	Units						
Temperature	°F	79.4415	3665.52	79.4415	92.7999	100*	100.112
Pressure	psig	-2.45311	1*	-2.45311	904	0.00405122*	300
Molecular Weight	lb/lbmol	64.3924	28.4515	64.3924	21.4828	65.9630	31.7545
Mass Flow	lb/h	12.6014	1772.65	28.3843	512032	104.449	6489.83
Std Vapor Volumetric Flow	MMSCFD	0.00178234	0.567445	0.00401466	217.076	0.0144215	1.86137
Std Liquid Volumetric Flow	sgpm	0.0416603	4.40135	0.0938384	2891.79	0.341056	30.4739
Net Ideal Gas Heating Valu	Btu/ft^3	3314.02	22.4714	3314.02	1144.51	3387.26	1681.06
Gross Ideal Gas Heating Va	Btu/ft^3	3586.19	31.4347	3586.19	1261.00	3663.33	1836.56

Process Streams		Working Losses	1	2	3	4	5	6
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	Combustion Air	Plant Harp	K-100	--	Condensate Storage Tanks
	To Block:	MIX-100	SAT-1	ECD-1	VLVE-100	Condensate Storage Tanks	Combustion Air	--
Mole Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		3.94053E-05*	0.005	7.76728E-07	0.00647713	1.29347E-06	0*	9.82357E-07
N2		1.80701E-08*	1.85011	76.3094	0.240938	3.14656E-10	79*	3.81200E-11
C1		0.000124731*	75.7682	2.69111E-06	23.5155	1.60571E-06	0*	4.95324E-07
CO2		4.86576E-05*	0.34366	5.74357E-07	0.208311	4.96902E-07	0*	2.61655E-07
C2		0.0806558*	11.8001	0.000944820	12.7559	0.00132809	0*	0.000946870
C3		3.17622*	5.75206	0.0610106	14.1619	0.215988	0*	0.192841
iC4		10.9277*	0.78161	0.258183	3.55757	2.10831	0*	2.02385
C4		48.4431*	1.91499	1.20854	11.0422	13.8175	0*	13.4667
iC5		15.6450*	0.49978	1.12361	4.91649	11.8530	0*	11.7993
nC5		13.5514*	0.49066	0.405480	5.73000	13.9197	0*	13.9068
i-Hexane		2.94654*	0.16464	0.0986956	3.05982	7.46671	0*	7.50962
Hexane		1.42875*	0.09458	0.0484210	2.09401	5.11073	0*	5.14812
Benzene		0.550841*	0.05825	0.0307941	1.29948	3.17125	0*	3.19414
Cyclohexane		1.00160*	0.09104	0.0423311	2.29548	5.60266	0*	5.64816
i-Heptane		1.08635*	0.1234	0.0408613	3.72639	9.09572	0*	9.18127
n-Heptane		0.190524*	0.0274	0.00733299	0.953524	2.32749	0*	2.35069
Toluene		0.182821*	0.04083	0.0108559	1.48142	3.61604	0*	3.65231
i-Octane		0.689862*	0.09393	0.0254621	3.16552	7.72682	0*	7.80337
n-Octane		0.0236926*	0.00906	0.00111212	0.434331	1.06019	0*	1.07169
Ethylbenzene		0.0109509*	0.00558	0.000678804	0.274001	0.668828	0*	0.676094
m-Xylene		0.0290352*	0.01668	0.00188179	0.832004	2.03090	0*	2.05303
o-Xylene		0*	0	0	0	0	0*	0
p-Xylene		0*	0	0	0	0	0*	0
Nonane		0.0248425*	0.02946	0.00153744	1.71385	4.18346	0*	4.23005
Decane		0.00989838*	0.03892	0.000790561	2.46759	6.02332	0*	6.09099
Sulfur Dioxide		0*	0	0	0	0	0*	0
H2O		1.61567E-08*	0	0.0372630	0.0672255	3.96328E-07	0*	2.27415E-07
Piperazine		0*	0	0	0	0	0*	0
TEG		0*	0	0	0	0	0*	0
Oxygen		0*	0	20.2848	0	0	21*	0
Mass Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		2.08560E-05	########	8.78337E-07	0.00404066	5.03258E-07	0*	3.81147E-07
N2		7.86125E-09	2.35994	70.9293	0.123547	1.00629E-10	76.7082*	1.21571E-11
C1		3.10751E-05	55.3473	1.43246E-06	6.90534	2.94076E-07	0*	9.04633E-08
CO2		3.32554E-05	0.688674	8.38706E-07	0.167810	2.49654E-07	0*	1.31096E-07
C2		0.0376635	16.1564	0.000942649	7.02086	0.000455898	0*	0.000324132
C3		2.17506	11.5493	0.0892653	11.4308	0.108729	0*	0.0968073
iC4		9.86365	2.06857	0.497910	3.78491	1.39894	0*	1.33916
C4		43.7260	5.06812	2.33069	11.7478	9.16841	0*	8.91079
iC5		17.5295	1.64190	2.68985	6.49297	9.76294	0*	9.69167
nC5		15.1837	1.61194	0.970688	7.56733	11.4652	0*	11.4227
i-Hexane		3.94331	0.646036	0.282203	4.82657	7.34572	0*	7.36739
Hexane		1.91208	0.371125	0.138452	3.30309	5.02791	0*	5.05062
Benzene		0.668204	0.207182	0.0798115	1.85800	2.82793	0*	2.84043
Cyclohexane		1.30908	0.348878	0.118207	3.53619	5.38294	0*	5.41157
i-Heptane		1.69049	0.563027	0.135853	6.83478	10.4048	0*	10.4735
n-Heptane		0.296477	0.125016	0.0243803	1.74891	2.66247	0*	2.68154
Toluene		0.261597	0.171300	0.0331885	2.49849	3.80360	0*	3.83108
i-Octane		1.22378	0.488559	0.0965052	6.61880	10.0762	0*	10.1477
n-Octane		0.0420294	########	0.00421509	0.908145	1.38255	0*	1.39366
Ethylbenzene		0.0180550	########	0.00239115	0.532468	0.810621	0*	0.817149
m-Xylene		0.0478709	########	0.00662877	1.61684	2.46145	0*	2.48136
o-Xylene		0	0	0	0	0	0*	0
p-Xylene		0	0	0	0	0	0*	0
Nonane		0.0494807	0.172046	0.00654264	4.02352	6.12537	0*	6.17636
Decane		0.0218715	0.252151	0.00373221	6.42659	9.78377	0*	9.86618
Sulfur Dioxide		0	0	0	0	0	0*	0
H2O		4.52021E-09	0	0.0222741	0.0221684	8.15113E-08	0*	4.66416E-08
Piperazine		0	0	0	0	0	0*	0
TEG		0	0	0	0	0	0*	0
Oxygen		0	0	21.5370	0	0	23.2918*	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		5.87657E-06*	41.1622	1.55699E-05	0.764267	6.25280E-05	0*	4.69581E-05
N2		2.21506E-09*	12519.3	1257.33	23.3681	1.25028E-08	1257.33*	1.49778E-09
C1		8.75600E-06*	293613	2.53926E-05	1306.10	3.65379E-05	0*	1.11453E-05
CO2		9.37035E-06*	3653.37	1.48674E-05	31.7403	3.10186E-05	0*	1.61512E-05
C2		0.0106124*	85708.6	0.0167099	1327.95	0.0566436	0*	0.0399337
C3		0.612866*	61268.4	1.58236	2162.06	13.5092	0*	11.9268
iC4		2.77927*	10973.6	8.82623	715.892	173.813	0*	164.987

Condensate PStreams AVG

Process Streams		Working Losses	1	2	3	4	5	6
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	Combustion Air	Plant Harp	K-100	--	Condensate Storage Tanks
	To Block:	MIX-100	SAT-1	ECD-1	VLVE-100	Condensate Storage Tanks	Combustion Air	--
C4		12.3206*	26886.0	41.3152	2222.03	1139.14	0*	1097.83
iC5		4.93928*	8710.15	47.6817	1228.11	1213.01	0*	1194.03
nC5		4.27830*	8551.21	17.2069	1431.32	1424.50	0*	1407.30
i-Hexane		1.11110*	3427.18	5.00249	912.917	912.679	0*	907.676
Hexane		0.538765*	1968.79	2.45427	624.760	624.700	0*	622.246
Benzene		0.188279*	1099.08	1.41478	351.430	351.361	0*	349.946
Cyclohexane		0.368857*	1850.77	2.09540	668.850	668.811	0*	666.715
i-Heptane		0.476327*	2986.82	2.40821	1292.76	1292.76	0*	1290.35
n-Heptane		0.0835381*	663.200	0.432178	330.795	330.803	0*	330.370
Toluene		0.0737099*	908.737	0.588317	472.575	472.584	0*	471.996
i-Octane		0.344823*	2591.77	1.71070	1251.91	1251.93	0*	1250.22
n-Octane		0.0118426*	249.989	0.0747191	171.770	171.777	0*	171.702
Ethylbenzene		0.00508735*	143.098	0.0423869	100.713	100.717	0*	100.674
m-Xylene		0.0134885*	427.755	0.117505	305.815	305.826	0*	305.709
o-Xylene		0*	0	0	0	0	0*	0
p-Xylene		0*	0	0	0	0	0*	0
Nonane		0.0139421*	912.694	0.115978	761.024	761.055	0*	760.939
Decane		0.00616271*	1337.64	0.0661592	1215.55	1215.60	0*	1215.53
Sulfur Dioxide		0*	0	0	0	0	0*	0
H2O		1.27365E-09*	0	0.394843	4.19302	1.01275E-05	0*	5.74634E-06
Piperazine		0*	0	0	0	0	0*	0
TEG		0*	0	0	0	0	0*	0
Oxygen		0*	0	381.777	0	0	381.777*	0

Process Streams		Working Losses	1	2	3	4	5	6
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	Combustion Air	Plant Harp	K-100	--	Condensate Storage Tanks
	To Block:	MIX-100	SAT-1	ECD-1	VLVE-100	Condensate Storage Tanks	Combustion Air	--
Property	Units							
Temperature	°F	79.4415	93.3580	74.9180	92.7999	382.925	72*	100
Pressure	psig	-2.45311	914*	0.00405122	904	303	1*	0.00405122
Molecular Weight	lb/lbmol	64.3924	21.9615	30.1383	54.6312	87.5948	28.8503	87.8390
Mass Flow	lb/h	28.1769	530493	1772.65	18914.4	12424.6	1639.11	12320.2
Std Vapor Volumetric Flow	MMSCFD	0.00398533	220*	0.535686	3.15324	1.29184	0.517442	1.27742
Std Liquid Volumetric Flow	sgpm	0.0931528	2957.73	4.21683	66.8471	36.3731	3.78320	36.0321
Net Ideal Gas Heating Valu	Btu/ft^3	3314.02	1169.44	116.209	2800.94	4414.61	0	4426.20
Gross Ideal Gas Heating Va	Btu/ft^3	3586.19	1287.64	125.702	3031.40	4753.07	0	4765.38

Process Streams		7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Mole Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		0*	0*	0.00499480	0.00647713	5.00065E-06	4.22993E-06	0.00863585
N2		0*	0*	1.84819	0.240938	3.32816E-09	2.70165E-09	0.215443
C1		0*	0*	75.6894	23.5155	1.16204E-05	9.53834E-06	22.5885
CO2		0*	0*	0.343302	0.208311	2.75219E-06	2.28331E-06	0.222103
C2		0*	0*	11.7879	12.7559	0.00537378	0.00453268	16.6075
C3		0*	0*	5.74608	14.1619	0.585675	0.508817	28.8303
iC4		0*	0*	0.780797	3.55757	4.18344	3.75202	8.96893
C4		0*	0*	1.91300	11.0422	24.8712	22.5731	21.7503
iC5		0.1*	0*	0.499260	4.91649	15.9034	15.0613	0.455519
nC5		0*	0*	0.490150	5.73000	17.4332	16.7027	0.243609
i-Hexane		0*	0*	0.164469	3.05982	7.10187	7.17772	0.0156085
Hexane		0*	0*	0.0944816	2.09401	4.47027	4.60342	0.00604589
Benzene		0*	0*	0.0581894	1.29948	2.69516	2.79414	0.00503917
Cyclohexane		0*	0*	0.0909453	2.29548	4.33408	4.59782	0.00492965
i-Heptane		0*	0*	0.123272	3.72639	6.14537	6.75875	0.00408602
n-Heptane		0*	0*	0.0273715	0.953524	1.43205	1.61821	0.000683582
Toluene		0*	0*	0.0407875	1.48142	2.11247	2.42506	0.00105149
i-Octane		0*	0*	0.0938323	3.16552	4.52706	5.19229	0.00230344
n-Octane		0*	0*	0.00905057	0.434331	0.459444	0.584339	0.000107983
Ethylbenzene		0*	0*	0.00557419	0.274001	0.275509	0.357280	7.17703E-05
m-Xylene		0*	0*	0.0166626	0.832004	0.809363	1.06332	0.000197350
o-Xylene		0*	0*	0	0	0	0	0
p-Xylene		0*	0*	0	0	0	0	0
Nonane		0*	0*	0.0294294	1.71385	1.30794	1.90576	0.000206412
Decane		0*	0*	0.0388795	2.46759	1.34712	2.31930	0.000183156
Sulfur Dioxide		0*	0*	0	0	0	0	0
H2O		99.9*	100*	0.104033	0.0672255	1.93133E-06	1.61220E-06	0.0686152
Piperazine		0*	0*	0	0	0	0	0
TEG		0*	0*	0	0	0	0	0
Oxygen		0*	0*	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		0*	0*	0.00775262	0.00404066	2.21606E-06	1.82186E-06	0.00737657
N2		0*	0*	2.35793	0.123547	1.21231E-09	9.56461E-10	0.151264
C1		0*	0*	55.3000	6.90534	2.42402E-06	1.93382E-06	9.08233
CO2		0*	0*	0.688086	0.167810	1.57496E-06	1.26994E-06	0.244985
C2		0*	0*	16.1426	7.02086	0.00210109	0.00172245	12.5159
C3		0*	0*	11.5395	11.4308	0.335812	0.283550	31.8628
iC4		0*	0*	2.06681	3.78491	3.16170	2.75600	13.0654
C4		0*	0*	5.06379	11.7478	18.7968	16.5808	31.6844
iC5		0.399287*	0*	1.64050	6.49297	14.9198	13.7330	0.823710
nC5		0*	0*	1.61056	7.56733	16.3550	15.2296	0.440515
i-Hexane		0*	0*	0.645485	4.82657	7.95793	7.81703	0.0337120
Hexane		0*	0*	0.370809	3.30309	5.00912	5.01344	0.0130582
Benzene		0*	0*	0.207005	1.85800	2.73744	2.75827	0.00986540
Cyclohexane		0*	0*	0.348580	3.53619	4.74290	4.89021	0.0103982
i-Heptane		0*	0*	0.562547	6.83478	8.00698	8.55884	0.0102616
n-Heptane		0*	0*	0.124909	1.74891	1.86585	2.04919	0.00171674
Toluene		0*	0*	0.171154	2.49849	2.53090	2.82381	0.00242821
i-Octane		0*	0*	0.488142	6.61880	6.72411	7.49559	0.00659464
n-Octane		0*	0*	0.0470837	0.908145	0.682419	0.843552	0.000309150
Ethylbenzene		0*	0*	0.0269515	0.532468	0.380330	0.479360	0.000190970
m-Xylene		0*	0*	0.0805647	1.61684	1.11730	1.42665	0.000525119
o-Xylene		0*	0*	0	0	0	0	0
p-Xylene		0*	0*	0	0	0	0	0
Nonane		0*	0*	0.171900	4.02352	2.18125	3.08898	0.000663513
Decane		0*	0*	0.251935	6.42659	2.49229	4.17040	0.000653142
Sulfur Dioxide		0*	0*	0	0	0	0	0
H2O		99.6007*	100*	0.0853554	0.0221684	4.52420E-07	3.67056E-07	0.0309813
Piperazine		0*	0*	0	0	0	0	0
TEG		0*	0*	0	0	0	0	0
Oxygen		0*	0*	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		0*	0*	41.1622	0.764267	0.000921018	0.000983545	1.20302
N2		0*	0*	12519.3	23.3681	5.03849E-07	5.16352E-07	24.6692
C1		0*	0*	293613	1306.10	0.00100745	0.00104399	1481.21
CO2		0*	0*	3653.37	31.7403	0.000654569	0.000685587	39.9539
C2		0*	0*	85708.6	1327.95	0.873233	0.929876	2041.18
C3		0*	0*	61268.4	2162.06	139.567	153.076	5196.41
iC4		0*	0*	10973.6	715.892	1314.03	1487.85	2130.79

Process Streams		7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
C4		0*	0*	26886.0	2222.03	7812.13	8951.27	5167.32
iC5		29.0586*	0*	8710.15	1228.11	6200.83	7413.84	134.336
nC5		0*	0*	8551.21	1431.32	6797.29	8221.80	71.8422
i-Hexane		0*	0*	3427.18	912.917	3307.40	4220.08	5.49799
Hexane		0*	0*	1968.79	624.760	2081.84	2706.54	2.12962
Benzene		0*	0*	1099.08	351.430	1137.71	1489.07	1.60892
Cyclohexane		0*	0*	1850.77	668.850	1971.20	2640.01	1.69581
i-Heptane		0*	0*	2986.82	1292.76	3327.78	4620.54	1.67353
n-Heptane		0*	0*	663.200	330.795	775.468	1106.27	0.279979
Toluene		0*	0*	908.737	472.575	1051.87	1524.45	0.396010
i-Octane		0*	0*	2591.77	1251.91	2794.61	4046.54	1.07550
n-Octane		0*	0*	249.989	171.770	283.620	455.397	0.0504183
Ethylbenzene		0*	0*	143.098	100.713	158.069	258.786	0.0311447
m-Xylene		0*	0*	427.755	305.815	464.361	770.187	0.0856402
o-Xylene		0*	0*	0	0	0	0	0
p-Xylene		0*	0*	0	0	0	0	0
Nonane		0*	0*	912.694	761.024	906.551	1667.61	0.108210
Decane		0*	0*	1337.64	1215.55	1035.82	2251.42	0.106519
Sulfur Dioxide		0*	0*	0	0	0	0	0
H2O		7248.57*	#######	453.191	4.19302	0.000188030	0.000198158	5.05266
Piperazine		0*	0*	0	0	0	0	0
TEG		0*	0*	0	0	0	0	0
Oxygen		0*	0*	0	0	0	0	0

Process Streams		7	8	9	10	11	12	13
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Property	Units							
Temperature	°F	95*	535.438	93.3580	46.9023	382.925	342.563	147.789
Pressure	psig	450*	914	914	83*	303	303	300
Molecular Weight	lb/lbmol	18.0694	18.0153	21.9574	54.6312	76.9052	79.1276	39.8989
Mass Flow	lb/h	7277.63	453.191	530946	18914.4	41561.0	53985.7	16308.7
Std Vapor Volumetric Flow	MMSCFD	3.66818	#######	220.229	3.15324	4.92193	6.21377	3.72274
Std Liquid Volumetric Flow	sgpm	14.5833*	#######	2958.64	66.8471	127.230	163.603	67.9304
Net Ideal Gas Heating Valu	Btu/ft^3	3.69900	0	1168.23	2800.94	3904.45	4010.51	2093.42
Gross Ideal Gas Heating Va	Btu/ft^3	54.2606	50.3100	1286.35	3031.40	4211.29	4323.93	2278.68

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--
Mole Fraction		%	%	%	%	%	%
Hydrogen Sulfide		0.00630032	0	0	3.94053E-05	0*	0
N2		0.0227255	0	0	1.80701E-08	0*	0
C1		5.34085	0	0	0.000124731	0*	0
CO2		0.0913219	0	0	4.86576E-05	0*	0
C2		11.6073	0	0	0.0806558	0*	0
C3		33.8211	0	0	3.17622	0*	0
iC4		13.3748	0	0	10.9277	0*	0
C4		34.3851	0	0	48.4431	0*	0
iC5		0.808496	94.7786	0.00122456	15.6450	0.0431145*	0.0431145
nC5		0.440796	0	0	13.5514	0*	0
i-Hexane		0.0297074	0	0	2.94654	0*	0
Hexane		0.0116362	0	0	1.42875	0*	0
Benzene		0.00957406	0	0	0.550841	0*	0
Cyclohexane		0.00950565	0	0	1.00160	0*	0
i-Heptane		0.00798099	0	0	1.08635	0*	0
n-Heptane		0.00134293	0	0	0.190524	0*	0
Toluene		0.00205922	0	0	0.182821	0*	0
i-Octane		0.00452689	0	0	0.689862	0*	0
n-Octane		0.000214462	0	0	0.0236926	0*	0
Ethylbenzene		0.000142248	0	0	0.0109509	0*	0
m-Xylene		0.000391460	0	0	0.0290352	0*	0
o-Xylene		0	0	0	0	0*	0
p-Xylene		0	0	0	0	0*	0
Nonane		0.000411814	0	0	0.0248425	0*	0
Decane		0.000365873	0	0	0.00989838	0*	0
Sulfur Dioxide		0	0	0	0	0*	0
H2O		0.0233484	5.22142	99.9988	1.61567E-08	99.9569*	99.9569
Piperazine		0	0	0	0	0*	0
TEG		0	0	0	0	0*	0
Oxygen		0	0	0	0	0*	0
Mass Fraction		%	%	%	%	%	%
Hydrogen Sulfide		0.00446931	0	0	2.08560E-05	0	0
N2		0.0132509	0	0	7.86125E-09	0	0
C1		1.78340	0	0	3.10751E-05	0	0
CO2		0.0836542	0	0	3.32554E-05	0	0
C2		7.26470	0	0	0.0376635	0	0
C3		31.0420	0	0	2.17506	0	0
iC4		16.1806	0	0	9.86365	0	0
C4		41.5986	0	0	43.7260	0	0
iC5		1.21415	98.6431	0.00490402	17.5295	0.172444	0.172444
nC5		0.661963	0	0	15.1837	0	0
i-Hexane		0.0532862	0	0	3.94331	0	0
Hexane		0.0208718	0	0	1.91208	0	0
Benzene		0.0155661	0	0	0.668204	0	0
Cyclohexane		0.0166514	0	0	1.30908	0	0
i-Heptane		0.0166456	0	0	1.69049	0	0
n-Heptane		0.00280088	0	0	0.296477	0	0
Toluene		0.00394921	0	0	0.261597	0	0
i-Octane		0.0107632	0	0	1.22378	0	0
n-Octane		0.000509907	0	0	0.0420294	0	0
Ethylbenzene		0.000314336	0	0	0.0180550	0	0
m-Xylene		0.000865039	0	0	0.0478709	0	0
o-Xylene		0	0	0	0	0	0
p-Xylene		0	0	0	0	0	0
Nonane		0.00109937	0	0	0.0494807	0	0
Decane		0.00108354	0	0	0.0218715	0	0
Sulfur Dioxide		0	0	0	0	0	0
H2O		0.00875519	1.35693	99.9951	4.52021E-09	99.8276	99.8276
Piperazine		0	0	0	0	0	0
TEG		0	0	0	0	0	0
Oxygen		0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		0.438836	0	0	8.50473E-06	0*	0
N2		1.30109	0	0	3.20569E-09	0*	0
C1		175.109	0	0	1.26719E-05	0*	0
CO2		8.21390	0	0	1.35610E-05	0*	0
C2		713.312	0	0	0.0153586	0*	0
C3		3047.97	0	0	0.886955	0*	0
iC4		1588.76	0	0	4.02223	0*	0

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--
C4		4084.52	0	0	17.8307	0*	0
iC5		119.216	28.7031	0.355470	7.14825	4.22177E-05*	0.000258101
nC5		64.9973	0	0	6.19166	0*	0
i-Hexane		5.23210	0	0	1.60802	0*	0
Hexane		2.04938	0	0	0.779715	0*	0
Benzene		1.52841	0	0	0.272482	0*	0
Cyclohexane		1.63498	0	0	0.533819	0*	0
i-Heptane		1.63441	0	0	0.689352	0*	0
n-Heptane		0.275015	0	0	0.120898	0*	0
Toluene		0.387768	0	0	0.106675	0*	0
i-Octane		1.05682	0	0	0.499036	0*	0
n-Octane		0.0500671	0	0	0.0171389	0*	0
Ethylbenzene		0.0308643	0	0	0.00736255	0*	0
m-Xylene		0.0849371	0	0	0.0195210	0*	0
o-Xylene		0	0	0	0	0*	0
p-Xylene		0	0	0	0	0*	0
Nonane		0.107945	0	0	0.0201774	0*	0
Decane		0.106392	0	0	0.00891884	0*	0
Sulfur Dioxide		0	0	0	0	0*	0
H2O		0.859661	0.394838	7248.17	1.84327E-09	0.0244397*	0.149414
Piperazine		0	0	0	0	0*	0
TEG		0	0	0	0	0*	0
Oxygen		0	0	0	0	0*	0

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--
Property	Units						
Temperature	°F	100.112	95.6286	95.6286	79.4415	78.5376	78.5376
Pressure	psig	300	1*	1	-2.45311	-14.2120	-14.2120
Molecular Weight	lb/lbmol	48.0434	69.3222	18.0159	64.3924	18.0386	18.0386
Mass Flow	lb/h	9818.87	29.0980	7248.53	40.7783	0.0244819	0.149672
Std Vapor Volumetric Flow	MMSCFD	1.86137	0.00382292	3.66436	0.00576766	1.23608E-05	7.55687E-05
Std Liquid Volumetric Flow	sgpm	37.4566	0.0925747	14.4908	0.134813	4.89917E-05	0.000299514
Net Ideal Gas Heating Valu	Btu/ft^3	2505.78	3505.86	0.0452965	3314.02	1.59481	1.59481
Gross Ideal Gas Heating Va	Btu/ft^3	2720.81	3794.62	50.3584	3586.19	52.0133	52.0133

Process Streams		18 - WT Working Losses
Composition	Status:	Solved
Phase: Total	From Block:	--
	To Block:	MIX-101
Mole Fraction		%
Hydrogen Sulfide		0*
N2		0*
C1		0*
CO2		0*
C2		0*
C3		0*
iC4		0*
C4		0*
iC5		0.0431145*
nC5		0*
i-Hexane		0*
Hexane		0*
Benzene		0*
Cyclohexane		0*
i-Heptane		0*
n-Heptane		0*
Toluene		0*
i-Octane		0*
n-Octane		0*
Ethylbenzene		0*
m-Xylene		0*
o-Xylene		0*
p-Xylene		0*
Nonane		0*
Decane		0*
Sulfur Dioxide		0*
H2O		99.9569*
Piperazine		0*
TEG		0*
Oxygen		0*
Mass Fraction		%
Hydrogen Sulfide		0
N2		0
C1		0
CO2		0
C2		0
C3		0
iC4		0
C4		0
iC5		0.172444
nC5		0
i-Hexane		0
Hexane		0
Benzene		0
Cyclohexane		0
i-Heptane		0
n-Heptane		0
Toluene		0
i-Octane		0
n-Octane		0
Ethylbenzene		0
m-Xylene		0
o-Xylene		0
p-Xylene		0
Nonane		0
Decane		0
Sulfur Dioxide		0
H2O		99.8276
Piperazine		0
TEG		0
Oxygen		0
Mass Flow		lb/h
Hydrogen Sulfide		0*
N2		0*
C1		0*
CO2		0*
C2		0*
C3		0*
iC4		0*

Process Streams		18 - WT Working Losses
Composition	**Status:**	Solved
Phase: **Total**	**From Block:**	--
	To Block:	MIX-101
C4		0*
iC5		0.000215883*
nC5		0*
i-Hexane		0*
Hexane		0*
Benzene		0*
Cyclohexane		0*
i-Heptane		0*
n-Heptane		0*
Toluene		0*
i-Octane		0*
n-Octane		0*
Ethylbenzene		0*
m-Xylene		0*
o-Xylene		0*
p-Xylene		0*
Nonane		0*
Decane		0*
Sulfur Dioxide		0*
H2O		0.124974*
Piperazine		0*
TEG		0*
Oxygen		0*

Process Streams		18 - WT Working Losses
Properties	**Status:**	Solved
Phase: **Total**	**From Block:**	--
	To Block:	MIX-101
Property	**Units**	
Temperature	°F	78.5376
Pressure	psig	-14.2120
Molecular Weight	lb/lbmol	18.0386
Mass Flow	lb/h	0.125190
Std Vapor Volumetric Flow	MMSCFD	6.32079E-05
Std Liquid Volumetric Flow	sgpm	0.000250523
Net Ideal Gas Heating Valu	Btu/ft^3	1.59481
Gross Ideal Gas Heating Va	Btu/ft^3	52.0133

Condensate PStreams MAX

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Mole Fraction		%	%	%	%	%	%	%	%	%	%
Hydrogen Sulfide		8.87206E-06*	5.78703E-07	8.87206E-06*	0.00497211	2.25653E-05	0.0110109	8.87206E-06*	0.005	6.08452E-07	0.00639962
N2		1.93032E-10*	72.9047	1.93032E-10*	1.87488	1.38988E-08	0.381197	1.93032E-10*	1.85011	76.6521	0.221534
C1		3.92632E-06*	0.697163	3.92632E-06*	76.5670	5.87269E-05	38.3138	3.92632E-06*	75.7682	1.58351E-06	22.2663
CO2		4.42674E-06*	12.0437	4.42674E-06*	0.345638	1.40403E-05	0.346890	4.42674E-06*	0.34366	3.78584E-07	0.201597
C2		0.0141126*	2.48821E-05	0.0141126*	11.7753	0.0264096	21.6738	0.0141126*	11.8001	0.000712108	12.5965
C3		1.41560*	0.00104630	1.41560*	5.60522	2.03990	24.5868	1.41560*	5.75206	0.0550040	14.3814
iC4		8.28622*	0.00475949	8.28622*	0.733277	9.27928	4.80301	8.28622*	0.78161	0.250207	3.69015
C4		42.9010*	0.0227893	42.9010*	1.75632	44.4308	9.60748	42.9010*	1.91499	1.19804	11.5032
iC5		18.3389*	0.0136875	18.3389*	0.422807	16.9995	0.115121	18.3389*	0.49978	0.719554	5.17743
nC5		16.9193*	0.00793581	16.9193*	0.399645	15.4719	0.0522373	16.9193*	0.49066	0.417186	6.02783
i-Hexane		4.16589*	0.00193858	4.16589*	0.114893	3.77952	0.00167679	4.16589*	0.16464	0.101911	3.19748
Hexane		2.09922*	0.000947846	2.09922*	0.0604537	1.84796	0.000502596	2.09922*	0.09458	0.0498283	2.17622
Benzene		0.829055*	0.000597146	0.829055*	0.0372193	1.16422	0.000557374	0.829055*	0.05825	0.0313920	1.34109
Cyclohexane		1.50292*	0.000819195	1.50292*	0.0538048	1.59713	0.000386003	1.50292*	0.09104	0.0430652	2.36306
i-Heptane		1.69088*	0.000786396	1.69088*	0.0631005	1.53319	0.000204700	1.69088*	0.1234	0.0413409	3.80424
n-Heptane		0.303059*	0.000139489	0.303059*	0.0121026	0.271952	2.56016E-05	0.303059*	0.0274	0.00733294	0.961431
Toluene		0.294397*	0.000204761	0.294397*	0.0172716	0.399209	4.59578E-05	0.294397*	0.04083	0.0107643	1.47935
i-Octane		1.07630*	0.000486591	1.07630*	0.0430055	0.948676	8.44317E-05	1.07630*	0.09393	0.0255801	3.20313
n-Octane		0.0400513*	2.03628E-05	0.0400513*	0.00232502	0.0397000	1.51486E-06	0.0400513*	0.00906	0.00107047	0.420470
Ethylbenzene		0.0183990*	1.23596E-05	0.0183990*	0.00136266	0.0240968	1.29688E-06	0.0183990*	0.00558	0.000649747	0.263204
m-Xylene		0.0489977*	3.42095E-05	0.0489977*	0.00389718	0.0666961	3.24257E-06	0.0489977*	0.01668	0.00179840	0.797557
o-Xylene		0*	0	0*	0	0	0	0*	0	0	0
p-Xylene		0*	0	0*	0	0	0	0*	0	0	0
Nonane		0.0410554*	2.71548E-05	0.0410554*	0.00374291	0.0529420	9.84864E-07	0.0410554*	0.02946	0.00142753	1.60072
Decane		0.0146462*	1.37081E-05	0.0146462*	0.00259218	0.0267258	4.19944E-07	0.0146462*	0.03892	0.000720635	2.25864
Sulfur Dioxide		0*	0	0*	0	0	0	0*	0	0	0
H2O		2.72705E-09*	13.9105	2.72705E-09*	0.0991252	1.03666E-05	0.105056	2.72705E-09*	0	0.0143888	0.0610541
Piperazine		0*	0	0*	0	0	0	0*	0	0	0
TEG		0*	0	0*	0	0	0	0*	0	0	0
Oxygen		0*	0.387595	0*	0	0	0	0*	0	20.3759	0
Mass Fraction		%	%	%	%	%	%	%	%	%	%
Hydrogen Sulfide		4.52519E-06	6.91954E-07	4.52519E-06	0.00791269	1.16234E-05	0.0116227	4.52519E-06	########	6.91957E-07	0.00395707
N2		8.09275E-11	71.6527	8.09275E-11	2.45252	5.88467E-09	0.330742	8.09275E-11	2.35994	71.6527	0.112594
C1		9.42667E-07	0.392389	9.42667E-07	57.3568	1.42393E-05	19.0371	9.42667E-07	55.3473	8.47686E-07	6.48077
CO2		2.91562E-06	18.5960	2.91562E-06	0.710298	9.33908E-06	0.472837	2.91562E-06	0.688674	5.55970E-07	0.160968
C2		0.00635078	2.62493E-05	0.00635078	16.5335	0.0120022	20.1850	0.00635078	16.1564	0.000714510	6.87193
C3		0.934192	0.00161868	0.934192	11.5415	1.35952	33.5793	0.934192	11.5493	0.0809342	11.5055
iC4		7.20775	0.00970540	7.20775	1.99014	8.15148	8.64628	7.20775	2.06857	0.485270	3.89129
C4		37.3174	0.0464712	37.3174	4.76670	39.0308	17.2952	37.3174	5.06812	2.32356	12.1302
iC5		19.8017	0.0346469	19.8017	1.42444	18.5372	0.257251	19.8017	1.64190	1.73235	6.77722
nC5		18.2689	0.0200878	18.2689	1.34640	16.8715	0.116730	18.2689	1.61194	1.00439	7.89038
i-Hexane		5.37269	0.00586108	5.37269	0.462327	4.92267	0.00447545	5.37269	0.646036	0.293054	4.99918
Hexane		2.70733	0.00286571	2.70733	0.243264	2.40688	0.00134145	2.70733	0.371125	0.143285	3.40247
Benzene		0.969173	0.00163647	0.969173	0.135755	1.37446	0.00134846	0.969173	0.207182	0.0818236	1.90056
Cyclohexane		1.89296	0.00241881	1.89296	0.211445	2.03154	0.00100616	1.89296	0.348878	0.120940	3.60816
i-Heptane		2.53566	0.00276458	2.53566	0.295244	2.32194	0.000635284	2.53566	0.563027	0.138229	6.91596
n-Heptane		0.454469	0.000490373	0.454469	0.0566276	0.411860	7.94543E-05	0.454469	0.125016	0.0245187	1.74784
Toluene		0.405952	0.000661910	0.405952	0.0743098	0.555932	0.000131152	0.405952	0.171300	0.0330955	2.47297
i-Octane		1.83996	0.00195007	1.83996	0.229388	1.63785	0.000298713	1.83996	0.488559	0.0975035	6.63830
n-Octane		0.0684687	8.16062E-05	0.0684687	0.0124015	0.0685403	5.35944E-06	0.0684687	########	0.00408031	0.871401
Ethylbenzene		0.0292333	4.60361E-05	0.0292333	0.00675526	0.0386653	4.26435E-06	0.0292333	########	0.00230180	0.506970
m-Xylene		0.0778499	0.000127420	0.0778499	0.0193199	0.107019	1.06621E-05	0.0778499	########	0.00637102	1.53621
o-Xylene		0	0	0	0	0	0	0	0	0	0
p-Xylene		0	0	0	0	0	0	0	0	0	0
Nonane		0.0788036	0.000122189	0.0788036	0.0224159	0.102625	3.91223E-06	0.0788036	0.172046	0.00610945	3.72475
Decane		0.0311870	6.84285E-05	0.0311870	0.0172221	0.0574724	1.85061E-06	0.0311870	0.252151	0.00342142	5.83046
Sulfur Dioxide		0	0	0	0	0	0	0	0	0	0
H2O		7.35251E-10	8.79216	7.35251E-10	0.0833868	2.82266E-06	0.0586187	7.35251E-10	0	0.00864984	0.0199556
Piperazine		0	0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0	0
Oxygen		0	0.435134	0	0	0	0	0	0	21.7567	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		4.08428E-07*	3.15862E-05	1.63099E-06*	40.3139	3.15863E-05	0.848209	1.61935E-06*	41.1622	3.15863E-05	0.848290
N2		7.30424E-12*	3270.79	2.91682E-11*	12495.2	1.59915E-08	24.1372	2.89600E-11*	12519.3	3270.79	24.1372
C1		8.50819E-08*	17.9117	3.39760E-07*	292224	3.86950E-05	1389.31	3.37335E-07*	293613	3.86950E-05	1389.31
CO2		2.63154E-07*	848.864	1.05086E-06*	3618.86	2.53788E-05	34.5071	1.04336E-06*	3653.37	2.53788E-05	34.5073
C2		0.000573199*	0.00119822	0.00228897*	84235.5	0.0326158	1473.08	0.00227264*	85708.6	0.0326158	1473.16
C3		0.0843169*	0.0738894	0.336705*	58802.0	3.69447	2450.58	0.334302*	61268.4	3.69447	2466.48
iC4		0.650547*	0.443030	2.59785*	10139.4	22.1515	630.996	2.57931*	10973.6	22.1515	834.190
C4		3.36814*	2.12131	13.4501*	24285.6	106.065	1262.18	13.3541*	26886.0	106.065	2600.39
iC5		1.78724*	1.58156	7.13702*	7257.30	50.3747	18.7739	7.08608*	8710.15	79.0778	1452.86
nC5		1.64889*	0.916962	6.58454*	6859.72	45.8481	8.51885	6.53755*	8551.21	45.8481	1691.49
i-Hexane		0.484921*	0.267545	1.93645*	2355.48	13.3773	0.326613	1.92263*	3427.18	13.3773	1071.69
Hexane		0.244355*	0.130813	0.975788*	1239.39	6.54066	0.0978979	0.968825*	1968.79	6.54066	729.400
Benzene		0.0874742*	0.0747014	0.349313*	691.653	3.73507	0.0984089	0.346820*	1099.08	3.73507	407.430
Cyclohexane		0.170852*	0.110413	0.682267*	1077.28	5.52067	0.0734285	0.677398*	1850.77	5.52067	773.495
i-Heptane		0.228860*	0.126197	0.913912*	1504.22	6.30984	0.0463623	0.907390*	2986.82	6.30984	1482.60
n-Heptane		0.0410188*	0.0223845	0.163801*	288.509	1.11922	0.00579849	0.162632*	663.200	1.11922	374.691
Toluene		0.0366399*	0.0302147	0.146315*	378.597	1.51074	0.00957130	0.145271*	908.737	1.51074	530.140
i-Octane		0.166068*	0.0890164	0.663164*	1168.70	4.45082	0.0217997	0.658432*	2591.77	4.45082	1423.08
n-Octane		0.00617975*	0.00372514	0.0246778*	63.1836	0.186257	0.000391126	0.0245016*	249.989	0.186257	186.805
Ethylbenzene		0.00263850*	0.00210145	0.0105364*	34.4170	0.105072	0.000311208	0.0104612*	143.098	0.105072	108.681
m-Xylene		0.00702646*	0.00581646	0.0280590*	98.4318	0.290823	0.000778110	0.0278587*	427.755	0.290823	329.323
o-Xylene		0*	0	0*	0	0	0	0*	0	0	0
p-Xylene		0*	0	0*	0	0	0	0*	0	0	0
Nonane		0.00711254*	0.00557766	0.0284027*	114.206	0.278883	0.000285510	0.0282000*	912.694	0.278883	798.488
Decane		0.00281484*	0.00312361	0.0112406*	87.7439	0.156180	0.000135055	0.0111603*	1337.64	0.156180	1249.90
Sulfur Dioxide		0*	0	0*	0	0	0	0*	0	0	0

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
H2O		6.63612E-11*	401.343	2.65002E-10*	424.843	7.67055E-06	4.27793	2.63111E-10*	0	0.394846	4.27795
Piperazine		0*	0	0*	0	0	0	0*	0	0	0
TEG		0*	0	0*	0	0	0	0*	0	0	0
Oxygen		0*	19.8629	0*	0	0	0	0*	0	993.145	0

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Property	Units										
Temperature	°F	101.014	3751.21	101.014	89.1657	100*	103.405	101.014	89.7416	74.6194	89.1657
Pressure	psig	0.475513	1*	0.475513	840.015	0.00405122*	300	0.475513	850.015	0.00405122	840.015
Molecular Weight	lb/lbmol	66.8188	28.5029	66.8188	21.4155	66.1637	32.2869	66.8188	21.9615	29.9680	55.1178
Mass Flow	lb/h	9.02566	4564.78	36.0424	509485	271.748	7297.89	35.7852	530493	4564.78	21437.4
Std Vapor Volumetric	MMSCFD	0.00123023	1.45860	0.00491269	216.675	0.0374069	2.05862	0.00487764	220*	1.38729	3.54229
Std Liquid Volumetric	sgpm	0.0293721	11.1562	0.117293	2883.09	0.886222	33.9904	0.116455	2957.73	10.8203	75.4930
Net Ideal Gas Heating	Btu/ft^3	3431.50	8.26640	3431.50	1141.20	3397.12	1708.29	3431.50	1169.44	101.261	2825.62
Gross Ideal Gas Heati	Btu/ft^3	3711.45	16.1231	3711.45	1257.46	3673.88	1865.76	3711.45	1287.64	109.519	3057.85

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Mole Fraction		%	%	%	%	%	%	%	%	%	
Hydrogen Sulfide		8.87206E-06	5.78703E-07	8.87206E-06	0.00497211	2.25653E-05	0.0110109	8.87206E-06	########	6.08452E-07	
N2		1.93032E-10	72.9047	1.93032E-10	1.87488	1.38988E-08	0.381197	1.93032E-10	1.87631	76.6521	
C1		3.92632E-06	0.697163	3.92632E-06	76.5670	5.87269E-05	38.3138	3.92632E-06	76.6271	1.58351E-06	
CO2		4.42674E-06	12.0437	4.42674E-06	0.345638	1.40403E-05	0.346890	4.42674E-06	0.345930	3.78584E-07	
C2		0.0141126	2.48821E-05	0.0141126	11.7753	0.0264096	21.6738	0.0141126	11.7866	0.000712108	
C3		1.41560	0.00104630	1.41560	5.60522	2.03990	24.5868	1.41560	5.61325	0.0550040	
iC4		8.28622	0.00475949	8.28622	0.733277	9.27928	4.80301	8.28622	0.735002	0.250207	
C4		42.9010	0.0227893	42.9010	1.75632	44.4308	9.60748	42.9010	1.76144	1.19804	
iC5		18.3389	0.0136875	18.3389	0.422807	16.9995	0.115121	18.3389	0.424992	0.719554	
nC5		16.9193	0.00793581	16.9193	0.399645	15.4719	0.0522373	16.9193	0.402112	0.417186	
i-Hexane		4.16589	0.00193858	4.16589	0.114893	3.77952	0.00167679	4.16589	0.116088	0.101911	
Hexane		2.09922	0.000947846	2.09922	0.0604537	1.84796	0.000502596	2.09922	########	0.0498283	
Benzene		0.829055	0.000597146	0.829055	0.0372193	1.16422	0.000557374	0.829055	########	0.0313920	
Cyclohexane		1.50292	0.000819195	1.50292	0.0538048	1.59713	0.000386003	1.50292	########	0.0430652	
i-Heptane		1.69088	0.000786396	1.69088	0.0631005	1.53319	0.000204700	1.69088	########	0.0413409	
n-Heptane		0.303059	0.000139489	0.303059	0.0121026	0.271952	2.56016E-05	0.303059	########	0.00733294	
Toluene		0.294397	0.000204761	0.294397	0.0172716	0.399209	4.59578E-05	0.294397	########	0.0107643	
i-Octane		1.07630	0.000486591	1.07630	0.0430055	0.948676	8.44317E-05	1.07630	########	0.0255801	
n-Octane		0.0400513	2.03628E-05	0.0400513	0.00232502	0.0397000	1.51486E-06	0.0400513	########	0.00107047	
Ethylbenzene		0.0183990	1.23596E-05	0.0183990	0.00136266	0.0240968	1.29688E-06	0.0183990	########	0.000649747	
m-Xylene		0.0489977	3.42095E-05	0.0489977	0.00389718	0.0666961	3.24257E-06	0.0489977	########	0.00179840	
o-Xylene		0	0	0	0	0	0	0	0	0	
p-Xylene		0	0	0	0	0	0	0	0	0	
Nonane		0.0410554	2.71548E-05	0.0410554	0.00374291	0.0529420	9.84864E-07	0.0410554	########	0.00142753	
Decane		0.0146462	1.37081E-05	0.0146462	0.00259218	0.0267258	4.19944E-07	0.0146462	########	0.000720635	
Sulfur Dioxide		0	0	0	0	0	0	0	0	0	
H2O		2.72705E-09	13.9105	2.72705E-09	0.0991252	1.03666E-05	0.105056	2.72705E-09	0	0.0143888	
Piperazine		0	0	0	0	0	0	0	0	0	
TEG		0	0	0	0	0	0	0	0	0	
Oxygen		0	0.387595	0	0	0	0	0	0	20.3759	
Mass Fraction		%	%	%	%	%	%	%	%	%	
Hydrogen Sulfide		4.52519E-06	6.91954E-07	4.52519E-06	0.00791269	1.16234E-05	0.0116227	4.52519E-06	########	6.91957E-07	
N2		8.09275E-11	71.6527	8.09275E-11	2.45252	5.88467E-09	0.330742	8.09275E-11	2.45292	71.6527	
C1		9.42667E-07	0.392389	9.42667E-07	57.3568	1.42393E-05	19.0371	9.42667E-07	57.3674	8.47686E-07	
CO2		2.91562E-06	18.5960	2.91562E-06	0.710298	9.33908E-06	0.472837	2.91562E-06	0.710472	5.55970E-07	
C2		0.00635078	2.62493E-05	0.00635078	16.5335	0.0120022	20.1850	0.00635078	16.5395	0.000714510	
C3		0.934192	0.00161868	0.934192	11.5415	1.35952	33.5793	0.934192	11.5511	0.0809342	
iC4		7.20775	0.00970540	7.20775	1.99014	8.15148	8.64628	7.20775	1.99362	0.485270	
C4		37.3174	0.0464712	37.3174	4.76670	39.0308	17.2952	37.3174	4.77773	2.32356	
iC5		19.8017	0.0346469	19.8017	1.42444	18.5372	0.257251	19.8017	1.43094	1.73235	
nC5		18.2689	0.0200878	18.2689	1.34640	16.8715	0.116730	18.2689	1.35391	1.00439	
i-Hexane		5.37269	0.00586108	5.37269	0.462327	4.92267	0.00447545	5.37269	0.466854	0.293054	
Hexane		2.70733	0.00286571	2.70733	0.243264	2.40688	0.00134145	2.70733	0.246234	0.143285	
Benzene		0.969173	0.00163647	0.969173	0.135755	1.37446	0.00134846	0.969173	0.137366	0.0818236	
Cyclohexane		1.89296	0.00241881	1.89296	0.211445	2.03154	0.00100616	1.89296	0.214395	0.120940	
i-Heptane		2.53566	0.00276458	2.53566	0.295244	2.32194	0.000635284	2.53566	0.300566	0.138229	
n-Heptane		0.454469	0.000490373	0.454469	0.0566276	0.411860	7.94543E-05	0.454469	########	0.0245187	
Toluene		0.405952	0.000661910	0.405952	0.0743098	0.555932	0.000131152	0.405952	########	0.0330955	
i-Octane		1.83996	0.00195007	1.83996	0.229388	1.63785	0.000298713	1.83996	0.234150	0.0975035	
n-Octane		0.0684687	8.16062E-05	0.0684687	0.0124015	0.0685403	5.35944E-06	0.0684687	########	0.00408031	
Ethylbenzene		0.0292333	4.60361E-05	0.0292333	0.00675526	0.0386653	4.26435E-06	0.0292333	########	0.00230180	
m-Xylene		0.0778499	0.000127420	0.0778499	0.0193199	0.107019	1.06621E-05	0.0778499	########	0.00637102	
o-Xylene		0	0	0	0	0	0	0	0	0	
p-Xylene		0	0	0	0	0	0	0	0	0	
Nonane		0.0788036	0.000122189	0.0788036	0.0224159	0.102625	3.91223E-06	0.0788036	########	0.00610945	
Decane		0.0311870	6.84285E-05	0.0311870	0.0172221	0.0574724	1.85061E-06	0.0311870	########	0.00342142	
Sulfur Dioxide		0	0	0	0	0	0	0	0	0	
H2O		7.35251E-10	8.79216	7.35251E-10	0.0833868	2.82266E-06	0.0586187	7.35251E-10	0	0.00864984	
Piperazine		0	0	0	0	0	0	0	0	0	
TEG		0	0	0	0	0	0	0	0	0	
Oxygen		0	0.435134	0	0	0	0	0	0	21.7567	
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Hydrogen Sulfide		4.08428E-07	3.15862E-05	1.63099E-06	40.3139	3.15863E-05	0.848209	1.61935E-06	40.3242	3.15863E-05	
N2		7.30424E-12	3270.79	2.91682E-11	12495.2	1.59915E-08	24.1372	2.89600E-11	12495.2	3270.79	
C1		8.50819E-08	17.9117	3.39760E-07	292224	3.86950E-05	1389.31	3.37335E-07	292231	3.86950E-05	
CO2		2.63154E-07	848.864	1.05086E-06	3618.86	2.53788E-05	34.5071	1.04336E-06	3619.16	2.53788E-05	
C2		0.000573199	0.00119822	0.00228897	84235.5	0.0326158	1473.08	0.00227264	84252.3	0.0326158	
C3		0.0843169	0.0738894	0.336705	58802.0	3.69447	2450.58	0.334302	58841.3	3.69447	
iC4		0.650547	0.443030	2.59785	10139.4	22.1515	630.996	2.57931	10155.5	22.1515	
C4		3.36814	2.12131	13.4501	24285.6	106.065	1262.18	13.3541	24337.9	106.065	
iC5		1.78724	1.58156	7.13702	7257.30	50.3747	18.7739	7.08608	7289.23	79.0778	
nC5		1.64889	0.916962	6.58454	6859.72	45.8481	8.51885	6.53755	6896.82	45.8481	
i-Hexane		0.484921	0.267545	1.93645	2355.48	13.3773	0.326613	1.92263	2378.16	13.3773	
Hexane		0.244355	0.130813	0.975788	1239.39	6.54066	0.0978979	0.968825	1254.32	6.54066	
Benzene		0.0874742	0.0747014	0.349313	691.653	3.73507	0.0984089	0.346820	699.746	3.73507	
Cyclohexane		0.170852	0.110413	0.682267	1077.28	5.52067	0.0734285	0.677398	1092.13	5.52067	
i-Heptane		0.228860	0.126197	0.913912	1504.22	6.30984	0.0463623	0.907390	1531.09	6.30984	
n-Heptane		0.0410188	0.0223845	0.163801	288.509	1.11922	0.00579849	0.162632	294.663	1.11922	
Toluene		0.0366399	0.0302147	0.146315	378.597	1.51074	0.00957130	0.145271	386.734	1.51074	
i-Octane		0.166068	0.0890164	0.663164	1168.70	4.45082	0.0217997	0.658432	1192.76	4.45082	
n-Octane		0.00617975	0.00372514	0.0246778	63.1836	0.186257	0.000391126	0.0245016	65.2150	0.186257	
Ethylbenzene		0.00263850	0.00210145	0.0105364	34.4170	0.105072	0.000311208	0.0104612	35.5086	0.105072	
m-Xylene		0.00702646	0.00581646	0.0280590	98.4318	0.290823	0.000778110	0.0278587	101.645	0.290823	
o-Xylene		0	0	0	0	0	0	0	0	0	
p-Xylene		0	0	0	0	0	0	0	0	0	
Nonane		0.00711254	0.00557766	0.0284027	114.206	0.278883	0.000285510	0.0282000	119.093	0.278883	
Decane		0.00281484	0.00312361	0.0112406	87.7439	0.156180	0.000135055	0.0111603	92.1335	0.156180	
Sulfur Dioxide		0	0	0	0	0	0	0	0	0	
H2O		6.63612E-11	401.343	2.65002E-10	424.843	7.67055E-06	4.27793	2.63111E-10	0	0.394846	
Piperazine		0	0	0	0	0	0	0	0	0	
TEG		0	0	0	0	0	0	0	0	0	
Oxygen		0	19.8629	0	0	0	0	0	0	993.145	

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Property	Units										
Temperature	°F	101.014	3751.21	101.014	89.1657	100	103.405	101.014	89.7416	74.6194	
Pressure	psig	0.475513	0.00405122	0.475513	840.015	0.00405122	300	0.475513	850.015	0.00405122	
Molecular Weight	lb/lbmol	66.8188	28.5029	66.8188	21.4155	66.1637	32.2869	66.8188	21.4283	29.9680	
Mass Flow	lb/h	9.02566	4564.78	36.0424	509485	271.748	7297.89	35.7852	509401	4564.78	
Std Vapor Volumetric	MMSCFD	0.00123023	1.45860	0.00491269	216.675	0.0374069	2.05862	0.00487764	216.510	1.38729	
Std Liquid Volumetric	sgpm	0.0293721	11.1562	0.117293	2883.09	0.886222	33.9904	0.116455	2883.39	10.8203	
Net Ideal Gas Heating	Btu/ft^3	3431.50	8.26640	3431.50	1141.20	3397.12	1708.29	3431.50	1142.80	101.261	
Gross Ideal Gas Heati	Btu/ft^3	3711.45	16.1231	3711.45	1257.46	3673.88	1865.76	3711.45	1259.16	109.519	

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Mole Fraction									%		%
Hydrogen Sulfide									########		0.00639962
N2									0.224854		0.221534
C1									22.4921		22.2663
CO2									0.202843		0.201597
C2									12.6382		12.5965
C3									14.3629		14.3814
iC4									3.67277		3.69015
C4									11.4399		11.5032
iC5									5.13899		5.17743
nC5									5.98338		6.02783
i-Hexane									3.17640		3.19748
Hexane									2.16342		2.17622
Benzene									1.33402		1.34109
Cyclohexane									2.35218		2.36306
i-Heptane									3.79091		3.80424
n-Heptane									0.959715		0.961431
Toluene									1.47832		1.47935
i-Octane									3.19583		3.20313
n-Octane									0.422088		0.420470
Ethylbenzene									0.264439		0.263204
m-Xylene									0.801531		0.797557
o-Xylene									0		0
p-Xylene									0		0
Nonane									1.61460		1.60072
Decane									2.28420		2.25864
Sulfur Dioxide									0		0
H2O									0		0.0610541
Piperazine									0		0
TEG									0		0
Oxygen									0		0
Mass Fraction									%		%
Hydrogen Sulfide									########		0.00395707
N2									0.114452		0.112594
C1									6.55628		6.48077
CO2									0.162205		0.160968
C2									6.90496		6.87193

Condensate PStreams MAX

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
C3									11.5079		11.5055
iC4									3.87875		3.89129
C4									12.0815		12.1302
iC5									6.73695		6.77722
nC5									7.84391		7.89038
i-Hexane									4.97366		4.99918
Hexane									3.38751		3.40247
Benzene									1.89337		1.90056
Cyclohexane									3.59692		3.60816
i-Heptane									6.90203		6.91596
n-Heptane									1.74733		1.74784
Toluene									2.47495		2.47297
i-Octane									6.63308		6.63830
n-Octane									0.876062		0.871401
Ethylbenzene									0.510110		0.506970
m-Xylene									1.54617		1.53621
o-Xylene									0		0
p-Xylene									0		0
Nonane									3.76267		3.72475
Decane									5.90528		5.83046
Sulfur Dioxide									0		0
H2O									0		0.0199556
Piperazine									0		0
TEG									0		0
Oxygen									0		0
Mass Flow									lb/h		lb/h
Hydrogen Sulfide									0.838050		0.848290
N2									24.1396		24.1372
C1									1382.81		1389.31
CO2									34.2113		34.5073
C2									1456.35		1473.16
C3									2427.17		2466.48
iC4									818.084		834.190
C4									2548.16		2600.39
iC5									1420.92		1452.86
nC5									1654.39		1691.49
i-Hexane									1049.01		1071.69
Hexane									714.475		729.400
Benzene									399.338		407.430
Cyclohexane									758.641		773.495
i-Heptane									1455.73		1482.60
n-Heptane									368.537		374.691
Toluene									522.003		530.140
i-Octane									1399.01		1423.08
n-Octane									184.774		186.805
Ethylbenzene									107.589		108.681
m-Xylene									326.110		329.323
o-Xylene									0		0
p-Xylene									0		0
Nonane									793.601		798.488
Decane									1245.51		1249.90
Sulfur Dioxide									0		0
H2O									0		4.27795
Piperazine									0		0
TEG									0		0
Oxygen									0		0

Process Streams		Breathing Losses	ECD-1 Emissions	Loading Losses	To Amine Treating	To ECD-1	To Plant Inlet	Working Losses	1	2	3
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	--	ECD-1	--	Plant Harp	Condensate Storage Tanks	VSSL-100	--	--	Combustion Air	Plant Harp
	To Block:	MIX-100	--	--	--	Combustion Air	--	MIX-100	SAT-1	ECD-1	VLVE-100
Property	Units										
Temperature	°F								89.7416		89.1657
Pressure	psig								850.015		840.015
Molecular Weight	lb/lbmol								55.0355		55.1178
Mass Flow	lb/h								21091.4		21437.4
Std Vapor Volumetric	MMSCFD								3.49034		3.54229
Std Liquid Volumetric	sgpm								74.3402		75.4930
Net Ideal Gas Heating	Btu/ft^3								2822.09		2825.62
Gross Ideal Gas Heati	Btu/ft^3								3054.07		3057.85

Condensate PStreams MAX

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Mole Fraction		%	%	%	%	%	%	%	%	%	%
Hydrogen Sulfide		1.31648E-06	0*	7.66882E-07	0*	0*	######	0.00639962	5.05552E-06	4.27818E-06	0.00860168
N2		3.71275E-10	79*	2.13902E-11	0*	0*	1.84829	0.221534	3.91829E-09	3.18086E-09	0.201308
C1		1.76478E-06	0*	2.91473E-07	0*	0*	75.6936	22.2663	1.27364E-05	1.04554E-05	21.7191
CO2		5.21832E-07	0*	1.72180E-07	0*	0*	######	0.201597	2.87809E-06	2.38823E-06	0.217783
C2		0.00136045	0*	0.000712562	0*	0*	11.7885	12.5965	0.00547101	0.00461643	16.5450
C3		0.220374	0*	0.173312	0*	0*	5.74639	14.3814	0.592769	0.515348	29.1763
iC4		2.14579	0*	1.96128	0*	0*	######	3.69015	4.21051	3.78126	9.15187
C4		14.1331	0*	13.3495	0*	0*	1.91310	11.5032	25.1398	22.8515	22.1277
iC5		12.2017	0*	12.0776	0.1*	0*	######	5.17743	16.1576	15.3352	0.487396
nC5		14.3193	0*	14.2895	0*	0*	######	6.02783	17.6889	16.9884	0.260393
i-Hexane		7.63187	0*	7.73151	0*	0*	######	3.19748	7.15000	7.25018	0.0162815
Hexane		5.19518	0*	5.28176	0*	0*	######	2.17622	4.47342	4.62348	0.00623135
Benzene		3.20117	0*	3.25385	0*	0*	######	1.34109	2.67843	2.78711	0.00522963
Cyclohexane		5.64144	0*	5.74605	0*	0*	######	2.36306	4.29293	4.57329	0.00502646
i-Heptane		9.08262	0*	9.27789	0*	0*	######	3.80424	6.02753	6.66268	0.00406588
n-Heptane		2.29545	0*	2.34779	0*	0*	######	0.961431	1.38621	1.57524	0.000667263
Toluene		3.53199	0*	3.61302	0*	0*	######	1.47935	2.02781	2.34053	0.00102339
i-Octane		7.64759	0*	7.82085	0*	0*	######	3.20313	4.40037	5.07547	0.00225070
n-Octane		1.00390	0*	1.02884	0*	0*	######	0.420470	0.426073	0.546204	9.91694E-05
Ethylbenzene		0.628419	0*	0.644049	0*	0*	######	0.263204	0.254077	0.331902	6.59204E-05
m-Xylene		1.90423	0*	1.95175	0*	0*	######	0.797557	0.744726	0.985786	0.000180553
o-Xylene		0	0*	0	0*	0*	0	0	0	0	0
p-Xylene		0	0*	0	0*	0*	0	0	0	0	0
Nonane		3.82184	0*	3.91932	0*	0*	######	1.60072	1.16715	1.71906	0.000180480
Decane		5.39267	0*	5.53145	0*	0*	######	2.25864	1.17618	2.05278	0.000156088
Sulfur Dioxide		0	0*	0	0*	0*	0	0	0	0	0
H2O		4.10459E-07	0*	1.52945E-07	99.9*	100*	######	0.0610541	1.99430E-06	1.66502E-06	0.0632282
Piperazine		0	0*	0	0*	0*	0	0	0	0	0
TEG		0	0*	0	0*	0*	0	0	0	0	0
Oxygen		0	21*	0	0*	0*	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%	%	%
Hydrogen Sulfide		5.16915E-07	0*	2.99277E-07	0*	0*	######	0.00395707	2.25211E-06	1.85397E-06	0.00728369
N2		1.19828E-10	76.7082*	6.86143E-12	0*	0*	2.35804	0.112594	1.43474E-09	1.13303E-09	0.140115
C1		3.26180E-07	0*	5.35430E-08	0*	0*	55.3026	6.48077	2.67073E-06	2.13277E-06	8.65703
CO2		2.64589E-07	0*	8.67685E-08	0*	0*	######	0.160968	1.65563E-06	1.33645E-06	0.238137
C2		0.000471300	0*	0.000245344	0*	0*	16.1434	6.87193	0.00215030	0.00176505	12.3607
C3		0.111957	0*	0.0875100	0*	0*	11.5400	11.5055	0.341659	0.288954	31.9656
iC4		1.43689	0*	1.30531	0*	0*	2.06690	3.89129	3.19882	2.79454	13.2163
C4		9.46400	0*	8.88462	0*	0*	5.06402	12.1302	19.0992	16.8884	31.9547
iC5		10.1425	0*	9.97798	0.399287*	0*	1.64057	6.77722	15.2377	14.0686	0.873711
nC5		11.9027	0*	11.8054	0*	0*	1.61063	7.89038	16.6818	15.5852	0.466784
i-Hexane		7.57722	0*	7.62923	0*	0*	######	4.99918	8.05381	7.94445	0.0348606
Hexane		5.15798	0*	5.21189	0*	0*	######	3.40247	5.03890	5.06622	0.0133420
Benzene		2.88085	0*	2.91037	0*	0*	######	1.90056	2.73470	2.76824	0.0101495
Cyclohexane		5.47002	0*	5.53740	0*	0*	######	3.60816	4.72247	4.89400	0.0105105
i-Heptane		10.4853	0*	10.6453	0*	0*	######	6.91596	7.89455	8.48902	0.0101225
n-Heptane		2.64996	0*	2.69382	0*	0*	######	1.74784	1.81559	2.00704	0.00166123
Toluene		3.74935	0*	3.81192	0*	0*	######	2.47297	2.44220	2.74213	0.00234282
i-Octane		10.0645	0*	10.2297	0*	0*	######	6.63830	6.57016	7.37196	0.00638778
n-Octane		1.32118	0*	1.34573	0*	0*	######	0.871401	0.636167	0.793345	0.000281455
Ethylbenzene		0.768645	0*	0.782949	0*	0*	######	0.506970	0.352581	0.448048	0.000173883
m-Xylene		2.32914	0*	2.37268	0*	0*	######	1.53621	1.03345	1.33075	0.000476259
o-Xylene		0	0*	0	0*	0*	0	0	0	0	0
p-Xylene		0	0*	0	0*	0*	0	0	0	0	0
Nonane		5.64732	0*	5.75597	0*	0*	######	3.72475	1.95664	2.80348	0.000575125
Decane		8.83991	0*	9.01201	0*	0*	######	5.83046	2.18743	3.71385	0.000551794
Sulfur Dioxide		0	0*	0	0*	0*	0	0	0	0	0
H2O		8.51935E-08	0*	3.15508E-08	99.6007*	100*	######	0.0199556	4.69616E-07	3.81409E-07	0.0283014
Piperazine		0	0*	0	0*	0*	0	0	0	0	0
TEG		0	0*	0	0*	0*	0	0	0	0	0
Oxygen		0	23.2918*	0	0*	0*	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		7.30893E-05	0*	4.15030E-05	0*	0*	41.1622	0.848290	0.00106938	0.00114247	1.32524
N2		1.69430E-08	3270.79*	9.51528E-10	0*	0*	12519.3	24.1372	6.81266E-07	6.98209E-07	25.4934
C1		4.61202E-05	0*	7.42522E-06	0*	0*	293613	1389.31	0.00126816	0.00131428	1575.12
CO2		3.74117E-05	0*	1.20329E-05	0*	0*	3653.37	34.5073	0.000786152	0.000823563	43.3283
C2		0.0666395	0*	0.0340237	0*	0*	85708.6	1473.16	1.02104	1.08768	2248.98
C3		15.8302	0*	12.1357	0*	0*	61268.4	2466.48	162.232	178.062	5816.03
iC4		203.169	0*	181.018	0*	0*	10973.6	834.190	1518.91	1722.08	2404.66
C4		1338.16	0*	1232.10	0*	0*	26886.0	2600.39	9068.98	10407.1	5814.05
iC5		1434.10	0*	1383.72	29.0586*	0*	8710.15	1452.86	7235.38	8669.48	158.969
nC5		1682.99	0*	1637.14	0*	0*	8551.21	1691.49	7921.09	9604.08	84.9297
i-Hexane		1071.38	0*	1058.00	0*	0*	3427.18	1071.69	3824.23	4895.61	6.34278
Hexane		729.313	0*	722.772	0*	0*	1968.79	729.400	2392.64	3121.96	2.42754
Benzene		407.338	0*	403.603	0*	0*	1099.08	407.430	1298.53	1705.87	1.84667
Cyclohexane		773.434	0*	767.913	0*	0*	1850.77	773.495	2242.39	3015.83	1.91234
i-Heptane		1482.58	0*	1476.27	0*	0*	2986.82	1482.60	3748.61	5231.19	1.84175
n-Heptane		374.692	0*	373.573	0*	0*	663.200	374.691	862.106	1236.80	0.302256
Toluene		530.139	0*	528.629	0*	0*	908.737	530.140	1159.64	1689.78	0.426268
i-Octane		1423.08	0*	1418.63	0*	0*	2591.77	1423.08	3119.74	4542.82	1.16223
n-Octane		186.808	0*	186.622	0*	0*	249.989	186.805	302.074	488.883	0.0512098
Ethylbenzene		108.683	0*	108.578	0*	0*	143.098	108.681	167.418	276.100	0.0316375
m-Xylene		329.329	0*	329.038	0*	0*	427.755	329.323	490.719	820.048	0.0866537
o-Xylene		0	0*	0	0*	0*	0	0	0	0	0
p-Xylene		0	0*	0	0*	0*	0	0	0	0	0
Nonane		798.504	0*	798.225	0*	0*	912.694	798.488	929.083	1727.59	0.104642
Decane		1249.92	0*	1249.76	0*	0*	1337.64	1249.90	1038.67	2288.59	0.100397
Sulfur Dioxide		0	0*	0	0*	0*	0	0	0	0	0

Condensate PStreams MAX

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
H2O		1.20459E-05	0*	4.37540E-06	7248.57*	#####	429.121	4.27795	0.000222990	0.000235036	5.14935
Piperazine		0	0*	0	0*	0*	0	0	0	0	0
TEG		0	0*	0	0*	0*	0	0	0	0	0
Oxygen		0	993.145*	0	0*	0*	0	0	0	0	0

Process Streams		4	5	6	7	8	9	10	11	12	13
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Property	Units										
Temperature	°F	379.643	72*	100	95*	#####	89.7416	73.3139	379.643	340.728	149.971
Pressure	psig	303	1*	0.00405122	450*	#####	850.015	339*	303	303	300
Molecular Weight	lb/lbmol	86.7970	28.8503	87.3307	18.0694	#####	21.9576	55.1178	76.5046	78.6444	40.2479
Mass Flow	lb/h	14139.5	4263.93	13867.8	7277.63	#####	530922	21437.4	47483.5	61623.0	18194.7
Std Vapor Volumetric	MMSCFD	1.48366	1.34606	1.44625	3.66818	#####	220.217	3.54229	5.65275	7.13641	4.11724
Std Liquid Volumetric	sgpm	41.5025	9.84152	40.6163	14.5833*	#####	2958.59	75.4930	145.648	187.150	75.4869
Net Ideal Gas Heating	Btu/ft^3	4375.98	0	4401.30	3.69900	0	1168.29	2825.62	3885.56	3987.52	2111.20
Gross Ideal Gas Heati	Btu/ft^3	4711.95	0	4738.80	54.2606	#####	1286.42	3057.85	4191.30	4299.55	2297.75

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Mole Fraction			%			%	%	%	%		%
Hydrogen Sulfide			0			0	######	0.00746320	5.05552E-06		0.00860168
N2			79			0	1.87439	0.878433	3.91829E-09		0.201308
C1			0			0	76.5493	69.3282	1.27364E-05		21.7191
CO2			0			0	######	0.435489	2.87809E-06		0.217783
C2			0			0	11.7751	17.0211	0.00547101		16.5450
C3			0			0	5.60810	7.99774	0.592769		29.1763
iC4			0			0	######	0.931784	4.21051		9.15187
C4			0			0	1.76010	2.13228	25.1398		22.1277
iC5			0			0	######	0.433694	16.1576		0.487396
nC5			0			0	######	0.394402	17.6889		0.260393
i-Hexane			0			0	######	0.0971356	7.15000		0.0162815
Hexane			0			0	######	0.0475927	4.47342		0.00623135
Benzene			0			0	######	0.0315455	2.67843		0.00522963
Cyclohexane			0			0	######	0.0423023	4.29293		0.00502646
i-Heptane			0			0	######	0.0429492	6.02753		0.00406588
n-Heptane			0			0	######	0.00765944	1.38621		0.000667263
Toluene			0			0	######	0.0116194	2.02781		0.00102339
i-Octane			0			0	######	0.0272320	4.40037		0.00225070
n-Octane			0			0	######	0.00116882	0.426073		9.91694E-05
Ethylbenzene			0			0	######	0.000736687	0.254077		6.59204E-05
m-Xylene			0			0	######	0.00205067	0.744726		0.000180553
o-Xylene			0			0	0	0	0		0
p-Xylene			0			0	0	0	0		0
Nonane			0			0	######	0.00148749	1.16715		0.000180480
Decane			0			0	######	0.000832270	1.17618		0.000156088
Sulfur Dioxide			0			0	0	0	0		0
H2O			0			100	######	0.125047	1.99430E-06		0.0632282
Piperazine			0			0	0	0	0		0
TEG			0			0	0	0	0		0
Oxygen			21			0	0	0	0		0
Mass Fraction			%			%	%	%	%		%
Hydrogen Sulfide			0			0	######	0.0111106	2.25211E-06		0.00728369
N2			76.7082			0	2.45069	1.07492	1.43474E-09		0.140115
C1			0			0	57.3159	48.5829	2.67073E-06		8.65703
CO2			0			0	######	0.837194	1.65563E-06		0.238137
C2			0			0	16.5252	22.3568	0.00215030		12.3607
C3			0			0	11.5418	15.4051	0.341659		31.9656
iC4			0			0	1.99223	2.36570	3.19882		13.2163
C4			0			0	4.77465	5.41363	19.0992		31.9547
iC5			0			0	1.43027	1.36683	15.2377		0.873711
nC5			0			0	1.35338	1.24300	16.6818		0.466784
i-Hexane			0			0	######	0.365649	8.05381		0.0348606
Hexane			0			0	######	0.179154	5.03890		0.0133420
Benzene			0			0	######	0.107636	2.73470		0.0101495
Cyclohexane			0			0	######	0.155514	4.72247		0.0105105
i-Heptane			0			0	######	0.187989	7.89455		0.0101225
n-Heptane			0			0	######	0.0335255	1.81559		0.00166123
Toluene			0			0	######	0.0467655	2.44220		0.00234282
i-Octane			0			0	######	0.135880	6.57016		0.00638778
n-Octane			0			0	######	0.00583209	0.636167		0.000281455
Ethylbenzene			0			0	######	0.00341638	0.352581		0.000173883
m-Xylene			0			0	######	0.00950996	1.03345		0.000476259
o-Xylene			0			0	0	0	0		0
p-Xylene			0			0	0	0	0		0
Nonane			0			0	######	0.00833357	1.95664		0.000575125
Decane			0			0	######	0.00517268	2.18743		0.000551794
Sulfur Dioxide			0			0	0	0	0		0
H2O			0			100	######	0.0984048	4.69616E-07		0.0283014
Piperazine			0			0	0	0	0		0
TEG			0			0	0	0	0		0
Oxygen			23.2918			0	0	0	0		0
Mass Flow			lb/h			lb/h	lb/h	lb/h	lb/h		lb/h

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Hydrogen Sulfide			0			0	40.3261	0.216220	0.00106938		1.32524
N2			3270.79			0	12495.3	20.9187	6.81266E-07		25.4934
C1			0			0	292235	945.454	0.00126816		1575.12
CO2			0			0	3619.24	16.2923	0.000786152		43.3283
C2			0			0	84256.4	435.079	1.02104		2248.98
C3			0			0	58847.9	299.793	162.232		5816.03
iC4			0			0	10157.7	46.0380	1518.91		2404.66
C4			0			0	24344.3	105.353	9068.98		5814.05
iC5			0			0	7292.49	26.5994	7235.38		158.969
nC5			0			0	6900.43	24.1895	7921.09		84.9297
i-Hexane			0			0	2380.13	7.11576	3824.23		6.34278
Hexane			0			0	1255.54	3.48644	2392.64		2.42754
Benzene			0			0	700.257	2.09466	1298.53		1.84667
Cyclohexane			0			0	1093.28	3.02640	2242.39		1.91234
i-Heptane			0			0	1532.96	3.65839	3748.61		1.84175
n-Heptane			0			0	295.070	0.652428	862.106		0.302256
Toluene			0			0	387.156	0.910086	1159.64		0.426268
i-Octane			0			0	1194.36	2.64432	3119.74		1.16223
n-Octane			0			0	65.3373	0.113496	302.074		0.0512098
Ethylbenzene			0			0	35.5560	0.0664850	167.418		0.0316375
m-Xylene			0			0	101.782	0.185070	490.719		0.0866537
o-Xylene			0			0	0	0	0		0
p-Xylene			0			0	0	0	0		0
Nonane			0			0	119.354	0.162177	929.083		0.104642
Decane			0			0	92.3433	0.100664	1038.67		0.100397
Sulfur Dioxide			0			0	0	0	0		0
H2O			0			#####	424.884	1.91502	0.000222990		5.14935
Piperazine			0			0	0	0	0		0
TEG			0			0	0	0	0		0
Oxygen			993.145			0	0	0	0		0

Process Streams		4	5	6	7	8	9	10	11	12	13
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Property	Units										
Temperature	°F		72			#####	89.7416	73.3139	379.643		149.971
Pressure	psig		1			#####	850.015	339	303		300
Molecular Weight	lb/lbmol		28.8503			#####	21.4258	22.8927	76.5046		40.2479
Mass Flow	lb/h		4263.93			#####	509867	1946.06	47483.5		18194.7
Std Vapor Volumetric	MMSCFD		1.34606			#####	216.733	0.774220	5.65275		4.11724
Std Liquid Volumetric	sgpm		9.84152			#####	2884.39	10.7761	145.648		75.4869
Net Ideal Gas Heating	Btu/ft^3		0			0	1141.71	1228.30	3885.56		2111.20
Gross Ideal Gas Heati	Btu/ft^3		0			#####	1258.01	1351.11	4191.30		2297.75

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Mole Fraction		%		%	%	%	%	%		%	
Hydrogen Sulfide		1.31648E-06		7.66882E-07	0	0	######	0.00610229		4.27818E-06	
N2		3.71275E-10		2.13902E-11	0	0	######	0.0378032		3.18086E-09	
C1		1.76478E-06		2.91473E-07	0	0	22.4649	9.10345		1.04554E-05	
CO2		5.21832E-07		1.72180E-07	0	0	######	0.136182		2.38823E-06	
C2		0.00136045		0.000712562	0	0	12.6240	11.3593		0.00461643	
C3		0.220374		0.173312	0	0	14.3484	16.1673		0.515348	
iC4		2.14579		1.96128	0	0	3.66934	4.46176		3.78126	
C4		14.1331		13.3495	0	0	11.4304	14.1245		22.8515	
iC5		12.2017		12.0776	99.9404	0	5.13602	6.50440		15.3352	
nC5		14.3193		14.2895	0	0	5.98058	7.60367		16.9884	
i-Hexane		7.63187		7.73151	0	0	3.17590	4.06473		7.25018	
Hexane		5.19518		5.28176	0	0	2.16344	2.77166		4.62348	
Benzene		3.20117		3.25385	0	0	1.33460	1.70740		2.78711	
Cyclohexane		5.64144		5.74605	0	0	2.35265	3.01224		4.57329	
i-Heptane		9.08262		9.27789	0	0	3.79254	4.85638		6.66268	
n-Heptane		2.29545		2.34779	0	0	######	1.22823		1.57524	
Toluene		3.53199		3.61302	0	0	1.47967	1.88991		2.34053	
i-Octane		7.64759		7.82085	0	0	3.19766	4.09151		5.07547	
n-Octane		1.00390		1.02884	0	0	######	0.537761		0.546204	
Ethylbenzene		0.628419		0.644049	0	0	######	0.336624		0.331902	
m-Xylene		1.90423		1.95175	0	0	######	1.02008		0.985786	
o-Xylene		0		0	0	0	0	0		0	
p-Xylene		0		0	0	0	0	0		0	
Nonane		3.82184		3.91932	0	0	1.61684	2.04807		1.71906	
Decane		5.39267		5.53145	0	0	2.28775	2.89021		2.05278	
Sulfur Dioxide		0		0	0	0	0	0		0	
H2O		4.10459E-07		1.52945E-07	0.0595922	100	######	0.0407050		1.66502E-06	
Piperazine		0		0	0	0	0	0		0	
TEG		0		0	0	0	0	0		0	
Oxygen		0		0	0	0	0	0		0	
Mass Fraction		%		%	%	%	%	%		%	
Hydrogen Sulfide		5.16915E-07		2.99277E-07	0	0	######	0.00324286		1.85397E-06	
N2		1.19828E-10		6.86143E-12	0	0	######	0.0165127		1.13303E-09	
C1		3.26180E-07		5.35430E-08	0	0	6.54836	2.27720		2.13277E-06	
CO2		2.64589E-07		8.67685E-08	0	0	######	0.0934523		1.33645E-06	
C2		0.000471300		0.000245344	0	0	6.89717	5.32591		0.00176505	

Process Streams		4	5	6	7	8	9	10	11	12	13
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
C3		0.111957		0.0875100	0	0	11.4962	11.1162		0.288954	
iC4		1.43689		1.30531	0	0	3.87512	4.04364		2.79454	
C4		9.46400		8.88462	0	0	12.0714	12.8009		16.8884	
iC5		10.1425		9.97798	99.9851	0	6.73306	7.31746		14.0686	
nC5		11.9027		11.8054	0	0	7.84023	8.55413		15.5852	
i-Hexane		7.57722		7.62923	0	0	4.97286	5.46184		7.94445	
Hexane		5.15798		5.21189	0	0	3.38754	3.72432		5.06622	
Benzene		2.88085		2.91037	0	0	1.89419	2.07959		2.76824	
Cyclohexane		5.47002		5.53740	0	0	3.59763	3.95291		4.89400	
i-Heptane		10.4853		10.6453	0	0	6.90499	7.58775		8.48902	
n-Heptane		2.64996		2.69382	0	0	1.74840	1.91902		2.00704	
Toluene		3.74935		3.81192	0	0	2.47720	2.71523		2.74213	
i-Octane		10.0645		10.2297	0	0	6.63687	7.28757		7.37196	
n-Octane		1.32118		1.34573	0	0	######	0.957828		0.793345	
Ethylbenzene		0.768645		0.782949	0	0	######	0.557250		0.448048	
m-Xylene		2.32914		2.37268	0	0	1.54818	1.68865		1.33075	
o-Xylene		0		0	0	0	0	0		0	
p-Xylene		0		0	0	0	0	0		0	
Nonane		5.64732		5.75597	0	0	3.76790	4.09584		2.80348	
Decane		8.83991		9.01201	0	0	5.91443	6.41212		3.71385	
Sulfur Dioxide		0		0	0	0	0	0		0	
H2O		8.51935E-08		3.15508E-08	0.0148866	100	######	0.0114344		3.81409E-07	
Piperazine		0		0	0	0	0	0		0	
TEG		0		0	0	0	0	0		0	
Oxygen		0		0	0	0	0	0		0	
Mass Flow		lb/h		lb/h	lb/h	lb/h	lb/h	lb/h		lb/h	
Hydrogen Sulfide		7.30893E-05		4.15030E-05	0	0	######	0.632070		0.00114247	
N2		1.69430E-08		9.51528E-10	0	0	24.0667	3.21852		6.98209E-07	
C1		4.61202E-05		7.42522E-06	0	0	1378.77	443.852		0.00131428	
CO2		3.74117E-05		1.20329E-05	0	0	34.1259	18.2149		0.000823563	
C2		0.0666395		0.0340237	0	0	1452.22	1038.08		1.08768	
C3		15.8302		12.1357	0	0	2420.56	2166.68		178.062	
iC4		203.169		181.018	0	0	815.917	788.152		1722.08	
C4		1338.16		1232.10	0	0	2541.67	2495.04		10407.1	
iC5		1434.10		1383.72	28.6093	0	1417.66	1426.26		8669.48	
nC5		1682.99		1637.14	0	0	1650.78	1667.30		9604.08	
i-Hexane		1071.38		1058.00	0	0	1047.05	1064.58		4895.61	
Hexane		729.313		722.772	0	0	713.255	725.913		3121.96	
Benzene		407.338		403.603	0	0	398.827	405.336		1705.87	
Cyclohexane		773.434		767.913	0	0	757.491	770.469		3015.83	
i-Heptane		1482.58		1476.27	0	0	1453.86	1478.94		5231.19	
n-Heptane		374.692		373.573	0	0	368.131	374.039		1236.80	
Toluene		530.139		528.629	0	0	521.581	529.230		1689.78	
i-Octane		1423.08		1418.63	0	0	1397.41	1420.43		4542.82	
n-Octane		186.808		186.622	0	0	184.652	186.692		488.883	
Ethylbenzene		108.683		108.578	0	0	107.542	108.614		276.100	
m-Xylene		329.329		329.038	0	0	325.973	329.138		820.048	
o-Xylene		0		0	0	0	0	0		0	
p-Xylene		0		0	0	0	0	0		0	
Nonane		798.504		798.225	0	0	793.340	798.326		1727.59	
Decane		1249.92		1249.76	0	0	1245.30	1249.80		2288.59	
Sulfur Dioxide		0		0	0	0	0	0		0	
H2O		1.20459E-05		4.37540E-06	0.00425959	#####	4.23653	2.22869		0.000235036	
Piperazine		0		0	0	0	0	0		0	
TEG		0		0	0	0	0	0		0	
Oxygen		0		0	0	0	0	0		0	

Process Streams		4	5	6	7	8	9	10	11	12	13
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	K-100	--	Condensate Storage Tanks	--	--	SAT-1	VLVE-100	K-100	Condensate Stabilizer	Condensate Stabilizer
	To Block:	Condensate Storage Tanks	Combustion Air	--	Produced Water Storage Tanks	SAT-1	Plant Harp	Condensate Stabilizer	Condensate Stabilizer	K-100	VSSL-100
Property	Units										
Temperature	°F	379.643		100	95	#####	89.7416	73.3139		340.728	
Pressure	psig	303		0.00405122	450	#####	850.015	339		303	
Molecular Weight	lb/lbmol	86.7970		87.3307	72.1165	#####	55.0356	64.1322		78.6444	
Mass Flow	lb/h	14139.5		13867.8	28.6136	#####	21055.3	19491.2		61623.0	
Std Vapor Volumetric	MMSCFD	1.48366		1.44625	0.00361362	#####	3.48435	2.76800		7.13641	
Std Liquid Volumetric	sgpm	41.5025		40.6163	0.0914939	#####	74.1923	64.7166		187.150	
Net Ideal Gas Heating	Btu/ft^3	4375.98		4401.30	3696.79	0	2821.47	3272.47		3987.52	
Gross Ideal Gas Heati	Btu/ft^3	4711.95		4738.80	3998.54	#####	3053.40	3535.31		4299.55	

Condensate PStreams MAX

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Mole Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		0.00619251	0	0	#########	0*	0	0*
N2		0.0214189	0	0	#########	0*	0	0*
C1		5.12428	0	0	#########	0*	0	0*
CO2		0.0886762	0	0	#########	0*	0	0*
C2		11.4161	0	0	0.0141126	0*	0	0*
C3		33.7657	0	0	1.41560	0*	0	0*
iC4		13.5007	0	0	8.28622	0*	0	0*
C4		34.6478	0	0	42.9010	0*	0	0*
iC5		0.859671	94.7786	0.00122456	18.3389	0.0225954*	0.0225954	0.0225954*
nC5		0.468549	0	0	16.9193	0*	0	0*
i-Hexane		0.0308863	0	0	4.16589	0*	0	0*
Hexane		0.0119601	0	0	2.09922	0*	0	0*
Benzene		0.00990189	0	0	0.829055	0*	0	0*
Cyclohexane		0.00966691	0	0	1.50292	0*	0	0*
i-Heptane		0.00792706	0	0	1.69088	0*	0	0*
n-Heptane		0.00130892	0	0	0.303059	0*	0	0*
Toluene		0.00200082	0	0	0.294397	0*	0	0*
i-Octane		0.00441698	0	0	1.07630	0*	0	0*
n-Octane		0.000196824	0	0	0.0400513	0*	0	0*
Ethylbenzene		0.000130544	0	0	0.0183990	0*	0	0*
m-Xylene		0.000357864	0	0	0.0489977	0*	0	0*
o-Xylene		0	0	0	0	0*	0	0*
p-Xylene		0	0	0	0	0*	0	0*
Nonane		0.000359976	0	0	0.0410554	0*	0	0*
Decane		0.000311757	0	0	0.0146462	0*	0	0*
Sulfur Dioxide		0	0	0	0	0*	0	0*
H2O		0.0214002	5.22142	99.9988	#########	99.9774*	99.9774	99.9774*
Piperazine		0	0	0	0	0*	0	0*
TEG		0	0	0	0	0*	0	0*
Oxygen		0	0	0	0	0*	0	0*
Mass Fraction		%	%	%	%	%	%	%
Hydrogen Sulfide		0.00437775	0	0	#########	0	0	0
N2		0.0124462	0	0	#########	0	0	0
C1		1.70521	0	0	#########	0	0	0
CO2		0.0809519	0	0	#########	0	0	0
C2		7.12051	0	0	0.00635078	0	0	0
C3		30.8848	0	0	0.934192	0	0	0
iC4		16.2769	0	0	7.20775	0	0	0
C4		41.7726	0	0	37.3174	0	0	0
iC5		1.28657	98.6431	0.00490402	19.8017	0.0904302	0.0904302	0.0904302
nC5		0.701225	0	0	18.2689	0	0	0
i-Hexane		0.0552105	0	0	5.37269	0	0	0
Hexane		0.0213792	0	0	2.70733	0	0	0
Benzene		0.0160438	0	0	0.969173	0	0	0
Cyclohexane		0.0168758	0	0	1.89296	0	0	0
i-Heptane		0.0164764	0	0	2.53566	0	0	0
n-Heptane		0.00272060	0	0	0.454469	0	0	0
Toluene		0.00382404	0	0	0.405952	0	0	0
i-Octane		0.0104658	0	0	1.83996	0	0	0
n-Octane		0.000466365	0	0	0.0684687	0	0	0
Ethylbenzene		0.000287482	0	0	0.0292333	0	0	0
m-Xylene		0.000788083	0	0	0.0778499	0	0	0
o-Xylene		0	0	0	0	0	0	0
p-Xylene		0	0	0	0	0	0	0
Nonane		0.000957683	0	0	0.0788036	0	0	0
Decane		0.000920107	0	0	0.0311870	0	0	0
Sulfur Dioxide		0	0	0	0	0	0	0
H2O		0.00799711	1.35693	99.9951	#########	99.9096	99.9096	99.9096
Piperazine		0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
Hydrogen Sulfide		0.477033	0	0	#########	0*	0	0*
N2		1.35623	0	0	#########	0*	0	0*
C1		185.813	0	0	#########	0*	0	0*
CO2		8.82114	0	0	#########	0*	0	0*
C2		775.906	0	0	0.00284584	0*	0	0*
C3		3365.44	0	0	0.418619	0*	0	0*
iC4		1773.66	0	0	3.22986	0*	0	0*
C4		4551.86	0	0	16.7222	0*	0	0*
iC5		140.195	28.7031	0.355470	8.87332	4.37912E-05*	0.000265562	0.000221771*
nC5		76.4108	0	0	8.18643	0*	0	0*
i-Hexane		6.01616	0	0	2.40755	0*	0	0*
Hexane		2.32964	0	0	1.21318	0*	0	0*
Benzene		1.74826	0	0	0.434295	0*	0	0*
Cyclohexane		1.83892	0	0	0.848250	0*	0	0*
i-Heptane		1.79539	0	0	1.13625	0*	0	0*
n-Heptane		0.296457	0	0	0.203651	0*	0	0*
Toluene		0.416697	0	0	0.181911	0*	0	0*
i-Octane		1.14044	0	0	0.824500	0*	0	0*
n-Octane		0.0508187	0	0	0.0306814	0*	0	0*
Ethylbenzene		0.0313263	0	0	0.0130997	0*	0	0*
m-Xylene		0.0858756	0	0	0.0348852	0*	0	0*
o-Xylene		0	0	0	0	0*	0	0*
p-Xylene		0	0	0	0	0*	0	0*
Nonane		0.104356	0	0	0.0353126	0*	0	0*
Decane		0.100262	0	0	0.0139752	0*	0	0*
Sulfur Dioxide		0	0	0	0	0*	0	0*

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
H2O		0.871427	0.394838	7248.17	#########	0.0483817*	0.293400	0.245018*
Piperazine		0	0	0	0	0*	0	0*
TEG		0	0	0	0	0*	0	0*
Oxygen		0	0	0	0	0*	0	0*

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Property	Units							
Temperature	°F	103.405	95.6286	95.6286	101.014	101.014	101.014	101.014
Pressure	psig	300	1*	1	0.475513	-13.7162	-13.7162	-13.7162
Molecular Weight	lb/lbmol	48.2088	69.3222	18.0159	66.8188	18.0275	18.0275	18.0275
Mass Flow	lb/h	10896.8	29.0980	7248.53	44.8108	0.0484255	0.293666	0.245240
Std Vapor Volumetric	MMSCFD	2.05862	0.00382292	3.66436	0.00610786	2.44649E-05	0.000148362	0.000123897
Std Liquid Volumetric	sgpm	41.4964	0.0925747	14.4908	0.145828	9.68585E-05	0.000587377	0.000490519
Net Ideal Gas Heating	Btu/ft^3	2514.11	3505.86	0.0452965	3431.50	0.835804	0.835804	0.835804
Gross Ideal Gas Heati	Btu/ft^3	2729.73	3794.62	50.3584	3711.45	51.2026	51.2026	51.2026

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Mole Fraction		%		%	%	%	%	%
Hydrogen Sulfide		0		#########	0	0	0	0
N2		0		#########	0	0	0	0
C1		0		#########	0	0	0	0
CO2		0		#########	0	0	0	0
C2		0		0.0141126	0	0	0	0
C3		0		1.41560	0	0	0	0
iC4		0		8.28622	0	0	0	0
C4		0		42.9010	0	0	0	0
iC5		94.7786		18.3389	0.0225954	0.0225954	0.0225954	0.0225954
nC5		0		16.9193	0	0	0	0
i-Hexane		0		4.16589	0	0	0	0
Hexane		0		2.09922	0	0	0	0
Benzene		0		0.829055	0	0	0	0
Cyclohexane		0		1.50292	0	0	0	0
i-Heptane		0		1.69088	0	0	0	0
n-Heptane		0		0.303059	0	0	0	0
Toluene		0		0.294397	0	0	0	0
i-Octane		0		1.07630	0	0	0	0
n-Octane		0		0.0400513	0	0	0	0
Ethylbenzene		0		0.0183990	0	0	0	0
m-Xylene		0		0.0489977	0	0	0	0
o-Xylene		0		0	0	0	0	0
p-Xylene		0		0	0	0	0	0
Nonane		0		0.0410554	0	0	0	0
Decane		0		0.0146462	0	0	0	0
Sulfur Dioxide		0		0	0	0	0	0
H2O		5.22142		#########	99.9774	99.9774	99.9774	99.9774
Piperazine		0		0	0	0	0	0
TEG		0		0	0	0	0	0
Oxygen		0		0	0	0	0	0
Mass Fraction		%		%	%	%	%	%
Hydrogen Sulfide		0		#########	0	0	0	0
N2		0		#########	0	0	0	0
C1		0		#########	0	0	0	0
CO2		0		#########	0	0	0	0
C2		0		0.00635078	0	0	0	0
C3		0		0.934192	0	0	0	0
iC4		0		7.20775	0	0	0	0
C4		0		37.3174	0	0	0	0
iC5		98.6431		19.8017	0.0904302	0.0904302	0.0904302	0.0904302
nC5		0		18.2689	0	0	0	0
i-Hexane		0		5.37269	0	0	0	0
Hexane		0		2.70733	0	0	0	0
Benzene		0		0.969173	0	0	0	0
Cyclohexane		0		1.89296	0	0	0	0
i-Heptane		0		2.53566	0	0	0	0
n-Heptane		0		0.454469	0	0	0	0
Toluene		0		0.405952	0	0	0	0
i-Octane		0		1.83996	0	0	0	0
n-Octane		0		0.0684687	0	0	0	0
Ethylbenzene		0		0.0292333	0	0	0	0
m-Xylene		0		0.0778499	0	0	0	0
o-Xylene		0		0	0	0	0	0
p-Xylene		0		0	0	0	0	0
Nonane		0		0.0788036	0	0	0	0
Decane		0		0.0311870	0	0	0	0
Sulfur Dioxide		0		0	0	0	0	0
H2O		1.35693		#########	99.9096	99.9096	99.9096	99.9096
Piperazine		0		0	0	0	0	0
TEG		0		0	0	0	0	0
Oxygen		0		0	0	0	0	0
Mass Flow		lb/h		lb/h	lb/h	lb/h	lb/h	lb/h

Condensate PStreams MAX

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Hydrogen Sulfide			0	#########	0	0	0	
N2			0	#########	0	0	0	
C1			0	#########	0	0	0	
CO2			0	#########	0	0	0	
C2			0	0.00284584	0	0	0	
C3			0	0.418619	0	0	0	
iC4			0	3.22986	0	0	0	
C4			0	16.7222	0	0	0	
iC5			28.7031	8.87332	4.37912E-05	0.000265562	0.000221771	
nC5			0	8.18643	0	0	0	
i-Hexane			0	2.40755	0	0	0	
Hexane			0	1.21318	0	0	0	
Benzene			0	0.434295	0	0	0	
Cyclohexane			0	0.848250	0	0	0	
i-Heptane			0	1.13625	0	0	0	
n-Heptane			0	0.203651	0	0	0	
Toluene			0	0.181911	0	0	0	
i-Octane			0	0.824500	0	0	0	
n-Octane			0	0.0306814	0	0	0	
Ethylbenzene			0	0.0130997	0	0	0	
m-Xylene			0	0.0348852	0	0	0	
o-Xylene			0	0	0	0	0	
p-Xylene			0	0	0	0	0	
Nonane			0	0.0353126	0	0	0	
Decane			0	0.0139752	0	0	0	
Sulfur Dioxide			0	0	0	0	0	
H2O			0.394838	#########	0.0483817	0.293400	0.245018	
Piperazine			0	0	0	0	0	
TEG			0	0	0	0	0	
Oxygen			0	0	0	0	0	

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Property	Units							
Temperature	°F		95.6286	101.014	101.014	101.014	101.014	
Pressure	psig		1	0.475513	-13.7162	-13.7162	-13.7162	
Molecular Weight	lb/lbmol		69.3222	66.8188	18.0275	18.0275	18.0275	
Mass Flow	lb/h		29.0980	44.8108	0.0484255	0.293666	0.245240	
Std Vapor Volumetric	MMSCFD		0.00382292	0.00610786	2.44649E-05	0.000148362	0.000123897	
Std Liquid Volumetric	sgpm		0.0925747	0.145828	9.68585E-05	0.000587377	0.000490519	
Net Ideal Gas Heating	Btu/ft^3		3505.86	3431.50	0.835804	0.835804	0.835804	
Gross Ideal Gas Heati	Btu/ft^3		3794.62	3711.45	51.2026	51.2026	51.2026	

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Mole Fraction		%		%				
Hydrogen Sulfide		0.00619251		0				
N2		0.0214189		0				
C1		5.12428		0				
CO2		0.0886762		0				
C2		11.4161		0				
C3		33.7657		0				
iC4		13.5007		0				
C4		34.6478		0				
iC5		0.859671		0.00122456				
nC5		0.468549		0				
i-Hexane		0.0308863		0				
Hexane		0.0119601		0				
Benzene		0.00990189		0				
Cyclohexane		0.00966691		0				
i-Heptane		0.00792706		0				
n-Heptane		0.00130892		0				
Toluene		0.00200082		0				
i-Octane		0.00441698		0				
n-Octane		0.000196824		0				
Ethylbenzene		0.000130544		0				
m-Xylene		0.000357864		0				
o-Xylene		0		0				
p-Xylene		0		0				
Nonane		0.000359976		0				
Decane		0.000311757		0				
Sulfur Dioxide		0		0				
H2O		0.0214002		99.9988				
Piperazine		0		0				
TEG		0		0				
Oxygen		0		0				
Mass Fraction		%		%				
Hydrogen Sulfide		0.00437775		0				
N2		0.0124462		0				
C1		1.70521		0				
CO2		0.0809519		0				
C2		7.12051		0				

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
C3		30.8848		0				
iC4		16.2769		0				
C4		41.7726		0				
iC5		1.28657		0.00490402				
nC5		0.701225		0				
i-Hexane		0.0552105		0				
Hexane		0.0213792		0				
Benzene		0.0160438		0				
Cyclohexane		0.0168758		0				
i-Heptane		0.0164764		0				
n-Heptane		0.00272060		0				
Toluene		0.00382404		0				
i-Octane		0.0104658		0				
n-Octane		0.000466365		0				
Ethylbenzene		0.000287482		0				
m-Xylene		0.000788083		0				
o-Xylene		0		0				
p-Xylene		0		0				
Nonane		0.000957683		0				
Decane		0.000920107		0				
Sulfur Dioxide		0		0				
H2O		0.00799711		99.9951				
Piperazine		0		0				
TEG		0		0				
Oxygen		0		0				
Mass Flow		lb/h		lb/h				
Hydrogen Sulfide		0.477033		0				
N2		1.35623		0				
C1		185.813		0				
CO2		8.82114		0				
C2		775.906		0				
C3		3365.44		0				
iC4		1773.66		0				
C4		4551.86		0				
iC5		140.195		0.355470				
nC5		76.4108		0				
i-Hexane		6.01616		0				
Hexane		2.32964		0				
Benzene		1.74826		0				
Cyclohexane		1.83892		0				
i-Heptane		1.79539		0				
n-Heptane		0.296457		0				
Toluene		0.416697		0				
i-Octane		1.14044		0				
n-Octane		0.0508187		0				
Ethylbenzene		0.0313263		0				
m-Xylene		0.0858756		0				
o-Xylene		0		0				
p-Xylene		0		0				
Nonane		0.104356		0				
Decane		0.100262		0				
Sulfur Dioxide		0		0				
H2O		0.871427		7248.17				
Piperazine		0		0				
TEG		0		0				
Oxygen		0		0				

Process Streams		14	15	16	17 - Oil W&B	18 - WT Breathing Losses	18 - WT W&B	18 - WT Working Losses
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Light Liquid	From Block:	VSSL-100	Produced Water Storage Tanks	Produced Water Storage Tanks	MIX-100	--	MIX-101	--
	To Block:	Condensate Stabilizer	Combustion Air	--	--	MIX-101	--	MIX-101
Property	Units							
Temperature	°F	103.405		95.6286				
Pressure	psig	300		1				
Molecular Weight	lb/lbmol	48.2088		18.0159				
Mass Flow	lb/h	10896.8		7248.53				
Std Vapor Volumetric	MMSCFD	2.05862		3.66436				
Std Liquid Volumetric	sgpm	41.4964		14.4908				
Net Ideal Gas Heating	Btu/ft^3	2514.11		0.0452965				
Gross Ideal Gas Heati	Btu/ft^3	2729.73		50.3584				

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Mole Fraction		%	%	%	%	%	%	%	%	%
H2S		0*	0*	0	0	0.000711099	0	0.00349947	0.00349947	0.00349947
N2		79*	79*	79	79	0	0	1.69100	1.69100	1.69100
CO2		0*	0*	0	0	0.0647099	0	2.01830	2.01830	2.01830
C1		0*	0*	0	0	0	0	74.5149	74.5149	74.5149
C2		0*	0*	0	0	0	0	12.0555	12.0555	12.0555
C3		0*	0*	0	0	0	0	5.73168	5.73168	5.73168
iC4		0*	0*	0	0	0	0	0.744080	0.744080	0.744080
nC4		0*	0*	0	0	0	0	1.76302	1.76302	1.76302
iC5		0*	0*	0	0	0	0	0.419379	0.419379	0.419379
nC5		0*	0*	0	0	0	0	0.435098	0.435098	0.435098
Neohexane		0*	0*	0	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0	0.154882	0.154882	0.154882
nC6		0*	0*	0	0	0	0	0.0881468	0.0881468	0.0881468
Benzene		0*	0*	0	0	0	0	0.0524047	0.0524047	0.0524047
Cyclohexane		0*	0*	0	0	0	0	0.0743020	0.0743020	0.0743020
3,3-Dimethylpentane		0*	0*	0	0	0	0	0.0992779	0.0992779	0.0992779
C7		0*	0*	0	0	0	0	0.0195810	0.0195810	0.0195810
Toluene		0*	0*	0	0	0	0	0.0289198	0.0289198	0.0289198
i-Octane		0*	0*	0	0	0	0	0.0701479	0.0701479	0.0701479
C8		0*	0*	0	0	0	0	0.00428040	0.00428040	0.00428040
Ethylbenzene		0*	0*	0	0	0	0	0.00228127	0.00228127	0.00228127
m-Xylene		0*	0*	0	0	0	0	0.00638390	0.00638390	0.00638390
C9		0*	0*	0	0	0	0	0.00638193	0.00638193	0.00638193
C10		0*	0*	0	0	0	0	0.00388642	0.00388642	0.00388642
H2O		0*	0*	0	0	88.1623	99.9751	0.0126291	0.0126291	0.0126291
TEG		0*	0*	0	0	0.000993668	0	1.82909E-05	1.82909E-05	1.82909E-05
UCARSOL™ AP-814		0*	0*	0	0	11.7713	0.0248984	0	0	0
Oxygen		21*	21*	21	21	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		0*	0*	0	0	0	0	0.785355	0.785355	0.785355
N2		48574.7*	24581.6*	48574.7	24581.6	0	0	379.496	379.496	379.496
CO2		0*	0*	0	0	0	0	452.949	452.949	452.949
C1		0*	0*	0	0	0	0	16722.7	16722.7	16722.7
C2		0*	0*	0	0	0	0	2705.51	2705.51	2705.51
C3		0*	0*	0	0	0	0	1286.31	1286.31	1286.31
iC4		0*	0*	0	0	0	0	166.988	166.988	166.988
nC4		0*	0*	0	0	0	0	395.660	395.660	395.660
iC5		0*	0*	0	0	0	0	94.1176	94.1176	94.1176
nC5		0*	0*	0	0	0	0	97.6453	97.6453	97.6453
Neohexane		0*	0*	0	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0	34.7589	34.7589	34.7589
nC6		0*	0*	0	0	0	0	19.7820	19.7820	19.7820
Benzene		0*	0*	0	0	0	0	11.7607	11.7607	11.7607
Cyclohexane		0*	0*	0	0	0	0	16.6750	16.6750	16.6750
3,3-Dimethylpentane		0*	0*	0	0	0	0	22.2801	22.2801	22.2801
C7		0*	0*	0	0	0	0	4.39439	4.39439	4.39439
Toluene		0*	0*	0	0	0	0	6.49022	6.49022	6.49022
i-Octane		0*	0*	0	0	0	0	15.7427	15.7427	15.7427
C8		0*	0*	0	0	0	0	0.960612	0.960612	0.960612
Ethylbenzene		0*	0*	0	0	0	0	0.511965	0.511965	0.511965
m-Xylene		0*	0*	0	0	0	0	1.43268	1.43268	1.43268
C9		0*	0*	0	0	0	0	1.43224	1.43224	1.43224
C10		0*	0*	0	0	0	0	0.872196	0.872196	0.872196
H2O		0*	0*	0	0	0	86.0950	2.83425	2.83425	2.83425
TEG		0*	0*	0	0	0	0	0.00410488	0.00410488	0.00410488
UCARSOL™ AP-814		0*	0*	0	0	0	0.0214416	0	0	0
Oxygen		12912.3*	6534.34*	12912.3	6534.34	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%	%
H2S		0*	0*	0	0	0.000834024	0	0.00539365	0.00539365	0.00539365
N2		76.7082*	76.7082*	76.7082	76.7082	0	0	2.14229	2.14229	2.14229
CO2		0*	0*	0	0	0.0980065	0	4.01700	4.01700	4.01700
C1		0*	0*	0	0	0	0	54.0610	54.0610	54.0610
C2		0*	0*	0	0	0	0	16.3936	16.3936	16.3936
C3		0*	0*	0	0	0	0	11.4300	11.4300	11.4300
iC4		0*	0*	0	0	0	0	1.95583	1.95583	1.95583
nC4		0*	0*	0	0	0	0	4.63414	4.63414	4.63414
iC5		0*	0*	0	0	0	0	1.36838	1.36838	1.36838
nC5		0*	0*	0	0	0	0	1.41966	1.41966	1.41966
Neohexane		0*	0*	0	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0	0.603608	0.603608	0.603608
nC6		0*	0*	0	0	0	0	0.343526	0.343526	0.343526
Benzene		0*	0*	0	0	0	0	0.185122	0.185122	0.185122
Cyclohexane		0*	0*	0	0	0	0	0.282796	0.282796	0.282796
3,3-Dimethylpentane		0*	0*	0	0	0	0	0.449882	0.449882	0.449882
C7		0*	0*	0	0	0	0	0.0887320	0.0887320	0.0887320
Toluene		0*	0*	0	0	0	0	0.120505	0.120505	0.120505
i-Octane		0*	0*	0	0	0	0	0.362376	0.362376	0.362376
C8		0*	0*	0	0	0	0	0.0221120	0.0221120	0.0221120
Ethylbenzene		0*	0*	0	0	0	0	0.0109529	0.0109529	0.0109529
m-Xylene		0*	0*	0	0	0	0	0.0306505	0.0306505	0.0306505
C9		0*	0*	0	0	0	0	0.0370166	0.0370166	0.0370166
C10		0*	0*	0	0	0	0	0.0250074	0.0250074	0.0250074
H2O		0*	0*	0	0	54.6590	99.8798	0.0102893	0.0102893	0.0102893
TEG		0*	0*	0	0	0.00513536	0	0.000124222	0.000124222	0.000124222
UCARSOL™ AP-814		0*	0*	0	0	45.2370	0.120166	0	0	0
Oxygen		23.2918*	23.2918*	23.2918	23.2918	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0*	0*	0	0	0	0	26.7656	26.7656	26.7656
N2		1.36074E+06*	688613*	1.36074E+06	688613	0	0	10631.0	10631.0	10631.0
CO2		0*	0*	0	0	0	0	19934.1	19934.1	19934.1
C1		0*	0*	0	0	0	0	268274	268274	268274
C2		0*	0*	0	0	0	0	81352.0	81352.0	81352.0
C3		0*	0*	0	0	0	0	56720.7	56720.7	56720.7
iC4		0*	0*	0	0	0	0	9705.68	9705.68	9705.68
nC4		0*	0*	0	0	0	0	22996.6	22996.6	22996.6
iC5		0*	0*	0	0	0	0	6790.47	6790.47	6790.47
nC5		0*	0*	0	0	0	0	7044.99	7044.99	7044.99
Neohexane		0*	0*	0	0	0	0	0	0	0

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Cyclopentane		0*	0*	0	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0	2995.36	2995.36	2995.36
nC6		0*	0*	0	0	0	0	1704.72	1704.72	1704.72
Benzene		0*	0*	0	0	0	0	918.653	918.653	918.653
Cyclohexane		0*	0*	0	0	0	0	1403.36	1403.36	1403.36
3,3-Dimethylpentane		0*	0*	0	0	0	0	2232.51	2232.51	2232.51
C7		0*	0*	0	0	0	0	440.326	440.326	440.326
Toluene		0*	0*	0	0	0	0	597.999	597.999	597.999
i-Octane		0*	0*	0	0	0	0	1798.27	1798.27	1798.27
C8		0*	0*	0	0	0	0	109.729	109.729	109.729
Ethylbenzene		0*	0*	0	0	0	0	54.3528	54.3528	54.3528
m-Xylene		0*	0*	0	0	0	0	152.101	152.101	152.101
C9		0*	0*	0	0	0	0	183.692	183.692	183.692
C10		0*	0*	0	0	0	0	124.098	124.098	124.098
H2O		0*	0*	0	0	0	1551.03	51.0598	51.0598	51.0598
TEG		0*	0*	0	0	0	0	0.616441	0.616441	0.616441
UCARSOL™ AP-814		0*	0*	0	0	0	1.86605	0	0	0
Oxygen		413177*	209091*	413177	209091	0	0	0	0	0

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Property	**Units**									
Temperature	°F	100*	100*	151*	140*		100*	101.279	101.212	115*
Pressure	psia	14.7316*	14.7959*	14.6959*	14.6959	71.6959	94.6959*	927.696	926.696	921.696
Mole Fraction Vapor	%	100	100	100	100		0	100	100	100
Mole Fraction Light Liquid	%	0	0	0	0		100	0	0	0
Mole Fraction Heavy Liquid	%	0	0	0	0		0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	28.8503	28.8503	28.8503	28.8503	29.0578	18.0325	22.1121	22.1121	22.1121
Mass Density	lb/ft^3	0.0707785	0.0710875	0.0646961	0.0658855		61.9603	4.22662	4.22214	4.00553
Molar Flow	lbmol/h	61487.0	31115.9	61487.0	31115.9	0	86.1165	22442.1	22442.1	22442.1
Mass Flow	lb/h	1.77392E+06	897704	1.77392E+06	897704	0	1552.89	496243	496243	496243
Vapor Volumetric Flow	ft^3/h	2.50630E+07	1.26282E+07	2.74193E+07	1.36252E+07	0	25.0627	117409	117534	123890
Liquid Volumetric Flow	gpm	3.12474E+06	1.57442E+06	3.41851E+06	1.69873E+06	0	3.12470	14638.0	14653.5	15446.0
Std Vapor Volumetric Flow	MMSCFD	560.000	283.392	560.000	283.392	0	0.784316	204.394	204.394	204.394
Std Liquid Volumetric Flow	sgpm	4094.36	2071.98	4094.36	2071.98	0	3.10573	2736.63	2736.63	2736.63
Compressibility		0.999782	0.999782	1.00000	0.999960		0.00458857	0.806224	0.806307	0.825042
Specific Gravity		0.996127	0.996127	0.996127	0.996127		0.993452	0.763474	0.763474	0.763474
API Gravity							9.97613			
Enthalpy	Btu/h	9.64532E+06	4.88064E+06	3.15309E+07	1.35666E+07	0	-1.05373E+07	-8.33834E+08	-8.33834E+08	-8.29504E+08
Mass Enthalpy	Btu/lb	5.43729	5.43681	17.7747	15.1125	-4320.26	-6785.59	-1680.29	-1680.29	-1671.57
Mass Cp	Btu/(lb*°F)	0.241791	0.241793	0.242057	0.241981		0.996905	0.623987	0.623819	0.613136
Ideal Gas CpCv Ratio		1.39908	1.39908	1.39828	1.39850		1.32754	1.23531	1.23533	1.23172
Dynamic Viscosity	cP	0.0187861	0.0187861	0.0199976	0.0197404		0.704642	0.0132465	0.0132422	0.0133303
Kinematic Viscosity	cSt	16.5697	16.4977	19.2965	18.7045		0.709961	0.195653	0.195797	0.207759
Thermal Conductivity	Btu/(h*ft*°F)	0.0154092	0.0154093	0.0165128	0.0162774		0.359455	0.0219384	0.0219309	0.0222851
Surface Tension	lbf/ft						0.00480525			
Net Ideal Gas Heating Value	Btu/ft^3	0	0	0	0	410.740	0.794867	1140.92	1140.92	1140.92
Net Liquid Heating Value	Btu/lb	0	0	0	0	4637.29	-1042.06	19515.7	19515.7	19515.7
Gross Ideal Gas Heating Value	Btu/ft^3	0	0	0	0	491.540	51.1554	1256.58	1256.58	1256.58
Gross Liquid Heating Value	Btu/lb	0	0	0	0	5692.51	17.7503	21501.0	21501.0	21501.0

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Mole Fraction		%	%	%	%			%	%	%
H2S		0	0	0	0			0.00349947	0.00349947	0.00349947
N2		79	79	79	79			1.69100	1.69100	1.69100
CO2		0	0	0	0			2.01830	2.01830	2.01830
C1		0	0	0	0			74.5149	74.5149	74.5149
C2		0	0	0	0			12.0555	12.0555	12.0555
C3		0	0	0	0			5.73168	5.73168	5.73168
iC4		0	0	0	0			0.744080	0.744080	0.744080
nC4		0	0	0	0			1.76302	1.76302	1.76302
iC5		0	0	0	0			0.419379	0.419379	0.419379
nC5		0	0	0	0			0.435098	0.435098	0.435098
Neohexane		0	0	0	0			0	0	0
Cyclopentane		0	0	0	0			0	0	0
2,3-Dimethylbutane		0	0	0	0			0.154882	0.154882	0.154882
nC6		0	0	0	0			0.0881468	0.0881468	0.0881468
Benzene		0	0	0	0			0.0524047	0.0524047	0.0524047
Cyclohexane		0	0	0	0			0.0743020	0.0743020	0.0743020
3,3-Dimethylpentane		0	0	0	0			0.0992779	0.0992779	0.0992779
C7		0	0	0	0			0.0195810	0.0195810	0.0195810
Toluene		0	0	0	0			0.0289198	0.0289198	0.0289198
i-Octane		0	0	0	0			0.0701479	0.0701479	0.0701479
C8		0	0	0	0			0.00428040	0.00428040	0.00428040
Ethylbenzene		0	0	0	0			0.00228127	0.00228127	0.00228127
m-Xylene		0	0	0	0			0.00638390	0.00638390	0.00638390
C9		0	0	0	0			0.00638193	0.00638193	0.00638193
C10		0	0	0	0			0.00388642	0.00388642	0.00388642
H2O		0	0	0	0			0.0126291	0.0126291	0.0126291
TEG		0	0	0	0			1.82909E-05	1.82909E-05	1.82909E-05
UCARSOL™ AP-814		0	0	0	0			0	0	0
Oxygen		21	21	21	21			0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h			lbmol/h	lbmol/h	lbmol/h
H2S		0	0	0	0			0.785355	0.785355	0.785355
N2		48574.7	24581.6	48574.7	24581.6			379.496	379.496	379.496
CO2		0	0	0	0			452.949	452.949	452.949
C1		0	0	0	0			16722.7	16722.7	16722.7
C2		0	0	0	0			2705.51	2705.51	2705.51
C3		0	0	0	0			1286.31	1286.31	1286.31
iC4		0	0	0	0			166.988	166.988	166.988
nC4		0	0	0	0			395.660	395.660	395.660
iC5		0	0	0	0			94.1176	94.1176	94.1176

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
nC5		0	0	0	0			97.6453	97.6453	97.6453
Neohexane		0	0	0	0			0	0	0
Cyclopentane		0	0	0	0			0	0	0
2,3-Dimethylbutane		0	0	0	0			34.7589	34.7589	34.7589
nC6		0	0	0	0			19.7820	19.7820	19.7820
Benzene		0	0	0	0			11.7607	11.7607	11.7607
Cyclohexane		0	0	0	0			16.6750	16.6750	16.6750
3,3-Dimethylpentane		0	0	0	0			22.2801	22.2801	22.2801
C7		0	0	0	0			4.39439	4.39439	4.39439
Toluene		0	0	0	0			6.49022	6.49022	6.49022
i-Octane		0	0	0	0			15.7427	15.7427	15.7427
C8		0	0	0	0			0.960612	0.960612	0.960612
Ethylbenzene		0	0	0	0			0.511965	0.511965	0.511965
m-Xylene		0	0	0	0			1.43268	1.43268	1.43268
C9		0	0	0	0			1.43224	1.43224	1.43224
C10		0	0	0	0			0.872196	0.872196	0.872196
H2O		0	0	0	0			2.83425	2.83425	2.83425
TEG		0	0	0	0			0.00410488	0.00410488	0.00410488
UCARSOL™ AP-814		0	0	0	0			0	0	0
Oxygen		12912.3	6534.34	12912.3	6534.34			0	0	0
Mass Fraction		%	%	%	%			%	%	%
H2S		0	0	0	0			0.00539365	0.00539365	0.00539365
N2		76.7082	76.7082	76.7082	76.7082			2.14229	2.14229	2.14229
CO2		0	0	0	0			4.01700	4.01700	4.01700
C1		0	0	0	0			54.0610	54.0610	54.0610
C2		0	0	0	0			16.3936	16.3936	16.3936
C3		0	0	0	0			11.4300	11.4300	11.4300
iC4		0	0	0	0			1.95583	1.95583	1.95583
nC4		0	0	0	0			4.63414	4.63414	4.63414
iC5		0	0	0	0			1.36838	1.36838	1.36838
nC5		0	0	0	0			1.41966	1.41966	1.41966
Neohexane		0	0	0	0			0	0	0
Cyclopentane		0	0	0	0			0	0	0
2,3-Dimethylbutane		0	0	0	0			0.603608	0.603608	0.603608
nC6		0	0	0	0			0.343526	0.343526	0.343526
Benzene		0	0	0	0			0.185122	0.185122	0.185122
Cyclohexane		0	0	0	0			0.282796	0.282796	0.282796
3,3-Dimethylpentane		0	0	0	0			0.449882	0.449882	0.449882
C7		0	0	0	0			0.0887320	0.0887320	0.0887320
Toluene		0	0	0	0			0.120505	0.120505	0.120505
i-Octane		0	0	0	0			0.362376	0.362376	0.362376
C8		0	0	0	0			0.0221120	0.0221120	0.0221120
Ethylbenzene		0	0	0	0			0.0109529	0.0109529	0.0109529
m-Xylene		0	0	0	0			0.0306505	0.0306505	0.0306505
C9		0	0	0	0			0.0370166	0.0370166	0.0370166
C10		0	0	0	0			0.0250074	0.0250074	0.0250074
H2O		0	0	0	0			0.0102893	0.0102893	0.0102893
TEG		0	0	0	0			0.000124222	0.000124222	0.000124222
UCARSOL™ AP-814		0	0	0	0			0	0	0
Oxygen		23.2918	23.2918	23.2918	23.2918			0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h			lb/h	lb/h	lb/h
H2S		0	0	0	0			26.7656	26.7656	26.7656
N2		1.36074E+06	688613	1.36074E+06	688613			10631.0	10631.0	10631.0
CO2		0	0	0	0			19934.1	19934.1	19934.1
C1		0	0	0	0			268274	268274	268274
C2		0	0	0	0			81352.0	81352.0	81352.0
C3		0	0	0	0			56720.7	56720.7	56720.7
iC4		0	0	0	0			9705.68	9705.68	9705.68
nC4		0	0	0	0			22996.6	22996.6	22996.6
iC5		0	0	0	0			6790.47	6790.47	6790.47
nC5		0	0	0	0			7044.99	7044.99	7044.99
Neohexane		0	0	0	0			0	0	0
Cyclopentane		0	0	0	0			0	0	0
2,3-Dimethylbutane		0	0	0	0			2995.36	2995.36	2995.36
nC6		0	0	0	0			1704.72	1704.72	1704.72
Benzene		0	0	0	0			918.653	918.653	918.653
Cyclohexane		0	0	0	0			1403.36	1403.36	1403.36
3,3-Dimethylpentane		0	0	0	0			2232.51	2232.51	2232.51
C7		0	0	0	0			440.326	440.326	440.326
Toluene		0	0	0	0			597.999	597.999	597.999
i-Octane		0	0	0	0			1798.27	1798.27	1798.27
C8		0	0	0	0			109.729	109.729	109.729
Ethylbenzene		0	0	0	0			54.3528	54.3528	54.3528
m-Xylene		0	0	0	0			152.101	152.101	152.101
C9		0	0	0	0			183.692	183.692	183.692
C10		0	0	0	0			124.098	124.098	124.098
H2O		0	0	0	0			51.0598	51.0598	51.0598
TEG		0	0	0	0			0.616441	0.616441	0.616441
UCARSOL™ AP-814		0	0	0	0			0	0	0
Oxygen		413177	209091	413177	209091			0	0	0

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Property	**Units**									
Temperature	°F	100	100	151	140			101.279	101.212	115
Pressure	psia	14.7316	14.7959	14.6959	14.6959			927.696	926.696	921.696
Mole Fraction Vapor	%	100	100	100	100			100	100	100
Mole Fraction Light Liquid	%	0	0	0	0			0	0	0
Mole Fraction Heavy Liquid	%	0	0	0	0			0	0	0
Phase Mole Fraction	%	100	100	100	100			100	100	100
Molecular Weight	lb/lbmol	28.8503	28.8503	28.8503	28.8503			22.1121	22.1121	22.1121
Mass Density	lb/ft^3	0.0707785	0.0710875	0.0646961	0.0658855			4.22662	4.22214	4.00553
Molar Flow	lbmol/h	61487.0	31115.9	61487.0	31115.9			22442.1	22442.1	22442.1
Mass Flow	lb/h	1.77392E+06	897704	1.77392E+06	897704			496243	496243	496243
Vapor Volumetric Flow	ft^3/h	2.50630E+07	1.26282E+07	2.74193E+07	1.36252E+07			117409	117534	123890
Liquid Volumetric Flow	gpm	3.12474E+06	1.57442E+06	3.41851E+06	1.69873E+06			14638.0	14653.5	15446.0
Std Vapor Volumetric Flow	MMSCFD	560.000	283.392	560.000	283.392			204.394	204.394	204.394
Std Liquid Volumetric Flow	sgpm	4094.36	2071.98	4094.36	2071.98			2736.63	2736.63	2736.63

Process Streams		AI2	AI3	AO2	AO3	Blowdown	Makeup	101	102	103
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	LA COOLER AIR	COND AIR	AMINE MU/BD	--	GAS TO TREATER	FILT/COAL	GAS/GAS EX
	To Block:	LA COOLER AIR	COND AIR	--	--	--	AMINE MU/BD	FILT/COAL	GAS/GAS EX	AMINE CONTACTOR
Compressibility		0.999782	0.999782	1.00000	0.999960			0.806224	0.806307	0.825042
Specific Gravity		0.996127	0.996127	0.996127	0.996127			0.763474	0.763474	0.763474
API Gravity										
Enthalpy	Btu/h	9.64532E+06	4.88064E+06	3.15309E+07	1.35666E+07			-8.33834E+08	-8.33834E+08	-8.29504E+08
Mass Enthalpy	Btu/lb	5.43729	5.43681	17.7747	15.1125			-1680.29	-1680.29	-1671.57
Mass Cp	Btu/(lb*°F)	0.241791	0.241793	0.242057	0.241981			0.623987	0.623819	0.613136
Ideal Gas CpCv Ratio		1.39908	1.39908	1.39828	1.39850			1.23531	1.23533	1.23172
Dynamic Viscosity	cP	0.0187861	0.0187861	0.0199976	0.0197404			0.0132465	0.0132422	0.0133303
Kinematic Viscosity	cSt	16.5697	16.4977	19.2965	18.7045			0.195653	0.195797	0.207759
Thermal Conductivity	Btu/(h*ft*°F)	0.0154092	0.0154093	0.0165128	0.0162774			0.0219384	0.0219309	0.0222851
Surface Tension	lbf/ft									
Net Ideal Gas Heating Value	Btu/ft^3	0	0	0	0			1140.92	1140.92	1140.92
Net Liquid Heating Value	Btu/lb	0	0	0	0			19515.7	19515.7	19515.7
Gross Ideal Gas Heating Value	Btu/ft^3	0	0	0	0			1256.58	1256.58	1256.58
Gross Liquid Heating Value	Btu/lb	0	0	0	0			21501.0	21501.0	21501.0

Process Streams		105A	107	108	109	120A	121A	122	123
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Mole Fraction		%	%	%	%	%	%	%	%
H2S		2.93205E-06	2.93205E-06	2.93205E-06	2.48883E-06	0.00807525	0.00807525	0.00806417	0.00805427
N2		1.72156	1.72156	1.72156	1.72279	0.000877101	0.000877101	0.000877253	3.27259E-05
CO2		4.24580E-05	4.24580E-05	4.24580E-05	2.18354E-05	4.33132	4.33132	4.32492	4.32257
C1		75.8313	75.8313	75.8313	75.8856	0.101695	0.101695	0.101649	0.0107853
C2		12.2673	12.2673	12.2673	12.2761	0.0188760	0.0188760	0.0188618	0.00283451
C3		5.83387	5.83387	5.83387	5.83804	0.00589935	0.00589935	0.00589451	0.000740987
iC4		0.757480	0.757480	0.757480	0.758023	0.000486301	0.000486301	0.000485839	4.82300E-05
nC4		1.79453	1.79453	1.79453	1.79582	0.00164511	0.00164511	0.00164356	0.000227486
iC5		0.426989	0.426989	0.426989	0.427295	0.000154702	0.000154702	0.000154553	1.12847E-05
nC5		0.442970	0.442970	0.442970	0.443287	0.000208615	0.000208615	0.000208411	1.92514E-05
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.157697	0.157697	0.157697	0.157810	4.83502E-05	4.83502E-05	4.82966E-05	3.41339E-06
nC6		0.0897496	0.0897496	0.0897496	0.0898139	2.56573E-05	2.56573E-05	2.56288E-05	1.80059E-06
Benzene		0.0518423	0.0518423	0.0518423	0.0518786	0.00316309	0.00316309	0.00316020	0.00293728
Cyclohexane		0.0755928	0.0755928	0.0755928	0.0756470	0.000146811	0.000146811	0.000146660	4.83708E-05
3,3-Dimethylpentane		0.101090	0.101090	0.101090	0.101163	1.42792E-05	1.42792E-05	1.42635E-05	5.69321E-07
C7		0.0199385	0.0199385	0.0199385	0.0199528	2.54105E-06	2.54105E-06	2.53824E-06	1.00397E-07
Toluene		0.0287820	0.0287820	0.0287820	0.0288023	0.00138716	0.00138716	0.00138570	0.00128436
i-Octane		0.0714297	0.0714297	0.0714297	0.0714809	7.47346E-06	7.47346E-06	7.46421E-06	2.66718E-07
C8		0.00435858	0.00435858	0.00435858	0.00436171	5.08578E-07	5.08578E-07	5.07965E-07	2.26828E-08
Ethylbenzene		0.00228526	0.00228526	0.00228526	0.00228688	7.85394E-05	7.85394E-05	7.84540E-05	7.18391E-05
m-Xylene		0.00636411	0.00636411	0.00636411	0.00636862	0.000284099	0.000284099	0.000283797	0.000266071
C9		0.00649874	0.00649874	0.00649874	0.00650340	2.64931E-07	2.64931E-07	2.64606E-07	5.33230E-09
C10		0.00395761	0.00395761	0.00395761	0.00396045	4.25731E-08	4.25731E-08	4.25215E-08	2.78285E-10
H2O		0.303634	0.303634	0.303634	0.232876	84.2982	84.2982	84.3201	84.4237
TEG		1.16613E-09	1.16613E-09	1.16613E-09	7.76636E-13	0.000986469	0.000986469	0.000985006	0.000986271
UCARSOL™ AP-814		0.000708338	0.000708338	0.000708338	9.56428E-05	11.2264	11.2264	11.2110	11.2254
Oxygen		0	0	0	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		0.000646174	0.000646174	0.000646174	0.000548104	0.856662	0.856662	0.856760	0.854611
N2		379.403	379.403	379.403	379.403	0.0930472	0.0930472	0.0932017	0.00347243
CO2		0.00935702	0.00935702	0.00935702	0.00480870	459.487	459.487	459.492	458.653
C1		16712.0	16712.0	16712.0	16711.9	10.7883	10.7883	10.7995	1.14439
C2		2703.51	2703.51	2703.51	2703.50	2.00246	2.00246	2.00393	0.300760
C3		1285.69	1285.69	1285.69	1285.69	0.625832	0.625832	0.626249	0.0786236
iC4		166.936	166.936	166.936	166.936	0.0515892	0.0515892	0.0516169	0.00511752
nC4		395.485	395.485	395.485	395.485	0.174521	0.174521	0.174617	0.0241377
iC5		94.1011	94.1011	94.1011	94.1011	0.0164115	0.0164115	0.0164202	0.00119738
nC5		97.6231	97.6231	97.6231	97.6231	0.0221309	0.0221309	0.0221422	0.00204270
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		34.7538	34.7538	34.7538	34.7538	0.00512922	0.00512922	0.00513116	0.000362183
nC6		19.7793	19.7793	19.7793	19.7793	0.00272185	0.00272185	0.00272287	0.000191055
Benzene		11.4252	11.4252	11.4252	11.4250	0.335556	0.335556	0.335749	0.311665
Cyclohexane		16.6594	16.6594	16.6594	16.6594	0.0155744	0.0155744	0.0155816	0.00513246
3,3-Dimethylpentane		22.2786	22.2786	22.2786	22.2786	0.00151481	0.00151481	0.00151539	6.04087E-05
C7		4.39412	4.39412	4.39412	4.39412	0.000269567	0.000269567	0.000269669	1.06527E-05
Toluene		6.34307	6.34307	6.34307	6.34300	0.147157	0.147157	0.147220	0.136279
i-Octane		15.7419	15.7419	15.7419	15.7419	0.000792822	0.000792822	0.000793018	2.83006E-05
C8		0.960558	0.960558	0.960558	0.960558	5.39524E-05	5.39524E-05	5.39676E-05	2.40679E-06
Ethylbenzene		0.503633	0.503633	0.503633	0.503630	0.00833185	0.00833185	0.00833517	0.00762260
m-Xylene		1.40254	1.40254	1.40254	1.40253	0.0301387	0.0301387	0.0301514	0.0282319
C9		1.43221	1.43221	1.43221	1.43221	2.81052E-05	2.81052E-05	2.81125E-05	5.65792E-07
C10		0.872192	0.872192	0.872192	0.872192	4.51636E-06	4.51636E-06	4.51760E-06	2.95278E-08
H2O		66.9158	66.9158	66.9158	51.2852	8942.77	8942.77	8958.40	8957.91
TEG		2.56996E-07	2.56996E-07	2.56996E-07	1.71035E-10	0.104650	0.104650	0.104650	0.104650
UCARSOL™ AP-814		0.156106	0.156106	0.156106	0.0210630	1190.95	1190.95	1191.09	1191.09
Oxygen		0	0	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%
H2S		4.61559E-06	4.61559E-06	4.61559E-06	3.91750E-06	0.00927754	0.00927754	0.00926992	0.00925541
N2		2.22758	2.22758	2.22758	2.22896	0.000828288	0.000828288	0.000828888	3.09112E-05
CO2		8.63081E-05	8.63081E-05	8.63081E-05	4.43823E-05	6.42588	6.42588	6.41993	6.41426
C1		56.1909	56.1909	56.1909	56.2255	0.0549969	0.0549969	0.0550020	0.00583393
C2		17.0378	17.0378	17.0378	17.0484	0.0191335	0.0191335	0.0191296	0.00287380
C3		11.8822	11.8822	11.8822	11.8896	0.00876931	0.00876931	0.00876694	0.00110170
iC4		2.03357	2.03357	2.03357	2.03483	0.000952825	0.000952825	0.000952444	9.45187E-05
nC4		4.81770	4.81770	4.81770	4.82067	0.00322331	0.00322331	0.00322206	0.000445815
iC5		1.42296	1.42296	1.42296	1.42383	0.000376262	0.000376262	0.000376108	2.74522E-05
nC5		1.47621	1.47621	1.47621	1.47713	0.000507389	0.000507389	0.000507173	4.68328E-05
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.627701	0.627701	0.627701	0.628089	0.000140458	0.000140458	0.000140380	9.91808E-06
nC6		0.357241	0.357241	0.357241	0.357462	7.45350E-05	7.45350E-05	7.44931E-05	5.23188E-06
Benzene		0.187046	0.187046	0.187046	0.187158	0.00832902	0.00832902	0.00832601	0.00773609
Cyclohexane		0.293853	0.293853	0.293853	0.294034	0.000416511	0.000416511	0.000416314	0.000137260
3,3-Dimethylpentane		0.467876	0.467876	0.467876	0.468165	4.82332E-05	4.82332E-05	4.82067E-05	1.92350E-06
C7		0.0922816	0.0922816	0.0922816	0.0923387	8.58332E-06	8.58332E-06	8.57854E-06	3.39198E-07
Toluene		0.122492	0.122492	0.122492	0.122566	0.00430856	0.00430856	0.00430640	0.00399013
i-Octane		0.376877	0.376877	0.376877	0.377110	2.87781E-05	2.87781E-05	2.87583E-05	1.02727E-06
C8		0.0229967	0.0229967	0.0229967	0.0230109	1.95838E-06	1.95838E-06	1.95710E-06	8.73633E-08
Ethylbenzene		0.0112063	0.0112063	0.0112063	0.0112132	0.000281083	0.000281083	0.000280932	0.000257158
m-Xylene		0.0312080	0.0312080	0.0312080	0.0312270	0.00101676	0.00101676	0.00101623	0.000952439
C9		0.0384990	0.0384990	0.0384990	0.0385228	1.14544E-06	1.14544E-06	1.14467E-06	2.30594E-08
C10		0.0260093	0.0260093	0.0260093	0.0260254	2.04197E-07	2.04197E-07	2.04062E-07	1.33505E-09
H2O		0.252660	0.252660	0.252660	0.193762	51.1948	51.1948	51.2363	51.2819
TEG		8.08884E-09	8.08884E-09	8.08884E-09	5.38657E-12	0.00499392	0.00499392	0.00498926	0.00499398
UCARSOL™ AP-814		0.00302553	0.00302553	0.00302553	0.000382846	42.2617	42.2617	42.2261	42.2661
Oxygen		0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.0220222	0.0220222	0.0220222	0.0186799	29.1958	29.1958	29.1991	29.1259
N2		10628.4	10628.4	10628.4	10628.4	2.60657	2.60657	2.61090	0.0972746
CO2		0.411798	0.411798	0.411798	0.211629	20221.8	20221.8	20222.0	20185.1
C1		268101	268101	268101	268101	173.072	173.072	173.250	18.3588
C2		81291.8	81291.8	81291.8	81291.8	60.2119	60.2119	60.2561	9.04357
C3		56693.1	56693.1	56693.1	56693.1	27.5965	27.5965	27.6148	3.46695
iC4		9702.68	9702.68	9702.68	9702.68	2.99848	2.99848	3.00009	0.297442
nC4		22986.5	22986.5	22986.5	22986.5	10.1435	10.1435	10.1491	1.40294
iC5		6789.28	6789.28	6789.28	6789.28	1.18407	1.18407	1.18470	0.0863895
nC5		7043.39	7043.39	7043.39	7043.39	1.59672	1.59672	1.59753	0.147378
Neohexane		0	0	0	0	0	0	0	0

Process Streams		105A	107	108	109	120A	121A	122	123
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		2994.92	2994.92	2994.92	2994.92	0.442013	0.442013	0.442180	0.0312113
nC6		1704.49	1704.49	1704.49	1704.49	0.234557	0.234557	0.234644	0.0164642
Benzene		892.442	892.442	892.442	892.427	26.2109	26.2109	26.2260	24.3447
Cyclohexane		1402.05	1402.05	1402.05	1402.05	1.31073	1.31073	1.31134	0.431946
3,3-Dimethylpentane		2232.36	2232.36	2232.36	2232.36	0.151787	0.151787	0.151845	0.00605307
C7		440.299	440.299	440.299	440.299	0.0270111	0.0270111	0.0270214	0.00106742
Toluene		584.440	584.440	584.440	584.434	13.5588	13.5588	13.5647	12.5566
i-Octane		1798.17	1798.17	1798.17	1798.17	0.0905629	0.0905629	0.0905853	0.00323273
C8		109.723	109.723	109.723	109.723	0.00616291	0.00616291	0.00616464	0.000274924
Ethylbenzene		53.4682	53.4682	53.4682	53.4679	0.884551	0.884551	0.884903	0.809253
m-Xylene		148.901	148.901	148.901	148.900	3.19967	3.19967	3.20102	2.99723
C9		183.689	183.689	183.689	183.689	0.00360464	0.00360464	0.00360557	7.25657E-05
C10		124.097	124.097	124.097	124.097	0.000642596	0.000642596	0.000642772	4.20127E-06
H2O		1205.51	1205.51	1205.51	923.917	161107	161107	161388	161379
TEG		3.85939E-05	3.85939E-05	3.85939E-05	2.56848E-08	15.7155	15.7155	15.7156	15.7156
UCARSOL™ AP-814		14.4356	14.4356	14.4356	1.82553	132995	132995	133007	133007
Oxygen		0	0	0	0	0	0	0	0

Process Streams		105A	107	108	109	120A	121A	122	123
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Property	**Units**								
Temperature	°F	135.967	135.679	121.637	121.577	145.915	148.399	148.371	148.373
Pressure	psia	916.696	911.696	906.696	905.696	921.696	89.6959*	89.6959	88.6959
Mole Fraction Vapor	%	100	99.9996	99.9285	100	0	0.127933	0.127843	0
Mole Fraction Light Liquid	%	0	0.000386939	0.0714560	0	100	99.8721	99.8722	100
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	21.6498	21.6498	21.6498	21.6519	29.6643	29.6643	29.6480	29.6580
Mass Density	lb/ft^3	3.65284	3.63307	3.76640	3.76009	68.9024	56.8347	56.8296	68.8805
Molar Flow	lbmol/h	22038.3	22038.3	22038.3	22022.5	10608.5	10608.5	10624.3	10610.7
Mass Flow	lb/h	477125	477125	477125	476831	314693	314693	314988	314691
Vapor Volumetric Flow	ft^3/h	130618	131329	126679	126814	4567.23	5537.00	5542.68	4568.65
Liquid Volumetric Flow	gpm	16284.8	16373.4	15793.8	15810.5	569.421	690.327	691.035	569.598
Std Vapor Volumetric Flow	MMSCFD	200.717	200.717	200.717	200.573	96.6181	96.6181	96.7619	96.6378
Std Liquid Volumetric Flow	sgpm	2688.38	2688.38	2688.38	2687.78	648.255	648.255	648.852	647.262
Compressibility		0.849971	0.850346	0.835448	0.836097	0.0610589	0.00717426	0.00717127	0.00585264
Specific Gravity		0.747512			0.747585	1.10476			1.10441
API Gravity						-4.83048			-4.85476
Enthalpy	Btu/h	-7.52539E+08	-7.52539E+08	-7.56869E+08	-7.54954E+08	-1.35666E+09	-1.35666E+09	-1.35857E+09	-1.35798E+09
Mass Enthalpy	Btu/lb	-1577.23	-1577.23	-1586.31	-1583.28	-4311.05	-4311.05	-4313.10	-4315.29
Mass Cp	Btu/(lb*°F)	0.616555	0.615842	0.620403	0.620026	0.749116	0.750300	0.750495	0.750751
Ideal Gas CpCv Ratio		1.22567	1.22574	1.22937	1.22934	1.16108	1.16048	1.16060	1.16054
Dynamic Viscosity	cP	0.0133672			0.0131951	2.56716			2.46576
Kinematic Viscosity	cSt	0.228449			0.219075	2.32593			2.23477
Thermal Conductivity	Btu/(h*ft*°F)	0.0230820			0.0225694	0.194759?			0.194631?
Surface Tension	lbf/ft					0.00345460			0.00344662
Net Ideal Gas Heating Value	Btu/ft^3	1161.04	1161.04	1161.04	1161.85	393.420	393.420	392.878	392.085
Net Liquid Heating Value	Btu/lb	20284.4	20284.4	20284.4	20297.3	4347.63	4347.63	4343.15	4330.74
Gross Ideal Gas Heating Value	Btu/ft^3	1278.88	1278.88	1278.88	1279.74	470.752	470.752	470.173	469.344
Gross Liquid Heating Value	Btu/lb	22350.5	22350.5	22350.5	22363.9	5336.90	5336.90	5332.50	5319.29

Process Streams		105A	107	108	109	120A	121A	122	123
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Mole Fraction		%	%	%	%		%	%	
H2S		2.93205E-06	2.92942E-06	2.48967E-06	2.48883E-06		0.0156438	0.0156114	
N2		1.72156	1.72157	1.72279	1.72279		0.659726	0.660285	
CO2		4.24580E-05	4.21632E-05	2.18644E-05	2.18354E-05		6.11115	6.09531	
C1		75.8313	75.8316	75.8855	75.8856		70.9638	70.9809	
C2		12.2673	12.2673	12.2761	12.2761		12.5138	12.5140	
C3		5.83387	5.83389	5.83803	5.83804		4.02532	4.02515	
iC4		0.757480	0.757483	0.758022	0.758023		0.341962	0.341906	
nC4		1.79453	1.79454	1.79582	1.79582		1.10604	1.10590	
iC5		0.426989	0.426990	0.427294	0.427295		0.111995	0.111973	
nC5		0.442970	0.442972	0.443287	0.443287		0.147837	0.147807	
Neohexane		0	0	0	0		0	0	
Cyclopentane		0	0	0	0		0	0	
2,3-Dimethylbutane		0.157697	0.157698	0.157810	0.157810		0.0350910	0.0350801	
nC6		0.0897496	0.0897499	0.0898138	0.0898139		0.0186298	0.0186240	
Benzene		0.0518423	0.0518425	0.0518785	0.0518786		0.175156	0.175230	
Cyclohexane		0.0755928	0.0755931	0.0756468	0.0756470		0.0766108	0.0766120	
3,3-Dimethylpentane		0.101090	0.101090	0.101162	0.101163		0.0107107	0.0107070	
C7		0.0199385	0.0199386	0.0199528	0.0199528		0.00190675	0.00190607	
Toluene		0.0287820	0.0287821	0.0288023	0.0288023		0.0795695	0.0796237	
i-Octane		0.0714297	0.0714300	0.0714808	0.0714809		0.00563039	0.00562775	
C8		0.00435858	0.00435860	0.00436170	0.00436171		0.000379574	0.000379410	
Ethylbenzene		0.00228526	0.00228527	0.00228688	0.00228688		0.00518420	0.00518749	
m-Xylene		0.00636411	0.00636414	0.00636861	0.00636862		0.0139626	0.0139712	
C9		0.00649874	0.00649876	0.00650339	0.00650340		0.000202863	0.000202764	
C10		0.00395761	0.00395763	0.00396044	0.00396045		3.30572E-05	3.30409E-05	
H2O		0.303634	0.303290	0.233039	0.232876		3.57926	3.57753	
TEG		1.16613E-09	2.41314E-10	7.81893E-13	7.76636E-13		2.70528E-09	2.69702E-09	
UCARSOL™ AP-814		0.000708338	0.000667488	9.60133E-05	9.56428E-05		0.000399376	0.000398524	
Oxygen		0	0	0	0		0	0	
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h	
H2S		0.000646174	0.000645593	0.000548289	0.000548104		0.00212313	0.00212040	
N2		379.403	379.403	379.403	379.403		0.0895364	0.0896824	
CO2		0.00935702	0.00929202	0.00481510	0.00480870		0.829390	0.827888	
C1		16712.0	16712.0	16711.9	16711.9		9.63103	9.64089	
C2		2703.51	2703.51	2703.50	2703.50		1.69835	1.69970	
C3		1285.69	1285.69	1285.69	1285.69		0.546306	0.546710	
iC4		166.936	166.936	166.936	166.936		0.0464103	0.0464390	
nC4		395.485	395.485	395.485	395.485		0.150109	0.150207	
iC5		94.1011	94.1011	94.1011	94.1011		0.0151997	0.0152086	

Process Streams		105A	107	108	109	120A	121A	122	123
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
nC5		97.6231	97.6231	97.6231	97.6231		0.0200640	0.0200757	
Neohexane		0	0	0	0		0	0	
Cyclopentane		0	0	0	0		0	0	
2,3-Dimethylbutane		34.7538	34.7538	34.7538	34.7538		0.00476246	0.00476472	
nC6		19.7793	19.7793	19.7793	19.7793		0.00252839	0.00252958	
Benzene		11.4252	11.4252	11.4250	11.4250		0.0237717	0.0238004	
Cyclohexane		16.6594	16.6594	16.6594	16.6594		0.0103974	0.0104057	
3,3-Dimethylpentane		22.2786	22.2786	22.2786	22.2786		0.00145363	0.00145426	
C7		4.39412	4.39412	4.39412	4.39412		0.000258779	0.000258890	
Toluene		6.34307	6.34307	6.34300	6.34300		0.0107990	0.0108148	
i-Octane		15.7419	15.7419	15.7419	15.7419		0.000764143	0.000764383	
C8		0.960558	0.960558	0.960558	0.960558		5.15148E-05	5.15329E-05	
Ethylbenzene		0.503633	0.503633	0.503630	0.503630		0.000703587	0.000704584	
m-Xylene		1.40254	1.40254	1.40253	1.40253		0.00189497	0.00189762	
C9		1.43221	1.43221	1.43221	1.43221		2.75320E-05	2.75401E-05	
C10		0.872192	0.872192	0.872192	0.872192		4.48645E-06	4.48773E-06	
H2O		66.9158	66.8398	51.3213	51.2852		0.485768	0.485914	
TEG		2.56996E-07	5.31813E-08	1.72193E-10	1.71035E-10		3.67153E-10	3.66319E-10	
UCARSOL™ AP-814		0.156106	0.147103	0.0211446	0.0210630		5.42024E-05	5.41291E-05	
Oxygen		0	0	0	0		0	0	
Mass Fraction		%	%	%	%		%	%	
H2S		4.61559E-06	4.61147E-06	3.91882E-06	3.91750E-06		0.0244150	0.0243694	
N2		2.22758	2.22760	2.22896	2.22896		0.846319	0.847209	
CO2		8.63081E-05	8.57090E-05	4.44413E-05	4.43823E-05		12.3161	12.2867	
C1		56.1909	56.1911	56.2255	56.2255		52.1330	52.1562	
C2		17.0378	17.0379	17.0483	17.0484		17.2311	17.2350	
C3		11.8822	11.8823	11.8895	11.8896		8.12831	8.12962	
iC4		2.03357	2.03358	2.03482	2.03483		0.910175	0.910211	
nC4		4.81770	4.81772	4.82067	4.82067		2.94386	2.94408	
iC5		1.42296	1.42296	1.42383	1.42383		0.370027	0.370029	
nC5		1.47621	1.47622	1.47712	1.47713		0.488445	0.488448	
Neohexane		0	0	0	0		0	0	
Cyclopentane		0	0	0	0		0	0	
2,3-Dimethylbutane		0.627701	0.627704	0.628088	0.628089		0.138479	0.138464	
nC6		0.357241	0.357243	0.357461	0.357462		0.0735185	0.0735104	
Benzene		0.187046	0.187046	0.187158	0.187158		0.626536	0.626929	
Cyclohexane		0.293853	0.293854	0.294034	0.294034		0.295255	0.295320	
3,3-Dimethylpentane		0.467876	0.467878	0.468164	0.468165		0.0491471	0.0491401	
C7		0.0922816	0.0922821	0.0923385	0.0923387		0.00874930	0.00874801	
Toluene		0.122492	0.122493	0.122566	0.122566		0.335732	0.336029	
i-Octane		0.376877	0.376879	0.377109	0.377110		0.0294522	0.0294444	
C8		0.0229967	0.0229968	0.0230109	0.0230109		0.00198552	0.00198507	
Ethylbenzene		0.0112063	0.0112064	0.0112132	0.0112132		0.0252039	0.0252250	
m-Xylene		0.0312080	0.0312081	0.0312269	0.0312270		0.0678818	0.0679375	
C9		0.0384990	0.0384992	0.0385228	0.0385228		0.00119147	0.00119113	
C10		0.0260093	0.0260094	0.0260253	0.0260254		0.000215387	0.000215325	
H2O		0.252660	0.252374	0.193898	0.193762		2.95283	2.95201	
TEG		8.08884E-09	1.67386E-09	5.42303E-12	5.38657E-12		1.86041E-08	1.85511E-08	
UCARSOL™ AP-814		0.00302553	0.00281674	0.000384333	0.000382846		0.00204935	0.00204519	
Oxygen		0	0	0	0		0	0	
Mass Flow		lb/h	lb/h	lb/h	lb/h		lb/h	lb/h	
H2S		0.0220222	0.0220024	0.0186862	0.0186799		0.0723582	0.0722649	
N2		10628.4	10628.4	10628.4	10628.4		2.50822	2.51231	
CO2		0.411798	0.408937	0.211910	0.211629		36.5011	36.4349	
C1		268101	268101	268101	268101		154.505	154.664	
C2		81291.8	81291.8	81291.8	81291.8		51.0676	51.1084	
C3		56693.1	56693.1	56693.1	56693.1		24.0897	24.1075	
iC4		9702.68	9702.68	9702.68	9702.68		2.69747	2.69913	
nC4		22986.5	22986.5	22986.5	22986.5		8.72467	8.73036	
iC5		6789.28	6789.28	6789.28	6789.28		1.09664	1.09728	
nC5		7043.39	7043.39	7043.39	7043.39		1.44760	1.44844	
Neohexane		0	0	0	0		0	0	
Cyclopentane		0	0	0	0		0	0	
2,3-Dimethylbutane		2994.92	2994.92	2994.92	2994.92		0.410407	0.410601	
nC6		1704.49	1704.49	1704.49	1704.49		0.217885	0.217987	
Benzene		892.442	892.442	892.427	892.427		1.85685	1.85909	
Cyclohexane		1402.05	1402.05	1402.05	1402.05		0.875042	0.875740	
3,3-Dimethylpentane		2232.36	2232.36	2232.36	2232.36		0.145656	0.145720	
C7		440.299	440.299	440.299	440.299		0.0259301	0.0259413	
Toluene		584.440	584.440	584.434	584.434		0.995001	0.996458	
i-Octane		1798.17	1798.17	1798.17	1798.17		0.0872869	0.0873143	
C8		109.723	109.723	109.723	109.723		0.00588446	0.00588653	
Ethylbenzene		53.4682	53.4682	53.4679	53.4679		0.0746963	0.0748022	
m-Xylene		148.901	148.901	148.900	148.900		0.201180	0.201461	
C9		183.689	183.689	183.689	183.689		0.00353112	0.00353216	
C10		124.097	124.097	124.097	124.097		0.000638339	0.000638522	
H2O		1205.51	1204.14	924.567	923.917		8.75126	8.75387	
TEG		3.85939E-05	7.98639E-06	2.58587E-08	2.56848E-08		5.51365E-08	5.50113E-08	
UCARSOL™ AP-814		14.4356	13.4393	1.83262	1.82553		0.00607363	0.00606480	
Oxygen		0	0	0	0		0	0	

Process Streams		105A	107	108	109	120A	121A	122	123
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Property	**Units**								
Temperature	°F	135.967	135.679	121.637	121.577		148.399	148.371	
Pressure	psia	916.696	911.696	906.696	905.696		89.6959	89.6959	
Mole Fraction Vapor	%	100	100	100	100		100	100	
Mole Fraction Light Liquid	%	0	0	0	0		0	0	
Mole Fraction Heavy Liquid	%	0	0	0	0		0	0	
Phase Mole Fraction	%	100	99.9996	99.9285	100		0.127933	0.127843	
Molecular Weight	lb/lbmol	21.6498	21.6498	21.6519	21.6519		21.8371	21.8327	
Mass Density	lb/ft^3	3.65284	3.63305	3.76422	3.76009		0.304499	0.304451	
Molar Flow	lbmol/h	22038.3	22038.2	22022.6	22022.5		13.5718	13.5824	
Mass Flow	lb/h	477125	477123	476831	476831		296.368	296.539	
Vapor Volumetric Flow	ft^3/h	130618	131329	126675	126814		973.298	974.015	
Liquid Volumetric Flow	gpm	16284.8	16373.4	15793.2	15810.5		121.346	121.436	
Std Vapor Volumetric Flow	MMSCFD	200.717	200.716	200.573	200.573		0.123606	0.123703	
Std Liquid Volumetric Flow	sgpm	2688.38	2688.37	2687.78	2687.78		1.58425	1.58550	

Process Streams		105A	107	108	109	120A	121A	122	123
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	AMINE CONTACTOR	FV-103B	GAS/GAS EX	OVHD SCRUBBER	AMINE CONTACTOR	LV-100B	MIX-103	FLASH TANK
	To Block:	FV-103B	GAS/GAS EX	OVHD SCRUBBER	GAS TO TEG DEHY	LV-100B	MIX-103	FLASH TANK	RICH AMINE FILTER
Compressibility		0.849971	0.850349	0.836014	0.836097		0.985749	0.985749	
Specific Gravity		0.747512	0.747511	0.747585	0.747585		0.753979	0.753825	
API Gravity									
Enthalpy	Btu/h	-7.52539E+08	-7.52528E+08	-7.54959E+08	-7.54954E+08		-590088	-590237	
Mass Enthalpy	Btu/lb	-1577.23	-1577.22	-1583.28	-1583.28		-1991.06	-1990.42	
Mass Cp	Btu/(lb*°F)	0.616555	0.615841	0.620182	0.620026		0.480441	0.480524	
Ideal Gas CpCv Ratio		1.22567	1.22574	1.22933	1.22934		1.23818	1.23819	
Dynamic Viscosity	cP	0.0133672	0.0133494	0.0131989	0.0131951		0.0124332	0.0124318	
Kinematic Viscosity	cSt	0.228449	0.229388	0.218897	0.219075		2.54904	2.54916	
Thermal Conductivity	Btu/(h*ft*°F)	0.0230820	0.0230486	0.0225763	0.0225694		0.0200668	0.0200674	
Surface Tension	lbf/ft								
Net Ideal Gas Heating Value	Btu/ft^3	1161.04	1161.04	1161.85	1161.85		1011.62	1011.77	
Net Liquid Heating Value	Btu/lb	20284.4	20284.5	20297.2	20297.3		17489.7	17495.9	
Gross Ideal Gas Heating Value	Btu/ft^3	1278.88	1278.89	1279.74	1279.74		1117.17	1117.34	
Gross Liquid Heating Value	Btu/lb	22350.5	22350.6	22363.9	22363.9		19324.3	19331.2	

Process Streams		125	126	127	128	129	129B	130
Composition	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Total	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Mole Fraction		%	%	%	%		%	%
H2S		0.00805427	0.00805427	0.00805427	0.00805427		0.00805427	0.000819514
N2		3.27259E-05	3.27259E-05	3.27259E-05	3.27259E-05		3.27259E-05	0
CO2		4.32257	4.32257	4.32257	4.32257		4.32257	0.106922
C1		0.0107853	0.0107853	0.0107853	0.0107853		0.0107853	0
C2		0.00283451	0.00283451	0.00283451	0.00283451		0.00283451	0
C3		0.000740987	0.000740987	0.000740987	0.000740987		0.000740987	0
iC4		4.82300E-05	4.82300E-05	4.82300E-05	4.82300E-05		4.82300E-05	0
nC4		0.000227486	0.000227486	0.000227486	0.000227486		0.000227486	0
iC5		1.12847E-05	1.12847E-05	1.12847E-05	1.12847E-05		1.12847E-05	0
nC5		1.92514E-05	1.92514E-05	1.92514E-05	1.92514E-05		1.92514E-05	0
Neohexane		0	0	0	0		0	0
Cyclopentane		0	0	0	0		0	0
2,3-Dimethylbutane		3.41339E-06	3.41339E-06	3.41339E-06	3.41339E-06		3.41339E-06	0
nC6		1.80059E-06	1.80059E-06	1.80059E-06	1.80059E-06		1.80059E-06	0
Benzene		0.00293728	0.00293728	0.00293728	0.00293728		0.00293728	0
Cyclohexane		4.83708E-05	4.83708E-05	4.83708E-05	4.83708E-05		4.83708E-05	0
3,3-Dimethylpentane		5.69321E-07	5.69321E-07	5.69321E-07	5.69321E-07		5.69321E-07	0
C7		1.00397E-07	1.00397E-07	1.00397E-07	1.00397E-07		1.00397E-07	0
Toluene		0.00128436	0.00128436	0.00128436	0.00128436		0.00128436	0
i-Octane		2.66718E-07	2.66718E-07	2.66718E-07	2.66718E-07		2.66718E-07	0
C8		2.26828E-08	2.26828E-08	2.26828E-08	2.26828E-08		2.26828E-08	0
Ethylbenzene		7.18391E-05	7.18391E-05	7.18391E-05	7.18391E-05		7.18391E-05	0
m-Xylene		0.000266071	0.000266071	0.000266071	0.000266071		0.000266071	0
C9		5.33230E-09	5.33230E-09	5.33230E-09	5.33230E-09		5.33230E-09	0
C10		2.78285E-10	2.78285E-10	2.78285E-10	2.78285E-10		2.78285E-10	0
H2O		84.4237	84.4237	84.4237	84.4237		84.4237	90.1816
TEG		0.000986271	0.000986271	0.000986271	0.000986271		0.000986271	0.000849853
UCARSOL™ AP-814		11.2254	11.2254	11.2254	11.2254		11.2254	9.70980
Oxygen		0	0	0	0		0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h
H2S		0.854611	0.854611	0.854611	0.854611		0.854611	0.100932
N2		0.00347243	0.00347243	0.00347243	0.00347243		0.00347243	0
CO2		458.653	458.653	458.653	458.653		458.653	13.1686
C1		1.14439	1.14439	1.14439	1.14439		1.14439	0
C2		0.300760	0.300760	0.300760	0.300760		0.300760	0
C3		0.0786236	0.0786236	0.0786236	0.0786236		0.0786236	0
iC4		0.00511752	0.00511752	0.00511752	0.00511752		0.00511752	0
nC4		0.0241377	0.0241377	0.0241377	0.0241377		0.0241377	0
iC5		0.00119738	0.00119738	0.00119738	0.00119738		0.00119738	0
nC5		0.00204270	0.00204270	0.00204270	0.00204270		0.00204270	0
Neohexane		0	0	0	0		0	0
Cyclopentane		0	0	0	0		0	0
2,3-Dimethylbutane		0.000362183	0.000362183	0.000362183	0.000362183		0.000362183	0
nC6		0.000191055	0.000191055	0.000191055	0.000191055		0.000191055	0
Benzene		0.311665	0.311665	0.311665	0.311665		0.311665	0
Cyclohexane		0.00513246	0.00513246	0.00513246	0.00513246		0.00513246	0
3,3-Dimethylpentane		6.04087E-05	6.04087E-05	6.04087E-05	6.04087E-05		6.04087E-05	0
C7		1.06527E-05	1.06527E-05	1.06527E-05	1.06527E-05		1.06527E-05	0
Toluene		0.136279	0.136279	0.136279	0.136279		0.136279	0
i-Octane		2.83006E-05	2.83006E-05	2.83006E-05	2.83006E-05		2.83006E-05	0
C8		2.40679E-06	2.40679E-06	2.40679E-06	2.40679E-06		2.40679E-06	0
Ethylbenzene		0.00762260	0.00762260	0.00762260	0.00762260		0.00762260	0
m-Xylene		0.0282319	0.0282319	0.0282319	0.0282319		0.0282319	0
C9		5.65792E-07	5.65792E-07	5.65792E-07	5.65792E-07		5.65792E-07	0
C10		2.95278E-08	2.95278E-08	2.95278E-08	2.95278E-08		2.95278E-08	0
H2O		8957.91	8957.91	8957.91	8957.91		8957.91	11106.8
TEG		0.104650	0.104650	0.104650	0.104650		0.104650	0.104669
UCARSOL™ AP-814		1191.09	1191.09	1191.09	1191.09		1191.09	1195.87
Oxygen		0	0	0	0		0	0
Mass Fraction		%	%	%	%		%	%
H2S		0.00925541	0.00925541	0.00925541	0.00925541		0.00925541	0.00102944
N2		3.09112E-05	3.09112E-05	3.09112E-05	3.09112E-05		3.09112E-05	0
CO2		6.41426	6.41426	6.41426	6.41426		6.41426	0.173440
C1		0.00583393	0.00583393	0.00583393	0.00583393		0.00583393	0
C2		0.00287380	0.00287380	0.00287380	0.00287380		0.00287380	0
C3		0.00110170	0.00110170	0.00110170	0.00110170		0.00110170	0
iC4		9.45187E-05	9.45187E-05	9.45187E-05	9.45187E-05		9.45187E-05	0
nC4		0.000445815	0.000445815	0.000445815	0.000445815		0.000445815	0
iC5		2.74522E-05	2.74522E-05	2.74522E-05	2.74522E-05		2.74522E-05	0
nC5		4.68328E-05	4.68328E-05	4.68328E-05	4.68328E-05		4.68328E-05	0
Neohexane		0	0	0	0		0	0
Cyclopentane		0	0	0	0		0	0
2,3-Dimethylbutane		9.91808E-06	9.91808E-06	9.91808E-06	9.91808E-06		9.91808E-06	0
nC6		5.23188E-06	5.23188E-06	5.23188E-06	5.23188E-06		5.23188E-06	0
Benzene		0.00773609	0.00773609	0.00773609	0.00773609		0.00773609	0
Cyclohexane		0.000137260	0.000137260	0.000137260	0.000137260		0.000137260	0
3,3-Dimethylpentane		1.92350E-06	1.92350E-06	1.92350E-06	1.92350E-06		1.92350E-06	0
C7		3.39198E-07	3.39198E-07	3.39198E-07	3.39198E-07		3.39198E-07	0
Toluene		0.00399013	0.00399013	0.00399013	0.00399013		0.00399013	0
i-Octane		1.02727E-06	1.02727E-06	1.02727E-06	1.02727E-06		1.02727E-06	0
C8		8.73633E-08	8.73633E-08	8.73633E-08	8.73633E-08		8.73633E-08	0
Ethylbenzene		0.000257158	0.000257158	0.000257158	0.000257158		0.000257158	0
m-Xylene		0.000952439	0.000952439	0.000952439	0.000952439		0.000952439	0
C9		2.30594E-08	2.30594E-08	2.30594E-08	2.30594E-08		2.30594E-08	0
C10		1.33505E-09	1.33505E-09	1.33505E-09	1.33505E-09		1.33505E-09	0
H2O		51.2819	51.2819	51.2819	51.2819		51.2819	59.8815
TEG		0.00499398	0.00499398	0.00499398	0.00499398		0.00499398	0.00470402
UCARSOL™ AP-814		42.2661	42.2661	42.2661	42.2661		42.2661	39.9393
Oxygen		0	0	0	0		0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h		lb/h	lb/h
H2S		29.1259	29.1259	29.1259	29.1259		29.1259	3.43985
N2		0.0972746	0.0972746	0.0972746	0.0972746		0.0972746	0
CO2		20185.1	20185.1	20185.1	20185.1		20185.1	579.545
C1		18.3588	18.3588	18.3588	18.3588		18.3588	0
C2		9.04357	9.04357	9.04357	9.04357		9.04357	0
C3		3.46695	3.46695	3.46695	3.46695		3.46695	0
iC4		0.297442	0.297442	0.297442	0.297442		0.297442	0
nC4		1.40294	1.40294	1.40294	1.40294		1.40294	0
iC5		0.0863895	0.0863895	0.0863895	0.0863895		0.0863895	0
nC5		0.147378	0.147378	0.147378	0.147378		0.147378	0
Neohexane		0	0	0	0		0	0

Process Streams		125	126	127	128	129	129B	130
Composition	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Total	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Cyclopentane		0	0	0	0		0	0
2,3-Dimethylbutane		0.0312113	0.0312113	0.0312113	0.0312113		0.0312113	0
nC6		0.0164642	0.0164642	0.0164642	0.0164642		0.0164642	0
Benzene		24.3447	24.3447	24.3447	24.3447		24.3447	0
Cyclohexane		0.431946	0.431946	0.431946	0.431946		0.431946	0
3,3-Dimethylpentane		0.00605307	0.00605307	0.00605307	0.00605307		0.00605307	0
C7		0.00106742	0.00106742	0.00106742	0.00106742		0.00106742	0
Toluene		12.5566	12.5566	12.5566	12.5566		12.5566	0
i-Octane		0.00323273	0.00323273	0.00323273	0.00323273		0.00323273	0
C8		0.000274924	0.000274924	0.000274924	0.000274924		0.000274924	0
Ethylbenzene		0.809253	0.809253	0.809253	0.809253		0.809253	0
m-Xylene		2.99723	2.99723	2.99723	2.99723		2.99723	0
C9		7.25657E-05	7.25657E-05	7.25657E-05	7.25657E-05		7.25657E-05	0
C10		4.20127E-06	4.20127E-06	4.20127E-06	4.20127E-06		4.20127E-06	0
H2O		161379	161379	161379	161379		161379	200093
TEG		15.7156	15.7156	15.7156	15.7156		15.7156	15.7184
UCARSOL™ AP-814		133007	133007	133007	133007		133007	133456
Oxygen		0	0	0	0		0	0

Process Streams		125	126	127	128	129	129B	130
Properties	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Total	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Property	**Units**							
Temperature	°F	148.387	148.402	148.416	205*		197.360	255.050
Pressure	psia	83.6959	78.6959	73.6959	68.6959		28.6959*	30.6959
Mole Fraction Vapor	%	0.000981177	0.00198464	0.00301330	0.0304099		0.758244	0
Mole Fraction Light Liquid	%	99.9990	99.9980	99.9970	99.9696		99.2418	100
Mole Fraction Heavy Liquid	%	0	0	0	0		0	0
Phase Mole Fraction	%	100	100	100	100		100	100
Molecular Weight	lb/lbmol	29.6580	29.6580	29.6580	29.6580		29.6580	27.1310
Mass Density	lb/ft^3	68.7605	68.6226	68.4630	63.4710		12.9919	60.2567
Molar Flow	lbmol/h	10610.7	10610.7	10610.7	10610.7		10610.7	12316.1
Mass Flow	lb/h	314691	314691	314691	314691		314691	334148
Vapor Volumetric Flow	ft^3/h	4576.62	4585.81	4596.51	4958.02		24222.1	5545.41
Liquid Volumetric Flow	gpm	570.592	571.738	573.071	618.143		3019.90	691.375
Std Vapor Volumetric Flow	MMSCFD	96.6378	96.6378	96.6378	96.6378		96.6378	112.170
Std Liquid Volumetric Flow	sgpm	647.262	647.262	647.262	647.262		647.262	677.470
Compressibility		0.00553221	0.00521205	0.00489216	0.00450016		0.00929055	0.00180195
Specific Gravity								0.966136
API Gravity								4.83399
Enthalpy	Btu/h	-1.35798E+09	-1.35798E+09	-1.35798E+09	-1.34417E+09		-1.34417E+09	-1.49807E+09
Mass Enthalpy	Btu/lb	-4315.29	-4315.29	-4315.29	-4271.41		-4271.41	-4483.25
Mass Cp	Btu/(lb*°F)	0.750755	0.750758	0.750762	0.798297		0.794397	0.945785
Ideal Gas CpCv Ratio		1.16053	1.16053	1.16053	1.14800		1.14958	1.15064
Dynamic Viscosity	cP							0.551698
Kinematic Viscosity	cSt							0.571577
Thermal Conductivity	Btu/(h*ft*°F)							0.222370
Surface Tension	lbf/ft							0.00306027
Net Ideal Gas Heating Value	Btu/ft^3	392.085	392.085	392.085	392.085		392.085	338.727
Net Liquid Heating Value	Btu/lb	4330.74	4330.74	4330.74	4330.74		4330.74	3972.91
Gross Ideal Gas Heating Value	Btu/ft^3	469.344	469.344	469.344	469.344		469.344	414.145
Gross Liquid Heating Value	Btu/lb	5319.29	5319.29	5319.29	5319.29		5319.29	5027.79

Process Streams		125	126	127	128	129	129B	130
Composition	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Vapor	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Mole Fraction		%	%	%	%		%	
H2S		0.0166916	0.0177188	0.0188852	0.0540139		0.0890135	
N2		0.577255	0.511885	0.458197	0.0951807		0.00430672	
CO2		6.52257	6.92910	7.39065	49.6693		63.8387	
C1		70.2558	69.5410	68.7370	24.8065		1.41204	
C2		12.6422	12.7730	12.8951	5.83273		0.369897	
C3		4.01996	4.01583	4.00775	1.61781		0.0968458	
iC4		0.335569	0.329580	0.323404	0.108941		0.00630999	
nC4		1.10962	1.11379	1.11716	0.487304		0.0297097	
iC5		0.106815	0.102134	0.0976853	0.0310022		0.00148267	
nC5		0.144066	0.140574	0.137080	0.0491277		0.00252523	
Neohexane		0	0	0	0		0	
Cyclopentane		0	0	0	0		0	
2,3-Dimethylbutane		0.0333315	0.0317565	0.0302740	0.00914121		0.000448201	
nC6		0.0176791	0.0168298	0.0160325	0.00482545		0.000236432	
Benzene		0.186181	0.196710	0.208651	0.311273		0.244161	
Cyclohexane		0.0794616	0.0824372	0.0856732	0.0619752		0.00619706	
3,3-Dimethylpentane		0.00941332	0.00839103	0.00754795	0.00168936		7.49234E-05	
C7		0.00167247	0.00148856	0.00133737	0.000298073		1.32124E-05	
Toluene		0.0844882	0.0891697	0.0944793	0.148990		0.109189	
i-Octane		0.00484741	0.00425231	0.00377611	0.000688360		3.50146E-05	
C8		0.000339186	0.000306532	0.000278943	6.53307E-05		2.98313E-06	
Ethylbenzene		0.00549677	0.00579508	0.00613338	0.0121069		0.00682518	
m-Xylene		0.0148047	0.0156062	0.0165156	0.0373987		0.0237421	
C9		0.000152562	0.000121925	0.000101105	1.65455E-05		7.02392E-07	
C10		1.55697E-05	1.01140E-05	7.44106E-06	9.01353E-07		3.66896E-08	
H2O		3.83113	4.07213	4.34581	16.6549		33.7489	
TEG		2.85611E-09	3.00778E-09	3.18017E-09	5.26283E-08		8.30874E-08	
UCARSOL™ AP-814		0.000423432	0.000447134	0.000474066	0.00476741		0.00935166	
Oxygen		0	0	0	0		0	
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	
H2S		1.73775E-05	3.73129E-05	6.03819E-05	0.00174286		0.0716156	
N2		0.000600976	0.00107794	0.00146500	0.00307119		0.00346496	
CO2		0.00679061	0.0145915	0.0236302	1.60268		51.3613	
C1		0.0731429	0.146442	0.219773	0.800429		1.13605	
C2		0.0131617	0.0268977	0.0412297	0.188204		0.297600	
C3		0.00418515	0.00845665	0.0128140	0.0522016		0.0779170	
iC4		0.000349359	0.000694040	0.00103402	0.00351520		0.00507669	
nC4		0.00115522	0.00234545	0.00357192	0.0157238		0.0239029	
iC5		0.000111205	0.000215076	0.000312330	0.00100034		0.00119287	

Process Streams		125	126	127	128	129	129B	130
Composition	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Total	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
nC5		0.000149986	0.000296025	0.000438286	0.00158520		0.00203167	
Neohexane		0	0	0	0		0	
Cyclopentane		0	0	0	0		0	
2,3-Dimethylbutane		3.47012E-05	6.68737E-05	9.67952E-05	0.000294959		0.000360599	
nC6		1.84055E-05	3.54408E-05	5.12609E-05	0.000155702		0.000190221	
Benzene		0.000193832	0.000414239	0.000667123	0.0100438		0.196439	
Cyclohexane		8.27269E-05	0.000173599	0.000273924	0.00199975		0.00498583	
3,3-Dimethylpentane		9.80014E-06	1.76701E-05	2.41331E-05	5.45104E-05		6.02794E-05	
C7		1.74119E-06	3.13465E-06	4.27599E-06	9.61791E-06		1.06300E-05	
Toluene		8.79601E-05	0.000187776	0.000302080	0.00480745		0.0878474	
i-Octane		5.04661E-06	8.95464E-06	1.20734E-05	2.22113E-05		2.81709E-05	
C8		3.53124E-07	6.45504E-07	8.91867E-07	2.10802E-06		2.40006E-06	
Ethylbenzene		5.72264E-06	1.22035E-05	1.96103E-05	0.000390652		0.00549118	
m-Xylene		1.54131E-05	3.28639E-05	5.28054E-05	0.00120674		0.0191017	
C9		1.58831E-07	2.56754E-07	3.23263E-07	5.33873E-07		5.65107E-07	
C10		1.62095E-08	2.12983E-08	2.37914E-08	2.90839E-08		2.95185E-08	
H2O		0.00398857	0.00857521	0.0138949	0.537401		27.1526	
TEG		2.97348E-12	6.33387E-12	1.01680E-11	1.69815E-09		6.68478E-08	
UCARSOL™ AP-814		4.40832E-07	9.41589E-07	1.51573E-06	0.000153830		0.00752385	
Oxygen		0	0	0	0		0	
Mass Fraction		%	%	%	%		%	
H2S		0.0258960	0.0273250	0.0289282	0.0570605		0.0867979	
N2		0.736134	0.648862	0.576909	0.0826484		0.00345188	
CO2		13.0674	13.7987	14.6190	67.7570		80.3846	
C1		51.3071	50.4807	49.5622	12.3355		0.648128	
C2		17.3047	17.3790	17.4274	5.43639		0.318231	
C3		8.06940	8.01280	7.94301	2.21127		0.122185	
iC4		0.887867	0.866796	0.844843	0.196270		0.0104933	
nC4		2.93590	2.92927	2.91842	0.877933		0.0494064	
iC5		0.350821	0.333436	0.316772	0.0693331		0.00306066	
nC5		0.473167	0.458932	0.444520	0.109869		0.00521282	
Neohexane		0	0	0	0		0	
Cyclopentane		0	0	0	0		0	
2,3-Dimethylbutane		0.130756	0.123831	0.117258	0.0244178		0.00110509	
nC6		0.0693531	0.0656262	0.0620974	0.0128896		0.000582950	
Benzene		0.662027	0.695278	0.732533	0.753664		0.545677	
Cyclohexane		0.304428	0.313935	0.324069	0.161674		0.0149221	
3,3-Dimethylpentane		0.0429381	0.0380457	0.0339933	0.00524707		0.000214801	
C7		0.00762882	0.00674925	0.00602306	0.000925803		3.78791E-05	
Toluene		0.354373	0.371768	0.391261	0.425517		0.287846	
i-Octane		0.0252062	0.0219793	0.0193869	0.00243730		0.000114437	
C8		0.00176374	0.00158440	0.00143212	0.000231319		9.74964E-06	
Ethylbenzene		0.0265651	0.0278391	0.0292665	0.0398413		0.0207319	
m-Xylene		0.0715494	0.0749706	0.0788068	0.123072		0.0721180	
C9		0.000890726	0.000707591	0.000582821	6.57770E-05		2.57749E-06	
C10		0.000100845	6.51154E-05	4.75853E-05	3.97524E-06		1.49360E-07	
H2O		3.14190	3.31953	3.51884	9.30040		17.3957	
TEG		1.95250E-08	2.04386E-08	2.14650E-08	2.44980E-07		3.57001E-07	
UCARSOL™ AP-814		0.00215932	0.00226619	0.00238620	0.0164294		0.0292945	
Oxygen		0	0	0	0		0	
Mass Flow		lb/h	lb/h	lb/h	lb/h		lb/h	
H2S		0.000592241	0.00127166	0.00205787	0.0593982		2.44072	
N2		0.0168354	0.0301969	0.0410396	0.0860344		0.0970653	
CO2		0.298851	0.642165	1.03995	70.5329		2260.38	
C1		1.17339	2.34928	3.52571	12.8408		18.2251	
C2		0.395759	0.808788	1.23974	5.65912		8.94853	
C3		0.184547	0.372901	0.565042	2.30186		3.43580	
iC4		0.0203055	0.0403391	0.0600996	0.204311		0.295068	
nC4		0.0671441	0.136323	0.207608	0.913901		1.38929	
iC5		0.00802328	0.0155175	0.0225342	0.0721736		0.0860644	
nC5		0.0108213	0.0213578	0.0316218	0.114370		0.146582	
Neohexane		0	0	0	0		0	
Cyclopentane		0	0	0	0		0	
2,3-Dimethylbutane		0.00299039	0.00576287	0.00834136	0.0254182		0.0310747	
nC6		0.00158610	0.00305412	0.00441742	0.0134177		0.0163923	
Benzene		0.0151405	0.0323570	0.0521102	0.784542		15.3442	
Cyclohexane		0.00696225	0.0146100	0.0230533	0.168298		0.419605	
3,3-Dimethylpentane		0.000981993	0.00177058	0.00241819	0.00546205		0.00604011	
C7		0.000174471	0.000314098	0.000428463	0.000963733		0.00106515	
Toluene		0.00810450	0.0173014	0.0278331	0.442951		8.09412	
i-Octane		0.000576467	0.00102288	0.00137912	0.00253716		0.00321792	
C8		4.03368E-05	7.37350E-05	0.000101877	0.000240796		0.000274156	
Ethylbenzene		0.000607545	0.00129558	0.00208193	0.0414736		0.582971	
m-Xylene		0.00163633	0.00348900	0.00560608	0.128114		2.02793	
C9		2.03709E-05	3.29300E-05	4.14601E-05	6.84719E-05		7.24779E-05	
C10		2.30632E-06	3.03035E-06	3.38508E-06	4.13810E-06		4.19994E-06	
H2O		0.0718552	0.154485	0.250320	9.68143		489.161	
TEG		4.46536E-10	9.51176E-10	1.52696E-09	2.55017E-07		1.00387E-05	
UCARSOL™ AP-814		4.93835E-05	0.000105464	0.000169747	0.0171025		0.823749	
Oxygen		0	0	0	0		0	

Process Streams		125	126	127	128	129	129B	130
Properties	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Vapor	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Property	**Units**							
Temperature	°F	148.387	148.402	148.416	205		197.360	
Pressure	psia	83.6959	78.6959	73.6959	68.6959		28.6959	
Mole Fraction Vapor	%	100	100	100	100		100	
Mole Fraction Light Liquid	%	0	0	0	0		0	
Mole Fraction Heavy Liquid	%	0	0	0	0		0	
Phase Mole Fraction	%	0.000981177	0.00198464	0.00301330	0.0304099		0.758244	
Molecular Weight	lb/lbmol	21.9673	22.0997	22.2490	32.2612		34.9508	
Mass Density	lb/ft^3	0.285589	0.269951	0.254323	0.314624		0.143393	
Molar Flow	lbmol/h	0.104109	0.210583	0.319731	3.22669		80.4547	
Mass Flow	lb/h	2.28700	4.65382	7.11370	104.097		2811.96	
Vapor Volumetric Flow	ft^3/h	8.00801	17.2395	27.9711	330.861		19610.2	
Liquid Volumetric Flow	gpm	0.998401	2.14934	3.48731	41.2502		2444.91	
Std Vapor Volumetric Flow	MMSCFD	0.000948188	0.00191791	0.00291199	0.0293875		0.732751	
Std Liquid Volumetric Flow	sgpm	0.0121451	0.0245516	0.0372447	0.326928		6.76790	

Process Streams		125	126	127	128	129	129B	130
Composition	Status:	Solved	Solved	Solved	Solved	Unsolved	Solved	Solved
Phase: Total	From Block:	RICH AMINE FILTER	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	--	LV-102	STRIPPER
	To Block:	AMINE CARBON FILTER	RICH AMINE AFTER FILTER	L/R EXCHANGER	LV-102	PIPE-1	STRIPPER	KETTLE REBOILER
Compressibility		0.986578	0.987267	0.987962	0.987529		0.991979	
Specific Gravity		0.758473	0.763045	0.768201	1.11390		1.20676	
API Gravity								
Enthalpy	Btu/h	-4605.24	-9470.37	-14644.6	-358974		-1.14736E+07	
Mass Enthalpy	Btu/lb	-2013.66	-2034.97	-2058.64	-3448.46		-4080.28	
Mass Cp	Btu/(lb*°F)	0.477359	0.474382	0.471051	0.314591		0.264903	
Ideal Gas CpCv Ratio		1.23802	1.23784	1.23768	1.24759		1.27610	
Dynamic Viscosity	cP	0.0124482	0.0124649	0.0124862	0.0163206		0.0171829	
Kinematic Viscosity	cSt	2.72110	2.88259	3.06496	3.23835		7.48083	
Thermal Conductivity	Btu/(h*ft*°F)	0.0199820	0.0199007	0.0198110	0.0168138		0.0133187	
Surface Tension	lbf/ft							
Net Ideal Gas Heating Value	Btu/ft^3	1007.26	1002.98	997.761	402.197		38.3833	
Net Liquid Heating Value	Btu/lb	17307.6	17127.5	16920.1	4564.90		169.432	
Gross Ideal Gas Heating Value	Btu/ft^3	1112.39	1107.70	1101.97	450.499		58.3980	
Gross Liquid Heating Value	Btu/lb	19124.2	18926.0	18697.9	5133.20		386.749	

Process Streams	131	132	133	133R	134	135	136	137	139A	139B
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Mole Fraction	%	%	%	%	%	%	%	%	%	%
H2S	0.000744536	0.000744536	0.000744536	0.000711099	0.000711099	0.000711099	0.000711099	0.000705098	0.000705098	0.000705098
N2	0	0	0	0	0	0	0	0	0	0
CO2	0.0647010	0.0647010	0.0647010	0.0647099	0.0647099	0.0647099	0.0647099	0.0641638	0.0641638	0.0641638
C1	0	0	0	0	0	0	0	0	0	0
C2	0	0	0	0	0	0	0	0	0	0
C3	0	0	0	0	0	0	0	0	0	0
iC4	0	0	0	0	0	0	0	0	0	0
nC4	0	0	0	0	0	0	0	0	0	0
iC5	0	0	0	0	0	0	0	0	0	0
nC5	0	0	0	0	0	0	0	0	0	0
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0	0	0	0	0	0	0	0	0	0
nC6	0	0	0	0	0	0	0	0	0	0
Benzene	0	0	0	0	0	0	0	0	0	0
Cyclohexane	0	0	0	0	0	0	0	0	0	0
3,3-Dimethylpentane	0	0	0	0	0	0	0	0	0	0
C7	0	0	0	0	0	0	0	0	0	0
Toluene	0	0	0	0	0	0	0	0	0	0
i-Octane	0	0	0	0	0	0	0	0	0	0
C8	0	0	0	0	0	0	0	0	0	0
Ethylbenzene	0	0	0	0	0	0	0	0	0	0
m-Xylene	0	0	0	0	0	0	0	0	0	0
C9	0	0	0	0	0	0	0	0	0	0
C10	0	0	0	0	0	0	0	0	0	0
H2O	88.1622	88.1622	88.1622	88.1623	88.1623	88.1623	88.1623	88.2620	88.2620	88.2620
TEG	0.00103424	0.00103424	0.00103424	0.000993668	0.000993668	0.000993668	0.000993668	0.000985282	0.000985282	0.000985282
UCARSOL™ AP-814	11.7713	11.7713	11.7713	11.7713	11.7713	11.7713	11.7713	11.6722	11.6722	11.6722
Oxygen	0	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	0.0753362	0.0753362	0.0753362	0.0719530	0.0719530	0.0719530	0.0719530	0.0719530	0.0359765	0.0359765
N2	0	0	0	0	0	0	0	0	0	0
CO2	6.54680	6.54680	6.54680	6.54771	6.54771	6.54771	6.54771	6.54771	3.27386	3.27386
C1	0	0	0	0	0	0	0	0	0	0
C2	0	0	0	0	0	0	0	0	0	0
C3	0	0	0	0	0	0	0	0	0	0
iC4	0	0	0	0	0	0	0	0	0	0
nC4	0	0	0	0	0	0	0	0	0	0
iC5	0	0	0	0	0	0	0	0	0	0
nC5	0	0	0	0	0	0	0	0	0	0
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0	0	0	0	0	0	0	0	0	0
nC6	0	0	0	0	0	0	0	0	0	0
Benzene	0	0	0	0	0	0	0	0	0	0
Cyclohexane	0	0	0	0	0	0	0	0	0	0
3,3-Dimethylpentane	0	0	0	0	0	0	0	0	0	0
C7	0	0	0	0	0	0	0	0	0	0
Toluene	0	0	0	0	0	0	0	0	0	0
i-Octane	0	0	0	0	0	0	0	0	0	0
C8	0	0	0	0	0	0	0	0	0	0
Ethylbenzene	0	0	0	0	0	0	0	0	0	0
m-Xylene	0	0	0	0	0	0	0	0	0	0
C9	0	0	0	0	0	0	0	0	0	0
C10	0	0	0	0	0	0	0	0	0	0
H2O	8920.73	8920.73	8920.73	8920.76	8920.76	8920.76	8920.76	9006.85	4503.43	4503.43
TEG	0.104650	0.104650	0.104650	0.100545	0.100545	0.100545	0.100545	0.100545	0.0502725	0.0502725
UCARSOL™ AP-814	1191.09	1191.09	1191.09	1191.09	1191.09	1191.09	1191.09	1191.11	595.554	595.554
Oxygen	0	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%	%
H2S	0.000873239	0.000873239	0.000873239	0.000834024	0.000834024	0.000834024	0.000834024	0.000829642	0.000829642	0.000829642
N2	0	0	0	0	0	0	0	0	0	0
CO2	0.0979928	0.0979928	0.0979928	0.0980065	0.0980065	0.0980065	0.0980065	0.0974916	0.0974916	0.0974916
C1	0	0	0	0	0	0	0	0	0	0
C2	0	0	0	0	0	0	0	0	0	0
C3	0	0	0	0	0	0	0	0	0	0
iC4	0	0	0	0	0	0	0	0	0	0
nC4	0	0	0	0	0	0	0	0	0	0
iC5	0	0	0	0	0	0	0	0	0	0
nC5	0	0	0	0	0	0	0	0	0	0
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0	0	0	0	0	0	0	0	0	0
nC6	0	0	0	0	0	0	0	0	0	0
Benzene	0	0	0	0	0	0	0	0	0	0
Cyclohexane	0	0	0	0	0	0	0	0	0	0
3,3-Dimethylpentane	0	0	0	0	0	0	0	0	0	0
C7	0	0	0	0	0	0	0	0	0	0
Toluene	0	0	0	0	0	0	0	0	0	0
i-Octane	0	0	0	0	0	0	0	0	0	0
C8	0	0	0	0	0	0	0	0	0	0
Ethylbenzene	0	0	0	0	0	0	0	0	0	0
m-Xylene	0	0	0	0	0	0	0	0	0	0
C9	0	0	0	0	0	0	0	0	0	0
C10	0	0	0	0	0	0	0	0	0	0
H2O	54.6588	54.6588	54.6588	54.6590	54.6590	54.6590	54.6590	54.8966	54.8966	54.8966
TEG	0.00534501	0.00534501	0.00534501	0.00513536	0.00513536	0.00513536	0.00513536	0.00510838	0.00510838	0.00510838
UCARSOL™ AP-814	45.2370	45.2370	45.2370	45.2370	45.2370	45.2370	45.2370	45	45	45
Oxygen	0	0	0	0	0	0	0	0	0	0
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S	2.56752	2.56752	2.56752	2.45222	2.45222	2.45222	2.45222	2.45222	1.22611	1.22611
N2	0	0	0	0	0	0	0	0	0	0
CO2	288.121	288.121	288.121	288.162	288.162	288.162	288.162	288.162	144.081	144.081
C1	0	0	0	0	0	0	0	0	0	0
C2	0	0	0	0	0	0	0	0	0	0
C3	0	0	0	0	0	0	0	0	0	0
iC4	0	0	0	0	0	0	0	0	0	0
nC4	0	0	0	0	0	0	0	0	0	0
iC5	0	0	0	0	0	0	0	0	0	0
nC5	0	0	0	0	0	0	0	0	0	0
Neohexane	0	0	0	0	0	0	0	0	0	0

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Cyclopentane		0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0	0	0	0	0	0	0	0	0	0
nC6		0	0	0	0	0	0	0	0	0	0
Benzene		0	0	0	0	0	0	0	0	0	0
Cyclohexane		0	0	0	0	0	0	0	0	0	0
3,3-Dimethylpentane		0	0	0	0	0	0	0	0	0	0
C7		0	0	0	0	0	0	0	0	0	0
Toluene		0	0	0	0	0	0	0	0	0	0
i-Octane		0	0	0	0	0	0	0	0	0	0
C8		0	0	0	0	0	0	0	0	0	0
Ethylbenzene		0	0	0	0	0	0	0	0	0	0
m-Xylene		0	0	0	0	0	0	0	0	0	0
C9		0	0	0	0	0	0	0	0	0	0
C10		0	0	0	0	0	0	0	0	0	0
H2O		160709	160709	160709	160710	160710	160710	160710	162261	81130.5	81130.5
TEG		15.7156	15.7156	15.7156	15.0991	15.0991	15.0991	15.0991	15.0991	7.54956	7.54956
UCARSOL™ AP-814		133007	133007	133007	133007	133007	133007	133007	133009	66504.6	66504.6
Oxygen		0	0	0	0	0	0	0	0	0	0

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Property	**Units**										
Temperature	°F	256.325	205.279	205.429	205.436	205.438	120*	120.014	119.901	119.901	119.901
Pressure	psia	29.6959	27.6959	87.6959	87.6959	86.6959	76.6959	71.6959	71.6959	71.6959	71.6959
Mole Fraction Vapor	%	0	0	0	0	0	0	0	0	0	0
Mole Fraction Light Liquid	%	100	100	100	100	100	100	100	100	100	100
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	29.0579	29.0579	29.0579	29.0578	29.0578	29.0578	29.0578	28.9647	28.9647	28.9647
Mass Density	lb/ft^3	60.2345	61.8229	61.8255	61.8253	61.8251	63.9069	63.9062	63.9001	63.9001	63.9001
Molar Flow	lbmol/h	10118.5	10118.5	10118.5	10118.6	10118.6	10118.6	10118.6	10204.7	5102.34	5102.34
Mass Flow	lb/h	294023	294023	294023	294023	294023	294023	294023	295576	147788	147788
Vapor Volumetric Flow	ft^3/h	4881.31	4755.89	4755.70	4755.71	4755.72	4600.80	4600.85	4625.60	2312.80	2312.80
Liquid Volumetric Flow	gpm	608.579	592.942	592.918	592.919	592.921	573.606	573.613	576.698	288.349	288.349
Std Vapor Volumetric Flow	MMSCFD	92.1558	92.1558	92.1558	92.1560	92.1560	92.1560	92.1560	92.9403	46.4702	46.4702
Std Liquid Volumetric Flow	sgpm	596.895	596.895	596.895	596.894	596.894	596.894	596.894	600*	300	300
Compressibility		0.00186441	0.00182423	0.00577465	0.00577460	0.00570875	0.00560586	0.00524034	0.00522508	0.00522508	0.00522508
Specific Gravity		0.965780	0.991249	0.991289	0.991286	0.991283	1.02466	1.02465	1.02455	1.02455	1.02455
API Gravity		4.46936	4.46970	4.45958	4.45960	4.45977	4.46146	4.46230	4.48390	4.48390	4.48390
Enthalpy	Btu/h	-1.23464E+09	-1.24845E+09	-1.24837E+09	-1.24837E+09	-1.24837E+09	-1.27026E+09	-1.27026E+09	-1.28079E+09	-6.40397E+08	-6.40397E+08
Mass Enthalpy	Btu/lb	-4199.11	-4246.08	-4245.82	-4245.83	-4245.83	-4320.26	-4320.26	-4333.21	-4333.21	-4333.21
Mass Cp	Btu/(lb*°F)	0.939195	0.901156	0.901004	0.901010	0.901016	0.842114	0.842140	0.842878	0.842878	0.842878
Ideal Gas CpCv Ratio		1.13515	1.14484	1.14481	1.14481	1.14481	1.16440	1.16440	1.16512	1.16512	1.16512
Dynamic Viscosity	cP	0.633443	0.991131	0.991011	0.990939	0.990895	2.86238	2.86148	2.83542	2.83542	2.83542
Kinematic Viscosity	cSt	0.656510	1.00083	1.00067	1.00060	1.00056	2.79613	2.79529	2.77010	2.77010	2.77010
Thermal Conductivity	Btu/(h*ft*°F)	0.205038	0.208442	0.208443	0.208444	0.208443	0.209879	0.209878	0.210541	0.210541	0.210541
Surface Tension	lbf/ft	0.00295912	0.003273107	0.003272327	0.003272287	0.003272267	0.00374993	0.00374985	0.00375607	0.00375607	0.00375607
Net Ideal Gas Heating Value	Btu/ft^3	410.743	410.743	410.743	410.740	410.740	410.740	410.740	407.280	407.280	407.280
Net Liquid Heating Value	Btu/lb	4637.31	4637.31	4637.31	4637.29	4637.29	4637.29	4637.29	4607.45	4607.45	4607.45
Gross Ideal Gas Heating Value	Btu/ft^3	491.543	491.543	491.543	491.540	491.540	491.540	491.540	487.824	487.824	487.824
Gross Liquid Heating Value	Btu/lb	5692.53	5692.53	5692.53	5692.51	5692.51	5692.51	5692.51	5662.70	5662.70	5662.70

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Mole Fraction											
H2S											
N2											
CO2											
C1											
C2											
C3											
iC4											
nC4											
iC5											
nC5											
Neohexane											
Cyclopentane											
2,3-Dimethylbutane											
nC6											
Benzene											
Cyclohexane											
3,3-Dimethylpentane											
C7											
Toluene											
i-Octane											
C8											
Ethylbenzene											
m-Xylene											
C9											
C10											
H2O											
TEG											
UCARSOL™ AP-814											
Oxygen											
Molar Flow											
H2S											
N2											
CO2											
C1											
C2											
C3											
iC4											
nC4											
iC5											

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
nC5											
Neohexane											
Cyclopentane											
2,3-Dimethylbutane											
nC6											
Benzene											
Cyclohexane											
3,3-Dimethylpentane											
C7											
Toluene											
i-Octane											
C8											
Ethylbenzene											
m-Xylene											
C9											
C10											
H2O											
TEG											
UCARSOL™ AP-814											
Oxygen											
Mass Fraction											
H2S											
N2											
CO2											
C1											
C2											
C3											
iC4											
nC4											
iC5											
nC5											
Neohexane											
Cyclopentane											
2,3-Dimethylbutane											
nC6											
Benzene											
Cyclohexane											
3,3-Dimethylpentane											
C7											
Toluene											
i-Octane											
C8											
Ethylbenzene											
m-Xylene											
C9											
C10											
H2O											
TEG											
UCARSOL™ AP-814											
Oxygen											
Mass Flow											
H2S											
N2											
CO2											
C1											
C2											
C3											
iC4											
nC4											
iC5											
nC5											
Neohexane											
Cyclopentane											
2,3-Dimethylbutane											
nC6											
Benzene											
Cyclohexane											
3,3-Dimethylpentane											
C7											
Toluene											
i-Octane											
C8											
Ethylbenzene											
m-Xylene											
C9											
C10											
H2O											
TEG											
UCARSOL™ AP-814											
Oxygen											

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Property	**Units**										
Temperature	°F										
Pressure	psia										
Mole Fraction Vapor	%										
Mole Fraction Light Liquid	%										
Mole Fraction Heavy Liquid	%										
Phase Mole Fraction	%										
Molecular Weight	lb/lbmol										
Mass Density	lb/ft^3										
Molar Flow	lbmol/h										
Mass Flow	lb/h										
Vapor Volumetric Flow	ft^3/h										
Liquid Volumetric Flow	gpm										
Std Vapor Volumetric Flow	MMSCFD										
Std Liquid Volumetric Flow	sgpm										

Process Streams		131	132	133	133R	134	135	136	137	139A	139B
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	KETTLE REBOILER	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	SPLT-100
	To Block:	L/R EXCHANGER	BOOSTER PUMP	Recycle	LEAN FILTER	LA COOLER	LV-104	AMINE MU/BD	SPLT-100	HP PUMP 1/3	HP PUMP 2/3
Compressibility											
Specific Gravity											
API Gravity											
Enthalpy	Btu/h										
Mass Enthalpy	Btu/lb										
Mass Cp	Btu/(lb*°F)										
Ideal Gas CpCv Ratio											
Dynamic Viscosity	cP										
Kinematic Viscosity	cSt										
Thermal Conductivity	Btu/(h*ft*°F)										
Surface Tension	lbf/ft										
Net Ideal Gas Heating Value	Btu/ft^3										
Net Liquid Heating Value	Btu/lb										
Gross Ideal Gas Heating Value	Btu/ft^3										
Gross Liquid Heating Value	Btu/lb										

Process Streams		140A	140B	141	143A	150	151	152	153
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Mole Fraction		%	%	%	%	%	%	%	%
H2S		0.000705098	0.000705098	0.000705098	0.000705098	0.0842348	0.0842348	0.000275813	0.000275813
N2		0	0	0	0	0.000374777	0.000374777	1.02002E-08	1.02002E-08
CO2		0.0641638	0.0641638	0.0641638	0.0641638	48.8186	48.8186	0.0506843	0.0506843
C1		0	0	0	0	0.123515	0.123515	6.49277E-06	6.49277E-06
C2		0	0	0	0	0.0324613	0.0324613	1.90400E-06	1.90400E-06
C3		0	0	0	0	0.00848585	0.00848585	3.82320E-07	3.82320E-07
iC4		0	0	0	0	0.000552330	0.000552330	1.56937E-08	1.56937E-08
nC4		0	0	0	0	0.00260519	0.00260519	1.11537E-07	1.11537E-07
iC5		0	0	0	0	0.000129232	0.000129232	2.79102E-09	2.79102E-09
nC5		0	0	0	0	0.000220467	0.000220467	5.87852E-09	5.87852E-09
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0	0	0	0	3.90899E-05	3.90899E-05	5.91154E-10	5.91154E-10
nC6		0	0	0	0	2.06203E-05	2.06203E-05	3.11209E-10	3.11209E-10
Benzene		0	0	0	0	0.0337013	0.0337013	0.000136423	0.000136423
Cyclohexane		0	0	0	0	0.000553967	0.000553967	6.69796E-08	6.69796E-08
3,3-Dimethylpentane		0	0	0	0	6.51981E-06	6.51981E-06	5.70029E-11	5.70029E-11
C7		0	0	0	0	1.14973E-06	1.14973E-06	1.00221E-11	1.00221E-11
Toluene		0	0	0	0	0.0147294	0.0147294	4.48691E-05	4.48691E-05
i-Octane		0	0	0	0	3.05443E-06	3.05443E-06	1.50394E-11	1.50394E-11
C8		0	0	0	0	2.59761E-07	2.59761E-07	1.94586E-12	1.94586E-12
Ethylbenzene		0	0	0	0	0.000823649	0.000823649	2.04432E-06	2.04432E-06
m-Xylene		0	0	0	0	0.00305232	0.00305232	1.13432E-05	1.13432E-05
C9		0	0	0	0	6.10648E-08	6.10648E-08	1.94390E-13	1.94390E-13
C10		0	0	0	0	3.18688E-09	3.18688E-09	3.75325E-15	3.75325E-15
H2O		88.2620	88.2620	88.2620	88.2620	50.8759	50.8759	99.9488	99.9488
TEG		0.000985282	0.000985282	0.000985282	0.000985282	0	0	0	0
UCARSOL™ AP-814		11.6722	11.6722	11.6722	11.6722	3.21249E-05	3.21249E-05	6.85158E-05	6.85158E-05
Oxygen		0	0	0	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		0.0359765	0.0359765	0.0719530	0.0719530	0.780473	0.780473	0.00119821	0.00119821
N2		0	0	0	0	0.00347248	0.00347248	4.43126E-08	4.43126E-08
CO2		3.27386	3.27386	6.54771	6.54771	452.326	452.326	0.220187	0.220187
C1		0	0	0	0	1.14442	1.14442	2.82064E-05	2.82064E-05
C2		0	0	0	0	0.300768	0.300768	8.27149E-06	8.27149E-06
C3		0	0	0	0	0.0786252	0.0786252	1.66090E-06	1.66090E-06
iC4		0	0	0	0	0.00511759	0.00511759	6.81780E-08	6.81780E-08
nC4		0	0	0	0	0.0241382	0.0241382	4.84550E-07	4.84550E-07
iC5		0	0	0	0	0.00119739	0.00119739	1.21250E-08	1.21250E-08
nC5		0	0	0	0	0.00204273	0.00204273	2.55379E-08	2.55379E-08
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0	0	0	0	0.000362186	0.000362186	2.56814E-09	2.56814E-09
nC6		0	0	0	0	0.000191056	0.000191056	1.35198E-09	1.35198E-09
Benzene		0	0	0	0	0.312258	0.312258	0.000592659	0.000592659
Cyclohexane		0	0	0	0	0.00513276	0.00513276	2.90978E-07	2.90978E-07
3,3-Dimethylpentane		0	0	0	0	6.04089E-05	6.04089E-05	2.47636E-10	2.47636E-10
C7		0	0	0	0	1.06528E-05	1.06528E-05	4.35389E-11	4.35389E-11
Toluene		0	0	0	0	0.136474	0.136474	0.000194924	0.000194924
i-Octane		0	0	0	0	2.83006E-05	2.83006E-05	6.53355E-11	6.53355E-11
C8		0	0	0	0	2.40680E-06	2.40680E-06	8.45335E-12	8.45335E-12
Ethylbenzene		0	0	0	0	0.00763148	0.00763148	8.88109E-06	8.88109E-06
m-Xylene		0	0	0	0	0.0282811	0.0282811	4.92778E-05	4.92778E-05
C9		0	0	0	0	5.65793E-07	5.65793E-07	8.44486E-13	8.44486E-13
C10		0	0	0	0	2.95279E-08	2.95279E-08	1.63052E-14	1.63052E-14
H2O		4503.43	4503.43	9006.85	9006.85	471.388	471.388	434.205	434.205
TEG		0.0502725	0.0502725	0.100545	0.100545	0	0	0	0
UCARSOL™ AP-814		595.554	595.554	1191.11	1191.11	0.000297652	0.000297652	0.000297652	0.000297652
Oxygen		0	0	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%
H2S		0.000829642	0.000829642	0.000829642	0.000829642	0.0933318	0.0933318	0.000521389	0.000521389
N2		0	0	0	0	0.000341323	0.000341323	1.58493E-08	1.58493E-08
CO2		0.0974916	0.0974916	0.0974916	0.0974916	69.8488	69.8488	0.123725	0.123725
C1		0	0	0	0	0.0644194	0.0644194	5.77746E-06	5.77746E-06
C2		0	0	0	0	0.0317331	0.0317331	3.17557E-06	3.17557E-06
C3		0	0	0	0	0.0121652	0.0121652	9.35100E-07	9.35100E-07
iC4		0	0	0	0	0.00104368	0.00104368	5.05947E-08	5.05947E-08
nC4		0	0	0	0	0.00492275	0.00492275	3.59583E-07	3.59583E-07
iC5		0	0	0	0	0.000303128	0.000303128	1.11693E-08	1.11693E-08
nC5		0	0	0	0	0.000517130	0.000517130	2.35252E-08	2.35252E-08
Neohexane		0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0	0	0	0	0.000109515	0.000109515	2.82566E-09	2.82566E-09
nC6		0	0	0	0	5.77704E-05	5.77704E-05	1.48755E-09	1.48755E-09
Benzene		0	0	0	0	0.0855837	0.0855837	0.000591072	0.000591072
Cyclohexane		0	0	0	0	0.00151570	0.00151570	3.12667E-07	3.12667E-07
3,3-Dimethylpentane		0	0	0	0	2.12392E-05	2.12392E-05	3.16817E-10	3.16817E-10
C7		0	0	0	0	3.74541E-06	3.74541E-06	5.57021E-11	5.57021E-11
Toluene		0	0	0	0	0.0441218	0.0441218	0.000229311	0.000229311
i-Octane		0	0	0	0	1.13431E-05	1.13431E-05	9.52889E-11	9.52889E-11
C8		0	0	0	0	9.64662E-07	9.64662E-07	1.23288E-11	1.23288E-11
Ethylbenzene		0	0	0	0	0.00284283	0.00284283	1.20383E-05	1.20383E-05
m-Xylene		0	0	0	0	0.0105351	0.0105351	6.67962E-05	6.67962E-05
C9		0	0	0	0	2.54620E-07	2.54620E-07	1.38288E-12	1.38288E-12
C10		0	0	0	0	1.47415E-08	1.47415E-08	2.96205E-14	2.96205E-14
H2O		54.8966	54.8966	54.8966	54.8966	29.7975	29.7975	99.8745	99.8745
TEG		0.00510838	0.00510838	0.00510838	0.00510838	0	0	0	0
UCARSOL™ AP-814		45	45	45	45	0.000101730	0.000101730	0.000370173	0.000370173
Oxygen		0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		1.22611	1.22611	2.45222	2.45222	26.5992	26.5992	0.0408360	0.0408360
N2		0	0	0	0	0.0972759	0.0972759	1.24135E-06	1.24135E-06
CO2		144.081	144.081	288.162	288.162	19906.6	19906.6	9.69031	9.69031
C1		0	0	0	0	18.3593	18.3593	0.000452500	0.000452500
C2		0	0	0	0	9.04382	9.04382	0.000248716	0.000248716
C3		0	0	0	0	3.46703	3.46703	7.32385E-05	7.32385E-05
iC4		0	0	0	0	0.297446	0.297446	3.96265E-06	3.96265E-06
nC4		0	0	0	0	1.40297	1.40297	2.81631E-05	2.81631E-05
iC5		0	0	0	0	0.0863904	0.0863904	8.74801E-07	8.74801E-07
nC5		0	0	0	0	0.147380	0.147380	1.84253E-06	1.84253E-06
Neohexane		0	0	0	0	0	0	0	0

Process Streams		140A	140B	141	143A	150	151	152	153
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Cyclopentane		0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0	0	0	0	0.0312115	0.0312115	2.21310E-07	2.21310E-07
nC6		0	0	0	0	0.0164643	0.0164643	1.16507E-07	1.16507E-07
Benzene		0	0	0	0	24.3910	24.3910	0.0462937	0.0462937
Cyclohexane		0	0	0	0	0.431970	0.431970	2.44886E-05	2.44886E-05
3,3-Dimethylpentane		0	0	0	0	0.00605309	0.00605309	2.48137E-08	2.48137E-08
C7		0	0	0	0	0.00106743	0.00106743	4.36268E-09	4.36268E-09
Toluene		0	0	0	0	12.5745	12.5745	0.0179600	0.0179600
i-Octane		0	0	0	0	0.00323274	0.00323274	7.46318E-09	7.46318E-09
C8		0	0	0	0	0.000274925	0.000274925	9.65613E-10	9.65613E-10
Ethylbenzene		0	0	0	0	0.810196	0.810196	0.000942861	0.000942861
m-Xylene		0	0	0	0	3.00247	3.00247	0.00523158	0.00523158
C9		0	0	0	0	7.25658E-05	7.25658E-05	1.08310E-10	1.08310E-10
C10		0	0	0	0	4.20127E-06	4.20127E-06	2.31993E-12	2.31993E-12
H2O		81130.5	81130.5	162261	162261	8492.18	8492.18	7822.33	7822.33
TEG		7.54956	7.54956	15.0991	15.0991	0	0	0	0
UCARSOL™ AP-814		66504.6	66504.6	133009	133009	0.0289925	0.0289925	0.0289925	0.0289925
Oxygen		0	0	0	0	0	0	0	0

Process Streams		140A	140B	141	143A	150	151	152	153
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Property	**Units**								
Temperature	°F	121.633	121.633	121.633	121.931	207.796	120.976	120.000	120.230
Pressure	psia	1034.70	1034.70	1034.70	927.696*	26.6959	23.6959	22.6959	89.6959*
Mole Fraction Vapor	%	0	0	0	0	100	53.0451	0	0
Mole Fraction Light Liquid	%	100	100	100	100	0	46.9549	100	100
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	28.9647	28.9647	28.9647	28.9647	30.7590	30.7590	18.0287	18.0287
Mass Density	lb/ft^3	63.9539	63.9539	63.9539	63.9382	0.115654	0.221945	61.6895	61.6902
Molar Flow	lbmol/h	5102.34	5102.34	10204.7	10204.7	926.545	926.545	434.428	434.428
Mass Flow	lb/h	147788	147788	295576	295576	28499.6	28499.6	7832.16	7832.16
Vapor Volumetric Flow	ft^3/h	2310.85	2310.85	4621.70	4622.84	246421	128409	126.961	126.959
Liquid Volumetric Flow	gpm	288.106	288.106	576.212	576.354	30722.6	16009.4	15.8289	15.8287
Std Vapor Volumetric Flow	MMSCFD	46.4702	46.4702	92.9403	92.9403	8.43862	8.43862	3.95660	3.95660
Std Liquid Volumetric Flow	sgpm	300	300	600	600	66.0292	66.0292	15.6614	15.6614
Compressibility		0.0751188	0.0751188	0.0751188	0.0673327	0.991206	0.527020	0.00106624	0.00421215
Specific Gravity		1.02542	1.02542	1.02542	1.02516	1.06203		0.989110	0.989121
API Gravity		4.32273	4.32273	4.32273	4.34054			9.95819	9.95005
Enthalpy	Btu/h	-6.39848E+08	-6.39848E+08	-1.27970E+09	-1.27970E+09	-1.24561E+08	-1.33247E+08	-5.30251E+07	-5.30220E+07
Mass Enthalpy	Btu/lb	-4329.50	-4329.50	-4329.50	-4329.50	-4370.61	-4675.39	-6770.18	-6769.78
Mass Cp	Btu/(lb*°F)	0.840781	0.840781	0.840781	0.841323	0.290988	0.432202	0.997564	0.997349
Ideal Gas CpCv Ratio		1.16467	1.16467	1.16467	1.16459	1.28851	1.30062	1.32733	1.32732
Dynamic Viscosity	cP	2.81164	2.81164	2.81164	2.79363	0.0167886		0.569543	0.568824
Kinematic Viscosity	cSt	2.74455	2.74455	2.74455	2.72764	9.06217		0.576360	0.575627
Thermal Conductivity	Btu/(h*ft*°F)	0.210678	0.210678	0.210678	0.210672	0.0137948		0.366882	0.366967
Surface Tension	lbf/ft	0.00374814	0.00374814	0.00374814	0.00374644			0.00466045	0.00465877
Net Ideal Gas Heating Value	Btu/ft^3	407.280	407.280	407.280	407.280	4.50518	4.50518	0.0114712	0.0114712
Net Liquid Heating Value	Btu/lb	4607.45	4607.45	4607.45	4607.45	-313.019	-313.019	-1058.28	-1058.28
Gross Ideal Gas Heating Value	Btu/ft^3	487.824	487.824	487.824	487.824	30.4347	30.4347	50.2963	50.2963
Gross Liquid Heating Value	Btu/lb	5662.70	5662.70	5662.70	5662.70	6.88308	6.88308	0.159135	0.159135

Process Streams		140A	140B	141	143A	150	151	152	153
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Mole Fraction						%	%		
H2S						0.0842348	0.158546		
N2						0.000374777	0.000706516		
CO2						48.8186	91.9858		
C1						0.123515	0.232842		
C2						0.0324613	0.0611939		
C3						0.00848585	0.0159971		
iC4						0.000552330	0.00104123		
nC4						0.00260519	0.00491116		
iC5						0.000129232	0.000243624		
nC5						0.000220467	0.000415617		
Neohexane						0	0		
Cyclopentane						0	0		
2,3-Dimethylbutane						3.90899E-05	7.36914E-05		
nC6						2.06203E-05	3.88729E-05		
Benzene						0.0337013	0.0634093		
Cyclohexane						0.000553967	0.00104427		
3,3-Dimethylpentane						6.51981E-06	1.22910E-05		
C7						1.14973E-06	2.16745E-06		
Toluene						0.0147294	0.0277270		
i-Octane						3.05443E-06	5.75816E-06		
C8						2.59761E-07	4.89696E-07		
Ethylbenzene						0.000823649	0.00155088		
m-Xylene						0.00305232	0.00574396		
C9						6.10648E-08	1.15118E-07		
C10						3.18688E-09	6.00787E-09		
H2O						50.8759	7.43868		
TEG						0	0		
UCARSOL™ AP-814						3.21249E-05	2.36860E-13		
Oxygen						0	0		
Molar Flow						lbmol/h	lbmol/h		
H2S						0.780473	0.779230		
N2						0.00347248	0.00347243		
CO2						452.326	452.098		
C1						1.14442	1.14439		
C2						0.300768	0.300760		
C3						0.0786252	0.0786235		
iC4						0.00511759	0.00511752		
nC4						0.0241382	0.0241377		
iC5						0.00119739	0.00119738		

Process Streams		140A	140B	141	143A	150	151	152	153
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
nC5						0.00204273	0.00204270		
Neohexane						0	0		
Cyclopentane						0	0		
2,3-Dimethylbutane						0.000362186	0.000362183		
nC6						0.000191056	0.000191055		
Benzene						0.312258	0.311648		
Cyclohexane						0.00513276	0.00513246		
3,3-Dimethylpentane						6.04089E-05	6.04087E-05		
C7						1.06528E-05	1.06527E-05		
Toluene						0.136474	0.136275		
i-Octane						2.83006E-05	2.83006E-05		
C8						2.40680E-06	2.40679E-06		
Ethylbenzene						0.00763148	0.00762238		
m-Xylene						0.0282811	0.0282308		
C9						5.65793E-07	5.65792E-07		
C10						2.95279E-08	2.95278E-08		
H2O						471.388	36.5601		
TEG						0	0		
UCARSOL™ AP-814						0.000297652	1.16413E-12		
Oxygen						0	0		
Mass Fraction						%	%		
H2S						0.0933318	0.128568		
N2						0.000341323	0.000470929		
CO2						69.8488	96.3241		
C1						0.0644194	0.0888793		
C2						0.0317331	0.0437820		
C3						0.0121652	0.0167843		
iC4						0.00104368	0.00143998		
nC4						0.00492275	0.00679194		
iC5						0.000303128	0.000418232		
nC5						0.000517130	0.000713492		
Neohexane						0	0		
Cyclopentane						0	0		
2,3-Dimethylbutane						0.000109515	0.000151101		
nC6						5.77704E-05	7.97071E-05		
Benzene						0.0855837	0.117852		
Cyclohexane						0.00151570	0.00209115		
3,3-Dimethylpentane						2.12392E-05	2.93043E-05		
C7						3.74541E-06	5.16765E-06		
Toluene						0.0441218	0.0607871		
i-Octane						1.13431E-05	1.56504E-05		
C8						9.64662E-07	1.33097E-06		
Ethylbenzene						0.00284283	0.00391767		
m-Xylene						0.0105351	0.0145098		
C9						2.54620E-07	3.51307E-07		
C10						1.47415E-08	2.03393E-08		
H2O						29.7975	3.18863		
TEG						0	0		
UCARSOL™ AP-814						0.000101730	5.91666E-13		
Oxygen						0	0		
Mass Flow						lb/h	lb/h		
H2S						26.5992	26.5569		
N2						0.0972759	0.0972746		
CO2						19906.6	19896.6		
C1						18.3593	18.3588		
C2						9.04382	9.04356		
C3						3.46703	3.46695		
iC4						0.297446	0.297441		
nC4						1.40297	1.40294		
iC5						0.0863904	0.0863895		
nC5						0.147380	0.147378		
Neohexane						0	0		
Cyclopentane						0	0		
2,3-Dimethylbutane						0.0312115	0.0312113		
nC6						0.0164643	0.0164642		
Benzene						24.3910	24.3434		
Cyclohexane						0.431970	0.431945		
3,3-Dimethylpentane						0.00605309	0.00605307		
C7						0.00106743	0.00106742		
Toluene						12.5745	12.5561		
i-Octane						0.00323274	0.00323273		
C8						0.000274925	0.000274924		
Ethylbenzene						0.810196	0.809230		
m-Xylene						3.00247	2.99712		
C9						7.25658E-05	7.25657E-05		
C10						4.20127E-06	4.20127E-06		
H2O						8492.18	658.640		
TEG						0	0		
UCARSOL™ AP-814						0.0289925	1.22214E-10		
Oxygen						0	0		

Process Streams		140A	140B	141	143A	150	151	152	153
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Property	**Units**								
Temperature	°F					207.796	120.976		
Pressure	psia					26.6959	23.6959		
Mole Fraction Vapor	%					100	100		
Mole Fraction Light Liquid	%					0	0		
Mole Fraction Heavy Liquid	%					0	0		
Phase Mole Fraction	%					100	53.0451		
Molecular Weight	lb/lbmol					30.7590	42.0274		
Mass Density	lb/ft^3					0.115654	0.161020		
Molar Flow	lbmol/h					926.545	491.487		
Mass Flow	lb/h					28499.6	20655.9		
Vapor Volumetric Flow	ft^3/h					246421	128281		
Liquid Volumetric Flow	gpm					30722.6	15993.5		
Std Vapor Volumetric Flow	MMSCFD					8.43862	4.47627		
Std Liquid Volumetric Flow	sgpm					66.0292	50.3445		

Process Streams		140A	140B	141	143A	150	151	152	153
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	HP PUMP 1/3	HP PUMP 2/3	MIX-100	FV-104B	STRIPPER	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604
	To Block:	MIX-100	MIX-100	FV-104B	AMINE CONTACTOR	CONDENSER	REFLUX ACCUM	REFLUX PUMP P-1603 / 1604	LV-103
Compressibility						0.991206	0.992548		
Specific Gravity						1.06203	1.45110		
API Gravity									
Enthalpy	Btu/h					-1.24561E+08	-8.01520E+07		
Mass Enthalpy	Btu/lb					-4370.61	-3880.34		
Mass Cp	Btu/(lb*°F)					0.290988	0.217508		
Ideal Gas CpCv Ratio						1.28851	1.28040		
Dynamic Viscosity	cP					0.0167886	0.0161284		
Kinematic Viscosity	cSt					9.06217	6.25304		
Thermal Conductivity	Btu/(h*ft*°F)					0.0137948	0.0107039		
Surface Tension	lbf/ft								
Net Ideal Gas Heating Value	Btu/ft^3					4.50518	8.48273		
Net Liquid Heating Value	Btu/lb					-313.019	-30.0355		
Gross Ideal Gas Heating Value	Btu/ft^3					30.4347	12.8540		
Gross Liquid Heating Value	Btu/lb					6.88308	9.43555		

Process Streams	154	155	156	160	160A	160B	170	172	173	174
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Mole Fraction	%	%	%	%	%	%	%	%	%	%
H2S	0.000275813	0.158352	0.158352	0.00116475	0.00116475	0.00116475	0.0157800	0.0157800	0.000621329	0.000621329
N2	1.02002E-08	0.000705611	0.000705611	0	0	0	0.658807	0.658807	0.000979042	0.000979042
CO2	0.0506843	91.8696	91.8696	0.301329	0.301329	0.301329	6.16179	6.16179	0.0288162	0.0288162
C1	6.49277E-06	0.232544	0.232544	0	0	0	70.8890	70.8890	0.0704435	0.0704435
C2	1.90400E-06	0.0611156	0.0611156	0	0	0	12.5049	12.5049	0.00930870	0.00930870
C3	3.82320E-07	0.0159766	0.0159766	0	0	0	4.02075	4.02075	0.00264083	0.00264083
iC4	1.56937E-08	0.00103990	0.00103990	0	0	0	0.341405	0.341405	0.000175357	0.000175357
nC4	1.11537E-07	0.00490488	0.00490488	0	0	0	1.10484	1.10484	0.000606060	0.000606060
iC5	2.79102E-09	0.000243312	0.000243312	0	0	0	0.111768	0.111768	5.49136E-05	5.49136E-05
nC5	5.87852E-09	0.000415084	0.000415084	0	0	0	0.147574	0.147574	7.15592E-05	7.15592E-05
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	5.91154E-10	7.35970E-05	7.35970E-05	0	0	0	0.0350146	0.0350146	1.22889E-05	1.22889E-05
nC6	3.11209E-10	3.88231E-05	3.88231E-05	0	0	0	0.0185890	0.0185890	6.44937E-06	6.44937E-06
Benzene	0.000136423	0.0633315	0.0633315	0	0	0	0.176827	0.176827	0.00122295	0.00122295
Cyclohexane	6.69796E-08	0.00104294	0.00104294	0	0	0	0.0767192	0.0767192	4.55750E-05	4.55750E-05
3,3-Dimethylpentane	5.70029E-11	1.22753E-05	1.22753E-05	0	0	0	0.0106827	0.0106827	3.69581E-06	3.69581E-06
C7	1.00221E-11	2.16467E-06	2.16467E-06	0	0	0	0.00190174	0.00190174	6.47464E-07	6.47464E-07
Toluene	4.48691E-05	0.0276925	0.0276925	0	0	0	0.0803299	0.0803299	0.000404666	0.000404666
i-Octane	1.50394E-11	5.75078E-06	5.75078E-06	0	0	0	0.00561468	0.00561468	1.24363E-06	1.24363E-06
C8	1.94586E-12	4.89069E-07	4.89069E-07	0	0	0	0.000378567	0.000378567	9.59479E-08	9.59479E-08
Ethylbenzene	2.04432E-06	0.00154894	0.00154894	0	0	0	0.00523178	0.00523178	2.09989E-05	2.09989E-05
m-Xylene	1.13432E-05	0.00573682	0.00573682	0	0	0	0.0140933	0.0140933	8.04699E-05	8.04699E-05
C9	1.94390E-13	1.14971E-07	1.14971E-07	0	0	0	0.000202252	0.000202252	4.58581E-08	4.58581E-08
C10	3.75325E-15	6.00017E-09	6.00017E-09	0	0	0	3.29521E-05	3.29521E-05	7.85438E-09	7.85438E-09
H2O	99.9488	7.55562	7.55562	99.4800	99.4800	99.4800	3.61730	3.61730	99.0289	99.0289
TEG	0	0	0	8.54807E-07	8.54807E-07	8.54807E-07	2.72167E-09	2.72167E-09	1.62713E-06	1.62713E-06
UCARSOL™ AP-814	6.85158E-05	2.36406E-13	2.36406E-13	0.217541	0.217541	0.217541	0.000402413	0.000402413	0.855572	0.855572
Oxygen	0	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	0.00119821	0.779275	0.779275	0.0255958	0.0127979	0.0127979	0.00214923	0.00214923	9.80700E-05	9.80700E-05
N2	4.43126E-08	0.00347243	0.00347243	0	0	0	0.0897293	0.0897293	0.000154531	0.000154531
CO2	0.220187	452.106	452.106	6.62183	3.31091	3.31091	0.839235	0.839235	0.00454832	0.00454832
C1	2.82064E-05	1.14439	1.14439	0	0	0	9.65507	9.65507	0.0111187	0.0111187
C2	8.27149E-06	0.300760	0.300760	0	0	0	1.70317	1.70317	0.00146928	0.00146928
C3	1.66090E-06	0.0786236	0.0786236	0	0	0	0.547625	0.547625	0.000416826	0.000416826
iC4	6.81780E-08	0.00511752	0.00511752	0	0	0	0.0464993	0.0464993	2.76782E-05	2.76782E-05
nC4	4.84550E-07	0.0241377	0.0241377	0	0	0	0.150479	0.150479	9.56599E-05	9.56599E-05
iC5	1.21250E-08	0.00119738	0.00119738	0	0	0	0.0152228	0.0152228	8.66751E-06	8.66751E-06
nC5	2.55379E-08	0.00204270	0.00204270	0	0	0	0.0200995	0.0200995	1.12948E-05	1.12948E-05
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	2.56814E-09	0.000362183	0.000362183	0	0	0	0.00476898	0.00476898	1.93966E-06	1.93966E-06
nC6	1.35198E-09	0.000191055	0.000191055	0	0	0	0.00253182	0.00253182	1.01796E-06	1.01796E-06
Benzene	0.000592659	0.311665	0.311665	0	0	0	0.0240838	0.0240838	0.000193030	0.000193030
Cyclohexane	2.90978E-07	0.00513246	0.00513246	0	0	0	0.0104491	0.0104491	7.19352E-06	7.19352E-06
3,3-Dimethylpentane	2.47636E-10	6.04087E-05	6.04087E-05	0	0	0	0.00145498	0.00145498	5.83344E-07	5.83344E-07
C7	4.35389E-11	1.06527E-05	1.06527E-05	0	0	0	0.000259017	0.000259017	1.02195E-07	1.02195E-07
Toluene	0.000194924	0.136279	0.136279	0	0	0	0.0109409	0.0109409	6.38722E-05	6.38722E-05
i-Octane	6.53355E-11	2.83006E-05	2.83006E-05	0	0	0	0.000764718	0.000764718	1.96294E-07	1.96294E-07
C8	8.45335E-12	2.40679E-06	2.40679E-06	0	0	0	5.15608E-05	5.15608E-05	1.51443E-08	1.51443E-08
Ethylbenzene	8.88109E-06	0.00762260	0.00762260	0	0	0	0.000712566	0.000712566	3.31445E-06	3.31445E-06
m-Xylene	4.92778E-05	0.0282319	0.0282319	0	0	0	0.00191950	0.00191950	1.27013E-05	1.27013E-05
C9	8.44486E-13	5.65792E-07	5.65792E-07	0	0	0	2.75467E-05	2.75467E-05	7.23820E-09	7.23820E-09
C10	1.63052E-14	2.95278E-08	2.95278E-08	0	0	0	4.48807E-06	4.48807E-06	1.23973E-09	1.23973E-09
H2O	434.205	37.1825	37.1825	2186.11	1093.06	1093.06	0.492676	0.492676	15.6306	15.6306
TEG	0	0	0	1.87847E-05	9.39236E-06	9.39236E-06	3.70691E-10	3.70691E-10	2.56825E-07	2.56825E-07
UCARSOL™ AP-814	0.000297652	1.16339E-12	1.16339E-12	4.78054	2.39027	2.39027	5.48086E-05	5.48086E-05	0.135043	0.135043
Oxygen	0	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%	%
H2S	0.000521389	0.128503	0.128503	0.00217403	0.00217403	0.00217403	0.0246130	0.0246130	0.00113421	0.00113421
N2	1.58493E-08	0.000470665	0.000470665	0	0	0	0.844637	0.844637	0.00146902	0.00146902
CO2	0.123725	96.2719	96.2719	0.726291	0.726291	0.726291	12.4108	12.4108	0.0679274	0.0679274
C1	5.77746E-06	0.0888296	0.0888296	0	0	0	52.0470	52.0470	0.0605305	0.0605305
C2	3.17557E-06	0.0437575	0.0437575	0	0	0	17.2086	17.2086	0.0149924	0.0149924
C3	9.35100E-07	0.0167749	0.0167749	0	0	0	8.11426	8.11426	0.00623732	0.00623732
iC4	5.05947E-08	0.00143918	0.00143918	0	0	0	0.908152	0.908152	0.000545918	0.000545918
nC4	3.59583E-07	0.00678815	0.00678815	0	0	0	2.93892	2.93892	0.00188677	0.00188677
iC5	1.11693E-08	0.000417998	0.000417998	0	0	0	0.369057	0.369057	0.000212212	0.000212212
nC5	2.35252E-08	0.000713093	0.000713093	0	0	0	0.487286	0.487286	0.000276539	0.000276539
Neohexane	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	2.82566E-09	0.000151016	0.000151016	0	0	0	0.138095	0.138095	5.67227E-05	5.67227E-05
nC6	1.48755E-09	7.96625E-05	7.96625E-05	0	0	0	0.0733137	0.0733137	2.97689E-05	2.97689E-05
Benzene	0.000591072	0.117793	0.117793	0	0	0	0.632137	0.632137	0.00511668	0.00511668
Cyclohexane	3.12667E-07	0.00208998	0.00208998	0	0	0	0.295497	0.295497	0.000205443	0.000205443
3,3-Dimethylpentane	3.16817E-10	2.92879E-05	2.92879E-05	0	0	0	0.0489896	0.0489896	1.98357E-05	1.98357E-05
C7	5.57021E-11	5.16476E-06	5.16476E-06	0	0	0	0.00872114	0.00872114	3.47499E-06	3.47499E-06
Toluene	0.000229311	0.0607553	0.0607553	0	0	0	0.338738	0.338738	0.00199710	0.00199710
i-Octane	9.52889E-11	1.56417E-05	1.56417E-05	0	0	0	0.0293525	0.0293525	7.60903E-06	7.60903E-06
C8	1.23288E-11	1.33023E-06	1.33023E-06	0	0	0	0.00197908	0.00197908	5.87046E-07	5.87046E-07
Ethylbenzene	1.20383E-05	0.00391559	0.00391559	0	0	0	0.0254200	0.0254200	0.000119410	0.000119410
m-Xylene	6.67962E-05	0.0145022	0.0145022	0	0	0	0.0684761	0.0684761	0.000457590	0.000457590
C9	1.38288E-12	3.51111E-07	3.51111E-07	0	0	0	0.00118717	0.00118717	3.15031E-07	3.15031E-07
C10	2.96205E-14	2.03279E-08	2.03279E-08	0	0	0	0.000214575	0.000214575	5.98581E-08	5.98581E-08
H2O	99.8745	3.24110	3.24110	98.1521	98.1521	98.1521	2.98244	2.98244	95.5575	95.5575
TEG	0	0	0	7.03044E-06	7.03044E-06	7.03044E-06	1.87057E-08	1.87057E-08	1.30881E-05	1.30881E-05
UCARSOL™ AP-814	0.000370173	5.90670E-13	5.90670E-13	1.11946	1.11946	1.11946	0.00206343	0.00206343	4.27922	4.27922
Oxygen	0	0	0	0	0	0	0	0	0	0
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S	0.0408360	26.5584	26.5584	0.872329	0.436164	0.436164	0.0732478	0.0732478	0.00334231	0.00334231
N2	1.24135E-06	0.0972746	0.0972746	0	0	0	2.51362	2.51362	0.00432894	0.00432894
CO2	9.69031	19897.0	19897.0	291.423	145.712	145.712	36.9343	36.9343	0.200169	0.200169
C1	0.000452500	18.3588	18.3588	0	0	0	154.891	154.891	0.178372	0.178372
C2	0.000248716	9.04357	9.04357	0	0	0	51.2126	51.2126	0.0441798	0.0441798
C3	7.32385E-05	3.46695	3.46695	0	0	0	24.1479	24.1479	0.0183802	0.0183802
iC4	3.96265E-06	0.297442	0.297442	0	0	0	2.70264	2.70264	0.00160872	0.00160872
nC4	2.81631E-05	1.40294	1.40294	0	0	0	8.74616	8.74616	0.00555996	0.00555996
iC5	8.74801E-07	0.0863895	0.0863895	0	0	0	1.09831	1.09831	0.000625350	0.000625350
nC5	1.84253E-06	0.147378	0.147378	0	0	0	1.45016	1.45016	0.000814909	0.000814909
Neohexane	0	0	0	0	0	0	0	0	0	0

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Cyclopentane		0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		2.21310E-07	0.0312113	0.0312113	0	0	0	0.410969	0.410969	0.000167151	0.000167151
nC6		1.16507E-07	0.0164642	0.0164642	0	0	0	0.218180	0.218180	8.77233E-05	8.77233E-05
Benzene		0.0462937	24.3447	24.3447	0	0	0	1.88123	1.88123	0.0150779	0.0150779
Cyclohexane		2.44886E-05	0.431946	0.431946	0	0	0	0.879394	0.879394	0.000605403	0.000605403
3,3-Dimethylpentane		2.48137E-08	0.00605307	0.00605307	0	0	0	0.145792	0.145792	5.84522E-05	5.84522E-05
C7		4.36268E-09	0.00106742	0.00106742	0	0	0	0.0259540	0.0259540	1.02401E-05	1.02401E-05
Toluene		0.0179600	12.5566	12.5566	0	0	0	1.00808	1.00808	0.00588508	0.00588508
i-Octane		7.46318E-09	0.00323273	0.00323273	0	0	0	0.0873526	0.0873526	2.24224E-05	2.24224E-05
C8		9.65613E-10	0.000274924	0.000274924	0	0	0	0.00588971	0.00588971	1.72991E-06	1.72991E-06
Ethylbenzene		0.000942861	0.809253	0.809253	0	0	0	0.0756496	0.0756496	0.000351878	0.000351878
m-Xylene		0.00523158	2.99723	2.99723	0	0	0	0.203784	0.203784	0.00134843	0.00134843
C9		1.08310E-10	7.25657E-05	7.25657E-05	0	0	0	0.00353300	0.00353300	9.28336E-07	9.28336E-07
C10		2.31993E-12	4.20127E-06	4.20127E-06	0	0	0	0.000638571	0.000638571	1.76391E-07	1.76391E-07
H2O		7822.33	669.853	669.853	39383.4	19691.7	19691.7	8.87569	8.87569	281.590	281.590
TEG		0	0	0	0.00282096	0.00141048	0.00141048	5.56677E-08	5.56677E-08	3.85682E-05	3.85682E-05
UCARSOL™ AP-814		0.0289925	1.22077E-10	1.22077E-10	449.183	224.592	224.592	0.00614074	0.00614074	12.6101	12.6101
Oxygen		0	0	0	0	0	0	0	0	0	0

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Property	**Units**										
Temperature	°F	120.393	120.000	119.876	256.325	256.325	256.325	148.373	148.043	121.577	123.541
Pressure	psia	26.6959*	22.6959	21.6959	29.6959	29.6959	29.6959	88.6959	83.6959	905.696	89.6959*
Mole Fraction Vapor	%	0	100	100	100	100	100	100	100	0	0.0758288
Mole Fraction Light Liquid	%	100	0	0	0	0	0	0	0	100	99.9242
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	18.0287	41.9971	41.9971	18.2590	18.2590	18.2590	21.8501	21.8501	18.6697	18.6697
Mass Density	lb/ft^3	61.6839	0.154331	0.147516	0.0716309	0.0716309	0.0716309	0.301251	0.284203	61.8497	52.7539
Molar Flow	lbmol/h	434.428	492.117	492.117	2197.54	1098.77	1098.77	13.6200	13.6200	15.7839	15.7839
Mass Flow	lb/h	7832.16	20667.5	20667.5	40124.9	20062.4	20062.4	297.598	297.598	294.681	294.681
Vapor Volumetric Flow	ft^3/h	126.972	133917	140103	560162	280081	280081	987.874	1047.13	4.76448	5.58596
Liquid Volumetric Flow	gpm	15.8303	16696.1	17467.4	69838.3	34919.2	34919.2	123.164	130.551	0.594013	0.696431
Std Vapor Volumetric Flow	MMSCFD	3.95660	4.48201	4.48201	20.0144	10.0072	10.0072	0.124046	0.124046	0.143754	0.143754
Std Liquid Volumetric Flow	sgpm	15.6614	50.3677	50.3677	80.5758	40.2879	40.2879	1.58940	1.58940	0.596978	0.596978
Compressibility		0.00125343	0.992819	0.993132	0.985145	0.985145	0.985145	0.985897	0.986659	0.0438287	0.00507186
Specific Gravity		0.989020	1.45005	1.45005	0.630436	0.630436	0.630436	0.754428	0.754428	0.991678	
API Gravity		9.95771								9.50807	
Enthalpy	Btu/h	-5.30220E+07	-8.02217E+07	-8.02217E+07	-2.25434E+08	-1.12717E+08	-1.12717E+08	-593458	-593458	-1.91465E+06	-1.91465E+06
Mass Enthalpy	Btu/lb	-6769.78	-3881.54	-3881.54	-5618.30	-5618.30	-5618.30	-1994.16	-1994.16	-6497.34	-6497.34
Mass Cp	Btu/(lb*°F)	0.997559	0.217439	0.217349	0.462130	0.462130	0.462130	0.480011	0.479444	0.980374	0.981075
Ideal Gas CpCv Ratio		1.32732	1.28066	1.28069	1.31328	1.31328	1.31328	1.23822	1.23830	1.30610	1.30594
Dynamic Viscosity	cP	0.567409	0.0161005	0.0160957	0.0135163	0.0135163	0.0135163	0.0124357	0.0124240	0.652904	
Kinematic Viscosity	cSt	0.574253	6.51277	6.81159	11.7798	11.7798	11.7798	2.57705	2.72906	0.659009	
Thermal Conductivity	Btu/(h*ft*°F)	0.367021	0.0106780	0.0106718	0.0169147	0.0169147	0.0169147	0.0200558	0.0200261	0.345311	
Surface Tension	lbf/ft	0.00465758								0.00451817	
Net Ideal Gas Heating Value	Btu/ft^3	0.0114712	8.47210	8.47210	7.13321	7.13321	7.13321	1010.72	1010.72	28.9210	28.9210
Net Liquid Heating Value	Btu/lb	-1058.28	-30.5928	-30.5928	-895.580	-895.580	-895.580	17463.2	17463.2	-436.736	-436.736
Gross Ideal Gas Heating Value	Btu/ft^3	50.2963	12.9014	12.9014	57.7677	57.7677	57.7677	1116.19	1116.19	81.1300	81.1300
Gross Liquid Heating Value	Btu/lb	0.159135	9.43120	9.43120	156.776	156.776	156.776	19295.4	19295.4	624.472	624.472

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Mole Fraction			%	%	%	%	%	%	%		%
H2S			0.158352	0.158352	0.00116475	0.00116475	0.00116475	0.0157800	0.0157800		1.81603E-05
N2			0.000705611	0.000705611	0	0	0	0.658807	0.658807		1.20368
CO2			91.8696	91.8696	0.301329	0.301329	0.301329	6.16179	6.16179		0.000190625
C1			0.232544	0.232544	0	0	0	70.8890	70.8890		81.5167
C2			0.0611156	0.0611156	0	0	0	12.5049	12.5049		10.6512
C3			0.0159766	0.0159766	0	0	0	4.02075	4.02075		3.12338
iC4			0.00103990	0.00103990	0	0	0	0.341405	0.341405		0.215626
nC4			0.00490488	0.00490488	0	0	0	1.10484	1.10484		0.720722
iC5			0.000243312	0.000243312	0	0	0	0.111768	0.111768		0.0687523
nC5			0.000415084	0.000415084	0	0	0	0.147574	0.147574		0.0885010
Neohexane			0	0	0	0	0	0	0		0
Cyclopentane			0	0	0	0	0	0	0		0
2,3-Dimethylbutane			7.35970E-05	7.35970E-05	0	0	0	0.0350146	0.0350146		0.0156282
nC6			3.88231E-05	3.88231E-05	0	0	0	0.0185890	0.0185890		0.00820397
Benzene			0.0633315	0.0633315	0	0	0	0.176827	0.176827		0.148352
Cyclohexane			0.00104294	0.00104294	0	0	0	0.0767192	0.0767192		0.0464357
3,3-Dimethylpentane			1.22753E-05	1.22753E-05	0	0	0	0.0106827	0.0106827		0.00477341
C7			2.16467E-06	2.16467E-06	0	0	0	0.00190174	0.00190174		0.000836424
Toluene			0.0276925	0.0276925	0	0	0	0.0803299	0.0803299		0.0643372
i-Octane			5.75078E-06	5.75078E-06	0	0	0	0.00561468	0.00561468		0.00162044
C8			4.89069E-07	4.89069E-07	0	0	0	0.000378567	0.000378567		0.000124292
Ethylbenzene			0.00154894	0.00154894	0	0	0	0.00523178	0.00523178		0.00402048
m-Xylene			0.00573682	0.00573682	0	0	0	0.0140933	0.0140933		0.0109755
C9			1.14971E-07	1.14971E-07	0	0	0	0.000202252	0.000202252		6.00301E-05
C10			6.00017E-09	6.00017E-09	0	0	0	3.29521E-05	3.29521E-05		1.03312E-05
H2O			7.55562	7.55562	99.4800	99.4800	99.4800	3.61730	3.61730		2.10548
TEG			0	0	8.54807E-07	8.54807E-07	8.54807E-07	2.72167E-09	2.72167E-09		1.02549E-12
UCARSOL™ AP-814			2.36406E-13	2.36406E-13	0.217541	0.217541	0.217541	0.000402413	0.000402413		0.000345244
Oxygen			0	0	0	0	0	0	0		0
Molar Flow			lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h
H2S			0.779275	0.779275	0.0255958	0.0127979	0.0127979	0.00214923	0.00214923		2.17356E-09
N2			0.00347243	0.00347243	0	0	0	0.0897293	0.0897293		0.000144065
CO2			452.106	452.106	6.62183	3.31091	3.31091	0.839235	0.839235		2.28155E-08
C1			1.14439	1.14439	0	0	0	9.65507	9.65507		0.00975653
C2			0.300760	0.300760	0	0	0	1.70317	1.70317		0.00127482
C3			0.0786236	0.0786236	0	0	0	0.547625	0.547625		0.000373830
iC4			0.00511752	0.00511752	0	0	0	0.0464993	0.0464993		2.58077E-05
nC4			0.0241377	0.0241377	0	0	0	0.150479	0.150479		8.62613E-05
iC5			0.00119738	0.00119738	0	0	0	0.0152228	0.0152228		8.22878E-06

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
nC5			0.00204270	0.00204270	0	0	0	0.0200995	0.0200995		1.05925E-05
Neohexane			0	0	0	0	0	0	0		0
Cyclopentane			0	0	0	0	0	0	0		0
2,3-Dimethylbutane			0.000362183	0.000362183	0	0	0	0.00476898	0.00476898		1.87050E-06
nC6			0.000191055	0.000191055	0	0	0	0.00253182	0.00253182		9.81913E-07
Benzene			0.311665	0.311665	0	0	0	0.0240838	0.0240838		1.77558E-05
Cyclohexane			0.00513246	0.00513246	0	0	0	0.0104491	0.0104491		5.55777E-06
3,3-Dimethylpentane			6.04087E-05	6.04087E-05	0	0	0	0.00145498	0.00145498		5.71318E-07
C7			1.06527E-05	1.06527E-05	0	0	0	0.000259017	0.000259017		1.00109E-07
Toluene			0.136279	0.136279	0	0	0	0.0109409	0.0109409		7.70036E-06
i-Octane			2.83006E-05	2.83006E-05	0	0	0	0.000764718	0.000764718		1.93947E-07
C8			2.40679E-06	2.40679E-06	0	0	0	5.15608E-05	5.15608E-05		1.48762E-08
Ethylbenzene			0.00762260	0.00762260	0	0	0	0.000712566	0.000712566		4.81201E-07
m-Xylene			0.0282319	0.0282319	0	0	0	0.00191950	0.00191950		1.31363E-06
C9			5.65792E-07	5.65792E-07	0	0	0	2.75467E-05	2.75467E-05		7.18485E-09
C10			2.95278E-08	2.95278E-08	0	0	0	4.48807E-06	4.48807E-06		1.23652E-09
H2O			37.1825	37.1825	2186.11	1093.06	1093.06	0.492676	0.492676		0.000251999
TEG			0	0	1.87847E-05	9.39236E-06	9.39236E-06	3.70691E-10	3.70691E-10		1.22738E-16
UCARSOL™ AP-814			1.16339E-12	1.16339E-12	4.78054	2.39027	2.39027	5.48086E-05	5.48086E-05		4.13214E-08
Oxygen			0	0	0	0	0	0	0		0
Mass Fraction			%	%	%	%	%	%	%		%
H2S			0.128503	0.128503	0.00217403	0.00217403	0.00217403	0.0246130	0.0246130		3.20846E-05
N2			0.000470665	0.000470665	0	0	0	0.844637	0.844637		1.74799
CO2			96.2719	96.2719	0.726291	0.726291	0.726291	12.4108	12.4108		0.000434900
C1			0.0888296	0.0888296	0	0	0	52.0470	52.0470		67.7922
C2			0.0437575	0.0437575	0	0	0	17.2086	17.2086		16.6028
C3			0.0167749	0.0167749	0	0	0	8.11426	8.11426		7.13974
iC4			0.00143918	0.00143918	0	0	0	0.908152	0.908152		0.649687
nC4			0.00678815	0.00678815	0	0	0	2.93892	2.93892		2.17156
iC5			0.000417998	0.000417998	0	0	0	0.369057	0.369057		0.257145
nC5			0.000713093	0.000713093	0	0	0	0.487286	0.487286		0.331009
Neohexane			0	0	0	0	0	0	0		0
Cyclopentane			0	0	0	0	0	0	0		0
2,3-Dimethylbutane			0.000151016	0.000151016	0	0	0	0.138095	0.138095		0.0698161
nC6			7.96625E-05	7.96625E-05	0	0	0	0.0733137	0.0733137		0.0366496
Benzene			0.117793	0.117793	0	0	0	0.632137	0.632137		0.600719
Cyclohexane			0.00208998	0.00208998	0	0	0	0.295497	0.295497		0.202589
3,3-Dimethylpentane			2.92879E-05	2.92879E-05	0	0	0	0.0489896	0.0489896		0.0247952
C7			5.16476E-06	5.16476E-06	0	0	0	0.00872114	0.00872114		0.00434475
Toluene			0.0607553	0.0607553	0	0	0	0.338738	0.338738		0.307302
i-Octane			1.56417E-05	1.56417E-05	0	0	0	0.0293525	0.0293525		0.00959556
C8			1.33023E-06	1.33023E-06	0	0	0	0.00197908	0.00197908		0.000736005
Ethylbenzene			0.00391559	0.00391559	0	0	0	0.0254200	0.0254200		0.0221270
m-Xylene			0.0145022	0.0145022	0	0	0	0.0684761	0.0684761		0.0604043
C9			3.51111E-07	3.51111E-07	0	0	0	0.00118717	0.00118717		0.000399122
C10			2.03279E-08	2.03279E-08	0	0	0	0.000214575	0.000214575		7.62015E-05
H2O			3.24110	3.24110	98.1521	98.1521	98.1521	2.98244	2.98244		1.96632
TEG			0	0	7.03044E-06	7.03044E-06	7.03044E-06	1.87057E-08	1.87057E-08		7.98334E-12
UCARSOL™ AP-814			5.90670E-13	5.90670E-13	1.11946	1.11946	1.11946	0.00206343	0.00206343		0.00154706
Oxygen			0	0	0	0	0	0	0		0
Mass Flow			lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h		lb/h
H2S			26.5584	26.5584	0.872329	0.436164	0.436164	0.0732478	0.0732478		7.40770E-08
N2			0.0972746	0.0972746	0	0	0	2.51362	2.51362		0.00403576
CO2			19897.0	19897.0	291.423	145.712	145.712	36.9343	36.9343		1.00410E-06
C1			18.3588	18.3588	0	0	0	154.891	154.891		0.156519
C2			9.04357	9.04357	0	0	0	51.2126	51.2126		0.0383325
C3			3.46695	3.46695	0	0	0	24.1479	24.1479		0.0164843
iC4			0.297442	0.297442	0	0	0	2.70264	2.70264		0.00150000
nC4			1.40294	1.40294	0	0	0	8.74616	8.74616		0.00501370
iC5			0.0863895	0.0863895	0	0	0	1.09831	1.09831		0.000593697
nC5			0.147378	0.147378	0	0	0	1.45016	1.45016		0.000764233
Neohexane			0	0	0	0	0	0	0		0
Cyclopentane			0	0	0	0	0	0	0		0
2,3-Dimethylbutane			0.0312113	0.0312113	0	0	0	0.410969	0.410969		0.000161191
nC6			0.0164642	0.0164642	0	0	0	0.218180	0.218180		8.46167E-05
Benzene			24.3447	24.3447	0	0	0	1.88123	1.88123		0.00138694
Cyclohexane			0.431946	0.431946	0	0	0	0.879394	0.879394		0.000467739
3,3-Dimethylpentane			0.00605307	0.00605307	0	0	0	0.145792	0.145792		5.72471E-05
C7			0.00106742	0.00106742	0	0	0	0.0259540	0.0259540		1.00312E-05
Toluene			12.5566	12.5566	0	0	0	1.00808	1.00808		0.000709499
i-Octane			0.00323273	0.00323273	0	0	0	0.0873526	0.0873526		2.21542E-05
C8			0.000274924	0.000274924	0	0	0	0.00588971	0.00588971		1.69929E-06
Ethylbenzene			0.809253	0.809253	0	0	0	0.0756496	0.0756496		5.10867E-05
m-Xylene			2.99723	2.99723	0	0	0	0.203784	0.203784		0.000139461
C9			7.25657E-05	7.25657E-05	0	0	0	0.00353300	0.00353300		9.21493E-07
C10			4.20127E-06	4.20127E-06	0	0	0	0.000638571	0.000638571		1.75934E-07
H2O			669.853	669.853	39383.4	19691.7	19691.7	8.87569	8.87569		0.00453983
TEG			0	0	0.00282096	0.00141048	0.00141048	5.56677E-08	5.56677E-08		1.84319E-14
UCARSOL™ AP-814			1.22077E-10	1.22077E-10	449.183	224.592	224.592	0.00614074	0.00614074		3.57186E-06
Oxygen			0	0	0	0	0	0	0		0

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Property	**Units**										
Temperature	°F		120.000	119.876	256.325	256.325	256.325	148.373	148.043		123.541
Pressure	psia		22.6959	21.6959	29.6959	29.6959	29.6959	88.6959	83.6959		89.6959
Mole Fraction Vapor	%		100	100	100	100	100	100	100		100
Mole Fraction Light Liquid	%		0	0	0	0	0	0	0		0
Mole Fraction Heavy Liquid	%		0	0	0	0	0	0	0		0
Phase Mole Fraction	%		100	100	100	100	100	100	100		0.0758288
Molecular Weight	lb/lbmol		41.9971	41.9971	18.2590	18.2590	18.2590	21.8501	21.8501		19.2903
Mass Density	lb/ft^3		0.154331	0.147516	0.0716309	0.0716309	0.0716309	0.301251	0.284203		0.280397
Molar Flow	lbmol/h		492.117	492.117	2197.54	1098.77	1098.77	13.6200	13.6200		0.0119687
Mass Flow	lb/h		20667.5	20667.5	40124.9	20062.4	20062.4	297.598	297.598		0.230880
Vapor Volumetric Flow	ft^3/h		133917	140103	560162	280081	280081	987.874	1047.13		0.823404
Liquid Volumetric Flow	gpm		16696.1	17467.4	69838.3	34919.2	34919.2	123.164	130.551		0.102658
Std Vapor Volumetric Flow	MMSCFD		4.48201	4.48201	20.0144	10.0072	10.0072	0.124046	0.124046		0.000109007
Std Liquid Volumetric Flow	sgpm		50.3677	50.3677	80.5758	40.2879	40.2879	1.58940	1.58940		0.00137680

Process Streams		154	155	156	160	160A	160B	170	172	173	174
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-103	REFLUX ACCUM	PV-100	TEE-100	SPLT-103	SPLT-103	FLASH TANK	PV-102	OVHD SCRUBBER	LV-105
	To Block:	STRIPPER	PV-100	ACID GAS	STRIPPER	TEE-100	TEE-100	PV-102	AMINE FLASH	LV-105	MIX-103
Compressibility			0.992819	0.993132	0.985145	0.985145	0.985145	0.985897	0.986659		0.985934
Specific Gravity			1.45005	1.45005	0.630436	0.630436	0.630436	0.754428	0.754428		0.666042
API Gravity											
Enthalpy	Btu/h		-8.02217E+07	-8.02217E+07	-2.25434E+08	-1.12717E+08	-1.12717E+08	-593458	-593458		-404.482
Mass Enthalpy	Btu/lb		-3881.54	-3881.54	-5618.30	-5618.30	-5618.30	-1994.16	-1994.16		-1751.91
Mass Cp	Btu/(lb*°F)		0.217439	0.217349	0.462130	0.462130	0.462130	0.480011	0.479444		0.515302
Ideal Gas CpCv Ratio			1.28066	1.28069	1.31328	1.31328	1.31328	1.23822	1.23830		1.25491
Dynamic Viscosity	cP		0.0161005	0.0160957	0.0135163	0.0135163	0.0135163	0.0124357	0.0124240		0.0117549
Kinematic Viscosity	cSt		6.51277	6.81159	11.7798	11.7798	11.7798	2.57705	2.72906		2.61712
Thermal Conductivity	Btu/(h*ft*°F)		0.0106780	0.0106718	0.0169147	0.0169147	0.0169147	0.0200558	0.0200261		0.0200668
Surface Tension	lbf/ft										
Net Ideal Gas Heating Value	Btu/ft^3		8.47210	8.47210	7.13321	7.13321	7.13321	1010.72	1010.72		1032.26
Net Liquid Heating Value	Btu/lb		-30.5928	-30.5928	-895.580	-895.580	-895.580	17463.2	17463.2		20241.6
Gross Ideal Gas Heating Value	Btu/ft^3		12.9014	12.9014	57.7677	57.7677	57.7677	1116.19	1116.19		1141.13
Gross Liquid Heating Value	Btu/lb		9.43120	9.43120	156.776	156.776	156.776	19295.4	19295.4		22383.8

Process Streams		181	182	199i
Composition	Status:	Solved	Solved	Solved
Phase: Total	From Block:	FILT/COAL	FLASH TANK	KETTLE REBOILER
	To Block:	--	--	SPLT-103
Mole Fraction				%
H2S				0.00116475
N2				0
CO2				0.301329
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				99.4800
TEG				8.54807E-07
UCARSOL™ AP-814				0.217541
Oxygen				0
Molar Flow		lbmol/h	lbmol/h	lbmol/h
H2S		0	0	0.0255958
N2		0	0	0
CO2		0	0	6.62183
C1		0	0	0
C2		0	0	0
C3		0	0	0
iC4		0	0	0
nC4		0	0	0
iC5		0	0	0
nC5		0	0	0
Neohexane		0	0	0
Cyclopentane		0	0	0
2,3-Dimethylbutane		0	0	0
nC6		0	0	0
Benzene		0	0	0
Cyclohexane		0	0	0
3,3-Dimethylpentane		0	0	0
C7		0	0	0
Toluene		0	0	0
i-Octane		0	0	0
C8		0	0	0
Ethylbenzene		0	0	0
m-Xylene		0	0	0
C9		0	0	0
C10		0	0	0
H2O		0	0	2186.11
TEG		0	0	1.87847E-05
UCARSOL™ AP-814		0	0	4.78054
Oxygen		0	0	0
Mass Fraction				%
H2S				0.00217403
N2				0
CO2				0.726291
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				98.1521
TEG				7.03044E-06
UCARSOL™ AP-814				1.11946
Oxygen				0
Mass Flow		lb/h	lb/h	lb/h
H2S		0	0	0.872329
N2		0	0	0
CO2		0	0	291.423
C1		0	0	0
C2		0	0	0
C3		0	0	0
iC4		0	0	0
nC4		0	0	0
iC5		0	0	0
nC5		0	0	0
Neohexane		0	0	0

Process Streams		181	182	199i
Composition	**Status:**	Solved	Solved	Solved
Phase: **Total**	**From Block:**	**FILT/COAL**	**FLASH TANK**	**KETTLE REBOILER**
	To Block:	--	--	**SPLT-103**
Cyclopentane		0	0	0
2,3-Dimethylbutane		0	0	0
nC6		0	0	0
Benzene		0	0	0
Cyclohexane		0	0	0
3,3-Dimethylpentane		0	0	0
C7		0	0	0
Toluene		0	0	0
i-Octane		0	0	0
C8		0	0	0
Ethylbenzene		0	0	0
m-Xylene		0	0	0
C9		0	0	0
C10		0	0	0
H2O		0	0	39383.4
TEG		0	0	0.00282096
UCARSOL™ AP-814		0	0	449.183
Oxygen		0	0	0

Process Streams		181	182	199i
Properties	**Status:**	Solved	Solved	Solved
Phase: Total	**From Block:**	**FILT/COAL**	**FLASH TANK**	**KETTLE REBOILER**
	To Block:	--	--	**SPLT-103**
Property	**Units**			
Temperature	°F			256.325
Pressure	psia	926.696	88.6959	29.6959
Mole Fraction Vapor	%			100
Mole Fraction Light Liquid	%			0
Mole Fraction Heavy Liquid	%			0
Phase Mole Fraction	%			100
Molecular Weight	lb/lbmol			18.2590
Mass Density	lb/ft^3			0.0716309
Molar Flow	lbmol/h	0	0	2197.54
Mass Flow	lb/h	0	0	40124.9
Vapor Volumetric Flow	ft^3/h	0	0	560162
Liquid Volumetric Flow	gpm	0	0	69838.3
Std Vapor Volumetric Flow	MMSCFD	0	0	20.0144
Std Liquid Volumetric Flow	sgpm	0	0	80.5758
Compressibility				0.985145
Specific Gravity				0.630436
API Gravity				
Enthalpy	Btu/h			-2.25434E+08
Mass Enthalpy	Btu/lb			-5618.30
Mass Cp	Btu/(lb*°F)			0.462130
Ideal Gas CpCv Ratio				1.31328
Dynamic Viscosity	cP			0.0135163
Kinematic Viscosity	cSt			11.7798
Thermal Conductivity	Btu/(h*ft*°F)			0.0169147
Surface Tension	lbf/ft			
Net Ideal Gas Heating Value	Btu/ft^3			7.13321
Net Liquid Heating Value	Btu/lb			-895.580
Gross Ideal Gas Heating Value	Btu/ft^3			57.7677
Gross Liquid Heating Value	Btu/lb			156.776

Process Streams		181	182	199i
Composition	**Status:**	Solved	Solved	Solved
Phase: Vapor	**From Block:**	**FILT/COAL**	**FLASH TANK**	**KETTLE REBOILER**
	To Block:	--	--	**SPLT-103**
Mole Fraction				**%**
H2S				0.00116475
N2				0
CO2				0.301329
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				99.4800
TEG				8.54807E-07
UCARSOL™ AP-814				0.217541
Oxygen				0
Molar Flow				**lbmol/h**
H2S				0.0255958
N2				0
CO2				6.62183
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0

Process Streams		181	182	199i
Composition	Status:	Solved	Solved	Solved
Phase: **Total**	From Block:	FILT/COAL	FLASH TANK	KETTLE REBOILER
	To Block:	--	--	SPLT-103
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				2186.11
TEG				1.87847E-05
UCARSOL™ AP-814				4.78054
Oxygen				0
Mass Fraction				**%**
H2S				0.00217403
N2				0
CO2				0.726291
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				98.1521
TEG				7.03044E-06
UCARSOL™ AP-814				1.11946
Oxygen				0
Mass Flow				**lb/h**
H2S				0.872329
N2				0
CO2				291.423
C1				0
C2				0
C3				0
iC4				0
nC4				0
iC5				0
nC5				0
Neohexane				0
Cyclopentane				0
2,3-Dimethylbutane				0
nC6				0
Benzene				0
Cyclohexane				0
3,3-Dimethylpentane				0
C7				0
Toluene				0
i-Octane				0
C8				0
Ethylbenzene				0
m-Xylene				0
C9				0
C10				0
H2O				39383.4
TEG				0.00282096
UCARSOL™ AP-814				449.183
Oxygen				0

Process Streams		181	182	199i
Properties	Status:	Solved	Solved	Solved
Phase: Vapor	From Block:	FILT/COAL	FLASH TANK	KETTLE REBOILER
	To Block:	--	--	SPLT-103
Property	**Units**			
Temperature	°F			256.325
Pressure	psia			29.6959
Mole Fraction Vapor	%			100
Mole Fraction Light Liquid	%			0
Mole Fraction Heavy Liquid	%			0
Phase Mole Fraction	%			100
Molecular Weight	lb/lbmol			18.2590
Mass Density	lb/ft^3			0.0716309
Molar Flow	lbmol/h			2197.54
Mass Flow	lb/h			40124.9
Vapor Volumetric Flow	ft^3/h			560162
Liquid Volumetric Flow	gpm			69838.3
Std Vapor Volumetric Flow	MMSCFD			20.0144
Std Liquid Volumetric Flow	sgpm			80.5758

Process Streams		181	182	199i
Composition	**Status:**	Solved	Solved	Solved
Phase: **Total**	**From Block:**	FILT/COAL	FLASH TANK	KETTLE REBOILER
	To Block:	--	--	SPLT-103
Compressibility				0.985145
Specific Gravity				0.630436
API Gravity				
Enthalpy	Btu/h			-2.25434E+08
Mass Enthalpy	Btu/lb			-5618.30
Mass Cp	Btu/(lb*°F)			0.462130
Ideal Gas CpCv Ratio				1.31328
Dynamic Viscosity	cP			0.0135163
Kinematic Viscosity	cSt			11.7798
Thermal Conductivity	Btu/(h*ft*°F)			0.0169147
Surface Tension	lbf/ft			
Net Ideal Gas Heating Value	Btu/ft^3			7.13321
Net Liquid Heating Value	Btu/lb			-895.580
Gross Ideal Gas Heating Value	Btu/ft^3			57.7677
Gross Liquid Heating Value	Btu/lb			156.776

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Mole Fraction		%	%	%	%	%	%	%	%	%	%	%
H2S		4.21692E-07	2.47108E-06	2.47140E-06	0	2.47140E-06	2.47140E-06	2.47140E-06	2.47140E-06	2.47140E-06	1.10198E-05	1.10198E-05
N2		2.17452	1.72743	1.72765	0	1.72765	1.72765	1.72765	1.72765	1.72765	2.07994E-05	2.07994E-05
CO2		1.84308E-05	2.18448E-05	2.18477E-05	0	2.18477E-05	2.18477E-05	2.18477E-05	2.18477E-05	2.18477E-05	8.42702E-05	8.42702E-05
C1		95.6426	76.0757	76.0856	0	76.0856	76.0856	76.0856	76.0856	76.0856	8.79052	8.79052
C2		2.15785	12.3012	12.3028	0	12.3028	12.3028	12.3028	12.3028	12.3028	55.6958	55.6958
C3		0.0244987	5.84753	5.84828	0	5.84828	5.84828	5.84828	5.84828	5.84828	21.7823	21.7823
iC4		0.000212699	0.759126	0.759224	0	0.759224	0.759224	0.759224	0.759224	0.759224	2.62603	2.62603
nC4		0.000315050	1.79737	1.79760	0	1.79760	1.79760	1.79760	1.79760	1.79760	6.15976	6.15976
iC5		2.86675E-06	0.427454	0.427509	0	0.427509	0.427509	0.427509	0.427509	0.427509	1.43629	1.43629
nC5		2.80925E-06	0.443227	0.443284	0	0.443284	0.443284	0.443284	0.443284	0.443284	1.48520	1.48520
Neohexane		0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		1.24864E-07	0.157587	0.157608	0	0.157608	0.157608	0.157608	0.157608	0.157608	0.525361	0.525361
nC6		1.50830E-08	0.0896466	0.0896582	0	0.0896582	0.0896582	0.0896582	0.0896582	0.0896582	0.298436	0.298436
Benzene		4.37442E-08	0.0474342	0.0474403	0	0.0474403	0.0474403	0.0474403	0.0474403	0.0474403	0.158107	0.158107
Cyclohexane		5.77791E-09	0.0747386	0.0747482	0	0.0747482	0.0747482	0.0747482	0.0747482	0.0747482	0.248723	0.248723
3,3-Dimethylpentane		8.66818E-09	0.100743	0.100756	0	0.100756	0.100756	0.100756	0.100756	0.100756	0.335106	0.335106
C7		2.26511E-10	0.0198685	0.0198711	0	0.0198711	0.0198711	0.0198711	0.0198711	0.0198711	0.0660454	0.0660454
Toluene		1.05199E-09	0.0249928	0.0249960	0	0.0249960	0.0249960	0.0249960	0.0249960	0.0249960	0.0831019	0.0831019
i-Octane		8.15362E-10	0.0712278	0.0712370	0	0.0712370	0.0712370	0.0712370	0.0712370	0.0712370	0.236788	0.236788
C8		1.77858E-12	0.00433116	0.00433172	0	0.00433172	0.00433172	0.00433172	0.00433172	0.00433172	0.0143902	0.0143902
Ethylbenzene		2.61355E-12	0.00186620	0.00186644	0	0.00186644	0.00186644	0.00186644	0.00186644	0.00186644	0.00620086	0.00620086
m-Xylene		5.13048E-12	0.00525353	0.00525421	0	0.00525421	0.00525421	0.00525421	0.00525421	0.00525421	0.0174555	0.0174555
C9		9.93391E-14	0.00643030	0.00643113	0	0.00643113	0.00643113	0.00643113	0.00643113	0.00643113	0.0213611	0.0213611
C10		0	0.00389279	0.00389329	0	0.00389329	0.00389329	0.00389329	0.00389329	0.00389329	0.0129313	0.0129313
H2O		0	0.0126939	0	98.4202	0	0	0	0	0	0	0
TEG		0	0.000131868	0	1.02242	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	7.18925E-05	0	0.557408	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		4.63010E-07	0.000542695	0.000542695	0	0.000282201	0.000260493	0.000260493	0.000260493	0.000282201	0.000728563	0.000728563
N2		2.38759	379.375	379.375	0	197.275	182.100	182.100	182.100	197.275	0.00137513	0.00137513
CO2		2.02367E-05	0.00479753	0.00479753	0	0.00249471	0.00230281	0.00230281	0.00230281	0.00249471	0.00557146	0.00557146
C1		105.014	16707.6	16707.6	0	8687.97	8019.66	8019.66	8019.66	8687.97	581.178	581.178
C2		2.36928	2701.57	2701.57	0	1404.82	1296.75	1296.75	1296.75	1404.82	3682.28	3682.28
C3		0.0268991	1284.22	1284.22	0	667.797	616.428	616.428	616.428	667.797	1440.12	1440.12
iC4		0.000233540	166.718	166.718	0	86.6934	80.0247	80.0247	80.0247	86.6934	173.618	173.618
nC4		0.000345919	394.735	394.735	0	205.262	189.473	189.473	189.473	205.262	407.247	407.247
iC5		3.14764E-06	93.8767	93.8767	0	48.8159	45.0608	45.0608	45.0608	48.8159	94.9589	94.9589
nC5		3.08450E-06	97.3408	97.3408	0	50.6172	46.7236	46.7236	46.7236	50.6172	98.1926	98.1926
Neohexane		0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		1.37099E-07	34.6091	34.6091	0	17.9967	16.6124	16.6124	16.6124	17.9967	34.7338	34.7338
nC6		1.65609E-08	19.6880	19.6880	0	10.2378	9.45026	9.45026	9.45026	10.2378	19.7308	19.7308
Benzene		4.80303E-08	10.4174	10.4174	0	5.41706	5.00037	5.00037	5.00037	5.41706	10.4531	10.4531
Cyclohexane		6.34404E-09	16.4140	16.4140	0	8.53526	7.87871	7.87871	7.87871	8.53526	16.4441	16.4441
3,3-Dimethylpentane		9.51750E-09	22.1250	22.1250	0	11.5050	10.6200	10.6200	10.6200	11.5050	22.1553	22.1553
C7		2.48705E-10	4.36350	4.36350	0	2.26902	2.09448	2.09448	2.09448	2.26902	4.36654	4.36654
Toluene		1.15506E-09	5.48888	5.48888	0	2.85422	2.63466	2.63466	2.63466	2.85422	5.49421	5.49421
i-Octane		8.95253E-10	15.6429	15.6429	0	8.13432	7.50861	7.50861	7.50861	8.13432	15.6550	15.6550
C8		1.95285E-12	0.951202	0.951202	0	0.494625	0.456577	0.456577	0.456577	0.494625	0.951394	0.951394
Ethylbenzene		2.86963E-12	0.409853	0.409853	0	0.213123	0.196729	0.196729	0.196729	0.213123	0.409965	0.409965
m-Xylene		5.63318E-12	1.15377	1.15377	0	0.599962	0.553811	0.553811	0.553811	0.599962	1.15405	1.15405
C9		1.09073E-13	1.41221	1.41221	0	0.734351	0.677862	0.677862	0.677862	0.734351	1.41227	1.41227
C10		0	0.854927	0.854927	0	0.444562	0.410365	0.410365	0.410365	0.444562	0.854940	0.854940
H2O		0	2.78781	0	2.78781	0	0	0	0	0	0	0
TEG		0	0.0289605	0	0.0289605	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0.0157889	0	0.0157889	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%	%	%	%
H2S		8.65107E-07	3.89047E-06	3.89093E-06	0	3.89093E-06	3.89093E-06	3.89093E-06	3.89093E-06	3.89093E-06	1.01901E-05	1.01901E-05
N2		3.66685	2.23548	2.23574	0	2.23574	2.23574	2.23574	2.23574	2.23574	1.58092E-05	1.58092E-05
CO2		4.88265E-05	4.44120E-05	4.44172E-05	0	4.44172E-05	4.44172E-05	4.44172E-05	4.44172E-05	4.44172E-05	0.000100627	0.000100627
C1		92.3604	56.3796	56.3863	0	56.3863	56.3863	56.3863	56.3863	56.3863	3.82630	3.82630
C2		3.90575	17.0872	17.0892	0	17.0892	17.0892	17.0892	17.0892	17.0892	45.4397	45.4397
C3		0.0650282	11.9117	11.9131	0	11.9131	11.9131	11.9131	11.9131	11.9131	26.0610	26.0610
iC4		0.000744170	2.03827	2.03851	0	2.03851	2.03851	2.03851	2.03851	2.03851	4.14129	4.14129
nC4		0.00110226	4.82597	4.82654	0	4.82654	4.82654	4.82654	4.82654	4.82654	9.71402	9.71402
iC5		1.24504E-05	1.42470	1.42487	0	1.42487	1.42487	1.42487	1.42487	1.42487	2.81166	2.81166
nC5		1.22006E-05	1.47727	1.47744	0	1.47744	1.47744	1.47744	1.47744	1.47744	2.90741	2.90741
Neohexane		0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		6.47716E-07	0.627350	0.627423	0	0.627423	0.627423	0.627423	0.627423	0.627423	1.22838	1.22838
nC6		7.82411E-08	0.356880	0.356922	0	0.356922	0.356922	0.356922	0.356922	0.356922	0.697794	0.697794
Benzene		2.05684E-07	0.171165	0.171185	0	0.171185	0.171185	0.171185	0.171185	0.171185	0.335089	0.335089
Cyclohexane		2.92710E-08	0.290572	0.290606	0	0.290606	0.290606	0.290606	0.290606	0.290606	0.567952	0.567952
3,3-Dimethylpentane		5.22839E-08	0.466332	0.466387	0	0.466387	0.466387	0.466387	0.466387	0.466387	0.911070	0.911070
C7		1.36625E-09	0.0919702	0.0919810	0	0.0919810	0.0919810	0.0919810	0.0919810	0.0919810	0.179561	0.179561
Toluene		5.83466E-09	0.106380	0.106393	0	0.106393	0.106393	0.106393	0.106393	0.106393	0.207752	0.207752
i-Octane		5.60646E-09	0.375862	0.375907	0	0.375907	0.375907	0.375907	0.375907	0.375907	0.733883	0.733883
C8		1.22296E-11	0.0228551	0.0228578	0	0.0228578	0.0228578	0.0228578	0.0228578	0.0228578	0.0445999	0.0445999
Ethylbenzene		1.67023E-11	0.00915262	0.00915370	0	0.00915370	0.00915370	0.00915370	0.00915370	0.00915370	0.0178618	0.0178618

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
m-Xylene		3.27871E-11	0.0257655	0.0257685	0	0.0257685	0.0257685	0.0257685	0.0257685	0.0257685	0.0502812	0.0502812
C9		7.66935E-13	0.0380988	0.0381033	0	0.0381033	0.0381033	0.0381033	0.0381033	0.0381033	0.0743346	0.0743346
C10		0	0.0255867	0.0255897	0	0.0255897	0.0255897	0.0255897	0.0255897	0.0255897	0.0499210	0.0499210
H2O		0	0.0105643	0	89.7898	0	0	0	0	0	0	0
TEG		0	0.000914818	0	7.77537	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0.000286478	0	2.43488	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		1.57798E-05	0.0184955	0.0184955	0	0.00961766	0.00887784	0.00887784	0.00887784	0.00961766	0.0248301	0.0248301
N2		66.8844	10627.6	10627.6	0	5526.34	5101.23	5101.23	5101.23	5526.34	0.0385222	0.0385222
CO2		0.000890609	0.211137	0.211137	0	0.109791	0.101346	0.101346	0.101346	0.109791	0.245197	0.245197
C1		1684.68	268031	268031	0	139376	128655	128655	128655	139376	9323.52	9323.52
C2		71.2420	81233.5	81233.5	0	42241.4	38992.1	38992.1	38992.1	42241.4	110723	110723
C3		1.18613	56628.7	56628.7	0	29446.9	27181.8	27181.8	27181.8	29446.9	63502.8	63502.8
iC4		0.0135739	9690.02	9690.02	0	5038.81	4651.21	4651.21	4651.21	5038.81	10091.1	10091.1
nC4		0.0201056	22942.9	22942.9	0	11930.3	11012.6	11012.6	11012.6	11930.3	23670.1	23670.1
iC5		0.000227098	6773.09	6773.09	0	3522.01	3251.08	3251.08	3251.08	3522.01	6851.17	6851.17
nC5		0.000222543	7023.02	7023.02	0	3651.97	3371.05	3371.05	3371.05	3651.97	7084.48	7084.48
Neohexane		0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		1.18145E-05	2982.45	2982.45	0	1550.87	1431.58	1431.58	1431.58	1550.87	2993.20	2993.20
nC6		1.42714E-06	1696.62	1696.62	0	882.244	814.379	814.379	814.379	882.244	1700.31	1700.31
Benzene		3.75174E-06	813.724	813.724	0	423.137	390.588	390.588	390.588	423.137	816.511	816.511
Cyclohexane		5.33912E-07	1381.39	1381.39	0	718.323	663.068	663.068	663.068	718.323	1383.93	1383.93
3,3-Dimethylpentane		9.53672E-07	2216.96	2216.96	0	1152.82	1064.14	1064.14	1064.14	1152.82	2220.00	2220.00
C7		2.49208E-08	437.231	437.231	0	227.360	209.871	209.871	209.871	227.360	437.536	437.536
Toluene		1.06426E-07	505.736	505.736	0	262.983	242.754	242.754	242.754	262.983	506.228	506.228
i-Octane		1.02263E-07	1786.87	1786.87	0	929.172	857.697	857.697	857.697	929.172	1788.25	1788.25
C8		2.23071E-10	108.654	108.654	0	56.5003	52.1541	52.1541	52.1541	56.5003	108.676	108.676
Ethylbenzene		3.04654E-10	43.5120	43.5120	0	22.6262	20.8858	20.8858	20.8858	22.6262	43.5239	43.5239
m-Xylene		5.98046E-10	122.490	122.490	0	63.6949	58.7953	58.7953	58.7953	63.6949	122.520	122.520
C9		1.39891E-11	181.123	181.123	0	94.1842	86.9393	86.9393	86.9393	94.1842	181.131	181.131
C10		0	121.640	121.640	0	63.2530	58.3874	58.3874	58.3874	63.2530	121.642	121.642
H2O		0	50.2231	0	50.2231	0	0	0	0	0	0	0
TEG		0	4.34909	0	4.34909	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	1.36193	0	1.36193	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Property	Units											
Temperature	°F	107.711	124.563	124.563	124.563	124.563	124.563	46.5198*	0.348918*	-3*	-26.8090	8.56839
Pressure	psia	210.787	902.696	902.696	902.696	902.696	902.696	900.696	899.696	901.696	215.787	215.787
Mole Fraction Vapor	%	100	100	100	0	100	100	94.7067	83.8330	82.7048	0	18.4485
Mole Fraction Light Liquid	%	0	0	0	100	0	0	5.29325	16.1670	17.2952	100	81.5515
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	16.6125	21.6469	21.6471	19.7469	21.6471	21.6471	21.6471	21.6471	21.6471	36.8559	36.8559
Mass Density	lb/ft^3	0.589585	3.71002	3.71006	62.4583	3.71006	3.71006	4.95929	6.41919	6.59137	32.7107	8.00132
Molar Flow	lbmol/h	109.798	21961.8	21959.0	2.83256	11418.7	10540.3	10540.3	10540.3	11418.7	6611.42	6611.42
Mass Flow	lb/h	1824.03	475405	475349	55.9342	247181	228167	228167	228167	247181	243670	243670
Vapor Volumetric Flow	ft^3/h	3093.75	128141	128124	0.895544	66624.7	61499.7	46008.1	35544.6	37500.8	7449.24	30453.7
Liquid Volumetric Flow	gpm	385.714	15976.0	15974.0	0.111652	8306.46	7667.50	5736.07	4431.54	4675.42	928.737	3796.82
Std Vapor Volumetric Flow	MMSCFD	1*	200.020	199.994	0.0257979	103.997	95.9972	95.9972	95.9972	103.997	60.2142	60.2142
Std Liquid Volumetric Flow	sgpm	11.8014	2684.03	2683.92	0.111869	1395.64	1288.28	1288.28	1288.28	1395.64	1129.85	1129.85
Compressibility		0.975427	0.840061	0.840061	0.0455197	0.840061	0.840061	0.723738	0.614577	0.604252	0.0523396	0.197806
Specific Gravity		0.573588	0.747410	0.747419	1.00144	0.747419	0.747419				0.524472	
API Gravity					7.95435						191.943	
Enthalpy	Btu/h	-3.43763E+06	-7.48600E+08	-7.48301E+08	-350754	-3.89116E+08	-3.59184E+08	-3.72622E+08	-3.82927E+08	-4.15746E+08	-3.22921E+08	-3.12616E+08
Mass Enthalpy	Btu/lb	-1884.64	-1574.66	-1574.21	-6270.83	-1574.21	-1574.21	-1633.11	-1678.27	-1681.94	-1325.24	-1282.95
Mass Cp	Btu/(lb**F)	0.546001	0.618409	0.618419	0.971711	0.618419	0.618419	0.682889	0.758035	0.766631	0.612492	0.614060
Ideal Gas CpCv Ratio		1.29389	1.22852	1.22851	1.28900	1.22851	1.22851	1.24904	1.26089	1.26172	1.17867	1.16859
Dynamic Viscosity	cP	0.0119753	0.0132043	0.0132038	0.723125	0.0132038	0.0132038				0.126442	
Kinematic Viscosity	cSt	1.26800	0.222187	0.222176	0.722774	0.222176	0.222176				0.241313	
Thermal Conductivity	Btu/(h*ft*°F)	0.0210850	0.0226512	0.0226513	0.329428	0.0226513	0.0226513				0.0693173?	
Surface Tension	lbf/ft				#########						0.000671697?	
Net Ideal Gas Heating Value	Btu/ft^3	905.292	1163.79	1163.93	56.3600	1163.93	1163.93	1163.93	1163.93	1163.93	1952.50	1952.50
Net Liquid Heating Value	Btu/lb	20673.8	20337.9	20340.3	105.249	20340.3	20340.3	20340.3	20340.3	20340.3	19955.3	19955.3
Gross Ideal Gas Heating Value	Btu/ft^3	1004.81	1281.80	1281.95	110.875	1281.95	1281.95	1281.95	1281.95	1281.95	2127.04	2127.04
Gross Liquid Heating Value	Btu/lb	22947.2	22407.1	22409.6	1152.88	22409.6	22409.6	22409.6	22409.6	22409.6	21753.5	21753.5

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Mole Fraction		%	%	%		%	%	%	%	%		%
H2S		4.21692E-07	2.47108E-06	2.47140E-06		2.47140E-06	2.47140E-06	2.38871E-06	2.05918E-06	2.02083E-06		1.17566E-05
N2		2.17452	1.72743	1.72765		1.72765	1.72765	1.80871	1.98980	2.00958		9.64159E-05
CO2		1.84308E-05	2.18448E-05	2.18477E-05		2.18477E-05	2.18477E-05	2.21180E-05	2.17145E-05	2.16090E-05		0.000181129
C1		95.6426	76.0757	76.0856		76.0856	76.0856	78.6600	83.0379	83.4092		30.1304

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
C2		2.15785	12.3012	12.3028		12.3028	12.3028	12.0197	10.5840	10.4063		61.6269
C3		0.0244987	5.84753	5.84828		5.84828	5.84828	5.13751	3.39955	3.25434		7.27023
iC4		0.000212699	0.759126	0.759224		0.759224	0.759224	0.567281	0.275745	0.258310		0.311714
nC4		0.000315050	1.79737	1.79760		1.79760	1.79760	1.23987	0.549341	0.512589		0.562732
iC5		2.86675E-06	0.427454	0.427509		0.427509	0.427509	0.221431	0.0701296	0.0642329		0.0478626
nC5		2.80925E-06	0.443227	0.443284		0.443284	0.443284	0.206547	0.0622260	0.0570325		0.0375570
Neohexane		0	0	0		0	0	0	0	0		0
Cyclopentane		0	0	0		0	0	0	0	0		0
2,3-Dimethylbutane		1.24864E-07	0.157587	0.157608		0.157608	0.157608	0.0508898	0.0124577	0.0113399		0.00544218
nC6		1.50830E-08	0.0896466	0.0896582		0.0896582	0.0896582	0.0226891	0.00493026	0.00446542		0.00185064
Benzene		4.37442E-08	0.0474342	0.0474403		0.0474403	0.0474403	0.0129865	0.00316519	0.00288689		0.00155166
Cyclohexane		5.77791E-09	0.0747386	0.0747482		0.0747482	0.0747482	0.0164451	0.00345520	0.00312240		0.00129855
3,3-Dimethylpentane		8.66818E-09	0.100743	0.100756		0.100756	0.100756	0.0191549	0.00403319	0.00365873		0.00130681
C7		2.26511E-10	0.0198685	0.0198711		0.0198711	0.0198711	0.00260245	0.000485808	0.000438423		0.000129639
Toluene		1.05199E-09	0.0249928	0.0249960		0.0249960	0.0249960	0.00335042	0.000683328	0.000620478		0.000228327
i-Octane		8.15362E-10	0.0712278	0.0712370		0.0712370	0.0712370	0.00996444	0.00189521	0.00171117		0.000517104
C8		1.77858E-12	0.00433116	0.00433172		0.00433172	0.00433172	0.000257787	4.19287E-05	3.76782E-05		8.01420E-06
Ethylbenzene		2.61355E-12	0.00186620	0.00186644		0.00186644	0.00186644	0.000117330	2.08097E-05	1.87946E-05		4.71025E-06
m-Xylene		5.13048E-12	0.00525353	0.00525421		0.00525421	0.00525421	0.000307859	5.30626E-05	4.78296E-05		1.17852E-05
C9		9.93391E-14	0.00643030	0.00643113		0.00643113	0.00643113	0.000148615	2.05065E-05	1.83387E-05		2.32778E-06
C10		0	0.00389279	0.00389329		0.00389329	0.00389329	4.55829E-05	6.05161E-06	5.40613E-06		5.20268E-07
H2O		0	0.0126939	0		0	0	0	0	0		0
TEG		0	0.000131868	0		0	0	0	0	0		0
UCARSOL™ AP-814		0	7.18925E-05	0		0	0	0	0	0		0
Oxygen		0	0	0		0	0	0	0	0		0
Molar Flow		lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h
H2S		4.63010E-07	0.000542695	0.000542695		0.000282201	0.000260493	0.000238450	0.000181954	0.000190843		0.000143396
N2		2.38759	379.375	379.375		197.275	182.100	180.552	175.824	189.780		0.00117599
CO2		2.02367E-05	0.00479753	0.00479753		0.00249471	0.00230281	0.00220791	0.00191875	0.00204071		0.00220924
C1		105.014	16707.6	16707.6		8687.97	8019.66	7852.15	7337.45	7876.99		367.502
C2		2.36928	2701.57	2701.57		1404.82	1296.75	1199.85	935.235	982.752		751.667
C3		0.0268991	1284.22	1284.22		667.797	616.428	512.846	300.394	307.333		88.6755
iC4		0.000233540	166.718	166.718		86.6934	80.0247	56.6282	24.3656	24.3943		3.80199
nC4		0.000345919	394.735	394.735		205.262	189.473	123.769	48.5412	48.4079		6.86368
iC5		3.14764E-06	93.8767	93.8767		48.8159	45.0608	22.1041	6.19684	6.06603		0.583784
nC5		3.08450E-06	97.3408	97.3408		50.6172	46.7236	20.6183	5.49846	5.38603		0.458085
Neohexane		0	0	0		0	0	0	0	0		0
Cyclopentane		0	0	0		0	0	0	0	0		0
2,3-Dimethylbutane		1.37099E-07	34.6091	34.6091		17.9967	16.6124	5.08002	1.10080	1.07091		0.0663786
nC6		1.65609E-08	19.6880	19.6880		10.2378	9.45026	2.26492	0.435651	0.421705		0.0225724
Benzene		4.80303E-08	10.4174	10.4174		5.41706	5.00037	1.29636	0.279684	0.272632		0.0189258
Cyclohexane		6.34404E-09	16.4140	16.4140		8.53526	7.87871	1.64162	0.305310	0.294873		0.0158385
3,3-Dimethylpentane		9.51750E-09	22.1250	22.1250		11.5050	10.6200	1.91212	0.356383	0.345523		0.0159393
C7		2.48705E-10	4.36350	4.36350		2.26902	2.09448	0.259787	0.0429273	0.0414038		0.00158121
Toluene		1.15506E-09	5.48888	5.48888		2.85422	2.63466	0.334453	0.0603807	0.0585967		0.00278492
i-Octane		8.95253E-10	15.6429	15.6429		8.13432	7.50861	0.994690	0.167466	0.161599		0.00630715
C8		1.95285E-12	0.951202	0.951202		0.494625	0.456577	0.0257333	0.00370493	0.00355825		9.77497E-05
Ethylbenzene		2.86963E-12	0.409853	0.409853		0.213123	0.196729	0.0117123	0.00183880	0.00177492		5.74513E-05
m-Xylene		5.63318E-12	1.15377	1.15377		0.599962	0.553811	0.0307317	0.00468875	0.00451693		0.000143745
C9		1.09073E-13	1.41221	1.41221		0.734351	0.677862	0.0148353	0.00181201	0.00173187		2.83921E-05
C10		0	0.854927	0.854927		0.444562	0.410365	0.00455026	0.000534737	0.000510544		6.34575E-06
H2O		0	2.78781	0		0	0	0	0	0		0
TEG		0	0.0289605	0		0	0	0	0	0		0
UCARSOL™ AP-814		0	0.0157889	0		0	0	0	0	0		0
Oxygen		0	0	0		0	0	0	0	0		0
Mass Fraction		%	%	%		%	%	%	%	%		%
H2S		8.65107E-07	3.89047E-06	3.89093E-06		3.89093E-06	3.89093E-06	3.97329E-06	3.66215E-06	3.61175E-06		1.47574E-05
N2		3.66685	2.23548	2.23574		2.23574	2.23574	2.47293	2.90876	2.95221		9.94785E-05
CO2		4.88265E-05	4.44120E-05	4.44172E-05		4.44172E-05	4.44172E-05	4.75084E-05	4.98686E-05	4.98722E-05		0.000293595
C1		92.3604	56.3796	56.3863		56.3863	56.3863	61.5888	69.5151	70.1717		17.8029
C2		3.90575	17.0872	17.0892		17.0892	17.0892	17.6396	16.6074	16.4094		68.2503
C3		0.0650282	11.9117	11.9131		11.9131	11.9131	11.0567	7.82256	7.52550		11.8075
iC4		0.000744170	2.03827	2.03851		2.03851	2.03851	1.60923	0.836338	0.787337		0.667287
nC4		0.00110226	4.82597	4.82654		4.82654	4.82654	3.51720	1.66616	1.56239		1.20464
iC5		1.24504E-05	1.42470	1.42487		1.42487	1.42487	0.779731	0.264035	0.243032		0.127186
nC5		1.22006E-05	1.47727	1.47744		1.47744	1.47744	0.727317	0.234279	0.215788		0.0998008
Neohexane		0	0	0		0	0	0	0	0		0
Cyclopentane		0	0	0		0	0	0	0	0		0
2,3-Dimethylbutane		6.47716E-07	0.627350	0.627423		0.627423	0.627423	0.214038	0.0560213	0.0512469		0.0172731
nC6		7.82411E-08	0.356880	0.356922		0.356922	0.356922	0.0954285	0.0221710	0.0201801		0.00587382
Benzene		2.05684E-07	0.171165	0.171185		0.171185	0.171185	0.0495090	0.0129017	0.0118256		0.00446405
Cyclohexane		2.92710E-08	0.290572	0.290606		0.290606	0.290606	0.0675488	0.0151743	0.0137806		0.00402509
3,3-Dimethylpentane		5.22839E-08	0.466332	0.466387		0.466387	0.466387	0.0936772	0.0210890	0.0192258		0.00482286
C7		1.36625E-09	0.0919702	0.0919810		0.0919810	0.0919810	0.0127273	0.00254023	0.00230381		0.000478439
Toluene		5.83466E-09	0.106380	0.106393		0.106393	0.106393	0.0150667	0.00328550	0.00299809		0.000774840
i-Octane		5.60646E-09	0.375862	0.375907		0.375907	0.375907	0.0555526	0.0112970	0.0102505		0.00217554
C8		1.22296E-11	0.0228551	0.0228578		0.0228578	0.0228578	0.00143718	0.000249929	0.000225705		3.37170E-05
Ethylbenzene		1.67023E-11	0.00915262	0.00915370		0.00915370	0.00915370	0.000607950	0.000115287	0.000104638		1.84179E-05
m-Xylene		3.27871E-11	0.0257655	0.0257685		0.0257685	0.0257685	0.00159518	0.000293969	0.000266290		4.60822E-05
C9		7.66935E-13	0.0380988	0.0381033		0.0381033	0.0381033	0.000930280	0.000137245	0.000123344		1.09959E-05
C10		0	0.0255867	0.0255897		0.0255897	0.0255897	0.000316539	4.49316E-05	4.03378E-05		2.72641E-06
H2O		0	0.0105643	0		0	0	0	0	0		0
TEG		0	0.000914818	0		0	0	0	0	0		0
UCARSOL™ AP-814		0	0.000286478	0		0	0	0	0	0		0

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Oxygen		0	0	0		0	0	0	0	0		0
Mass Flow		lb/h	lb/h	lb/h		lb/h	lb/h	lb/h	lb/h	lb/h		lb/h
H2S		1.57798E-05	0.0184955	0.0184955		0.00961766	0.00887784	0.00812659	0.00620117	0.00650410		0.00488708
N2		66.8844	10627.6	10627.6		5526.34	5101.23	5057.88	4925.44	5316.39		0.0329435
CO2		0.000890609	0.211137	0.211137		0.109791	0.101346	0.0971690	0.0844432	0.0898108		0.0972274
C1		1684.68	268031	268031		139376	128655	125968	117711	126366		5895.64
C2		71.2420	81233.5	81233.5		42241.4	38992.1	36078.3	28121.6	29550.4		22601.9
C3		1.18613	56628.7	56628.7		29446.9	27181.8	22614.3	13246.0	13552.0		3910.20
iC4		0.0135739	9690.02	9690.02		5038.81	4651.21	3291.36	1416.18	1417.85		220.980
nC4		0.0201056	22942.9	22942.9		11930.3	11012.6	7193.74	2821.32	2813.57		398.932
iC5		0.000227098	6773.09	6773.09		3522.01	3251.08	1594.79	447.095	437.656		42.1193
nC5		0.000222543	7023.02	7023.02		3651.97	3371.05	1487.58	396.707	388.596		33.0503
Neohexane		0	0	0		0	0	0	0	0		0
Cyclopentane		0	0	0		0	0	0	0	0		0
2,3-Dimethylbutane		1.18145E-05	2982.45	2982.45		1550.87	1431.58	437.773	94.8616	92.2863		5.72020
nC6		1.42714E-06	1696.62	1696.62		882.244	814.379	195.180	37.5424	36.3406		1.94519
Benzene		3.75174E-06	813.724	813.724		423.137	390.588	101.261	21.8467	21.2958		1.47833
Cyclohexane		5.33912E-07	1381.39	1381.39		718.323	663.068	138.158	25.6948	24.8163		1.33296
3,3-Dimethylpentane		9.53672E-07	2216.96	2216.96		1152.82	1064.14	191.598	35.7103	34.6221		1.59715
C7		2.49208E-08	437.231	437.231		227.360	209.871	26.0312	4.30140	4.14874		0.158441
Toluene		1.06426E-07	505.736	505.736		262.983	242.754	30.8159	5.56338	5.39901		0.256598
i-Octane		1.02263E-07	1786.87	1786.87		929.172	857.697	113.622	19.1294	18.4592		0.720456
C8		2.23071E-10	108.654	108.654		56.5003	52.1541	2.93948	0.423209	0.406454		0.0111658
Ethylbenzene		3.04654E-10	43.5120	43.5120		22.6262	20.8858	1.24344	0.195217	0.188435		0.00609932
m-Xylene		5.98046E-10	122.490	122.490		63.6949	58.7953	3.26263	0.497781	0.479540		0.0152607
C9		1.39891E-11	181.123	181.123		94.1842	86.9393	1.90270	0.232399	0.222121		0.00364143
C10		0	121.640	121.640		63.2530	58.3874	0.647419	0.0760832	0.0726410		0.000902883
H2O		0	50.2231	0		0	0	0	0	0		0
TEG		0	4.34909	0		0	0	0	0	0		0
UCARSOL™ AP-814		0	1.36193	0		0	0	0	0	0		0
Oxygen		0	0	0		0	0	0	0	0		0

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Property	Units											
Temperature	°F	107.711	124.563	124.563		124.563	124.563	46.5198	0.348918	-3		8.56839
Pressure	psia	210.787	902.696	902.696		902.696	902.696	900.696	899.696	901.696		215.787
Mole Fraction Vapor	%	100	100	100		100	100	100	100	100		100
Mole Fraction Light Liquid	%	0	0	0		0	0	0	0	0		0
Mole Fraction Heavy Liquid	%	0	0	0		0	0	0	0	0		0
Phase Mole Fraction	%	100	100	100		100	100	94.7067	83.8330	82.7048		18.4485
Molecular Weight	lb/lbmol	16.6125	21.6469	21.6471		21.6471	21.6471	20.4891	19.1632	19.0688		27.1510
Mass Density	lb/ft^3	0.589585	3.71002	3.71006		3.71006	3.71006	4.51810	5.04446	5.11135		1.38581
Molar Flow	lbmol/h	109.798	21961.8	21959.0		11418.7	10540.3	9982.40	8836.27	9443.80		1219.71
Mass Flow	lb/h	1824.03	475405	475349		247181	228167	204530	169331	180082		33116.2
Vapor Volumetric Flow	ft^3/h	3093.75	128141	128124		66624.7	61499.7	45269.1	33567.8	35231.7		23896.6
Liquid Volumetric Flow	gpm	385.714	15976.0	15974.0		8306.46	7667.50	5643.94	4185.08	4392.53		2979.32
Std Vapor Volumetric Flow	MMSCFD	1	200.020	199.994		103.997	95.9972	90.9159	80.4774	86.0105		11.1086
Std Liquid Volumetric Flow	sgpm	11.8014	2684.03	2683.92		1395.64	1288.28	1193.54	1025.01	1092.81		183.961
Compressibility		0.975427	0.840061	0.840061		0.840061	0.840061	0.751914	0.692326	0.686407		0.841347
Specific Gravity		0.573588	0.747410	0.747419		0.747419	0.747419	0.707436	0.661656	0.658396		0.937452
API Gravity												
Enthalpy	Btu/h	-3.43763E+06	-7.48600E+08	-7.48301E+08		-3.89116E+08	-3.59184E+08	-3.43879E+08	-3.02530E+08	-3.23219E+08		-4.50506E+07
Mass Enthalpy	Btu/lb	-1884.64	-1574.66	-1574.21		-1574.21	-1574.21	-1681.31	-1786.61	-1794.85		-1360.38
Mass Cp	Btu/(lb*°F)	0.546001	0.618409	0.618419		0.618419	0.618419	0.688218	0.787703	0.800225		0.467178
Ideal Gas CpCv Ratio		1.29389	1.22852	1.22851		1.22851	1.22851	1.26128	1.28763	1.28947		1.22271
Dynamic Viscosity	cP	0.0119753	0.0132043	0.0132038		0.0132038	0.0132038	0.0125766	0.0123383	0.0123446		0.00911011
Kinematic Viscosity	cSt	1.26800	0.222187	0.222176		0.222176	0.222176	0.173775	0.152693	0.150772		0.410391
Thermal Conductivity	Btu/(h*ft*°F)	0.0210850	0.0226512	0.0226513		0.0226513	0.0226513	0.0208670	0.0204899	0.0205085		0.0124146
Surface Tension	lbf/ft											
Net Ideal Gas Heating Value	Btu/ft^3	905.292	1163.79	1163.93		1163.93	1163.93	1105.32	1036.31	1031.28		1470.05
Net Liquid Heating Value	Btu/lb	20673.8	20337.9	20340.3		20340.3	20340.3	20416.1	20479.1	20481.7		20420.7
Gross Ideal Gas Heating Value	Btu/ft^3	1004.81	1281.80	1281.95		1281.95	1281.95	1219.21	1145.22	1139.82		1610.35
Gross Liquid Heating Value	Btu/lb	22947.2	22407.1	22409.6		22409.6	22409.6	22525.8	22636.0	22642.0		22383.1

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Mole Fraction								%	%	%	%	%
H2S								3.95092E-06	4.60894E-06	4.62599E-06	1.10198E-05	1.08531E-05
N2								0.277358	0.368267	0.379488	2.07994E-05	3.69350E-06
CO2								1.70100E-05	2.25382E-05	2.29887E-05	8.42702E-05	6.23590E-05
C1								30.0234	40.0347	41.0643	8.79052	3.96304
C2								17.3685	21.2151	21.3715	55.6958	54.3541
C3								18.5655	18.5460	18.2524	21.7823	25.0652
iC4								4.19347	3.26627	3.15456	2.62603	3.14958
nC4								11.7764	8.27038	7.94246	6.15976	7.42591
iC5								4.11465	2.28068	2.16467	1.43629	1.75037
nC5								4.67899	2.41924	2.29032	1.48520	1.81268

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Neohexane								0	0	0	0	0
Cyclopentane								0	0	0	0	0
2,3-Dimethylbutane								2.06700	0.910274	0.857052	0.525361	0.642976
nC6								1.28787	0.529009	0.497045	0.298436	0.365529
Benzene								0.663889	0.277026	0.260492	0.158107	0.193523
Cyclohexane								1.11791	0.444434	0.417259	0.248723	0.304695
3,3-Dimethylpentane								1.56076	0.602305	0.565068	0.335106	0.410618
C7								0.328842	0.120392	0.112797	0.0660454	0.0809568
Toluene								0.412279	0.151068	0.141558	0.0831019	0.101850
i-Octane								1.16752	0.430804	0.403705	0.236788	0.290237
C8								0.0772224	0.0265762	0.0248656	0.0143902	0.0176437
Ethylbenzene								0.0331616	0.0114369	0.0107018	0.00620086	0.00760255
m-Xylene								0.0937543	0.0322245	0.0301508	0.0174555	0.0214016
C9								0.118838	0.0396730	0.0370967	0.0213611	0.0261928
C10								0.0727363	0.0240503	0.0224849	0.0129313	0.0158564
H2O								0	0	0	0	0
TEG								0	0	0	0	0
UCARSOL™ AP-814								0	0	0	0	0
Oxygen								0	0	0	0	0
Molar Flow								lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S								2.20432E-05	7.85389E-05	9.13581E-05	0.000728563	0.000585167
N2								1.54745	6.27546	7.49445	0.00137513	0.000199143
CO2								9.49030E-05	0.000384063	0.000454001	0.00557146	0.00336222
C1								167.508	682.213	810.974	581.178	213.675
C2								96.9031	361.518	422.063	3682.28	2930.61
C3								103.581	316.034	360.464	1440.12	1351.44
iC4								23.3965	55.6591	62.2991	173.618	169.816
nC4								65.7038	140.932	156.855	407.247	400.384
iC5								22.9567	38.8640	42.7499	94.9589	94.3751
nC5								26.1053	41.2251	45.2312	98.1926	97.7345
Neohexane								0	0	0	0	0
Cyclopentane								0	0	0	0	0
2,3-Dimethylbutane								11.5323	15.5116	16.9258	34.7338	34.6674
nC6								7.18534	9.01461	9.81607	19.7308	19.7083
Benzene								3.70401	4.72068	5.14443	10.4531	10.4342
Cyclohexane								6.23709	7.57340	8.24039	16.4441	16.4283
3,3-Dimethylpentane								8.70786	10.2636	11.1595	22.1553	22.1393
C7								1.83469	2.05155	2.22761	4.36654	4.36496
Toluene								2.30021	2.57428	2.79562	5.49421	5.49143
i-Octane								6.51392	7.34114	7.97272	15.6550	15.6487
C8								0.430844	0.452872	0.491067	0.951394	0.951296
Ethylbenzene								0.185017	0.194890	0.211348	0.409965	0.409907
m-Xylene								0.523079	0.549122	0.595445	1.15405	1.15391
C9								0.663027	0.676050	0.732619	1.41227	1.41224
C10								0.405815	0.409830	0.444052	0.854940	0.854934
H2O								0	0	0	0	0
TEG								0	0	0	0	0
UCARSOL™ AP-814								0	0	0	0	0
Oxygen								0	0	0	0	0
Mass Fraction								%	%	%	%	%
H2S								3.17827E-06	4.54937E-06	4.64021E-06	1.01901E-05	9.47170E-06
N2								0.183396	0.298791	0.312885	1.58092E-05	2.64953E-06
CO2								1.76698E-05	2.87279E-05	2.97771E-05	0.000100627	7.02765E-05
C1								11.3687	18.6014	19.3891	3.82630	1.62803
C2								12.3271	18.4759	18.9137	45.4397	41.8520
C3								19.3234	23.6856	23.6884	26.0610	28.3029
iC4								5.75304	5.49836	5.39639	4.14129	4.68769
nC4								16.1562	13.9222	13.5868	9.71402	11.0524
iC5								7.00719	4.76576	4.59667	2.81166	3.23388
nC5								7.96824	5.05529	4.86347	2.90741	3.34900
Neohexane								0	0	0	0	0
Cyclopentane								0	0	0	0	0
2,3-Dimethylbutane								4.20442	2.27193	2.17376	1.22838	1.41887
nC6								2.61960	1.32034	1.26067	0.697794	0.806620
Benzene								1.22403	0.626725	0.598871	0.335089	0.387091
Cyclohexane								2.22070	1.08330	1.03355	0.567952	0.656648
3,3-Dimethylpentane								3.69141	1.74796	1.66647	0.911070	1.05361
C7								0.777758	0.349393	0.332656	0.179561	0.207727
Toluene								0.896630	0.403136	0.383882	0.207752	0.240306
i-Octane								3.14791	1.42526	1.35725	0.733883	0.848968
C8								0.208209	0.0879236	0.0835977	0.0445999	0.0516093
Ethylbenzene								0.0830994	0.0351664	0.0334395	0.0178618	0.0206683
m-Xylene								0.234938	0.0990845	0.0942111	0.0502812	0.0581823
C9								0.359758	0.147370	0.140033	0.0743346	0.0860243
C10								0.244277	0.0991079	0.0941589	0.0499210	0.0577722
H2O								0	0	0	0	0
TEG								0	0	0	0	0
UCARSOL™ AP-814								0	0	0	0	0
Oxygen								0	0	0	0	0
Mass Flow								lb/h	lb/h	lb/h	lb/h	lb/h
H2S								0.000751252	0.00267667	0.00311357	0.0248301	0.0199430
N2								43.3495	175.797	209.945	0.0385222	0.00557867
CO2								0.00417663	0.0169024	0.0199804	0.245197	0.147970
C1								2687.24	10944.4	13010.0	9323.52	3427.88

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
C2								2913.78	10870.5	12691.0	110723	88120.7
C3								4567.49	13935.7	15894.9	63502.8	59592.6
iC4								1359.85	3235.03	3620.96	10091.1	9870.08
nC4								3818.85	8191.26	9116.73	23670.1	23271.2
iC5								1656.30	2803.99	3084.35	6851.17	6809.05
nC5								1883.46	2974.34	3263.37	7084.48	7051.43
Neohexane								0	0	0	0	0
Cyclopentane								0	0	0	0	0
2,3-Dimethylbutane								993.804	1336.71	1458.59	2993.20	2987.48
nC6								619.199	776.837	845.904	1700.31	1698.37
Benzene								289.327	368.741	401.841	816.511	815.033
Cyclohexane								524.910	637.373	693.507	1383.93	1382.59
3,3-Dimethylpentane								872.545	1028.43	1118.20	2220.00	2218.40
C7								183.840	205.569	223.211	437.536	437.377
Toluene								211.938	237.190	257.584	506.228	505.972
i-Octane								744.075	838.568	910.712	1788.25	1787.53
C8								49.2146	51.7309	56.0938	108.676	108.665
Ethylbenzene								19.6423	20.6905	22.4378	43.5239	43.5178
m-Xylene								55.5327	58.2976	63.2154	122.520	122.505
C9								85.0366	86.7069	93.9621	181.131	181.127
C10								57.7400	58.3113	63.1804	121.642	121.641
H2O								0	0	0	0	0
TEG								0	0	0	0	0
UCARSOL™ AP-814								0	0	0	0	0
Oxygen								0	0	0	0	0

Process Streams		Fuel Gas	1	2	3	4	5	6	7	8	9	10
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	SPLT-103	Cryo	DEHY	DEHY	SPLT-100	SPLT-100	Bottoms	Side	Gas/Gas	DTWR-100	Side
	To Block:	--	DEHY	SPLT-100	--	Gas/Gas	Gas/Product	Side	MIX-100	MIX-100	Side	DTWR-102
Property	Units											
Temperature	°F							46.5198	0.348918	-3	-26.8090	8.56839
Pressure	psia							900.696	899.696	901.696	215.787	215.787
Mole Fraction Vapor	%							0	0	0	0	0
Mole Fraction Light Liquid	%							100	100	100	100	100
Mole Fraction Heavy Liquid	%							0	0	0	0	0
Phase Mole Fraction	%							5.29325	16.1670	17.2952	100	81.5515
Molecular Weight	lb/lbmol							42.3661	34.5272	33.9765	36.8559	39.0513
Mass Density	lb/ft^3							31.9864	29.7633	29.5720	32.7107	32.1109
Molar Flow	lbmol/h							557.926	1704.05	1974.89	6611.42	5391.71
Mass Flow	lb/h							23637.1	58836.2	67099.7	243670	210553
Vapor Volumetric Flow	ft^3/h							738.975	1976.80	2269.03	7449.24	6557.07
Liquid Volumetric Flow	gpm							92.1320	246.459	282.892	928.737	817.504
Std Vapor Volumetric Flow	MMSCFD							5.08137	15.5199	17.9865	60.2142	49.1056
Std Liquid Volumetric Flow	sgpm							94.7441	263.271	302.830	1129.85	945.890
Compressibility								0.219611	0.211415	0.211394	0.0523396	0.0522249
Specific Gravity								0.512859	0.477215	0.474147	0.524472	0.514856
API Gravity								150.906	215.549?	224.385?	191.943	172.596
Enthalpy	Btu/h							-2.87430E+07	-8.03978E+07	-9.25261E+07	-3.22921E+08	-2.67565E+08
Mass Enthalpy	Btu/lb							-1216.01	-1366.47	-1378.93	-1325.24	-1270.77
Mass Cp	Btu/(lb*°F)							0.636774	0.672650	0.676471	0.612492	0.637162
Ideal Gas CpCv Ratio								1.13551	1.17602	1.17947	1.17867	1.15981
Dynamic Viscosity	cP							0.112504	0.0973269	0.0960503	0.126442	0.115988
Kinematic Viscosity	cSt							0.219574	0.204142	0.202767	0.241313	0.225497
Thermal Conductivity	Btu/(h*ft*°F)							0.0608959	0.0642429?	0.0644975?	0.0693173?	0.0626936?
Surface Tension	lbf/ft							0.000309298?	0.000239706?	0.000232905?	0.000671697?	0.000583505?
Net Ideal Gas Heating Value	Btu/ft^3							2212.54	1825.68	1798.25	1952.50	2061.64
Net Liquid Heating Value	Btu/lb							19684.5	19940.9	19960.9	19955.3	19882.1
Gross Ideal Gas Heating Value	Btu/ft^3							2404.53	1990.97	1961.61	2127.04	2243.93
Gross Liquid Heating Value	Btu/lb							21404.5	21758.1	21786.0	21753.5	21654.5

Process Streams	11	12	13	14	15	16	17	18	19	20	21
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Mole Fraction	%	%	%	%	%	%	%	%	%	%	%
H2S	1.14998E-05	1.14998E-05	2.47140E-06	2.47140E-06	1.72826E-06	4.58756E-06	1.14998E-05	1.55697E-05	1.23616E-05	1.72826E-06	1.72826E-06
N2	1.15875E-07	1.15875E-07	1.72765	1.72765	2.17229	0.461472	1.15875E-07	4.73639E-07	6.54814E-05	2.17229	2.17229
CO2	5.50427E-05	5.50427E-05	2.18477E-05	2.18477E-05	2.05277E-05	2.56064E-05	5.50427E-05	0.000128713	0.000190087	2.05277E-05	2.05277E-05
C1	1.23073	1.23073	76.0856	76.0856	85.9228	48.0730	1.23073	4.01013	26.6667	85.9228	85.9228
C2	57.6946	57.6946	12.3028	12.3028	9.00521	21.6929	57.6946	80.4413	64.6664	9.00521	9.00521
C3	25.1606	25.1606	5.84828	5.84828	2.33889	15.8417	25.1606	13.3543	7.63155	2.33889	2.33889
iC4	3.05052	3.05052	0.759224	0.759224	0.162426	2.45867	3.05052	0.679918	0.330537	0.162426	0.162426
nC4	7.14739	7.14739	1.79760	1.79760	0.316440	6.01537	7.14739	1.25444	0.598783	0.316440	0.316440
iC5	1.66242	1.66242	0.427509	0.427509	0.0352186	1.54460	1.66242	0.122087	0.0515848	0.0352186	0.0352186
nC5	1.71799	1.71799	0.443284	0.443284	0.0317472	1.61518	1.71799	0.0995698	0.0406115	0.0317472	0.0317472
Neohexane	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0.606674	0.606674	0.157608	0.157608	0.00608093	0.589097	0.606674	0.0159361	0.00594329	0.00608093	0.00608093
nC6	0.344440	0.344440	0.0896582	0.0896582	0.00231732	0.338371	0.344440	0.00588948	0.00203908	0.00231732	0.00231732
Benzene	0.182554	0.182554	0.0474403	0.0474403	0.00157443	0.178049	0.182554	0.00453430	0.00170025	0.00157443	0.00157443
Cyclohexane	0.287025	0.287025	0.0747482	0.0747482	0.00159202	0.283069	0.287025	0.00427150	0.00143551	0.00159202	0.00159202
3,3-Dimethylpentane	0.386572	0.386572	0.100756	0.100756	0.00192112	0.382198	0.386572	0.00426706	0.00144360	0.00192112	0.00192112
C7	0.0761610	0.0761610	0.0198711	0.0198711	0.000222086	0.0758239	0.0761610	0.000471505	0.000144903	0.000222086	0.000222086
Toluene	0.0958429	0.0958429	0.0249960	0.0249960	0.000328700	0.0952389	0.0958429	0.000777584	0.000254307	0.000328700	0.000328700
i-Octane	0.273060	0.273060	0.0712370	0.0712370	0.000865443	0.271628	0.273060	0.00181512	0.000576419	0.000865443	0.000865443
C8	0.0165877	0.0165877	0.00433172	0.00433172	1.84684E-05	0.0166142	0.0165877	3.38927E-05	9.12252E-06	1.84684E-05	1.84684E-05
Ethylbenzene	0.00714821	0.00714821	0.00186644	0.00186644	9.56766E-06	0.00715410	0.00714821	1.89219E-05	5.33450E-06	9.56766E-06	9.56766E-06
m-Xylene	0.0201217	0.0201217	0.00525421	0.00525421	2.39909E-05	0.0201478	0.0201217	4.78312E-05	1.33656E-05	2.39909E-05	2.39909E-05
C9	0.0246189	0.0246189	0.00643113	0.00643113	8.77185E-06	0.0247195	0.0246189	1.20416E-05	2.70535E-06	8.77185E-06	8.77185E-06
C10	0.0149029	0.0149029	0.00389329	0.00389329	2.54671E-06	0.0149726	0.0149029	2.99142E-06	6.11538E-07	2.54671E-06	2.54671E-06
H2O	0	0	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	0.000659730	0.000659730	0.000542695	0.000542695	0.000280874	0.000261821	0.000659730	0.000190605	0.000259438	7.58360E-05	0.000205038
N2	6.64763E-06	6.64763E-06	379.375	379.375	353.037	26.3370	6.64763E-06	5.79831E-06	0.00137429	95.3201	257.717
CO2	0.00315774	0.00315774	0.00479753	0.00479753	0.00333613	0.00146140	0.00315774	0.00157571	0.00398943	0.000900754	0.00243537
C1	70.6053	70.6053	16707.6	16707.6	13964.0	2743.61	70.6053	49.0923	559.665	3770.29	10193.7
C2	3309.87	3309.87	2701.57	2701.57	1463.51	1238.06	3309.87	984.768	1357.18	395.148	1068.36
C3	1443.43	1443.43	1284.22	1284.22	380.112	904.113	1443.43	163.484	160.166	102.630	277.482
iC4	175.005	175.005	166.718	166.718	26.3972	140.321	175.005	8.32360	6.93712	7.12723	19.2699
nC4	410.037	410.037	394.735	394.735	51.4272	343.308	410.037	15.3569	12.5669	13.8854	37.5419
iC5	95.3708	95.3708	93.8767	93.8767	5.72366	88.1531	95.3708	1.49459	1.08263	1.54539	4.17827
nC5	98.5592	98.5592	97.3408	97.3408	5.15950	92.1813	98.5592	1.21894	0.852329	1.39306	3.76643
Neohexane	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	34.8042	34.8042	34.6091	34.6091	0.988262	33.6208	34.8042	0.195091	0.124734	0.266831	0.721432
nC6	19.7601	19.7601	19.6880	19.6880	0.376608	19.3114	19.7601	0.0720994	0.0427949	0.101684	0.274924
Benzene	10.4729	10.4729	10.4174	10.4174	0.255874	10.1616	10.4729	0.0555092	0.0356838	0.0690860	0.186788
Cyclohexane	16.4663	16.4663	16.4140	16.4140	0.258733	16.1552	16.4663	0.0522920	0.0301277	0.0698578	0.188875
3,3-Dimethylpentane	22.1772	22.1772	22.1250	22.1250	0.312217	21.8127	22.1772	0.0522376	0.0302974	0.0842985	0.227918
C7	4.36927	4.36927	4.36350	4.36350	0.0360930	4.32740	4.36927	0.00577219	0.00304113	0.00974511	0.0263479
Toluene	5.49840	5.49840	5.48888	5.48888	0.0534197	5.43546	5.49840	0.00951923	0.00533725	0.0144233	0.0389964
i-Octane	15.6651	15.6651	15.6429	15.6429	0.140650	15.5023	15.6651	0.0222208	0.0120975	0.0379756	0.102675
C8	0.951617	0.951617	0.951202	0.951202	0.00300145	0.948201	0.951617	0.000414916	0.000191458	0.000810390	0.00219106
Ethylbenzene	0.410084	0.410084	0.409853	0.409853	0.00155492	0.408298	0.410084	0.000231644	0.000111957	0.000419828	0.00113509
m-Xylene	1.15436	1.15436	1.15377	1.15377	0.00389895	1.14987	1.15436	0.000585553	0.000280510	0.00105272	0.00284624
C9	1.41236	1.41236	1.41221	1.41221	0.00142559	1.41079	1.41236	0.000147415	5.67783E-05	0.000384908	0.00104068
C10	0.854964	0.854964	0.854927	0.854927	0.000413887	0.854513	0.854964	3.66211E-05	1.28346E-05	0.000111749	0.000302137
H2O	0	0	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%	%	%
H2S	1.00044E-05	1.00044E-05	3.89093E-06	3.89093E-06	3.18869E-06	5.09456E-06	1.00044E-05	1.65625E-05	1.52057E-05	3.18869E-06	3.18869E-06
N2	8.28607E-08	8.28607E-08	2.23574	2.23574	3.29440	0.421235	8.28607E-08	4.14143E-07	6.62069E-05	3.29440	3.29440
CO2	6.18356E-05	6.18356E-05	4.44172E-05	4.44172E-05	4.89078E-05	3.67205E-05	6.18356E-05	0.000176810	0.000301938	4.89078E-05	4.89078E-05
C1	0.503993	0.503993	56.3863	56.3863	74.6227	25.1296	0.503993	2.00801	15.4404	74.6227	74.6227
C2	44.2840	44.2840	17.0892	17.0892	14.6590	21.2545	44.2840	75.4981	70.1807	14.6590	14.6590
C3	28.3210	28.3210	11.9131	11.9131	5.58337	22.7620	28.3210	18.3804	12.1458	5.58337	5.58337
iC4	4.52592	4.52592	2.03851	2.03851	0.511080	4.65646	4.52592	1.23349	0.693397	0.511080	0.511080
nC4	10.6043	10.6043	4.82654	4.82654	0.995692	11.3925	10.6043	2.27577	1.25612	0.995692	0.995692
iC5	3.06169	3.06169	1.42487	1.42487	0.137560	3.63127	3.06169	0.274938	0.134329	0.137560	0.137560
nC5	3.16404	3.16404	1.47744	1.47744	0.124001	3.79720	3.16404	0.224230	0.105754	0.124001	0.124001
Neohexane	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	1.33454	1.33454	0.627423	0.627423	0.0283691	1.65418	1.33454	0.0428649	0.0184854	0.0283691	0.0283691
nC6	0.757685	0.757685	0.356922	0.356922	0.0108109	0.950144	0.757685	0.0158415	0.00634215	0.0108109	0.0108109
Benzene	0.364000	0.364000	0.171185	0.171185	0.00665783	0.453178	0.364000	0.0110551	0.00479345	0.00665783	0.00665783
Cyclohexane	0.616615	0.616615	0.290606	0.290606	0.00725344	0.776262	0.616615	0.0112207	0.00436044	0.00725344	0.00725344
3,3-Dimethylpentane	0.988778	0.988778	0.466387	0.466387	0.0104213	1.24790	0.988778	0.0133457	0.00522087	0.0104213	0.0104213
C7	0.194805	0.194805	0.0919810	0.0919810	0.00120473	0.247569	0.194805	0.00147469	0.000524049	0.00120473	0.00120473
Toluene	0.225420	0.225420	0.106393	0.106393	0.00163958	0.285936	0.225420	0.00223627	0.000845705	0.00163958	0.00163958
i-Octane	0.796205	0.796205	0.375907	0.375907	0.00535186	1.01103	0.796205	0.00647168	0.00237647	0.00535186	0.00535186
C8	0.0483674	0.0483674	0.0228578	0.0228578	0.000114208	0.0618396	0.0483674	0.000120842	3.76104E-05	0.000114208	0.000114208
Ethylbenzene	0.0193718	0.0193718	0.00915370	0.00915370	5.49894E-05	0.0247486	0.0193718	6.27024E-05	2.04406E-05	5.49894E-05	5.49894E-05

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
m-Xylene		0.0545303	0.0545303	0.0257685	0.0257685	0.000137886	0.0696985	0.0545303	0.000158500	5.12142E-05	0.000137886	0.000137886
C9		0.0806002	0.0806002	0.0381033	0.0381033	6.09057E-05	0.103307	0.0806002	4.82056E-05	1.25233E-05	6.09057E-05	6.09057E-05
C10		0.0541268	0.0541268	0.0255897	0.0255897	1.96164E-05	0.0694160	0.0541268	1.32851E-05	3.14045E-06	1.96164E-05	1.96164E-05
H2O		0	0	0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.0224842	0.0224842	0.0184955	0.0184955	0.00957243	0.00892307	0.0224842	0.00649598	0.00884188	0.00258456	0.00698788
N2		0.000186223	0.000186223	10627.6	10627.6	9889.78	737.790	0.000186223	0.000162430	0.0384984	2670.24	7219.54
CO2		0.138970	0.138970	0.211137	0.211137	0.146821	0.0643156	0.138970	0.0693464	0.175573	0.0396417	0.107179
C1		1132.68	1132.68	268031	268031	224017	44014.3	1132.68	787.561	8978.40	60484.6	163533
C2		99524.6	99524.6	81233.5	81233.5	44006.4	37227.2	99524.6	29611.0	40809.1	11881.7	32124.7
C3		63649.2	63649.2	56628.7	56628.7	16761.3	39867.4	63649.2	7208.95	7062.64	4525.54	12235.7
iC4		10171.6	10171.6	9690.02	9690.02	1534.26	8155.76	10171.6	483.786	403.201	414.251	1120.01
nC4		23832.3	23832.3	22942.9	22942.9	2989.06	19953.8	23832.3	892.577	730.416	807.047	2182.02
iC5		6880.89	6880.89	6773.09	6773.09	412.955	6360.14	6880.89	107.833	78.1105	111.498	301.457
nC5		7110.93	7110.93	7023.02	7023.02	372.251	6650.77	7110.93	87.9451	61.4945	100.508	271.743
Neohexane		0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		2999.26	2999.26	2982.45	2982.45	85.1639	2897.29	2999.26	16.8120	10.7490	22.9942	62.1696
nC6		1702.84	1702.84	1696.62	1696.62	32.4543	1664.17	1702.84	6.21319	3.68787	8.76266	23.6916
Benzene		818.060	818.060	813.724	813.724	19.9868	793.738	818.060	4.33592	2.78732	5.39643	14.5904
Cyclohexane		1385.79	1385.79	1381.39	1381.39	21.7748	1359.62	1385.79	4.40087	2.53553	5.87920	15.8956
3,3-Dimethylpentane		2222.20	2222.20	2216.96	2216.96	31.2847	2185.68	2222.20	5.23431	3.03586	8.44687	22.8378
C7		437.809	437.809	437.231	437.231	3.61659	433.614	437.809	0.578385	0.304727	0.976479	2.64011
Toluene		506.614	506.614	505.736	505.736	4.92201	500.814	506.614	0.877087	0.491766	1.32894	3.59307
i-Octane		1789.41	1789.41	1786.87	1786.87	16.0663	1770.80	1789.41	2.53825	1.38188	4.33789	11.7284
C8		108.702	108.702	108.654	108.654	0.342851	108.312	108.702	0.0473953	0.0218700	0.0925697	0.250281
Ethylbenzene		43.5366	43.5366	43.5120	43.5120	0.165078	43.3469	43.5366	0.0245924	0.0118859	0.0445711	0.120507
m-Xylene		122.552	122.552	122.490	122.490	0.413933	122.076	122.552	0.0621652	0.0297803	0.111762	0.302171
C9		181.142	181.142	181.123	181.123	0.182839	180.941	181.142	0.0189067	0.00728211	0.0493664	0.133472
C10		121.646	121.646	121.640	121.640	0.0588885	121.582	121.646	0.00521052	0.00182613	0.0158999	0.0429886
H2O		0	0	0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Property	Units											
Temperature	°F	27.5196	41.0666	-1.45908	-25*	-25.0615	-25.0615	41.0666	41.0666	11.7002	-170.761	-118.462
Pressure	psia	217.787	217.787	899.696	897.696	896.696	896.696	217.787	217.787	215.787	214.696*	214.696*
Mole Fraction Vapor	%	0	21.3392	83.2508	74.0050	100	0	21.3392	100	100	19.9146	89.8460
Mole Fraction Light Liquid	%	100	78.6608	16.7492	25.9950	0	100	78.6608	0	0	80.0854	10.1540
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	39.1749	39.1749	21.6471	21.6471	18.4718	30.6893	39.1749	32.0378	27.7064	18.4718	18.4718
Mass Density	lb/ft^3	31.2173	7.40469	6.49925	7.80551	5.47751	28.3762	7.40469	1.60383	1.41190	6.44425	1.39973
Molar Flow	lbmol/h	5736.88	5736.88	21959.0	21959.0	16251.8	5707.18	5736.88	1224.21	2098.74	4387.99	11863.8
Mass Flow	lb/h	224742	224742	475349	475349	300200	175149	224742	39220.9	58148.6	81053.9	219146
Vapor Volumetric Flow	ft^3/h	7199.26	30351.3	73139.1	60899.1	54805.9	6172.39	30351.3	24454.5	41184.7	12577.7	156563
Liquid Volumetric Flow	gpm	897.570	3784.06	9118.64	7592.62	6832.95	769.545	3784.06	3048.88	5134.71	1568.13	19519.5
Std Vapor Volumetric Flow	MMSCFD	52.2493	52.2493	199.994	199.994	148.015	51.9788	52.2493	11.1496	19.1145	39.9642	108.051
Std Liquid Volumetric Flow	sgpm	1014.06	1014.06	2683.92	2683.92	1849.72	834.193	1014.06	205.322	321.118	499.426	1350.30
Compressibility		0.0522736	0.214417	0.609402	0.533709	0.648349	0.207929	0.214417	0.809587	0.837098	0.198488	0.773755
Specific Gravity		0.500529				0.637782	0.454975		1.10618	0.956631		
API Gravity		170.637					318.316?					
Enthalpy	Btu/h	-2.81972E+08	-2.74308E+08	-7.98673E+08	-8.11025E+08	-5.54810E+08	-2.56214E+08	-2.74308E+08	-4.72396E+07	-7.78834E+07	-1.63624E+08	##########
Mass Enthalpy	Btu/lb	-1254.65	-1220.55	-1680.18	-1706.17	-1848.14	-1462.84	-1220.55	-1204.45	-1339.39	-2018.70	-1879.45
Mass Cp	Btu/(lb**F)	0.666373	0.630180	0.761983	0.823680	0.893234	0.702869	0.630180	0.468656	0.466529	0.812323?	0.562137?
Ideal Gas CpCv Ratio		1.15473	1.15127	1.26134	1.26706	1.30091	1.20229	1.15127	1.18567	1.21843	1.31935	1.31451
Dynamic Viscosity	cP	0.107221				0.0123292	0.0884881		0.00929172	0.00911971		
Kinematic Viscosity	cSt	0.214418				0.140518	0.194675		0.361674	0.403233		
Thermal Conductivity	Btu/(h*ft*°F)	0.0584665?				0.0205752	0.0659693?		0.0117809	0.0122953		
Surface Tension	lbf/ft	0.000506884?					0.000195889?					
Net Ideal Gas Heating Value	Btu/ft^3	2068.28	2068.28	1163.93	1163.93	998.870	1633.96	2068.28	1716.03	1498.08	998.870	998.870
Net Liquid Heating Value	Btu/lb	19881.5	19881.5	20340.3	20340.3	20486.6	20089.5	19881.5	20175.4	20389.1	20486.6	20486.6
Gross Ideal Gas Heating Value	Btu/ft^3	2251.05	2251.05	1281.95	1281.95	1105.04	1785.72	2251.05	1873.80	1640.37	1105.04	1105.04
Gross Liquid Heating Value	Btu/lb	21652.9	21652.9	22409.6	22409.6	22668.1	21966.6	21652.9	22045.9	22339.4	22668.1	22668.1

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Mole Fraction			%	%	%	%		%	%	%	%	%
H2S			1.55697E-05	2.03902E-06	1.72892E-06	1.72826E-06		1.55697E-05	1.55697E-05	1.23616E-05	9.36275E-08	1.00212E-06
N2			4.73639E-07	2.00010	2.17215	2.17229		4.73639E-07	4.73639E-07	6.54814E-05	6.88978	2.40279
CO2			0.000128713	2.16616E-05	2.05286E-05	2.05277E-05		0.000128713	0.000128713	0.000190087	3.48948E-06	1.84436E-05
C1			4.01013	83.2374	85.9153	85.9228		4.01013	4.01013	26.6667	92.6717	91.9492

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
C2			80.4413	10.4909	9.00834	9.00521		80.4413	80.4413	64.6664	0.429067	5.35614
C3			13.3543	3.32094	2.34192	2.33889		13.3543	13.3543	7.63155	0.00921580	0.283049
iC4			0.679918	0.266098	0.162798	0.162426		0.679918	0.679918	0.330537	7.85040E-05	0.00360544
nC4			1.25444	0.528868	0.317247	0.316440		1.25444	1.25444	0.598783	0.000113353	0.00508000
iC5			0.122087	0.0667928	0.0353465	0.0352186		0.122087	0.122087	0.0515848	5.54130E-07	8.70395E-05
nC5			0.0995698	0.0592702	0.0318679	0.0317472		0.0995698	0.0995698	0.0406115	9.64164E-07	6.06847E-05
Neohexane			0	0	0	0		0	0	0	0	0
Cyclopentane			0	0	0	0		0	0	0	0	0
2,3-Dimethylbutane			0.0159361	0.0118135	0.00610879	0.00608093		0.0159361	0.0159361	0.00594329	4.30525E-08	2.94208E-06
nC6			0.00588948	0.00466073	0.00232914	0.00231732		0.00588948	0.00588948	0.00203908	4.97605E-09	4.15949E-07
Benzene			0.00453430	0.00300436	0.00158169	0.00157443		0.00453430	0.00453430	0.00170025	1.90538E-08	7.67905E-07
Cyclohexane			0.00427150	0.00326218	0.00160034	0.00159202		0.00427150	0.00427150	0.00143551	2.17938E-09	1.90624E-07
3,3-Dimethylpentane			0.00426706	0.00381453	0.00193150	0.00192112		0.00426706	0.00426706	0.00144360	3.33754E-09	2.21014E-07
C7			0.000471505	0.000457940	0.000223434	0.000222086		0.000471505	0.000471505	0.000144903	8.23896E-11	6.92136E-09
Toluene			0.000777584	0.000646392	0.000330574	0.000328700		0.000777584	0.000777584	0.000254307	4.97092E-10	2.19432E-08
i-Octane			0.00181512	0.00178709	0.000870640	0.000865443		0.00181512	0.00181512	0.000576419	1.94041E-10	3.16000E-08
C8			3.38927E-05	3.93940E-05	1.86011E-05	1.84684E-05		3.38927E-05	3.38927E-05	9.12252E-06	5.77509E-13	6.90764E-11
Ethylbenzene			1.89219E-05	1.96098E-05	9.63273E-06	9.56766E-06		1.89219E-05	1.89219E-05	5.33450E-06	1.11114E-12	7.38301E-11
m-Xylene			4.78312E-05	4.99464E-05	2.41569E-05	2.39909E-05		4.78312E-05	4.78312E-05	1.33656E-05	2.08352E-12	1.51344E-10
C9			1.20416E-05	1.91935E-05	8.84628E-06	8.77185E-06		1.20416E-05	1.20416E-05	2.70535E-06	5.90697E-14	2.67963E-12
C10			2.99142E-06	5.65683E-06	2.57042E-06	2.54671E-06		2.99142E-06	2.99142E-06	6.11538E-07	2.55442E-15	1.75960E-13
H2O			0	0	0	0		0	0	0	0	0
TEG			0	0	0	0		0	0	0	0	0
UCARSOL™ AP-814			0	0	0	0		0	0	0	0	0
Oxygen			0	0	0	0		0	0	0	0	0
Molar Flow			lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S			0.000190605	0.000372754	0.000280962	0.000280874		0.000190605	0.000190605	0.000259438	8.18166E-07	0.000106818
N2			5.79831E-06	365.640	352.991	353.037		5.79831E-06	5.79831E-06	0.00137429	60.2066	256.117
CO2			0.00157571	0.00395996	0.00333606	0.00333613		0.00157571	0.00157571	0.00398943	3.04929E-05	0.00196594
C1			49.0923	15216.7	13961.9	13964.0		49.0923	49.0923	559.665	809.814	9801.03
C2			984.768	1917.84	1463.92	1463.51		984.768	984.768	1357.18	3.74941	570.921
C3			163.484	607.102	380.580	380.112		163.484	163.484	160.166	0.0805325	30.1707
iC4			8.32360	48.6455	26.4559	26.3972		8.32360	8.32360	6.93712	0.000686009	0.384310
nC4			15.3569	96.6826	51.5550	51.4272		15.3569	15.3569	12.5669	0.000990536	0.541486
iC5			1.49459	12.2104	5.74407	5.72366		1.49459	1.49459	1.08263	4.84228E-06	0.00927770
nC5			1.21894	10.8352	5.17878	5.15950		1.21894	1.21894	0.852329	8.42537E-06	0.00646849
Neohexane			0	0	0	0		0	0	0	0	0
Cyclopentane			0	0	0	0		0	0	0	0	0
2,3-Dimethylbutane			0.195091	2.15963	0.992724	0.988262		0.195091	0.195091	0.124734	3.76216E-07	0.000313601
nC6			0.0720994	0.852030	0.378502	0.376608		0.0720994	0.0720994	0.0427949	4.34834E-08	4.43368E-05
Benzene			0.0555092	0.549227	0.257037	0.255874		0.0555092	0.0555092	0.0356838	1.66502E-07	8.18524E-05
Cyclohexane			0.0522920	0.596361	0.260068	0.258733		0.0522920	0.0522920	0.0301277	1.90446E-08	2.03190E-05
3,3-Dimethylpentane			0.0522376	0.697336	0.313883	0.312217		0.0522376	0.0522376	0.0302974	2.91652E-08	2.35583E-05
C7			0.00577219	0.0837161	0.0363097	0.0360930		0.00577219	0.00577219	0.00304113	7.19963E-10	7.37760E-07
Toluene			0.00951923	0.118167	0.0537209	0.0534197		0.00951923	0.00951923	0.00533725	4.34385E-09	2.33897E-06
i-Octane			0.0222208	0.326698	0.141486	0.140650		0.0222208	0.0222208	0.0120975	1.69563E-09	3.36830E-06
C8			0.000414916	0.00720163	0.00302282	0.00300145		0.000414916	0.000414916	0.000191458	5.04658E-12	7.36298E-09
Ethylbenzene			0.000231644	0.00358487	0.00156539	0.00155492		0.000231644	0.000231644	0.000111957	9.70971E-12	7.86968E-09
m-Xylene			0.000585553	0.00913071	0.00392568	0.00389895		0.000585553	0.000585553	0.000280510	1.82069E-11	1.61320E-08
C9			0.000147415	0.00350877	0.00143759	0.00142559		0.000147415	0.000147415	5.67783E-05	5.16182E-13	2.85627E-10
C10			3.66211E-05	0.00103413	0.000417712	0.000413887		3.66211E-05	3.66211E-05	1.28346E-05	2.23219E-14	1.87559E-11
H2O			0	0	0	0		0	0	0	0	0
TEG			0	0	0	0		0	0	0	0	0
UCARSOL™ AP-814			0	0	0	0		0	0	0	0	0
Oxygen			0	0	0	0		0	0	0	0	0
Mass Fraction			%	%	%	%		%	%	%	%	%
H2S			1.65625E-05	3.63604E-06	3.18956E-06	3.18869E-06		1.65625E-05	1.65625E-05	1.52057E-05	1.88476E-07	1.98975E-06
N2			4.14143E-07	2.93167	3.29383	3.29440		4.14143E-07	4.14143E-07	6.62069E-05	11.4002	3.92147
CO2			0.000176810	4.98807E-05	4.89048E-05	4.89078E-05		0.000176810	0.000176810	0.000301938	9.07085E-06	4.72891E-05
C1			2.00801	69.8692	74.6083	74.6227		2.00801	2.00801	15.4404	87.8131	85.9383
C2			75.4981	16.5055	14.6626	14.6590		75.4981	75.4981	70.1807	0.762054	9.38295
C3			18.3804	7.66218	5.59001	5.58337		18.3804	18.3804	12.1458	0.0240032	0.727152
iC4			1.23349	0.809246	0.512197	0.511080		1.23349	1.23349	0.693397	0.000269510	0.0122087
nC4			2.27577	1.60837	0.998125	0.995692		2.27577	2.27577	1.25612	0.000389148	0.0172018
iC5			0.274938	0.252148	0.138045	0.137560		0.274938	0.274938	0.134329	2.36147E-06	0.000365859
nC5			0.224230	0.223749	0.124460	0.124001		0.224230	0.224230	0.105754	4.10885E-06	0.000255080
Neohexane			0	0	0	0		0	0	0	0	0
Cyclopentane			0	0	0	0		0	0	0	0	0
2,3-Dimethylbutane			0.0428649	0.0532668	0.0284960	0.0283691		0.0428649	0.0428649	0.0184854	2.19140E-07	1.47708E-05
nC6			0.0158415	0.0210152	0.0108648	0.0108109		0.0158415	0.0158415	0.00634215	2.53285E-08	2.08829E-06
Benzene			0.0110551	0.0122790	0.00668783	0.00665783		0.0110551	0.0110551	0.00479345	8.79104E-08	3.49456E-06
Cyclohexane			0.0112207	0.0143651	0.00729057	0.00725344		0.0112207	0.0112207	0.00436044	1.08337E-08	9.34651E-07
3,3-Dimethylpentane			0.0133457	0.0199992	0.0104765	0.0104213		0.0133457	0.0133457	0.00522087	1.97535E-08	1.29022E-06
C7			0.00147469	0.00240094	0.00121191	0.00120473		0.00147469	0.00147469	0.000524049	4.87629E-10	4.04051E-08
Toluene			0.00223627	0.00311625	0.00164875	0.00163958		0.00223627	0.00223627	0.000845705	2.70532E-09	1.17790E-07
i-Octane			0.00647168	0.0106811	0.00538343	0.00535186		0.00647168	0.00647168	0.00237647	1.30921E-09	2.10295E-07
C8			0.000120842	0.000235451	0.000115016	0.000114208		0.000120842	0.000120842	3.76104E-05	3.89650E-12	4.59698E-10
Ethylbenzene			6.27024E-05	0.000108931	5.53575E-05	5.49894E-05		6.27024E-05	6.27024E-05	2.04406E-05	6.96771E-12	4.56649E-10
m-Xylene			0.000158500	0.000277448	0.000138825	0.000137886		0.000158500	0.000158500	5.12142E-05	1.30653E-11	9.36083E-10
C9			4.82056E-05	0.000128803	6.14159E-05	6.09057E-05		4.82056E-05	4.82056E-05	1.25233E-05	4.47487E-13	2.00225E-11
C10			1.32851E-05	4.21132E-05	1.97969E-05	1.96164E-05		1.32851E-05	1.32851E-05	3.14045E-06	2.14676E-14	1.45858E-12
H2O			0	0	0	0		0	0	0	0	0
TEG			0	0	0	0		0	0	0	0	0
UCARSOL™ AP-814			0	0	0	0		0	0	0	0	0

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Oxygen			0	0	0	0		0	0	0	0	0
Mass Flow			lb/h	lb/h	lb/h	lb/h		lb/h	lb/h	lb/h	lb/h	lb/h
H2S			0.00649598	0.0127038	0.00957543	0.00957243		0.00649598	0.00649598	0.00884188	2.78838E-05	0.00364045
N2			0.000162430	10242.8	9888.47	9889.78		0.000162430	0.000162430	0.0384984	1686.59	7174.72
CO2			0.0693464	0.174276	0.146818	0.146821		0.0693464	0.0693464	0.175573	0.00134198	0.0865200
C1			787.561	244113	223983	224017		787.561	787.561	8978.40	12991.4	157233
C2			29611.0	57667.7	44018.8	44006.4		29611.0	29611.0	40809.1	112.741	17167.0
C3			7208.95	26770.6	16781.9	16761.3		7208.95	7208.95	7062.64	3.55113	1330.40
iC4			483.786	2827.39	1537.68	1534.26		483.786	483.786	403.201	0.0398723	22.3369
nC4			892.577	5619.40	2996.49	2989.06		892.577	892.577	730.416	0.0575721	31.4724
iC5			107.833	880.967	414.427	412.955		107.833	107.833	78.1105	0.000349365	0.669374
nC5			87.9451	781.746	373.643	372.251		87.9451	87.9451	61.4945	0.000607880	0.466693
Neohexane			0	0	0	0		0	0	0	0	0
Cyclopentane			0	0	0	0		0	0	0	0	0
2,3-Dimethylbutane			16.8120	186.107	85.5484	85.1639		16.8120	16.8120	10.7490	3.24205E-05	0.0270247
nC6			6.21319	73.4240	32.6176	32.4543		6.21319	6.21319	3.68787	3.74719E-06	0.00382074
Benzene			4.33592	42.9012	20.0777	19.9868		4.33592	4.33592	2.78732	1.30058E-05	0.00639364
Cyclohexane			4.40087	50.1894	21.8872	21.7748		4.40087	4.40087	2.53553	1.60278E-06	0.00171003
3,3-Dimethylpentane			5.23431	69.8744	31.4517	31.2847		5.23431	5.23431	3.03586	2.92241E-06	0.00236059
C7			0.578385	8.38852	3.63831	3.61659		0.578385	0.578385	0.304727	7.21417E-08	7.39250E-05
Toluene			0.877087	10.8877	4.94975	4.92201		0.877087	0.877087	0.491766	4.00235E-07	0.000215509
i-Octane			2.53825	37.3183	16.1617	16.0663		2.53825	2.53825	1.38188	1.93690E-07	0.000384756
C8			0.0473953	0.822632	0.345292	0.342851		0.0473953	0.0473953	0.0218700	5.76463E-10	8.41062E-07
Ethylbenzene			0.0245924	0.380588	0.166190	0.165078		0.0245924	0.0245924	0.0118859	1.03083E-09	8.35484E-07
m-Xylene			0.0621652	0.969362	0.416769	0.413933		0.0621652	0.0621652	0.0297803	1.93293E-09	1.71266E-06
C9			0.0189067	0.450018	0.184378	0.182839		0.0189067	0.0189067	0.00728211	6.62030E-11	3.66331E-08
C10			0.00521052	0.147137	0.0594328	0.0588885		0.00521052	0.00521052	0.00182613	3.17600E-12	2.66862E-09
H2O			0	0	0	0		0	0	0	0	0
TEG			0	0	0	0		0	0	0	0	0
UCARSOL™ AP-814			0	0	0	0		0	0	0	0	0
Oxygen			0	0	0	0		0	0	0	0	0

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Property	Units											
Temperature	°F		41.0666	-1.45908	-25	-25.0615		41.0666	41.0666	11.7002	-170.761	-118.462
Pressure	psia		217.787	899.696	897.696	896.696		217.787	217.787	215.787	214.696	214.696
Mole Fraction Vapor	%		100	100	100	100		100	100	100	100	100
Mole Fraction Light Liquid	%		0	0	0	0		0	0	0	0	0
Mole Fraction Heavy Liquid	%		0	0	0	0		0	0	0	0	0
Phase Mole Fraction	%		21.3392	83.2508	74.0050	100		21.3392	100	100	19.9146	89.8460
Molecular Weight	lb/lbmol		32.0378	19.1119	18.4737	18.4718		32.0378	32.0378	27.7064	16.9301	17.1645
Mass Density	lb/ft^3		1.60383	5.07135	5.48582	5.47751		1.60383	1.60383	1.41190	1.48953	1.17690
Molar Flow	lbmol/h		1224.21	18281.0	16250.8	16251.8		1224.21	1224.21	2098.74	873.852	10659.2
Mass Flow	lb/h		39220.9	349385	300212	300200		39220.9	39220.9	58148.6	14794.4	182960
Vapor Volumetric Flow	ft^3/h		24454.5	68894.0	54725.1	54805.9		24454.5	24454.5	41184.7	9932.24	155459
Liquid Volumetric Flow	gpm		3048.88	8589.38	6822.87	6832.95		3048.88	3048.88	5134.71	1238.31	19381.9
Std Vapor Volumetric Flow	MMSCFD		11.1496	166.497	148.006	148.015		11.1496	11.1496	19.1145	7.95871	97.0797
Std Liquid Volumetric Flow	sgpm		205.322	2117.82	1849.69	1849.72		205.322	205.322	321.118	91.4349	1167.75
Compressibility			0.809587	0.689521	0.648066	0.648349		0.809587	0.809587	0.837098	0.787059	0.855129
Specific Gravity			1.10618	0.659884	0.637850	0.637782		1.10618	1.10618	0.956631	0.584552	0.592647
API Gravity												
Enthalpy	Btu/h		-4.72396E+07	-6.25748E+08	-5.54803E+08	-5.54810E+08		-4.72396E+07	-4.72396E+07	-7.78834E+07	-2.81414E+07?	##########
Mass Enthalpy	Btu/lb		-1204.45	-1791.00	-1848.04	-1848.14		-1204.45	-1204.45	-1339.39	-1902.16?	-1948.98?
Mass Cp	Btu/(lb*°F)		0.468656	0.793561	0.893999	0.893234		0.468656	0.468656	0.466529	0.608239?	0.554627?
Ideal Gas CpCv Ratio			1.18567	1.28863	1.30088	1.30091		1.18567	1.18567	1.21843	1.33652	1.32652
Dynamic Viscosity	cP		0.00929172	0.0123342	0.0123371	0.0123292		0.00929172	0.00929172	0.00911971	0.00715463	0.00785421
Kinematic Viscosity	cSt		0.361674	0.151834	0.140395	0.140518		0.361674	0.361674	0.403233	0.299858	0.416621
Thermal Conductivity	Btu/(h*ft*°F)		0.0117809	0.0204882	0.0205899	0.0205752		0.0117809	0.0117809	0.0122953	0.0112230?	0.0125717?
Surface Tension	lbf/ft											
Net Ideal Gas Heating Value	Btu/ft^3		1716.03	1033.59	998.970	998.870		1716.03	1716.03	1498.08	849.922	929.721
Net Liquid Heating Value	Btu/lb		20175.4	20480.6	20486.5	20486.6		20175.4	20175.4	20389.1	19049.6	20539.4
Gross Ideal Gas Heating Value	Btu/ft^3		1873.80	1142.29	1105.15	1105.04		1873.80	1873.80	1640.37	943.816	1030.88
Gross Liquid Heating Value	Btu/lb		22045.9	22639.4	22667.9	22668.1		22045.9	22045.9	22339.4	21154.2	22776.2

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Mole Fraction		%	%	%	%		%	%			%	%
H2S		1.14998E-05	1.03957E-05	4.62050E-06	4.58517E-06		4.58756E-06	1.03957E-05			2.13474E-06	8.15339E-06
N2		1.15875E-07	1.88207E-08	0.373431	0.462206		0.461472	1.88207E-08			0.999208	0.132809
CO2		5.50427E-05	3.50573E-05	2.27726E-05	2.56028E-05		2.56064E-05	3.50573E-05			2.47645E-05	3.89683E-05
C1		1.23073	0.476723	40.5378	48.1014		48.0730	0.476723			84.2445	32.5993
C2		57.6946	51.5238	21.3086	21.6817		21.6929	51.5238			11.1378	41.2935
C3		25.1606	28.3634	18.4102	15.8305		15.8417	28.3634			2.91820	20.5296
iC4		3.05052	3.69362	3.21027	2.45718		2.45867	3.69362			0.202796	1.56772
nC4		7.14739	8.74604	8.10374	6.01201		6.01537	8.74604			0.395100	3.07146
iC5		1.66242	2.08028	2.22042	1.54395		1.54460	2.08028			0.0439761	0.346074
nC5		1.71799	2.15704	2.35199	1.61454		1.61518	2.15704			0.0396414	0.312120

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Neohexane		0	0	0	0		0	0			0	0
Cyclopentane		0	0	0	0		0	0			0	0
2,3-Dimethylbutane		0.606674	0.766930	0.882266	0.588909		0.589097	0.766930			0.00759305	0.0598610
nC6		0.344440	0.436283	0.512131	0.338274		0.338371	0.436283			0.00289357	0.0228181
Benzene		0.182554	0.230848	0.268306	0.177995		0.178049	0.230848			0.00196594	0.0154987
Cyclohexane		0.287025	0.363730	0.430064	0.282992		0.283069	0.363730			0.00198791	0.0156771
3,3-Dimethylpentane		0.386572	0.490285	0.582594	0.382098		0.382198	0.490285			0.00239884	0.0189178
C7		0.0761610	0.0966942	0.116363	0.0758059		0.0758239	0.0966942			0.000277311	0.00218711
Toluene		0.0958429	0.121632	0.146024	0.0952159		0.0952389	0.121632			0.000410437	0.00323695
i-Octane		0.273060	0.346644	0.416432	0.271562		0.271628	0.346644			0.00108065	0.00852290
C8		0.0165877	0.0210785	0.0256664	0.0166107		0.0166142	0.0210785			2.30608E-05	0.000181882
Ethylbenzene		0.00714821	0.00908225	0.0110460	0.00715259		0.00715410	0.00908225			1.19468E-05	9.42249E-05
m-Xylene		0.0201217	0.0255674	0.0311216	0.0201436		0.0201478	0.0255674			2.99566E-05	0.000236269
C9		0.0246189	0.0312944	0.0383012	0.0247147		0.0247195	0.0312944			1.09531E-05	8.63881E-05
C10		0.0149029	0.0189450	0.0232164	0.0149697		0.0149726	0.0189450			3.17999E-06	2.50809E-05
H2O		0	0	0	0		0	0			0	0
TEG		0	0	0	0		0	0			0	0
UCARSOL™ AP-814		0	0	0	0		0	0			0	0
Oxygen		0	0	0	0		0	0			0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h			lbmol/h	lbmol/h
H2S		0.000659730	0.000469125	0.000169940	0.000261733		0.000261821	0.000469125			7.50178E-05	9.82201E-05
N2		6.64763E-06	8.49316E-07	13.7347	26.3839		26.3370	8.49316E-07			35.1136	1.59989
CO2		0.00315774	0.00158202	0.000837570	0.00146147		0.00146140	0.00158202			0.000870261	0.000469433
C1		70.6053	21.5130	1490.97	2745.75		2743.61	21.5130			2960.47	392.709
C2		3309.87	2325.10	783.723	1237.64		1238.06	2325.10			391.399	497.443
C3		1443.43	1279.95	677.122	903.645		904.113	1279.95			102.550	247.311
iC4		175.005	166.681	118.073	140.262		140.321	166.681			7.12655	18.8856
nC4		410.037	394.680	298.053	343.180		343.308	394.680			13.8844	37.0004
iC5		95.3708	93.8762	81.6663	88.1327		88.1531	93.8762			1.54538	4.16899
nC5		98.5592	97.3403	86.5056	92.1620		92.1813	97.3403			1.39306	3.75996
Neohexane		0	0	0	0		0	0			0	0
Cyclopentane		0	0	0	0		0	0			0	0
2,3-Dimethylbutane		34.8042	34.6091	32.4495	33.6164		33.6208	34.6091			0.266830	0.721118
nC6		19.7601	19.6880	18.8360	19.3095		19.3114	19.6880			0.101684	0.274879
Benzene		10.4729	10.4174	9.86820	10.1604		10.1616	10.4174			0.0690858	0.186706
Cyclohexane		16.4663	16.4140	15.8176	16.1539		16.1552	16.4140			0.0698578	0.188854
3,3-Dimethylpentane		22.1772	22.1250	21.4276	21.8111		21.8127	22.1250			0.0842984	0.227894
C7		4.36927	4.36350	4.27978	4.32719		4.32740	4.36350			0.00974511	0.0263471
Toluene		5.49840	5.48888	5.37071	5.43516		5.43546	5.48888			0.0144233	0.0389941
i-Octane		15.6651	15.6429	15.3162	15.5014		15.5023	15.6429			0.0379756	0.102671
C8		0.951617	0.951202	0.944001	0.948179		0.948201	0.951202			0.000810390	0.00219105
Ethylbenzene		0.410084	0.409853	0.406268	0.408287		0.408298	0.409853			0.000419828	0.00113508
m-Xylene		1.15436	1.15377	1.14464	1.14985		1.14987	1.15377			0.00105272	0.00284622
C9		1.41236	1.41221	1.40870	1.41078		1.41079	1.41221			0.000384908	0.00104068
C10		0.854964	0.854927	0.853893	0.854509		0.854513	0.854927			0.000111749	0.000302137
H2O		0	0	0	0		0	0			0	0
TEG		0	0	0	0		0	0			0	0
UCARSOL™ AP-814		0	0	0	0		0	0			0	0
Oxygen		0	0	0	0		0	0			0	0
Mass Fraction		%	%	%	%		%	%			%	%
H2S		1.00044E-05	8.61799E-06	4.59793E-06	5.09320E-06		5.09456E-06	8.61799E-06			3.85857E-06	9.25060E-06
N2		8.28607E-08	1.28245E-08	0.305449	0.422014		0.421235	1.28245E-08			1.48454	0.123855
CO2		6.18356E-05	3.75289E-05	2.92633E-05	3.67248E-05		3.67205E-05	3.75289E-05			5.78026E-05	5.70924E-05
C1		0.503993	0.186028	18.9886	25.1509		25.1296	0.186028			71.6776	17.4101
C2		44.2840	37.6850	18.7084	21.2489		21.2545	37.6850			17.7619	41.3353
C3		28.3210	30.4225	23.7038	22.7518		22.7620	30.4225			6.82467	30.1368
iC4		4.52592	5.22198	5.44811	4.65484		4.65646	5.22198			0.625134	3.03342
nC4		10.6043	12.3650	13.7528	11.3890		11.3925	12.3650			1.21792	5.94302
iC5		3.06169	3.65083	4.67764	3.63068		3.63127	3.65083			0.168274	0.831226
nC5		3.16404	3.78555	4.95482	3.79667		3.79720	3.78555			0.151687	0.749672
Neohexane		0	0	0	0		0	0			0	0
Cyclopentane		0	0	0	0		0	0			0	0
2,3-Dimethylbutane		1.33454	1.60761	2.21996	1.65408		1.65418	1.60761			0.0347032	0.171731
nC6		0.757685	0.914518	1.28863	0.950117		0.950144	0.914518			0.0132247	0.0654611
Benzene		0.364000	0.438616	0.611942	0.453158		0.453178	0.438616			0.00814436	0.0403027
Cyclohexane		0.616615	0.744601	1.05682	0.776252		0.776262	0.744601			0.00887298	0.0439227
3,3-Dimethylpentane		0.988778	1.19499	1.70453	1.24789		1.24790	1.19499			0.0127481	0.0631057
C7		0.194805	0.235677	0.340450	0.247573		0.247569	0.235677			0.00147372	0.00729572
Toluene		0.225420	0.272603	0.392851	0.285940		0.285936	0.272603			0.00200566	0.00992883
i-Octane		0.796205	0.963162	1.38893	1.01104		1.01103	0.963162			0.00654682	0.0324103
C8		0.0483674	0.0585672	0.0856055	0.0618425		0.0618396	0.0585672			0.000139708	0.000691648
Ethylbenzene		0.0193718	0.0234540	0.0342412	0.0247497		0.0247486	0.0234540			6.72674E-05	0.000333018
m-Xylene		0.0545303	0.0660250	0.0964731	0.0697017		0.0696985	0.0660250			0.000168673	0.000835043
C9		0.0806002	0.0976296	0.143433	0.103313		0.103307	0.0976296			7.45046E-05	0.000368850
C10		0.0541268	0.0655670	0.0964512	0.0694205		0.0694160	0.0655670			2.39964E-05	0.000118799
H2O		0	0	0	0		0	0			0	0
TEG		0	0	0	0		0	0			0	0
UCARSOL™ AP-814		0	0	0	0		0	0			0	0
Oxygen		0	0	0	0		0	0			0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h		lb/h	lb/h			lb/h	lb/h
H2S		0.0224842	0.0159882	0.00579172	0.00892008		0.00892307	0.0159882			0.00255667	0.00334743
N2		0.000186223	2.37922E-05	384.755	739.102		737.790	2.37922E-05			983.651	44.8183
CO2		0.138970	0.0696240	0.0368611	0.0643186		0.0643156	0.0696240			0.0382997	0.0206595
C1		1132.68	345.121	23918.8	44048.6		44014.3	345.121			47493.2	6300.02

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
C2		99524.6	69913.6	23565.8	37214.8		37227.2	69913.6			11769.0	14957.6
C3		63649.2	56440.2	29858.1	39846.8		39867.4	56440.2			4521.99	10905.3
iC4		10171.6	9687.86	6862.63	8152.34		8155.76	9687.86			414.211	1097.67
nC4		23832.3	22939.7	17323.5	19946.4		19953.8	22939.7			806.990	2150.54
iC5		6880.89	6773.06	5892.13	6358.67		6360.14	6773.06			111.498	300.788
nC5		7110.93	7022.98	6241.27	6649.38		6650.77	7022.98			100.507	271.277
Neohexane		0	0	0	0		0	0			0	0
Cyclopentane		0	0	0	0		0	0			0	0
2,3-Dimethylbutane		2999.26	2982.45	2796.34	2896.90		2897.29	2982.45			22.9942	62.1426
nC6		1702.84	1696.62	1623.20	1664.01		1664.17	1696.62			8.76265	23.6878
Benzene		818.060	813.724	770.823	793.647		793.738	813.724			5.39642	14.5840
Cyclohexane		1385.79	1381.39	1331.20	1359.50		1359.62	1381.39			5.87919	15.8939
3,3-Dimethylpentane		2222.20	2216.96	2147.09	2185.51		2185.68	2216.96			8.44687	22.8355
C7		437.809	437.231	428.842	433.593		433.614	437.231			0.976478	2.64003
Toluene		506.614	505.736	494.849	500.787		500.814	505.736			1.32894	3.59285
i-Octane		1789.41	1786.87	1749.55	1770.71		1770.80	1786.87			4.33789	11.7280
C8		108.702	108.654	107.832	108.309		108.312	108.654			0.0925697	0.250280
Ethylbenzene		43.5366	43.5120	43.1314	43.3458		43.3469	43.5120			0.0445711	0.120506
m-Xylene		122.552	122.490	121.521	122.074		122.076	122.490			0.111762	0.302169
C9		181.142	181.123	180.673	180.939		180.941	181.123			0.0493664	0.133472
C10		121.646	121.640	121.493	121.581		121.582	121.640			0.0158999	0.0429886
H2O		0	0	0	0		0	0			0	0
TEG		0	0	0	0		0	0			0	0
UCARSOL™ AP-814		0	0	0	0		0	0			0	0
Oxygen		0	0	0	0		0	0			0	0

Process Streams		11	12	13	14	15	16	17	18	19	20	21
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	DTWR-102	Bottoms	MIX-100	Chiller	Cold Sep	Cold Sep	Trim Reboiler	VSSL-100	DTWR-102	VLVE-101	TRBN-100
	To Block:	Bottoms	Trim Reboiler	Chiller	Cold Sep	SPLT-101	SPLT-102	VSSL-100	DTWR-102	DTWR-100	DTWR-100	DTWR-100
Property	Units											
Temperature	°F	27.5196	41.0666	-1.45908	-25		-25.0615	41.0666			-170.761	-118.462
Pressure	psia	217.787	217.787	899.696	897.696		896.696	217.787			214.696	214.696
Mole Fraction Vapor	%	0	0	0	0		0	0			0	0
Mole Fraction Light Liquid	%	100	100	100	100		100	100			100	100
Mole Fraction Heavy Liquid	%	0	0	0	0		0	0			0	0
Phase Mole Fraction	%	100	78.6608	16.7492	25.9950		100	78.6608			80.0854	10.1540
Molecular Weight	lb/lbmol	39.1749	41.1111	34.2481	30.6814		30.6893	41.1111			18.8551	30.0386
Mass Density	lb/ft^3	31.2173	31.4616	29.6728	28.3668		28.3762	31.4616			25.0463	32.7782
Molar Flow	lbmol/h	5736.88	4512.68	3677.97	5708.25		5707.18	4512.68			3514.14	1204.65
Mass Flow	lb/h	224742	185521	125964	175137		175149	185521			66259.5	36186.1
Vapor Volumetric Flow	ft^3/h	7199.26	5896.74	4245.08	6174.01		6172.39	5896.74			2645.48	1103.97
Liquid Volumetric Flow	gpm	897.570	735.178	529.256	769.747		769.545	735.178			329.826	137.637
Std Vapor Volumetric Flow	MMSCFD	52.2493	41.0997	33.4975	51.9885		51.9788	41.0997			32.0054	10.9715
Std Liquid Volumetric Flow	sgpm	1014.06	808.734	566.102	834.224		834.193	808.734			407.991	182.549
Compressibility		0.0522736	0.0529586	0.211176	0.208147		0.207929	0.0529586			0.0521296	0.0537322
Specific Gravity		0.500529	0.504445	0.475765	0.454824		0.454975	0.504445			0.401584	0.525555
API Gravity		170.637	159.307	219.908?	318.489?		318.316?	159.307			3185.17?	526.475?
Enthalpy	Btu/h	-2.81972E+08	-2.27068E+08	-1.72925E+08	-2.56221E+08		-2.56214E+08	-2.27068E+08			-1.35482E+08?	##########
Mass Enthalpy	Btu/lb	-1254.65	-1223.95	-1372.82	-1462.98		-1462.84	-1223.95			-2044.72?	-1527.92?
Mass Cp	Btu/(lb*°F)	0.666373	0.664327	0.674395	0.703142		0.702869	0.664327			0.857891?	0.600111?
Ideal Gas CpCv Ratio		1.15473	1.14403	1.17779	1.20231		1.20229	1.14403			1.31535	1.23730
Dynamic Viscosity	cP	0.107221	0.108085	0.0967436	0.0884088		0.0884881	0.108085			0.0704166	0.145184
Kinematic Viscosity	cSt	0.214418	0.214468	0.203536	0.194565		0.194675	0.214468			0.175513	0.276512
Thermal Conductivity	Btu/(h*ft*°F)	0.0584665?	0.0572946?	0.0643863?	0.0659594?		0.0659693?	0.0572946?			0.0718620?	0.0799389?
Surface Tension	lbf/ft	0.000506884?	0.000502067?	0.000236809?	0.000195284?		0.000195889?	0.000502067?			0.000448870?	##########
Net Ideal Gas Heating Value	Btu/ft^3	2068.28	2163.85	1811.80	1633.55		1633.96	2163.85			1035.91	1610.73
Net Liquid Heating Value	Btu/lb	19881.5	19819.3	19951.1	20089.7		20089.5	19819.3			20807.5	20219.9
Gross Ideal Gas Heating Value	Btu/ft^3	2251.05	2353.38	1976.11	1785.29		1785.72	2353.38			1145.13	1761.18
Gross Liquid Heating Value	Btu/lb	21652.9	21569.8	21772.3	21966.9		21966.6	21569.8			23006.1	22121.6

Process Streams	22	23	24	25	26	27	28	29	30	31	32	33	34
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Mole Fraction	%	%	%	%	%	%	%	%	%	%	%	%	%
H2S	##########	##########	1.72826E-06	4.21692E-07	##########	##########	##########	1.03957E-05	4.58756E-06	2.47140E-06	1.03957E-05	1.03957E-05	##########
N2	2.17229	2.17229	2.17229	2.17452	2.17452	2.17452	2.17452	1.88207E-08	0.461472	1.72765	1.88207E-08	1.88207E-08	2.17452
CO2	##########	##########	2.05277E-05	1.84308E-05	##########	##########	##########	3.50573E-05	2.56064E-05	2.18477E-05	3.50573E-05	3.50573E-05	##########
C1	85.9228	85.9228	85.9228	95.6426	95.6426	95.6426	95.6426	0.476723	48.0730	76.0856	0.476723	0.476723	95.6426
C2	9.00521	9.00521	9.00521	2.15785	2.15785	2.15785	2.15785	51.5238	21.6929	12.3028	51.5238	51.5238	2.15785
C3	2.33889	2.33889	2.33889	0.0244987	0.0244987	0.0244987	0.0244987	28.3634	15.8417	5.84828	28.3634	28.3634	0.0244987
iC4	0.162426	0.162426	0.162426	0.000212699	##########	##########	##########	3.69362	2.45867	0.759224	3.69362	3.69362	##########
nC4	0.316440	0.316440	0.316440	0.000315050	##########	##########	##########	8.74604	6.01537	1.79760	8.74604	8.74604	##########
iC5	0.0352186	0.0352186	0.0352186	2.86675E-06	##########	##########	##########	2.08028	1.54460	0.427509	2.08028	2.08028	##########
nC5	0.0317472	0.0317472	0.0317472	2.80925E-06	##########	##########	##########	2.15704	1.61518	0.443284	2.15704	2.15704	##########
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0.00608093	0.00608093	0.00608093	1.24864E-07	##########	##########	##########	0.766930	0.589097	0.157608	0.766930	0.766930	##########
nC6	0.00231732	0.00231732	0.00231732	1.50830E-08	##########	##########	##########	0.436283	0.338371	0.0896582	0.436283	0.436283	##########
Benzene	0.00157443	0.00157443	0.00157443	4.37442E-08	##########	##########	##########	0.230848	0.178049	0.0474403	0.230848	0.230848	##########
Cyclohexane	0.00159202	0.00159202	0.00159202	5.77791E-09	##########	##########	##########	0.363730	0.283069	0.0747482	0.363730	0.363730	##########
3,3-Dimethylpentane	0.00192112	0.00192112	0.00192112	8.66818E-09	##########	##########	##########	0.490285	0.382198	0.100756	0.490285	0.490285	##########
C7	##########	##########	0.000222086	2.26511E-10	##########	##########	##########	0.0966942	0.0758239	0.0198711	0.0966942	0.0966942	##########
Toluene	##########	##########	0.000328700	1.05199E-09	##########	##########	##########	0.121632	0.0952389	0.0249960	0.121632	0.121632	##########
i-Octane	##########	##########	0.000865443	8.15362E-10	##########	##########	##########	0.346644	0.271628	0.0712370	0.346644	0.346644	##########
C8	##########	##########	1.84684E-05	1.77858E-12	##########	##########	##########	0.0210785	0.0166142	0.00433172	0.0210785	0.0210785	##########
Ethylbenzene	##########	##########	9.56766E-06	2.61355E-12	##########	##########	##########	0.00908225	0.00715410	0.00186644	0.00908225	0.00908225	##########
m-Xylene	##########	##########	2.39909E-05	5.13048E-12	##########	##########	##########	0.0255674	0.0201478	0.00525421	0.0255674	0.0255674	##########
C9	##########	##########	8.77185E-06	9.93391E-14	##########	##########	##########	0.0312944	0.0247195	0.00643113	0.0312944	0.0312944	##########
C10	##########	##########	2.54671E-06	0	0	0	0	0.0189450	0.0149726	0.00389329	0.0189450	0.0189450	0
H2O	0	0	0	0	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	##########	##########	7.58360E-05	7.35697E-05	##########	##########	##########	##########	##########	##########	##########	##########	##########
N2	95.3201	257.717	95.3201	379.375	379.375	379.375	376.987	8.49316E-07	26.3370	182.100	8.49316E-07	8.49316E-07	376.987
CO2	##########	0.00243537	0.000900754	0.00321551	0.00321551	0.00321551	0.00319527	0.00158202	0.00146140	0.00230281	0.00158202	0.00158202	0.00319527
C1	3770.29	10193.7	3770.29	16686.1	16686.1	16686.1	16581.1	21.5130	2743.61	8019.66	21.5130	21.5130	16581.1
C2	395.148	1068.36	395.148	376.466	376.466	376.466	374.097	2325.10	1238.06	1296.75	2325.10	2325.10	374.097
C3	102.630	277.482	102.630	4.27412	4.27412	4.27412	4.24722	1279.95	904.113	616.428	1279.95	1279.95	4.24722
iC4	7.12723	19.2699	7.12723	0.0371082	0.0371082	0.0371082	0.0368747	166.681	140.321	80.0247	166.681	166.681	0.0368747
nC4	13.8854	37.5419	13.8854	0.0549647	0.0549647	0.0549647	0.0546187	394.680	343.308	189.473	394.680	394.680	0.0546187
iC5	1.54539	4.17827	1.54539	0.000500142	##########	##########	##########	93.8762	88.1531	45.0608	93.8762	93.8762	##########
nC5	1.39306	3.76643	1.39306	0.000490110	##########	##########	##########	97.3403	92.1813	46.7236	97.3403	97.3403	##########
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0.266831	0.721432	0.266831	2.17842E-05	##########	##########	##########	34.6091	33.6208	16.6124	34.6091	34.6091	##########
nC6	0.101684	0.274924	0.101684	2.63143E-06	##########	##########	##########	19.6880	19.3114	9.45026	19.6880	19.6880	##########
Benzene	0.0690860	0.186788	0.0690860	7.63176E-06	##########	##########	##########	10.4174	10.1616	5.00037	10.4174	10.4174	##########
Cyclohexane	0.0698578	0.188875	0.0698578	1.00803E-06	##########	##########	##########	16.4140	16.1552	7.87871	16.4140	16.4140	##########
3,3-Dimethylpentane	0.0842985	0.227918	0.0842985	1.51228E-06	##########	##########	##########	22.1250	21.8127	10.6200	22.1250	22.1250	##########
C7	0.00974511	0.0263479	0.00974511	3.95179E-08	##########	##########	##########	4.36350	4.32740	2.09448	4.36350	4.36350	##########
Toluene	0.0144233	0.0389964	0.0144233	1.83533E-07	##########	##########	##########	5.48888	5.43546	2.63466	5.48888	5.48888	##########
i-Octane	0.0379756	0.102675	0.0379756	1.42251E-07	##########	##########	##########	15.6429	15.5023	7.50861	15.6429	15.6429	##########
C8	##########	0.00219106	0.000810390	3.10297E-10	##########	##########	##########	0.951202	0.948201	0.456577	0.951202	0.951202	##########
Ethylbenzene	##########	0.00113509	0.000419828	4.55968E-10	##########	##########	##########	0.409853	0.408298	0.196729	0.409853	0.409853	##########
m-Xylene	0.00105272	0.00284624	0.00105272	8.95081E-10	##########	##########	##########	1.15377	1.14987	0.553811	1.15377	1.15377	##########
C9	##########	0.00104068	0.000384908	1.73310E-11	##########	##########	##########	1.41221	1.41079	0.677862	1.41221	1.41221	##########
C10	##########	##########	0.000111749	0	0	0	0	0.854927	0.854513	0.410365	0.854927	0.854927	0
H2O	0	0	0	0	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%	%	%	%	%
H2S	##########	##########	3.18869E-06	8.65107E-07	##########	##########	##########	8.61799E-06	5.09456E-06	3.89093E-06	8.61799E-06	8.61799E-06	##########
N2	3.29440	3.29440	3.29440	3.66685	3.66685	3.66685	3.66685	1.28245E-08	0.421235	2.23574	1.28245E-08	1.28245E-08	3.66685
CO2	##########	##########	4.89078E-05	4.88265E-05	##########	##########	##########	3.75289E-05	3.67205E-05	4.44172E-05	3.75289E-05	3.75289E-05	##########
C1	74.6227	74.6227	74.6227	92.3604	92.3604	92.3604	92.3604	0.186028	25.1296	56.3863	0.186028	0.186028	92.3604
C2	14.6590	14.6590	14.6590	3.90575	3.90575	3.90575	3.90575	37.6850	21.2545	17.0892	37.6850	37.6850	3.90575
C3	5.58337	5.58337	5.58337	0.0650282	0.0650282	0.0650282	0.0650282	30.4225	22.7620	11.9131	30.4225	30.4225	0.0650282
iC4	0.511080	0.511080	0.511080	0.000744170	##########	##########	##########	5.22198	4.65646	2.03851	5.22198	5.22198	##########
nC4	0.995692	0.995692	0.995692	0.00110226	0.00110226	0.00110226	0.00110226	12.3650	11.3925	4.82654	12.3650	12.3650	0.00110226
iC5	0.137560	0.137560	0.137560	1.24504E-05	##########	##########	##########	3.65083	3.63127	1.42487	3.65083	3.65083	##########
nC5	0.124001	0.124001	0.124001	1.22006E-05	##########	##########	##########	3.78555	3.79720	1.47744	3.78555	3.78555	##########
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0.0283691	0.0283691	0.0283691	6.47716E-07	##########	##########	##########	1.60761	1.65418	0.627423	1.60761	1.60761	##########
nC6	0.0108109	0.0108109	0.0108109	7.82411E-08	##########	##########	##########	0.914518	0.950144	0.356922	0.914518	0.914518	##########
Benzene	0.00665783	0.00665783	0.00665783	2.05684E-07	##########	##########	##########	0.438616	0.453178	0.171185	0.438616	0.438616	##########
Cyclohexane	0.00725344	0.00725344	0.00725344	2.92710E-08	##########	##########	##########	0.744601	0.776262	0.290606	0.744601	0.744601	##########
3,3-Dimethylpentane	0.0104213	0.0104213	0.0104213	5.22839E-08	##########	##########	##########	1.19499	1.24790	0.466387	1.19499	1.19499	##########
C7	0.00120473	0.00120473	0.00120473	1.36625E-09	##########	##########	##########	0.235677	0.247569	0.0919810	0.235677	0.235677	##########
Toluene	0.00163958	0.00163958	0.00163958	5.83466E-09	##########	##########	##########	0.272603	0.285936	0.106393	0.272603	0.272603	##########
i-Octane	0.00535186	0.00535186	0.00535186	5.60646E-09	##########	##########	##########	0.963162	1.01103	0.375907	0.963162	0.963162	##########
C8	##########	##########	0.000114208	1.22296E-11	##########	##########	##########	0.0585672	0.0618396	0.0228578	0.0585672	0.0585672	##########
Ethylbenzene	##########	##########	5.49894E-05	1.67023E-11	##########	##########	##########	0.0234540	0.0247486	0.00915370	0.0234540	0.0234540	##########

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
m-Xylene		##########	##########	0.000137886	3.27871E-11	##########	##########	##########	0.0660250	0.0696985	0.0257685	0.0660250	0.0660250	##########
C9		##########	##########	6.09057E-05	7.66935E-13	##########	##########	##########	0.0976296	0.103307	0.0381033	0.0976296	0.0976296	##########
C10		##########	##########	1.96164E-05	0	0	0	0	0.0655670	0.0694160	0.0255897	0.0655670	0.0655670	0
H2O		0	0	0	0	0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.00258456	0.00698788	0.00258456	0.00250732	0.00250732	0.00250732	0.00249154	0.0159882	0.00892307	0.00887784	0.0159882	0.0159882	0.00249154
N2		2670.24	7219.54	2670.24	10627.6	10627.6	10627.6	10560.7	2.37922E-05	737.790	5101.23	2.37922E-05	2.37922E-05	10560.7
CO2		0.0396417	0.107179	0.0396417	0.141513	0.141513	0.141513	0.140622	0.0696240	0.0643156	0.101346	0.0696240	0.0696240	0.140622
C1		60484.6	163533	60484.6	267686	267686	267686	266002	345.121	44014.3	128655	345.121	345.121	266002
C2		11881.7	32124.7	11881.7	11320.0	11320.0	11320.0	11248.7	69913.6	37227.2	38992.1	69913.6	69913.6	11248.7
C3		4525.54	12235.7	4525.54	188.470	188.470	188.470	187.284	56440.2	39867.4	27181.8	56440.2	56440.2	187.284
iC4		414.251	1120.01	414.251	2.15681	2.15681	2.15681	2.14324	9687.86	8155.76	4651.21	9687.86	9687.86	2.14324
nC4		807.047	2182.02	807.047	3.19467	3.19467	3.19467	3.17456	22939.7	19953.8	11012.6	22939.7	22939.7	3.17456
iC5		111.498	301.457	111.498	0.0360846	0.0360846	0.0360846	0.0358575	6773.06	6360.14	3251.08	6773.06	6773.06	0.0358575
nC5		100.508	271.743	100.508	0.0353608	0.0353608	0.0353608	0.0351383	7022.98	6650.77	3371.05	7022.98	7022.98	0.0351383
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		22.9942	62.1696	22.9942	0.00187726	0.00187726	0.00187726	0.00186545	2982.45	2897.29	1431.58	2982.45	2982.45	0.00186545
nC6		8.76266	23.6916	8.76266	0.000226765	##########	##########	##########	1696.62	1664.17	814.379	1696.62	1696.62	##########
Benzene		5.39643	14.5904	5.39643	0.000596131	##########	##########	##########	813.724	793.738	390.588	813.724	813.724	##########
Cyclohexane		5.87920	15.8956	5.87920	8.48356E-05	##########	##########	##########	1381.39	1359.62	663.068	1381.39	1381.39	##########
3,3-Dimethylpentane		8.44687	22.8378	8.44687	0.000151533	##########	##########	##########	2216.96	2185.68	1064.14	2216.96	2216.96	##########
C7		0.976479	2.64011	0.976479	3.95977E-06	##########	##########	##########	437.231	433.614	209.871	437.231	437.231	##########
Toluene		1.32894	3.59307	1.32894	1.69105E-05	##########	##########	##########	505.736	500.814	242.754	505.736	505.736	##########
i-Octane		4.33789	11.7284	4.33789	1.62491E-05	##########	##########	##########	1786.87	1770.80	857.697	1786.87	1786.87	##########
C8		0.0925697	0.250281	0.0925697	3.54448E-08	##########	##########	##########	108.654	108.312	52.1541	108.654	108.654	##########
Ethylbenzene		0.0445711	0.120507	0.0445711	4.84078E-08	##########	##########	##########	43.5120	43.3469	20.8858	43.5120	43.5120	##########
m-Xylene		0.111762	0.302171	0.111762	9.50262E-08	##########	##########	##########	122.490	122.076	58.7953	122.490	122.490	##########
C9		0.0493664	0.133472	0.0493664	2.22279E-09	##########	##########	##########	181.123	180.941	86.9393	181.123	181.123	##########
C10		0.0158999	0.0429886	0.0158999	0	0	0	0	121.640	121.582	58.3874	121.640	121.640	0
H2O		0	0	0	0	0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Property	Units													
Temperature	°F	-25.0615	-25.0615	-140*	-150.437	-64.6690	107.711	153.849	41.0666	-78.4665	86.5290*	98.5632	52.2305	120*
Pressure	psia	896.696	896.696	895.696	212.787	211.787	210.787	273.227	217.787	214.696*	901.696	1013.70	1014.70*	271.227
Mole Fraction Vapor	%	100	100	0	100	100	100	100	0	41.8501	99.2985	0	0	100
Mole Fraction Light Liquid	%	0	0	100	0	0	0	0	100	58.1499	0.701533	100	100	0
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	18.4718	18.4718	18.4718	16.6125	16.6125	16.6125	16.6125	41.1111	30.6893	21.6471	41.1111	41.1111	16.6125
Mass Density	lb/ft^3	5.47751	5.47751	23.0101	1.30353	0.907139	0.589585	0.705445	31.4616	3.98954	4.20610	29.2601	31.7879	0.745726
Molar Flow	lbmol/h	4387.99	11863.8	4387.99	17446.3	17446.3	17446.3	17336.5	4512.68	5707.18	10540.3	4512.68	4512.68	17336.5
Mass Flow	lb/h	81053.9	219146	81053.9	289828	289828	289828	288004	185521	175149	228167	185521	185521	288004
Vapor Volumetric Flow	ft^3/h	14797.6	40008.3	3522.54	222341	319497	491579	408259	5896.74	43902.1	54246.8	6340.41	5836.22	386206
Liquid Volumetric Flow	gpm	1844.90	4988.05	439.174	27720.5	39833.4	61287.8	50899.8	735.178	5473.51	6763.24	790.493	727.632	48150.4
Std Vapor Volumetric Flow	MMSCFD	39.9642	108.051	39.9642	158.894	158.894	158.894	157.894	41.0997	51.9788	95.9972	41.0997	41.0997	157.894
Std Liquid Volumetric Flow	sgpm	499.426	1350.30	499.426	1875.18	1875.18	1875.18	1863.38	808.734	834.193	1288.28	808.734	808.734	1863.38
Compressibility		0.648349	0.648349	0.209597	0.817167	0.914955	0.975427	0.977249	0.0529586	0.403708	0.791710	0.237745	0.238882	0.971283
Specific Gravity		0.637782	0.637782	0.368936	0.573588	0.573588	0.573588	0.573588	0.504445			0.469146	0.509677	0.573588
API Gravity				2335.51?					159.307			149.609	149.599	
Enthalpy	Btu/h	##########	##########	##########	-5.86675E+08	##########	##########	##########	##########	##########	##########	##########	##########	##########
Mass Enthalpy	Btu/lb	-1848.14	-1848.14	-2018.70?	-2024.22	-1976.52	-1884.64	-1860.81	-1223.95	-1462.84	-1599.52	-1185.65	-1216.78	-1879.71
Mass Cp	Btu/(lb**F)	0.893234	0.893234	0.934723?	0.596223?	0.533218	0.546001	0.565450	0.664327	0.531735	0.643104	0.698580	0.639828	0.555176
Ideal Gas CpCv Ratio		1.30091	1.30091	1.31661	1.33186	1.32654	1.29389	1.28182	1.14403	1.21694	1.23849	1.13112	1.14137	1.29072
Dynamic Viscosity	cP	0.0123292	0.0123292	0.0614048	0.00728339	0.00889702	0.0119753	0.0128042	0.108085			0.0859705	0.113022	0.0122483
Kinematic Viscosity	cSt	0.140518	0.140518	0.166596	0.348813	0.612280	1.26800	1.13310	0.214468			0.183423	0.221963	1.02536
Thermal Conductivity	Btu/(h*ft*°F	0.0205752	0.0205752	0.0625633?	0.0117959?	0.0145235	0.0210850	0.0233115	0.0572946?			0.0533033	0.0566904	0.0218109
Surface Tension	lbf/ft			##########					##########			##########	##########	
Net Ideal Gas Heating Value	Btu/ft^3	998.870	998.870	998.870	905.292	905.292	905.292	905.292	2163.85	1633.96	1163.93	2163.85	2163.85	905.292
Net Liquid Heating Value	Btu/lb	20486.6	20486.6	20486.6	20673.8	20673.8	20673.8	20673.8	19819.3	20089.5	20340.3	19819.3	19819.3	20673.8
Gross Ideal Gas Heating Value	Btu/ft^3	1105.04	1105.04	1105.04	1004.81	1004.81	1004.81	1004.81	2353.38	1785.72	1281.95	2353.38	2353.38	1004.81
Gross Liquid Heating Value	Btu/lb	22668.1	22668.1	22668.1	22947.2	22947.2	22947.2	22947.2	21569.8	21966.6	22409.6	21569.8	21569.8	22947.2

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Mole Fraction		%	%		%	%	%	%		%	%			%
H2S		##########	##########		4.21692E-07	##########	##########	##########		1.75185E-06	2.46588E-06			##########
N2		2.17229	2.17229		2.17452	2.17452	2.17452	2.17452		1.04821	1.73824			2.17452
CO2		##########	##########		1.84308E-05	##########	##########	##########		2.54152E-05	2.19067E-05			##########
C1		85.9228	85.9228		95.6426	95.6426	95.6426	95.6426		88.2478	76.4528			95.6426

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
C2		9.00521	9.00521		2.15785	2.15785	2.15785	2.15785		9.42260	12.2927			2.15785
C3		2.33889	2.33889		0.0244987	0.0244987	0.0244987	0.0244987		1.16785	5.78306			0.0244987
iC4		0.162426	0.162426		0.000212699	##########	##########	##########		0.0401937	0.738078			##########
nC4		0.316440	0.316440		0.000315050	##########	##########	##########		0.0661097	1.73017			##########
iC5		0.0352186	0.0352186		2.86675E-06	##########	##########	##########		0.00382974	0.396793			##########
nC5		0.0317472	0.0317472		2.80925E-06	##########	##########	##########		0.00279669	0.404404			##########
Neohexane		0	0		0	0	0	0		0	0			0
Cyclopentane		0	0		0	0	0	0		0	0			0
2,3-Dimethylbutane		0.00608093	0.00608093		1.24864E-07	##########	##########	##########		##########	0.134518			##########
nC6		0.00231732	0.00231732		1.50830E-08	##########	##########	##########		7.83507E-05	0.0726809			##########
Benzene		0.00157443	0.00157443		4.37442E-08	##########	##########	##########		7.71714E-05	0.0384826			##########
Cyclohexane		0.00159202	0.00159202		5.77791E-09	##########	##########	##########		5.18455E-05	0.0581098			##########
3,3-Dimethylpentane		0.00192112	0.00192112		8.66818E-09	##########	##########	##########		5.33952E-05	0.0748411			##########
C7		##########	##########		2.26511E-10	##########	##########	##########		3.56802E-06	0.0131374			##########
Toluene		##########	##########		1.05199E-09	##########	##########	##########		6.93512E-06	0.0161952			##########
i-Octane		##########	##########		8.15362E-10	##########	##########	##########		1.55444E-05	0.0481816			##########
C8		##########	##########		1.77858E-12	##########	##########	##########		1.23940E-07	0.00201928			##########
Ethylbenzene		##########	##########		2.61355E-12	##########	##########	##########		8.58928E-08	##########			##########
m-Xylene		##########	##########		5.13048E-12	##########	##########	##########		2.06881E-07	0.00231409			##########
C9		##########	##########		9.93391E-14	##########	##########	##########		2.01664E-08	0.00173883			##########
C10		##########	##########		0	0	0	0		3.13992E-09	##########			0
H2O		0	0		0	0	0	0		0	0			0
TEG		0	0		0	0	0	0		0	0			0
UCARSOL™ AP-814		0	0		0	0	0	0		0	0			0
Oxygen		0	0		0	0	0	0		0	0			0
Molar Flow		lbmol/h	lbmol/h		lbmol/h	lbmol/h	lbmol/h	lbmol/h		lbmol/h	lbmol/h			lbmol/h
H2S		##########	##########		7.35697E-05	##########	##########	##########		4.18422E-05	##########			##########
N2		95.3201	257.717		379.375	379.375	379.375	376.987		25.0362	181.931			376.987
CO2		##########	0.00243537		0.00321551	0.00321551	0.00321551	0.00319527		##########	0.00229283			0.00319527
C1		3770.29	10193.7		16686.1	16686.1	16686.1	16581.1		2107.76	8001.84			16581.1
C2		395.148	1068.36		376.466	376.466	376.466	374.097		225.055	1286.60			374.097
C3		102.630	277.482		4.27412	4.27412	4.27412	4.24722		27.8937	605.277			4.24722
iC4		7.12723	19.2699		0.0371082	0.0371082	0.0371082	0.0368747		0.960010	77.2500			0.0368747
nC4		13.8854	37.5419		0.0549647	0.0549647	0.0549647	0.0546187		1.57900	181.087			0.0546187
iC5		1.54539	4.17827		0.000500142	##########	##########	##########		0.0914718	41.5298			##########
nC5		1.39306	3.76643		0.000490110	##########	##########	##########		0.0667979	42.3265			##########
Neohexane		0	0		0	0	0	0		0	0			0
Cyclopentane		0	0		0	0	0	0		0	0			0
2,3-Dimethylbutane		0.266831	0.721432		2.17842E-05	##########	##########	##########		0.00742550	14.0792			##########
nC6		0.101684	0.274924		2.63143E-06	##########	##########	##########		0.00187137	7.60705			##########
Benzene		0.0690860	0.186788		7.63176E-06	##########	##########	##########		0.00184321	4.02773			##########
Cyclohexane		0.0698578	0.188875		1.00803E-06	##########	##########	##########		0.00123831	6.08199			##########
3,3-Dimethylpentane		0.0842985	0.227918		1.51228E-06	##########	##########	##########		0.00127532	7.83316			##########
C7		0.00974511	0.0263479		3.95179E-08	##########	##########	##########		8.52208E-05	1.37501			##########
Toluene		0.0144233	0.0389964		1.83533E-07	##########	##########	##########		##########	1.69505			##########
i-Octane		0.0379756	0.102675		1.42251E-07	##########	##########	##########		##########	5.04287			##########
C8		##########	0.00219106		3.10297E-10	##########	##########	##########		2.96026E-06	0.211345			##########
Ethylbenzene		##########	0.00113509		4.55968E-10	##########	##########	##########		2.05151E-06	0.0887952			##########
m-Xylene		0.00105272	0.00284624		8.95081E-10	##########	##########	##########		4.94128E-06	0.242202			##########
C9		##########	0.00104068		1.73310E-11	##########	##########	##########		4.81667E-07	0.181992			##########
C10		##########	##########		0	0	0	0		7.49957E-08	0.0641930			0
H2O		0	0		0	0	0	0		0	0			0
TEG		0	0		0	0	0	0		0	0			0
UCARSOL™ AP-814		0	0		0	0	0	0		0	0			0
Oxygen		0	0		0	0	0	0		0	0			0
Mass Fraction		%	%		%	%	%	%		%	%			%
H2S		##########	##########		8.65107E-07	##########	##########	##########		3.34178E-06	3.92061E-06			##########
N2		3.29440	3.29440		3.66685	3.66685	3.66685	3.66685		1.64356	2.27168			3.66685
CO2		##########	##########		4.88265E-05	##########	##########	##########		6.26053E-05	4.49773E-05			##########
C1		74.6227	74.6227		92.3604	92.3604	92.3604	92.3604		79.2400	57.2183			92.3604
C2		14.6590	14.6590		3.90575	3.90575	3.90575	3.90575		15.8584	17.2440			3.90575
C3		5.58337	5.58337		0.0650282	0.0650282	0.0650282	0.0650282		2.88240	11.8966			0.0650282
iC4		0.511080	0.511080		0.000744170	##########	##########	##########		0.130758	2.00131			##########
nC4		0.995692	0.995692		0.00110226	0.00110226	0.00110226	0.00110226		0.215069	4.69140			0.00110226
iC5		0.137560	0.137560		1.24504E-05	##########	##########	##########		0.0154657	1.33556			##########
nC5		0.124001	0.124001		1.22006E-05	##########	##########	##########		0.0112939	1.36118			##########
Neohexane		0	0		0	0	0	0		0	0			0
Cyclopentane		0	0		0	0	0	0		0	0			0
2,3-Dimethylbutane		0.0283691	0.0283691		6.47716E-07	##########	##########	##########		0.00149955	0.540796			##########
nC6		0.0108109	0.0108109		7.82411E-08	##########	##########	##########		##########	0.292196			##########
Benzene		0.00665783	0.00665783		2.05684E-07	##########	##########	##########		##########	0.140233			##########
Cyclohexane		0.00725344	0.00725344		2.92710E-08	##########	##########	##########		##########	0.228151			##########
3,3-Dimethylpentane		0.0104213	0.0104213		5.22839E-08	##########	##########	##########		##########	0.349854			##########
C7		0.00120473	0.00120473		1.36625E-09	##########	##########	##########		2.00112E-05	0.0614123			##########
Toluene		0.00163958	0.00163958		5.83466E-09	##########	##########	##########		3.57655E-05	0.0696142			##########
i-Octane		0.00535186	0.00535186		5.60646E-09	##########	##########	##########		9.93844E-05	0.256759			##########
C8		##########	##########		1.22296E-11	##########	##########	##########		7.92422E-07	0.0107607			##########
Ethylbenzene		##########	##########		1.67023E-11	##########	##########	##########		5.10397E-07	0.00420189			##########
m-Xylene		##########	##########		3.27871E-11	##########	##########	##########		1.22934E-06	0.0114613			##########
C9		##########	##########		7.66935E-13	##########	##########	##########		1.44768E-07	0.0104040			##########
C10		##########	##########		0	0	0	0		2.50056E-08	0.00407109			0
H2O		0	0		0	0	0	0		0	0			0
TEG		0	0		0	0	0	0		0	0			0
UCARSOL™ AP-814		0	0		0	0	0	0		0	0			0

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Oxygen		0	0		0	0	0	0		0	0			0
Mass Flow		lb/h	lb/h		lb/h	lb/h	lb/h	lb/h		lb/h	lb/h			lb/h
H2S		0.00258456	0.00698788		0.00250732	0.00250732	0.00250732	0.00249154		0.00142602	0.00879588			0.00249154
N2		2670.24	7219.54		10627.6	10627.6	10627.6	10560.7		701.348	5096.51			10560.7
CO2		0.0396417	0.107179		0.141513	0.141513	0.141513	0.140622		0.0267152	0.100906			0.140622
C1		60484.6	163533		267686	267686	267686	266002		33813.7	128369			266002
C2		11881.7	32124.7		11320.0	11320.0	11320.0	11248.7		6767.19	38686.9			11248.7
C3		4525.54	12235.7		188.470	188.470	188.470	187.284		1229.99	26690.0			187.284
iC4		414.251	1120.01		2.15681	2.15681	2.15681	2.14324		55.7979	4489.94			2.14324
nC4		807.047	2182.02		3.19467	3.19467	3.19467	3.17456		91.7751	10525.1			3.17456
iC5		111.498	301.457		0.0360846	0.0360846	0.0360846	0.0358575		6.59958	2996.33			0.0358575
nC5		100.508	271.743		0.0353608	0.0353608	0.0353608	0.0351383		4.81939	3053.80			0.0351383
Neohexane		0	0		0	0	0	0		0	0			0
Cyclopentane		0	0		0	0	0	0		0	0			0
2,3-Dimethylbutane		22.9942	62.1696		0.00187726	0.00187726	0.00187726	0.00186545		0.639895	1213.28			0.00186545
nC6		8.76266	23.6916		0.000226765	##########	##########	##########		0.161266	655.541			##########
Benzene		5.39643	14.5904		0.000596131	##########	##########	##########		0.143976	314.613			##########
Cyclohexane		5.87920	15.8956		8.48356E-05	##########	##########	##########		0.104215	511.857			##########
3,3-Dimethylpentane		8.44687	22.8378		0.000151533	##########	##########	##########		0.127790	784.897			##########
C7		0.976479	2.64011		3.95977E-06	##########	##########	##########		0.00853929	137.778			##########
Toluene		1.32894	3.59307		1.69105E-05	##########	##########	##########		0.0152620	156.179			##########
i-Octane		4.33789	11.7284		1.62491E-05	##########	##########	##########		0.0424098	576.039			##########
C8		0.0925697	0.250281		3.54448E-08	##########	##########	##########		##########	24.1417			##########
Ethylbenzene		0.0445711	0.120507		4.84078E-08	##########	##########	##########		##########	9.42695			##########
m-Xylene		0.111762	0.302171		9.50262E-08	##########	##########	##########		##########	25.7134			##########
C9		0.0493664	0.133472		2.22279E-09	##########	##########	##########		6.17763E-05	23.3414			##########
C10		0.0158999	0.0429886		0	0	0	0		1.06705E-05	9.13349			0
H2O		0	0		0	0	0	0		0	0			0
TEG		0	0		0	0	0	0		0	0			0
UCARSOL™ AP-814		0	0		0	0	0	0		0	0			0
Oxygen		0	0		0	0	0	0		0	0			0

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Property	Units													
Temperature	°F	-25.0615	-25.0615		-150.437	-64.6690	107.711	153.849		-78.4665	86.5290			120
Pressure	psia	896.696	896.696		212.787	211.787	210.787	273.227		214.696	901.696			271.227
Mole Fraction Vapor	%	100	100		100	100	100	100		100	100			100
Mole Fraction Light Liquid	%	0	0		0	0	0	0		0	0			0
Mole Fraction Heavy Liquid	%	0	0		0	0	0	0		0	0			0
Phase Mole Fraction	%	100	100		100	100	100	100		41.8501	99.2985			100
Molecular Weight	lb/lbmol	18.4718	18.4718		16.6125	16.6125	16.6125	16.6125		17.8661	21.4353			16.6125
Mass Density	lb/ft^3	5.47751	5.47751		1.30353	0.907139	0.589585	0.705445		1.06016	4.14421			0.745726
Molar Flow	lbmol/h	4387.99	11863.8		17446.3	17446.3	17446.3	17336.5		2388.46	10466.4			17336.5
Mass Flow	lb/h	81053.9	219146		289828	289828	289828	288004		42672.5	224350			288004
Vapor Volumetric Flow	ft^3/h	14797.6	40008.3		222341	319497	491579	408259		40251.1	54135.8			386206
Liquid Volumetric Flow	gpm	1844.90	4988.05		27720.5	39833.4	61287.8	50899.8		5018.32	6749.39			48150.4
Std Vapor Volumetric Flow	MMSCFD	39.9642	108.051		158.894	158.894	158.894	157.894		21.7532	95.3238			157.894
Std Liquid Volumetric Flow	sgpm	499.426	1350.30		1875.18	1875.18	1875.18	1863.38		270.533	1274.45			1863.38
Compressibility		0.648349	0.648349		0.817167	0.914955	0.975427	0.977249		0.884429	0.795671			0.971283
Specific Gravity		0.637782	0.637782		0.573588	0.573588	0.573588	0.573588		0.616871	0.740105			0.573588
API Gravity														
Enthalpy	Btu/h	##########	##########		##########	##########	##########	##########		##########	##########			##########
Mass Enthalpy	Btu/lb	-1848.14	-1848.14		-2024.22?	-1976.52	-1884.64	-1860.81		-1896.42	-1608.38			-1879.71
Mass Cp	Btu/(lb*°F)	0.893234	0.893234		0.596223?	0.533218	0.546001	0.565450		0.526015	0.643722			0.555176
Ideal Gas CpCv Ratio		1.30091	1.30091		1.33186	1.32654	1.29389	1.28182		1.31450	1.24063			1.29072
Dynamic Viscosity	cP	0.0123292	0.0123292		0.00728339	0.00889702	0.0119753	0.0128042		0.00845212	0.0128809			0.0122483
Kinematic Viscosity	cSt	0.140518	0.140518		0.348813	0.612280	1.26800	1.13310		0.497708	0.194037			1.02536
Thermal Conductivity	Btu/(h*ft*°F)	0.0205752	0.0205752		0.0117959?	0.0145235	0.0210850	0.0233115		0.0135322	0.0215994			0.0218109
Surface Tension	lbf/ft													
Net Ideal Gas Heating Value	Btu/ft^3	998.870	998.870		905.292	905.292	905.292	905.292		985.581	1153.35			905.292
Net Liquid Heating Value	Btu/lb	20486.6	20486.6		20673.8	20673.8	20673.8	20673.8		20904.9	20355.8			20673.8
Gross Ideal Gas Heating Value	Btu/ft^3	1105.04	1105.04		1004.81	1004.81	1004.81	1004.81		1091.20	1270.64			1004.81
Gross Liquid Heating Value	Btu/lb	22668.1	22668.1		22947.2	22947.2	22947.2	22947.2		23148.5	22432.7			22947.2

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Mole Fraction				%					%	%	%	%	%	
H2S				1.72826E-06					1.03957E-05	6.62841E-06	3.25246E-06	1.03957E-05	1.03957E-05	
N2				2.17229					1.88207E-08	0.0391981	0.228095	1.88207E-08	1.88207E-08	
CO2				2.05277E-05					3.50573E-05	2.57439E-05	1.34959E-05	3.50573E-05	3.50573E-05	
C1				85.9228					0.476723	19.1595	24.1003	0.476723	0.476723	
C2				9.00521					51.5238	30.5238	13.7265	51.5238	51.5238	
C3				2.33889					28.3634	26.4023	15.0806	28.3634	28.3634	
iC4				0.162426					3.69362	4.19923	3.75238	3.69362	3.69362	
nC4				0.316440					8.74604	10.2970	11.3417	8.74604	8.74604	
iC5				0.0352186					2.08028	2.65348	4.77523	2.08028	2.08028	
nC5				0.0317472					2.15704	2.77560	5.94653	2.15704	2.15704	

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Neohexane				0					0	0	0	0	0	
Cyclopentane				0					0	0	0	0	0	
2,3-Dimethylbutane				0.00608093					0.766930	1.01284	3.42584	0.766930	0.766930	
nC6				0.00231732					0.436283	0.581837	2.49271	0.436283	0.436283	
Benzene				0.00157443					0.230848	0.306133	1.31537	0.230848	0.230848	
Cyclohexane				0.00159202					0.363730	0.486754	2.42983	0.363730	0.363730	
3,3-Dimethylpentane				0.00192112					0.490285	0.657225	3.76884	0.490285	0.490285	
C7				0.000222086					0.0966942	0.130391	0.972997	0.0966942	0.0966942	
Toluene				0.000328700					0.121632	0.163777	1.27071	0.121632	0.121632	
i-Octane				0.000865443					0.346644	0.467105	3.33461	0.346644	0.346644	
C8				1.84684E-05					0.0210785	0.0285712	0.331646	0.0210785	0.0210785	
Ethylbenzene				9.56766E-06					0.00908225	0.0123028	0.145968	0.00908225	0.00908225	
m-Xylene				2.39909E-05					0.0255674	0.0346480	0.421413	0.0255674	0.0255674	
C9				8.77185E-06					0.0312944	0.0425099	0.670603	0.0312944	0.0312944	
C10				2.54671E-06					0.0189450	0.0257483	0.468155	0.0189450	0.0189450	
H2O				0					0	0	0	0	0	
TEG				0					0	0	0	0	0	
UCARSOL™ AP-814				0					0	0	0	0	0	
Oxygen				0					0	0	0	0	0	
Molar Flow				lbmol/h					lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	
H2S				7.58360E-05					##########	##########	2.40500E-06	##########	##########	
N2				95.3201					8.49316E-07	1.30088	0.168662	8.49316E-07	8.49316E-07	
CO2				0.000900754					0.00158202	##########	9.97937E-06	0.00158202	0.00158202	
C1				3770.29					21.5130	635.849	17.8207	21.5130	21.5130	
C2				395.148					2325.10	1013.00	10.1499	2325.10	2325.10	
C3				102.630					1279.95	876.219	11.1511	1279.95	1279.95	
iC4				7.12723					166.681	139.361	2.77466	166.681	166.681	
nC4				13.8854					394.680	341.729	8.38647	394.680	394.680	
iC5				1.54539					93.8762	88.0616	3.53099	93.8762	93.8762	
nC5				1.39306					97.3403	92.1145	4.39709	97.3403	97.3403	
Neohexane				0					0	0	0	0	0	
Cyclopentane				0					0	0	0	0	0	
2,3-Dimethylbutane				0.266831					34.6091	33.6134	2.53320	34.6091	34.6091	
nC6				0.101684					19.6880	19.3096	1.84321	19.6880	19.6880	
Benzene				0.0690860					10.4174	10.1597	0.972636	10.4174	10.4174	
Cyclohexane				0.0698578					16.4140	16.1540	1.79671	16.4140	16.4140	
3,3-Dimethylpentane				0.0842985					22.1250	21.8115	2.78683	22.1250	22.1250	
C7				0.00974511					4.36350	4.32732	0.719471	4.36350	4.36350	
Toluene				0.0144233					5.48888	5.43529	0.939610	5.48888	5.48888	
i-Octane				0.0379756					15.6429	15.5019	2.46574	15.6429	15.6429	
C8				0.000810390					0.951202	0.948198	0.245232	0.951202	0.951202	
Ethylbenzene				0.000419828					0.409853	0.408296	0.107934	0.409853	0.409853	
m-Xylene				0.00105272					1.15377	1.14987	0.311609	1.15377	1.15377	
C9				0.000384908					1.41221	1.41079	0.495870	1.41221	1.41221	
C10				0.000111749					0.854927	0.854513	0.346172	0.854927	0.854927	
H2O				0					0	0	0	0	0	
TEG				0					0	0	0	0	0	
UCARSOL™ AP-814				0					0	0	0	0	0	
Oxygen				0					0	0	0	0	0	
Mass Fraction				%					%	%	%	%	%	
H2S				3.18869E-06					8.61799E-06	5.65915E-06	2.14705E-06	8.61799E-06	8.61799E-06	
N2				3.29440					1.28245E-08	0.0275082	0.123765	1.28245E-08	1.28245E-08	
CO2				4.89078E-05					3.75289E-05	2.83826E-05	1.15045E-05	3.75289E-05	3.75289E-05	
C1				74.6227					0.186028	7.69991	7.48879	0.186028	0.186028	
C2				14.6590					37.6850	22.9927	7.99465	37.6850	37.6850	
C3				5.58337					30.4225	29.1654	12.8805	30.4225	30.4225	
iC4				0.511080					5.22198	6.11425	4.22443	5.22198	5.22198	
nC4				0.995692					12.3650	14.9929	12.7684	12.3650	12.3650	
iC5				0.137560					3.65083	4.79597	6.67333	3.65083	3.65083	
nC5				0.124001					3.78555	5.01669	8.31020	3.78555	3.78555	
Neohexane				0					0	0	0	0	0	
Cyclopentane				0					0	0	0	0	0	
2,3-Dimethylbutane				0.0283691					1.60761	2.18653	5.71833	1.60761	1.60761	
nC6				0.0108109					0.914518	1.25608	4.16077	0.914518	0.914518	
Benzene				0.00665783					0.438616	0.599044	1.99014	0.438616	0.438616	
Cyclohexane				0.00725344					0.744601	1.02623	3.96094	0.744601	0.744601	
3,3-Dimethylpentane				0.0104213					1.19499	1.64976	7.31481	1.19499	1.19499	
C7				0.00120473					0.235677	0.327307	1.88845	0.235677	0.235677	
Toluene				0.00163958					0.272603	0.378028	2.26780	0.272603	0.272603	
i-Octane				0.00535186					0.963162	1.33666	7.37799	0.963162	0.963162	
C8				0.000114208					0.0585672	0.0817587	0.733784	0.0585672	0.0585672	
Ethylbenzene				5.49894E-05					0.0234540	0.0327203	0.300163	0.0234540	0.0234540	
m-Xylene				0.000137886					0.0660250	0.0921489	0.866579	0.0660250	0.0660250	
C9				6.09057E-05					0.0976296	0.136583	1.66594	0.0976296	0.0976296	
C10				1.96164E-05					0.0655670	0.0917758	1.29020	0.0655670	0.0655670	
H2O				0					0	0	0	0	0	
TEG				0					0	0	0	0	0	
UCARSOL™ AP-814				0					0	0	0	0	0	
Oxygen				0					0	0	0	0	0	
Mass Flow				lb/h					lb/h	lb/h	lb/h	lb/h	lb/h	
H2S				0.00258456					0.0159882	0.00749705	8.19644E-05	0.0159882	0.0159882	
N2				2670.24					2.37922E-05	36.4420	4.72479	2.37922E-05	2.37922E-05	
CO2				0.0396417					0.0696240	0.0376004	##########	0.0696240	0.0696240	
C1				60484.6					345.121	10200.6	285.887	345.121	345.121	

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
C2				11881.7					69913.6	30460.0	305.199	69913.6	69913.6	
C3				4525.54					56440.2	38637.4	491.717	56440.2	56440.2	
iC4				414.251					9687.86	8099.96	161.269	9687.86	9687.86	
nC4				807.047					22939.7	19862.1	487.440	22939.7	22939.7	
iC5				111.498					6773.06	6353.54	254.757	6773.06	6773.06	
nC5				100.508					7022.98	6645.95	317.245	7022.98	7022.98	
Neohexane				0					0	0	0	0	0	
Cyclopentane				0					0	0	0	0	0	
2,3-Dimethylbutane				22.9942					2982.45	2896.65	218.299	2982.45	2982.45	
nC6				8.76266					1696.62	1664.01	158.839	1696.62	1696.62	
Benzene				5.39643					813.724	793.594	75.9744	813.724	813.724	
Cyclohexane				5.87920					1381.39	1359.51	151.210	1381.39	1381.39	
3,3-Dimethylpentane				8.44687					2216.96	2185.55	279.246	2216.96	2216.96	
C7				0.976479					437.231	433.606	72.0924	437.231	437.231	
Toluene				1.32894					505.736	500.799	86.5742	505.736	505.736	
i-Octane				4.33789					1786.87	1770.76	281.658	1786.87	1786.87	
C8				0.0925697					108.654	108.311	28.0125	108.654	108.654	
Ethylbenzene				0.0445711					43.5120	43.3467	11.4588	43.5120	43.5120	
m-Xylene				0.111762					122.490	122.076	33.0820	122.490	122.490	
C9				0.0493664					181.123	180.941	63.5979	181.123	181.123	
C10				0.0158999					121.640	121.582	49.2539	121.640	121.640	
H2O				0					0	0	0	0	0	
TEG				0					0	0	0	0	0	
UCARSOL™ AP-814				0					0	0	0	0	0	
Oxygen				0					0	0	0	0	0	

Process Streams		22	23	24	25	26	27	28	29	30	31	32	33	34
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	SPLT-101	SPLT-101	GSP	DTWR-100	GSP	Gas/Gas	CMPR-100	VSSL-100	VLVE-100	Gas/Product	Gas/Product	PUMP-100	FAXR-101
	To Block:	MIX-101	TRBN-100	VLVE-101	GSP	Gas/Gas	SPLT-103	FAXR-101	PUMP-100	DTWR-100	Bottoms	FAXR-100	Gas/Product	CMPR-200
Property	Units													
Temperature	°F			-140					41.0666	-78.4665	86.5290	98.5632	52.2305	
Pressure	psia			895.696					217.787	214.696	901.696	1013.70	1014.70	
Mole Fraction Vapor	%			0					0	0	0	0	0	
Mole Fraction Light Liquid	%			100					100	100	100	100	100	
Mole Fraction Heavy Liquid	%			0					0	0	0	0	0	
Phase Mole Fraction	%			100					100	58.1499	0.701533	100	100	
Molecular Weight	lb/lbmol			18.4718					41.1111	39.9180	51.6275	41.1111	41.1111	
Mass Density	lb/ft^3			23.0101					31.4616	36.2845	34.3738	29.2601	31.7879	
Molar Flow	lbmol/h			4387.99					4512.68	3318.72	73.9438	4512.68	4512.68	
Mass Flow	lb/h			81053.9					185521	132477	3817.54	185521	185521	
Vapor Volumetric Flow	ft^3/h			3522.54					5896.74	3651.05	111.059	6340.41	5836.22	
Liquid Volumetric Flow	gpm			439.174					735.178	455.196	13.8464	790.493	727.632	
Std Vapor Volumetric Flow	MMSCFD			39.9642					41.0997	30.2256	0.673452	41.0997	41.0997	
Std Liquid Volumetric Flow	sgpm			499.426					808.734	563.660	13.8301	808.734	808.734	
Compressibility				0.209597					0.0529586	0.0577365	0.231046	0.237745	0.238882	
Specific Gravity				0.368936					0.504445	0.581774	0.551139	0.469146	0.509677	
API Gravity				2335.51?					159.307	173.309	116.354	149.609	149.599	
Enthalpy	Btu/h			##########					##########	##########	##########	##########	##########	
Mass Enthalpy	Btu/lb			-2018.70?					-1223.95	-1323.17	-1078.63	-1185.65	-1216.78	
Mass Cp	Btu/(lb*°F)			0.934723?					0.664327	0.533578	0.606771	0.698580	0.639828	
Ideal Gas CpCv Ratio				1.31661					1.14403	1.17735	1.10554	1.13112	1.14137	
Dynamic Viscosity	cP			0.0614048					0.108085	0.195403	0.132613	0.0859705	0.113022	
Kinematic Viscosity	cSt			0.166596					0.214468	0.336194	0.240845	0.183423	0.221963	
Thermal Conductivity	Btu/(h*ft*°F)			0.0625633?					0.0572946?	0.0773308?	0.0593960	0.0533033	0.0566904	
Surface Tension	lbf/ft			##########					##########	##########	##########	##########	##########	
Net Ideal Gas Heating Value	Btu/ft^3			998.870					2163.85	2100.59	2661.92	2163.85	2163.85	
Net Liquid Heating Value	Btu/lb			20486.6					19819.3	19826.8	19429.0	19819.3	19819.3	
Gross Ideal Gas Heating Value	Btu/ft^3			1105.04					2353.38	2285.56	2883.28	2353.38	2353.38	
Gross Liquid Heating Value	Btu/lb			22668.1					21569.8	21585.9	21056.4	21569.8	21569.8	

Process Streams	35	36	37	38	40	128	134	228	234
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Mole Fraction	%	%	%	%	%	%	%	%	%
H2S	##########	##########	4.58756E-06	##########	##########	##########	##########	##########	##########
N2	##########	0.461472	0.461472	2.17229	2.17452	2.17452	2.17452	2.17452	2.17452
CO2	##########	##########	2.56064E-05	##########	##########	##########	##########	##########	##########
C1	0.476723	48.0730	48.0730	85.9228	95.6426	95.6426	95.6426	95.6426	95.6426
C2	51.5238	21.6929	21.6929	9.00521	2.15785	2.15785	2.15785	2.15785	2.15785
C3	28.3634	15.8417	15.8417	2.33889	0.0244987	0.0244987	0.0244987	0.0244987	0.0244987
iC4	3.69362	2.45867	2.45867	0.162426	##########	##########	##########	##########	##########
nC4	8.74604	6.01537	6.01537	0.316440	##########	##########	##########	##########	##########
iC5	2.08028	1.54460	1.54460	0.0352186	##########	##########	##########	##########	##########
nC5	2.15704	1.61518	1.61518	0.0317472	##########	##########	##########	##########	##########
Neohexane	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	0.766930	0.589097	0.589097	0.00608093	##########	##########	##########	##########	##########
nC6	0.436283	0.338371	0.338371	0.00231732	##########	##########	##########	##########	##########
Benzene	0.230848	0.178049	0.178049	0.00157443	##########	##########	##########	##########	##########
Cyclohexane	0.363730	0.283069	0.283069	0.00159202	##########	##########	##########	##########	##########
3,3-Dimethylpentane	0.490285	0.382198	0.382198	0.00192112	##########	##########	##########	##########	##########
C7	0.0966942	0.0758239	0.0758239	##########	##########	##########	##########	##########	##########
Toluene	0.121632	0.0952389	0.0952389	##########	##########	##########	##########	##########	##########
i-Octane	0.346644	0.271628	0.271628	##########	##########	##########	##########	##########	##########
C8	0.0210785	0.0166142	0.0166142	##########	##########	##########	##########	##########	##########
Ethylbenzene	0.00908225	##########	0.00715410	##########	##########	##########	##########	##########	##########
m-Xylene	0.0255674	0.0201478	0.0201478	##########	##########	##########	##########	##########	##########
C9	0.0312944	0.0247195	0.0247195	##########	##########	##########	##########	##########	##########
C10	0.0189450	0.0149726	0.0149726	##########	0	0	0	0	0
H2O	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	##########	0	##########	##########	##########	##########	##########	##########	##########
N2	##########	0	26.3370	95.3201	376.987	376.987	376.987	376.987	376.987
CO2	0.00158202	0	0.00146140	##########	0.00319527	0.00319527	0.00319527	0.00319527	0.00319527
C1	21.5130	0	2743.61	3770.29	16581.1	16581.1	16581.1	16581.1	16581.1
C2	2325.10	0	1238.06	395.148	374.097	374.097	374.097	374.097	374.097
C3	1279.95	0	904.113	102.630	4.24722	4.24722	4.24722	4.24722	4.24722
iC4	166.681	0	140.321	7.12723	0.0368747	0.0368747	0.0368747	0.0368747	0.0368747
nC4	394.680	0	343.308	13.8854	0.0546187	0.0546187	0.0546187	0.0546187	0.0546187
iC5	93.8762	0	88.1531	1.54539	##########	##########	##########	##########	##########
nC5	97.3403	0	92.1813	1.39306	##########	##########	##########	##########	##########
Neohexane	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	34.6091	0	33.6208	0.266831	##########	##########	##########	##########	##########
nC6	19.6880	0	19.3114	0.101684	##########	##########	##########	##########	##########
Benzene	10.4174	0	10.1616	0.0690860	##########	##########	##########	##########	##########
Cyclohexane	16.4140	0	16.1552	0.0698578	##########	##########	##########	##########	##########
3,3-Dimethylpentane	22.1250	0	21.8127	0.0842985	##########	##########	##########	##########	##########
C7	4.36350	0	4.32740	0.00974511	##########	##########	##########	##########	##########
Toluene	5.48888	0	5.43546	0.0144233	##########	##########	##########	##########	##########
i-Octane	15.6429	0	15.5023	0.0379756	##########	##########	##########	##########	##########
C8	0.951202	0	0.948201	##########	##########	##########	##########	##########	##########
Ethylbenzene	0.409853	0	0.408298	##########	##########	##########	##########	##########	##########
m-Xylene	1.15377	0	1.14987	0.00105272	##########	##########	##########	##########	##########
C9	1.41221	0	1.41079	##########	##########	##########	##########	##########	##########
C10	0.854927	0	0.854513	##########	0	0	0	0	0
H2O	0	0	0	0	0	0	0	0	0
TEG	0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814	0	0	0	0	0	0	0	0	0
Oxygen	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%
H2S	##########	##########	5.09456E-06	##########	##########	##########	##########	##########	##########
N2	##########	0.421235	0.421235	3.29440	3.66685	3.66685	3.66685	3.66685	3.66685
CO2	##########	##########	3.67205E-05	##########	##########	##########	##########	##########	##########
C1	0.186028	25.1296	25.1296	74.6227	92.3604	92.3604	92.3604	92.3604	92.3604
C2	37.6850	21.2545	21.2545	14.6590	3.90575	3.90575	3.90575	3.90575	3.90575
C3	30.4225	22.7620	22.7620	5.58337	0.0650282	0.0650282	0.0650282	0.0650282	0.0650282
iC4	5.22198	4.65646	4.65646	0.511080	##########	##########	##########	##########	##########
nC4	12.3650	11.3925	11.3925	0.995692	0.00110226	0.00110226	0.00110226	0.00110226	0.00110226
iC5	3.65083	3.63127	3.63127	0.137560	##########	##########	##########	##########	##########
nC5	3.78555	3.79720	3.79720	0.124001	##########	##########	##########	##########	##########
Neohexane	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	1.60761	1.65418	1.65418	0.0283691	##########	##########	##########	##########	##########
nC6	0.914518	0.950144	0.950144	0.0108109	##########	##########	##########	##########	##########
Benzene	0.438616	0.453178	0.453178	0.00665783	##########	##########	##########	##########	##########
Cyclohexane	0.744601	0.776262	0.776262	0.00725344	##########	##########	##########	##########	##########
3,3-Dimethylpentane	1.19499	1.24790	1.24790	0.0104213	##########	##########	##########	##########	##########
C7	0.235677	0.247569	0.247569	0.00120473	##########	##########	##########	##########	##########
Toluene	0.272603	0.285936	0.285936	0.00163958	##########	##########	##########	##########	##########
i-Octane	0.963162	1.01103	1.01103	0.00535186	##########	##########	##########	##########	##########
C8	0.0585672	0.0618396	0.0618396	##########	##########	##########	##########	##########	##########
Ethylbenzene	0.0234540	0.0247486	0.0247486	##########	##########	##########	##########	##########	##########

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
m-Xylene		0.0660250	0.0696985	0.0696985	##########	##########	##########	##########	##########	##########
C9		0.0976296	0.103307	0.103307	##########	##########	##########	##########	##########	##########
C10		0.0655670	0.0694160	0.0694160	##########	0	0	0	0	0
H2O		0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.0159882	0	0.00892307	0.00258456	0.00249154	0.00249154	0.00249154	0.00249154	0.00249154
N2		##########	0	737.790	2670.24	10560.7	10560.7	10560.7	10560.7	10560.7
CO2		0.0696240	0	0.0643156	0.0396417	0.140622	0.140622	0.140622	0.140622	0.140622
C1		345.121	0	44014.3	60484.6	266002	266002	266002	266002	266002
C2		69913.6	0	37227.2	11881.7	11248.7	11248.7	11248.7	11248.7	11248.7
C3		56440.2	0	39867.4	4525.54	187.284	187.284	187.284	187.284	187.284
iC4		9687.86	0	8155.76	414.251	2.14324	2.14324	2.14324	2.14324	2.14324
nC4		22939.7	0	19953.8	807.047	3.17456	3.17456	3.17456	3.17456	3.17456
iC5		6773.06	0	6360.14	111.498	0.0358575	0.0358575	0.0358575	0.0358575	0.0358575
nC5		7022.98	0	6650.77	100.508	0.0351383	0.0351383	0.0351383	0.0351383	0.0351383
Neohexane		0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		2982.45	0	2897.29	22.9942	0.00186545	0.00186545	0.00186545	0.00186545	0.00186545
nC6		1696.62	0	1664.17	8.76266	##########	##########	##########	##########	##########
Benzene		813.724	0	793.738	5.39643	##########	##########	##########	##########	##########
Cyclohexane		1381.39	0	1359.62	5.87920	##########	##########	##########	##########	##########
3,3-Dimethylpentane		2216.96	0	2185.68	8.44687	##########	##########	##########	##########	##########
C7		437.231	0	433.614	0.976479	##########	##########	##########	##########	##########
Toluene		505.736	0	500.814	1.32894	##########	##########	##########	##########	##########
i-Octane		1786.87	0	1770.80	4.33789	##########	##########	##########	##########	##########
C8		108.654	0	108.312	0.0925697	##########	##########	##########	##########	##########
Ethylbenzene		43.5120	0	43.3469	0.0445711	##########	##########	##########	##########	##########
m-Xylene		122.490	0	122.076	0.111762	##########	##########	##########	##########	##########
C9		181.123	0	180.941	0.0493664	##########	##########	##########	##########	##########
C10		121.640	0	121.582	0.0158999	0	0	0	0	0
H2O		0	0	0	0	0	0	0	0	0
TEG		0	0	0	0	0	0	0	0	0
UCARSOL™ AP-814		0	0	0	0	0	0	0	0	0
Oxygen		0	0	0	0	0	0	0	0	0

Process Streams		35	36	37	38	40	128	134	228	234
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Property	Units									
Temperature	°F	120*		-25.0615	-25.0615	107.711	239.178	120*	284.319	120*
Pressure	psia	1011.70	896.696	896.696	896.696	210.787	514.696*	512.696	1214.70*	1212.70
Mole Fraction Vapor	%	0		0	100	100	100	100	100	100
Mole Fraction Light Liquid	%	100		100	0	0	0	0	0	0
Mole Fraction Heavy Liquid	%	0		0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	41.1111	30.6893	30.6893	18.4718	16.6125	16.6125	16.6125	16.6125	16.6125
Mass Density	lb/ft^3	27.8811		28.3762	5.47751	0.589585	1.16426	1.44392	2.58695	3.61049
Molar Flow	lbmol/h	4512.68	0	5707.18	4387.99	17336.5	17336.5	17336.5	17336.5	17336.5
Mass Flow	lb/h	185521	0	175149	81053.9	288004	288004	288004	288004	288004
Vapor Volumetric Flow	ft^3/h	6654.00	0	6172.39	14797.6	488486	247371	199460	111330	79768.8
Liquid Volumetric Flow	gpm	829.590	0	769.545	1844.90	60902.1	30841.0	24867.7	13880.0	9945.20
Std Vapor Volumetric Flow	MMSCFD	41.0997	0	51.9788	39.9642	157.894	157.894	157.894	157.894	157.894
Std Liquid Volumetric Flow	sgpm	808.734	0	834.193	499.426	1863.38	1863.38	1863.38	1863.38	1863.38
Compressibility		0.239803		0.207929	0.648349	0.975427	0.979244	0.948220	0.976980	0.896971
Specific Gravity		0.447037		0.454975	0.637782	0.573588	0.573588	0.573588	0.573588	0.573588
API Gravity		149.630		318.316?						
Enthalpy	Btu/h	##########	0	##########	##########	##########	##########	##########	##########	##########
Mass Enthalpy	Btu/lb	-1170.26	-1462.84	-1462.84	-1848.14	-1884.64	-1816.22	-1886.87	-1799.77	-1906.58
Mass Cp	Btu/(lb*°F)	0.741090		0.702869	0.893234	0.546001	0.611408	0.578767	0.662920	0.651771
Ideal Gas CpCv Ratio		1.12680		1.20229	1.30091	1.29389	1.25940	1.29072	1.24826	1.29072
Dynamic Viscosity	cP	0.0748933		0.0884881	0.0123292	0.0119753	0.0143810	0.0125548	0.0158174	0.0138136
Kinematic Viscosity	cSt	0.167692		0.194675	0.140518	1.26800	0.771114	0.542808	0.381703	0.238848
Thermal Conductivity	Btu/(h*ft*°F	0.0516298		0.0659693?	0.0205752	0.0210850	0.0280018	0.0226315	0.0320657	0.0253729
Surface Tension	lbf/ft	##########		##########						
Net Ideal Gas Heating Value	Btu/ft^3	2163.85	1633.96	1633.96	998.870	905.292	905.292	905.292	905.292	905.292
Net Liquid Heating Value	Btu/lb	19819.3	20089.5	20089.5	20486.6	20673.8	20673.8	20673.8	20673.8	20673.8
Gross Ideal Gas Heating Value	Btu/ft^3	2353.38	1785.72	1785.72	1105.04	1004.81	1004.81	1004.81	1004.81	1004.81
Gross Liquid Heating Value	Btu/lb	21569.8	21966.6	21966.6	22668.1	22947.2	22947.2	22947.2	22947.2	22947.2

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Mole Fraction					%	%	%	%	%	%
H2S					##########	##########	##########	##########	##########	##########
N2					2.17229	2.17452	2.17452	2.17452	2.17452	2.17452
CO2					##########	##########	##########	##########	##########	##########
C1					85.9228	95.6426	95.6426	95.6426	95.6426	95.6426

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
C2					9.00521	2.15785	2.15785	2.15785	2.15785	2.15785
C3					2.33889	0.0244987	0.0244987	0.0244987	0.0244987	0.0244987
iC4					0.162426	##########	##########	##########	##########	##########
nC4					0.316440	##########	##########	##########	##########	##########
iC5					0.0352186	##########	##########	##########	##########	##########
nC5					0.0317472	##########	##########	##########	##########	##########
Neohexane					0	0	0	0	0	0
Cyclopentane					0	0	0	0	0	0
2,3-Dimethylbutane					0.00608093	##########	##########	##########	##########	##########
nC6					0.00231732	##########	##########	##########	##########	##########
Benzene					0.00157443	##########	##########	##########	##########	##########
Cyclohexane					0.00159202	##########	##########	##########	##########	##########
3,3-Dimethylpentane					0.00192112	##########	##########	##########	##########	##########
C7					##########	##########	##########	##########	##########	##########
Toluene					##########	##########	##########	##########	##########	##########
i-Octane					##########	##########	##########	##########	##########	##########
C8					##########	##########	##########	##########	##########	##########
Ethylbenzene					##########	##########	##########	##########	##########	##########
m-Xylene					##########	##########	##########	##########	##########	##########
C9					##########	##########	##########	##########	##########	##########
C10					##########	0	0	0	0	0
H2O					0	0	0	0	0	0
TEG					0	0	0	0	0	0
UCARSOL™ AP-814					0	0	0	0	0	0
Oxygen					0	0	0	0	0	0
Molar Flow					**lbmol/h**	**lbmol/h**	**lbmol/h**	**lbmol/h**	**lbmol/h**	**lbmol/h**
H2S					##########	##########	##########	##########	##########	##########
N2					95.3201	376.987	376.987	376.987	376.987	376.987
CO2					##########	0.00319527	0.00319527	0.00319527	0.00319527	0.00319527
C1					3770.29	16581.1	16581.1	16581.1	16581.1	16581.1
C2					395.148	374.097	374.097	374.097	374.097	374.097
C3					102.630	4.24722	4.24722	4.24722	4.24722	4.24722
iC4					7.12723	0.0368747	0.0368747	0.0368747	0.0368747	0.0368747
nC4					13.8854	0.0546187	0.0546187	0.0546187	0.0546187	0.0546187
iC5					1.54539	##########	##########	##########	##########	##########
nC5					1.39306	##########	##########	##########	##########	##########
Neohexane					0	0	0	0	0	0
Cyclopentane					0	0	0	0	0	0
2,3-Dimethylbutane					0.266831	##########	##########	##########	##########	##########
nC6					0.101684	##########	##########	##########	##########	##########
Benzene					0.0690860	##########	##########	##########	##########	##########
Cyclohexane					0.0698578	##########	##########	##########	##########	##########
3,3-Dimethylpentane					0.0842985	##########	##########	##########	##########	##########
C7					0.00974511	##########	##########	##########	##########	##########
Toluene					0.0144233	##########	##########	##########	##########	##########
i-Octane					0.0379756	##########	##########	##########	##########	##########
C8					##########	##########	##########	##########	##########	##########
Ethylbenzene					##########	##########	##########	##########	##########	##########
m-Xylene					0.00105272	##########	##########	##########	##########	##########
C9					##########	##########	##########	##########	##########	##########
C10					##########	0	0	0	0	0
H2O					0	0	0	0	0	0
TEG					0	0	0	0	0	0
UCARSOL™ AP-814					0	0	0	0	0	0
Oxygen					0	0	0	0	0	0
Mass Fraction					**%**	**%**	**%**	**%**	**%**	**%**
H2S					##########	##########	##########	##########	##########	##########
N2					3.29440	3.66685	3.66685	3.66685	3.66685	3.66685
CO2					##########	##########	##########	##########	##########	##########
C1					74.6227	92.3604	92.3604	92.3604	92.3604	92.3604
C2					14.6590	3.90575	3.90575	3.90575	3.90575	3.90575
C3					5.58337	0.0650282	0.0650282	0.0650282	0.0650282	0.0650282
iC4					0.511080	##########	##########	##########	##########	##########
nC4					0.995692	0.00110226	0.00110226	0.00110226	0.00110226	0.00110226
iC5					0.137560	##########	##########	##########	##########	##########
nC5					0.124001	##########	##########	##########	##########	##########
Neohexane					0	0	0	0	0	0
Cyclopentane					0	0	0	0	0	0
2,3-Dimethylbutane					0.0283691	##########	##########	##########	##########	##########
nC6					0.0108109	##########	##########	##########	##########	##########
Benzene					0.00665783	##########	##########	##########	##########	##########
Cyclohexane					0.00725344	##########	##########	##########	##########	##########
3,3-Dimethylpentane					0.0104213	##########	##########	##########	##########	##########
C7					0.00120473	##########	##########	##########	##########	##########
Toluene					0.00163958	##########	##########	##########	##########	##########
i-Octane					0.00535186	##########	##########	##########	##########	##########
C8					##########	##########	##########	##########	##########	##########
Ethylbenzene					##########	##########	##########	##########	##########	##########
m-Xylene					##########	##########	##########	##########	##########	##########
C9					##########	##########	##########	##########	##########	##########
C10					##########	0	0	0	0	0
H2O					0	0	0	0	0	0
TEG					0	0	0	0	0	0
UCARSOL™ AP-814					0	0	0	0	0	0

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Oxygen					0	0	0	0	0	0
Mass Flow					lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S					0.00258456	0.00249154	0.00249154	0.00249154	0.00249154	0.00249154
N2					2670.24	10560.7	10560.7	10560.7	10560.7	10560.7
CO2					0.0396417	0.140622	0.140622	0.140622	0.140622	0.140622
C1					60484.6	266002	266002	266002	266002	266002
C2					11881.7	11248.7	11248.7	11248.7	11248.7	11248.7
C3					4525.54	187.284	187.284	187.284	187.284	187.284
iC4					414.251	2.14324	2.14324	2.14324	2.14324	2.14324
nC4					807.047	3.17456	3.17456	3.17456	3.17456	3.17456
iC5					111.498	0.0358575	0.0358575	0.0358575	0.0358575	0.0358575
nC5					100.508	0.0351383	0.0351383	0.0351383	0.0351383	0.0351383
Neohexane					0	0	0	0	0	0
Cyclopentane					0	0	0	0	0	0
2,3-Dimethylbutane					22.9942	0.00186545	0.00186545	0.00186545	0.00186545	0.00186545
nC6					8.76266	##########	##########	##########	##########	##########
Benzene					5.39643	##########	##########	##########	##########	##########
Cyclohexane					5.87920	##########	##########	##########	##########	##########
3,3-Dimethylpentane					8.44687	##########	##########	##########	##########	##########
C7					0.976479	##########	##########	##########	##########	##########
Toluene					1.32894	##########	##########	##########	##########	##########
i-Octane					4.33789	##########	##########	##########	##########	##########
C8					0.0925697	##########	##########	##########	##########	##########
Ethylbenzene					0.0445711	##########	##########	##########	##########	##########
m-Xylene					0.111762	##########	##########	##########	##########	##########
C9					0.0493664	##########	##########	##########	##########	##########
C10					0.0158999	0	0	0	0	0
H2O					0	0	0	0	0	0
TEG					0	0	0	0	0	0
UCARSOL™ AP-814					0	0	0	0	0	0
Oxygen					0	0	0	0	0	0

Process Streams		35	36	37	38	40	128	134	228	234
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Property	Units									
Temperature	°F				-25.0615	107.711	239.178	120	284.319	120
Pressure	psia				896.696	210.787	514.696	512.696	1214.70	1212.70
Mole Fraction Vapor	%				100	100	100	100	100	100
Mole Fraction Light Liquid	%				0	0	0	0	0	0
Mole Fraction Heavy Liquid	%				0	0	0	0	0	0
Phase Mole Fraction	%				100	100	100	100	100	100
Molecular Weight	lb/lbmol				18.4718	16.6125	16.6125	16.6125	16.6125	16.6125
Mass Density	lb/ft^3				5.47751	0.589585	1.16426	1.44392	2.58695	3.61049
Molar Flow	lbmol/h				4387.99	17336.5	17336.5	17336.5	17336.5	17336.5
Mass Flow	lb/h				81053.9	288004	288004	288004	288004	288004
Vapor Volumetric Flow	ft^3/h				14797.6	488486	247371	199460	111330	79768.8
Liquid Volumetric Flow	gpm				1844.90	60902.1	30841.0	24867.7	13880.0	9945.20
Std Vapor Volumetric Flow	MMSCFD				39.9642	157.894	157.894	157.894	157.894	157.894
Std Liquid Volumetric Flow	sgpm				499.426	1863.38	1863.38	1863.38	1863.38	1863.38
Compressibility					0.648349	0.975427	0.979244	0.948220	0.976980	0.896971
Specific Gravity					0.637782	0.573588	0.573588	0.573588	0.573588	0.573588
API Gravity										
Enthalpy	Btu/h				##########	##########	##########	##########	##########	##########
Mass Enthalpy	Btu/lb				-1848.14	-1884.64	-1816.22	-1886.87	-1799.77	-1906.58
Mass Cp	Btu/(lb*°F)				0.893234	0.546001	0.611408	0.578767	0.662920	0.651771
Ideal Gas CpCv Ratio					1.30091	1.29389	1.25940	1.29072	1.24826	1.29072
Dynamic Viscosity	cP				0.0123292	0.0119753	0.0143810	0.0125548	0.0158174	0.0138136
Kinematic Viscosity	cSt				0.140518	1.26800	0.771114	0.542808	0.381703	0.238848
Thermal Conductivity	Btu/(h*ft*°F)				0.0205752	0.0210850	0.0280018	0.0226315	0.0320657	0.0253729
Surface Tension	lbf/ft									
Net Ideal Gas Heating Value	Btu/ft^3				998.870	905.292	905.292	905.292	905.292	905.292
Net Liquid Heating Value	Btu/lb				20486.6	20673.8	20673.8	20673.8	20673.8	20673.8
Gross Ideal Gas Heating Value	Btu/ft^3				1105.04	1004.81	1004.81	1004.81	1004.81	1004.81
Gross Liquid Heating Value	Btu/lb				22668.1	22947.2	22947.2	22947.2	22947.2	22947.2

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Mole Fraction		%		%						
H2S		##########		4.58756E-06						
N2		##########		0.461472						
CO2		##########		2.56064E-05						
C1		0.476723		48.0730						
C2		51.5238		21.6929						
C3		28.3634		15.8417						
iC4		3.69362		2.45867						
nC4		8.74604		6.01537						
iC5		2.08028		1.54460						
nC5		2.15704		1.61518						

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Neohexane		0		0						
Cyclopentane		0		0						
2,3-Dimethylbutane		0.766930		0.589097						
nC6		0.436283		0.338371						
Benzene		0.230848		0.178049						
Cyclohexane		0.363730		0.283069						
3,3-Dimethylpentane		0.490285		0.382198						
C7		0.0966942		0.0758239						
Toluene		0.121632		0.0952389						
i-Octane		0.346644		0.271628						
C8		0.0210785		0.0166142						
Ethylbenzene		0.00908225		0.00715410						
m-Xylene		0.0255674		0.0201478						
C9		0.0312944		0.0247195						
C10		0.0189450		0.0149726						
H2O		0		0						
TEG		0		0						
UCARSOL™ AP-814		0		0						
Oxygen		0		0						
Molar Flow		lbmol/h		lbmol/h						
H2S		##########		##########						
N2		##########		26.3370						
CO2		0.00158202		0.00146140						
C1		21.5130		2743.61						
C2		2325.10		1238.06						
C3		1279.95		904.113						
iC4		166.681		140.321						
nC4		394.680		343.308						
iC5		93.8762		88.1531						
nC5		97.3403		92.1813						
Neohexane		0		0						
Cyclopentane		0		0						
2,3-Dimethylbutane		34.6091		33.6208						
nC6		19.6880		19.3114						
Benzene		10.4174		10.1616						
Cyclohexane		16.4140		16.1552						
3,3-Dimethylpentane		22.1250		21.8127						
C7		4.36350		4.32740						
Toluene		5.48888		5.43546						
i-Octane		15.6429		15.5023						
C8		0.951202		0.948201						
Ethylbenzene		0.409853		0.408298						
m-Xylene		1.15377		1.14987						
C9		1.41221		1.41079						
C10		0.854927		0.854513						
H2O		0		0						
TEG		0		0						
UCARSOL™ AP-814		0		0						
Oxygen		0		0						
Mass Fraction		%		%						
H2S		##########		5.09456E-06						
N2		##########		0.421235						
CO2		##########		3.67205E-05						
C1		0.186028		25.1296						
C2		37.6850		21.2545						
C3		30.4225		22.7620						
iC4		5.22198		4.65646						
nC4		12.3650		11.3925						
iC5		3.65083		3.63127						
nC5		3.78555		3.79720						
Neohexane		0		0						
Cyclopentane		0		0						
2,3-Dimethylbutane		1.60761		1.65418						
nC6		0.914518		0.950144						
Benzene		0.438616		0.453178						
Cyclohexane		0.744601		0.776262						
3,3-Dimethylpentane		1.19499		1.24790						
C7		0.235677		0.247569						
Toluene		0.272603		0.285936						
i-Octane		0.963162		1.01103						
C8		0.0585672		0.0618396						
Ethylbenzene		0.0234540		0.0247486						
m-Xylene		0.0660250		0.0696985						
C9		0.0976296		0.103307						
C10		0.0655670		0.0694160						
H2O		0		0						
TEG		0		0						
UCARSOL™ AP-814		0		0						
Oxygen		0		0						
Mass Flow		lb/h		lb/h						
H2S		0.0159882		0.00892307						
N2		##########		737.790						
CO2		0.0696240		0.0643156						
C1		345.121		44014.3						

Process Streams		35	36	37	38	40	128	134	228	234
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
C2		69913.6		37227.2						
C3		56440.2		39867.4						
iC4		9687.86		8155.76						
nC4		22939.7		19953.8						
iC5		6773.06		6360.14						
nC5		7022.98		6650.77						
Neohexane		0		0						
Cyclopentane		0		0						
2,3-Dimethylbutane		2982.45		2897.29						
nC6		1696.62		1664.17						
Benzene		813.724		793.738						
Cyclohexane		1381.39		1359.62						
3,3-Dimethylpentane		2216.96		2185.68						
C7		437.231		433.614						
Toluene		505.736		500.814						
i-Octane		1786.87		1770.80						
C8		108.654		108.312						
Ethylbenzene		43.5120		43.3469						
m-Xylene		122.490		122.076						
C9		181.123		180.941						
C10		121.640		121.582						
H2O		0		0						
TEG		0		0						
UCARSOL™ AP-814		0		0						
Oxygen		0		0						

Process Streams		35	36	37	38	40	128	134	228	234
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Nonspecific Liquid	From Block:	FAXR-100	SPLT-102	SPLT-102	MIX-101	SPLT-103	CMPR-200	FAXR-201	CMPR-300	FAXR-301
	To Block:	--	MIX-101	VLVE-100	GSP	CMPR-100	FAXR-201	CMPR-300	FAXR-301	--
Property	Units									
Temperature	°F	120		-25.0615						
Pressure	psia	1011.70		896.696						
Mole Fraction Vapor	%	0		0						
Mole Fraction Light Liquid	%	100		100						
Mole Fraction Heavy Liquid	%	0		0						
Phase Mole Fraction	%	100		100						
Molecular Weight	lb/lbmol	41.1111		30.6893						
Mass Density	lb/ft^3	27.8811		28.3762						
Molar Flow	lbmol/h	4512.68		5707.18						
Mass Flow	lb/h	185521		175149						
Vapor Volumetric Flow	ft^3/h	6654.00		6172.39						
Liquid Volumetric Flow	gpm	829.590		769.545						
Std Vapor Volumetric Flow	MMSCFD	41.0997		51.9788						
Std Liquid Volumetric Flow	sgpm	808.734		834.193						
Compressibility		0.239803		0.207929						
Specific Gravity		0.447037		0.454975						
API Gravity		149.630		318.316?						
Enthalpy	Btu/h	##########		##########						
Mass Enthalpy	Btu/lb	-1170.26		-1462.84						
Mass Cp	Btu/(lb*°F)	0.741090		0.702869						
Ideal Gas CpCv Ratio		1.12680		1.20229						
Dynamic Viscosity	cP	0.0748933		0.0884881						
Kinematic Viscosity	cSt	0.167692		0.194675						
Thermal Conductivity	Btu/(h*ft*°F)	0.0516298		0.0659693?						
Surface Tension	lbf/ft	##########		##########						
Net Ideal Gas Heating Value	Btu/ft^3	2163.85		1633.96						
Net Liquid Heating Value	Btu/lb	19819.3		20089.5						
Gross Ideal Gas Heating Value	Btu/ft^3	2353.38		1785.72						
Gross Liquid Heating Value	Btu/lb	21569.8		21966.6						

TEG PStreams

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
Mole Fraction		%	%	%	%	%	%	%	%	%	%	%	%
H2S		0*	0*	0	0	5.56174E-10	0*	2.48883E-06	2.47108E-06	2.47108E-06	2.51274E-06	2.51274E-06	2.51274E-06
N2		79*	79*	79	79	3.09633E-10	0*	1.72279	1.72743	1.72743	0.0132610	0.0132610	0.0132610
CO2		0*	0*	0	0	1.35421E-10	0*	2.18354E-05	2.18448E-05	2.18448E-05	5.19027E-06	5.19027E-06	5.19027E-06
C1		0*	0*	0	0	7.88653E-07	0*	75.8856	76.0757	76.0757	2.00421	2.00421	2.00421
C2		0*	0*	0	0	4.97484E-06	0*	12.2761	12.3012	12.3012	0.899753	0.899753	0.899753
C3		0*	0*	0	0	1.59276E-05	0*	5.83804	5.84753	5.84753	0.678771	0.678771	0.678771
iC4		0*	0*	0	0	5.14357E-06	0*	0.758023	0.759126	0.759126	0.101200	0.101200	0.101200
nC4		0*	0*	0	0	3.68743E-05	0*	1.79582	1.79737	1.79737	0.348216	0.348216	0.348216
iC5		0*	0*	0	0	2.96834E-05	0*	0.427295	0.427454	0.427454	0.104258	0.104258	0.104258
nC5		0*	0*	0	0	4.84938E-05	0*	0.443287	0.443227	0.443227	0.131200	0.131200	0.131200
Neohexane		0*	0*	0	0	0	0*	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0*	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0.000122816	0*	0.157810	0.157587	0.157587	0.0673086	0.0673086	0.0673086
nC6		0*	0*	0	0	8.96948E-05	0*	0.0898139	0.0896466	0.0896466	0.0424611	0.0424611	0.0424611
Benzene		0*	0*	0	0	0.0106639	0*	0.0518786	0.0474342	0.0474342	0.475701	0.475701	0.475701
Cyclohexane		0*	0*	0	0	0.000652669	0*	0.0756470	0.0747386	0.0747386	0.114472	0.114472	0.114472
3,3-Dimethylpentane		0*	0*	0	0	0.000176362	0*	0.101163	0.100743	0.100743	0.0714775	0.0714775	0.0714775
C7		0*	0*	0	0	3.56076E-05	0*	0.0199528	0.0198685	0.0198685	0.0142500	0.0142500	0.0142500
Toluene		0*	0*	0	0	0.0180101	0*	0.0288023	0.0249928	0.0249928	0.409699	0.409699	0.409699
i-Octane		0*	0*	0	0	0.000115500	0*	0.0714809	0.0712278	0.0712278	0.0460612	0.0460612	0.0460612
C8		0*	0*	0	0	2.08827E-05	0*	0.00436171	0.00433116	0.00433116	0.00436128	0.00436128	0.00436128
Ethylbenzene		0*	0*	0	0	0.00335981	0*	0.00228688	0.00186620	0.00186620	0.0459746	0.0459746	0.0459746
m-Xylene		0*	0*	0	0	0.00963409	0*	0.00636862	0.00525353	0.00525353	0.122473	0.122473	0.122473
C9		0*	0*	0	0	8.42063E-05	0*	0.00650340	0.00643030	0.00643030	0.00935137	0.00935137	0.00935137
C10		0*	0*	0	0	0.000141588	0*	0.00396045	0.00389279	0.00389279	0.00812160	0.00812160	0.00812160
H2O		0*	0*	0	0	7.25181	0.827516*	0.232876	0.0126939	0.0126939	27.7346	27.7346	27.7346
TEG		0*	0*	0	0	92.6309	99.1725*	7.76636E-13	0.000131868	0.000131868	66.4972	66.4972	66.4972
UCARSOL™ AP-814		0*	0*	0	0	0.0740065	0*	9.56428E-05	7.18925E-05	7.18925E-05	0.0555766	0.0555766	0.0555766
Oxygen		21*	21*	21	21	0	0*	0	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		0*	0*	0	0	0	0*	0.000548104	0.000542695	0.000542695	5.40917E-06	5.40917E-06	5.40917E-06
N2		20612.9*	10952.7*	20612.9	10952.7	0	0*	379.403	379.375	379.375	0.0285470	0.0285470	0.0285470
CO2		0*	0*	0	0	0	0*	0.00480870	0.00479753	0.00479753	1.11731E-05	1.11731E-05	1.11731E-05
C1		0*	0*	0	0	0	0*	16711.9	16707.6	16707.6	4.31447	4.31447	4.31447
C2		0*	0*	0	0	0	0*	2703.50	2701.57	2701.57	1.93690	1.93690	1.93690
C3		0*	0*	0	0	0	0*	1285.69	1284.22	1284.22	1.46119	1.46119	1.46119
iC4		0*	0*	0	0	0	0*	166.936	166.718	166.718	0.217852	0.217852	0.217852
nC4		0*	0*	0	0	0	0*	395.485	394.735	394.735	0.749604	0.749604	0.749604
iC5		0*	0*	0	0	0	0*	94.1011	93.8767	93.8767	0.224437	0.224437	0.224437
nC5		0*	0*	0	0	0	0*	97.6231	97.3408	97.3408	0.282434	0.282434	0.282434
Neohexane		0*	0*	0	0	0	0*	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0*	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0*	34.7538	34.6091	34.6091	0.144895	0.144895	0.144895
nC6		0*	0*	0	0	0	0*	19.7793	19.6880	19.6880	0.0914060	0.0914060	0.0914060
Benzene		0*	0*	0	0	0	0*	11.4250	10.4174	10.4174	1.02404	1.02404	1.02404
Cyclohexane		0*	0*	0	0	0	0*	16.6594	16.4140	16.4140	0.246424	0.246424	0.246424
3,3-Dimethylpentane		0*	0*	0	0	0	0*	22.2786	22.1250	22.1250	0.153869	0.153869	0.153869
C7		0*	0*	0	0	0	0*	4.39412	4.36350	4.36350	0.0306761	0.0306761	0.0306761
Toluene		0*	0*	0	0	0	0*	6.34300	5.48888	5.48888	0.881959	0.881959	0.881959
i-Octane		0*	0*	0	0	0	0*	15.7419	15.6429	15.6429	0.0991558	0.0991558	0.0991558
C8		0*	0*	0	0	0	0*	0.960558	0.951202	0.951202	0.00938853	0.00938853	0.00938853
Ethylbenzene		0*	0*	0	0	0	0*	0.503630	0.409853	0.409853	0.0989694	0.0989694	0.0989694
m-Xylene		0*	0*	0	0	0	0*	1.40253	1.15377	1.15377	0.263647	0.263647	0.263647
C9		0*	0*	0	0	0	0*	1.43221	1.41221	1.41221	0.0201307	0.0201307	0.0201307
C10		0*	0*	0	0	0	0*	0.872192	0.854927	0.854927	0.0174834	0.0174834	0.0174834
H2O		0*	0*	0	0	0	##########	51.2852	2.78781	2.78781	59.7042	59.7042	59.7042
TEG		0*	0*	0	0	0	0.0305237*	1.71035E-10	0.0289605	0.0289605	143.149	143.149	143.149
UCARSOL™ AP-814		0*	0*	0	0	0	0*	0.0210630	0.0157889	0.0157889	0.119640	0.119640	0.119640
Oxygen		5479.38*	2911.48*	5479.38	2911.48	0	0*	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%	%	%	%	%
H2S		0*	0*	0	0	1.34889E-10	0*	3.91750E-06	3.89047E-06	3.89047E-06	7.96460E-07	7.96460E-07	7.96460E-07
N2		76.7082*	76.7082*	76.7082	76.7082	6.17260E-11	0*	2.22896	2.23548	2.23548	0.00345500	0.00345500	0.00345500
CO2		0*	0*	0	0	4.24119E-11	0*	4.43823E-05	4.44120E-05	4.44120E-05	2.12443E-06	2.12443E-06	2.12443E-06
C1		0*	0*	0	0	9.00350E-08	0*	56.2255	56.3796	56.3796	0.299034	0.299034	0.299034
C2		0*	0*	0	0	1.06452E-06	0*	17.0484	17.0872	17.0872	0.251622	0.251622	0.251622
C3		0*	0*	0	0	4.99805E-06	0*	11.8896	11.9117	11.9117	0.278372	0.278372	0.278372
iC4		0*	0*	0	0	2.12746E-06	0*	2.03483	2.03827	2.03827	0.0547050	0.0547050	0.0547050
nC4		0*	0*	0	0	1.52518E-05	0*	4.82067	4.82597	4.82597	0.188233	0.188233	0.188233
iC5		0*	0*	0	0	1.52404E-05	0*	1.42383	1.42470	1.42470	0.0699594	0.0699594	0.0699594
nC5		0*	0*	0	0	2.48983E-05	0*	1.47713	1.47727	1.47727	0.0880378	0.0880378	0.0880378
Neohexane		0*	0*	0	0	0	0*	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0*	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	7.53170E-05	0*	0.628089	0.627350	0.627350	0.0539460	0.0539460	0.0539460
nC6		0*	0*	0	0	5.50054E-05	0*	0.357462	0.356880	0.356880	0.0340314	0.0340314	0.0340314
Benzene		0*	0*	0	0	0.00592769	0*	0.187158	0.171165	0.171165	0.345586	0.345586	0.345586
Cyclohexane		0*	0*	0	0	0.000390886	0*	0.294034	0.290572	0.290572	0.0896001	0.0896001	0.0896001
3,3-Dimethylpentane		0*	0*	0	0	0.000125758	0*	0.468165	0.466332	0.466332	0.0666118	0.0666118	0.0666118
C7		0*	0*	0	0	2.53906E-05	0*	0.0923387	0.0919702	0.0919702	0.0132800	0.0132800	0.0132800
Toluene		0*	0*	0	0	0.0118090	0*	0.122566	0.106380	0.106380	0.351085	0.351085	0.351085
i-Octane		0*	0*	0	0	9.38885E-05	0*	0.377110	0.375862	0.375862	0.0489345	0.0489345	0.0489345
C8		0*	0*	0	0	1.69752E-05	0*	0.0230109	0.0228551	0.0228551	0.00463335	0.00463335	0.00463335
Ethylbenzene		0*	0*	0	0	0.00253835	0*	0.0112132	0.00915262	0.00915262	0.0453947	0.0453947	0.0453947
m-Xylene		0*	0*	0	0	0.00727858	0*	0.0312270	0.0257655	0.0257655	0.120928	0.120928	0.120928
C9		0*	0*	0	0	7.68553E-05	0*	0.0385228	0.0380988	0.0380988	0.0111547	0.0111547	0.0111547
C10		0*	0*	0	0	0.000143360	0*	0.0260254	0.0255867	0.0255867	0.0107472	0.0107472	0.0107472
H2O		0*	0*	0	0	0.929698	0.1*	0.193762	0.0105643	0.0105643	4.64696	4.64696	4.64696
TEG		0*	0*	0	0	98.9925	99.9*	5.38657E-12	0.000914818	0.000914818	92.8755	92.8755	92.8755
UCARSOL™ AP-814		0*	0*	0	0	0.0492014	0*	0.000382846	0.000286478	0.000286478	0.0481635	0.0481635	0.0481635
Oxygen		23.2918*	23.2918*	23.2918	23.2918	0	0*	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0*	0*	0	0	0	0*	0.0186799	0.0184955	0.0184955	0.000184349	0.000184349	0.000184349
N2		577437*	306823*	577437	306823	0	0*	10628.4	10627.6	10627.6	0.799698	0.799698	0.799698
CO2		0*	0*	0	0	0	0*	0.211629	0.211137	0.211137	0.000491722	0.000491722	0.000491722

TEG PStreams

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
C1		0*	0*	0	0	0	0*	268101	268031	268031	69.2146	69.2146	69.2146
C2		0*	0*	0	0	0	0*	81291.8	81233.5	81233.5	58.2407	58.2407	58.2407
C3		0*	0*	0	0	0	0*	56693.1	56628.7	56628.7	64.4321	64.4321	64.4321
iC4		0*	0*	0	0	0	0*	9702.68	9690.02	9690.02	12.6621	12.6621	12.6621
nC4		0*	0*	0	0	0	0*	22986.5	22942.9	22942.9	43.5686	43.5686	43.5686
iC5		0*	0*	0	0	0	0*	6789.28	6773.09	6773.09	16.1928	16.1928	16.1928
nC5		0*	0*	0	0	0	0*	7043.39	7023.02	7023.02	20.3773	20.3773	20.3773
Neohexane		0*	0*	0	0	0	0*	0	0	0	0	0	0
Cyclopentane		0*	0*	0	0	0	0*	0	0	0	0	0	0
2,3-Dimethylbutane		0*	0*	0	0	0	0*	2994.92	2982.45	2982.45	12.4864	12.4864	12.4864
nC6		0*	0*	0	0	0	0*	1704.49	1696.62	1696.62	7.87694	7.87694	7.87694
Benzene		0*	0*	0	0	0	0*	892.427	813.724	813.724	79.9897	79.9897	79.9897
Cyclohexane		0*	0*	0	0	0	0*	1402.05	1381.39	1381.39	20.7389	20.7389	20.7389
3,3-Dimethylpentane		0*	0*	0	0	0	0*	2232.36	2216.96	2216.96	15.4180	15.4180	15.4180
C7		0*	0*	0	0	0	0*	440.299	437.231	437.231	3.07380	3.07380	3.07380
Toluene		0*	0*	0	0	0	0*	584.434	505.736	505.736	81.2623	81.2623	81.2623
i-Octane		0*	0*	0	0	0	0*	1798.17	1786.87	1786.87	11.3264	11.3264	11.3264
C8		0*	0*	0	0	0	0*	109.723	108.654	108.654	1.07244	1.07244	1.07244
Ethylbenzene		0*	0*	0	0	0	0*	53.4679	43.5120	43.5120	10.5071	10.5071	10.5071
m-Xylene		0*	0*	0	0	0	0*	148.900	122.490	122.490	27.9901	27.9901	27.9901
C9		0*	0*	0	0	0	0*	183.689	181.123	181.123	2.58186	2.58186	2.58186
C10		0*	0*	0	0	0	0*	124.097	121.640	121.640	2.48756	2.48756	2.48756
H2O		0*	0*	0	0	0	##########	923.917	50.2231	50.2231	1075.59	1075.59	1075.59
TEG		0*	0*	0	0	0	4.58384*	2.56848E-08	4.34909	4.34909	21497.0	21497.0	21497.0
UCARSOL™ AP-814		0*	0*	0	0	0	0*	1.82553	1.36193	1.36193	11.1480	11.1480	11.1480
Oxygen		175334*	93163.9*	175334	93163.9	0	0*	0	0	0	0	0	0

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
Property	Units												
Temperature	°F	105*	105*	115*	115*		100*	121.577	124.625	124.563	124.233	139.233*	207*
Pressure	psia	14.7959*	14.7959*	14.6959*	14.6959*	73.6959	74.6959*	905.696	903.696	902.696	905.696	903.696	898.696
Mole Fraction Vapor	%	100	100	100	100		0	100	100	100	0	0.0226690	0
Mole Fraction Light Liquid	%	0	0	0	0		100	0	0	0	100	99.9773	100
Mole Fraction Heavy Liquid	%	0	0	0	0		0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	28.8503	28.8503	28.8503	28.8503	140.522	149.079	21.6519	21.6469	21.6469	107.521	107.521	107.521
Mass Density	lb/ft^3	0.0704562	0.0704562	0.0687589	0.0687589		69.4652	3.76009	3.71409	3.71002	66.7161	66.1894	63.9550
Molar Flow	lbmol/h	26092.3	13864.2	26092.3	13864.2	0	0.0307784	22022.5	21961.8	21961.8	215.270	215.270	215.270
Mass Flow	lb/h	752771	399987	752771	399987	0	4.58843	476831	475405	475405	23146.1	23146.1	23146.1
Vapor Volumetric Flow	ft^3/h	#########	#########	#########	#########	0	0.0660536	126814	128000	128141	346.934	349.695	361.912
Liquid Volumetric Flow	gpm	#########	707794	#########	725266	0	0.00823525	15810.5	15958.5	15976.0	43.2541	43.5983	45.1215
Std Vapor Volumetric Flow	MMSCFD	237.638	126.270	237.638	126.270	0	##########	200.573	200.020	200.020	1.96060	1.96060	1.96060
Std Liquid Volumetric Flow	sgpm	1737.46	923.203	1737.46	923.203	0	0.00812131	2687.78	2684.03	2684.03	42.2493	42.2493	42.2493
Compressibility		0.999807	0.999807	0.999856	0.999856		0.0266902	0.836097	0.839981	0.840061	0.232939	0.228406	0.211183
Specific Gravity		0.996127	0.996127	0.996127	0.996127		1.11378	0.747585	0.747410	0.747410	1.06970		1.02543
API Gravity							-7.09167				-2.98086		-2.97944
Enthalpy	Btu/h	#########	#########	#########	#########	0	-10553.2	-7.54954E+08	-7.48600E+08	-7.48600E+08	-5.68009E+07	-5.65957E+07	-5.56405E+07
Mass Enthalpy	Btu/lb	6.64581	6.64581	9.06480	9.06480	-2325.56	-2299.95	-1583.28	-1574.66	-1574.66	-2454.02	-2445.15	-2403.88
Mass Cp	Btu/(lb*°F)	0.241809	0.241809	0.241845	0.241845		0.542606	0.620026	0.618561	0.618409	0.588063	0.594776	0.623003
Ideal Gas CpCv Ratio		1.39902	1.39902	1.39890	1.39890		1.03561	1.22934	1.22850	1.22852	1.04808	1.04716	1.04377
Dynamic Viscosity	cP	0.0189072	0.0189072	0.0191476	0.0191476		21.1393	0.0131951	0.0132080	0.0132043	8.18853		2.65909
Kinematic Viscosity	cSt	16.7528	16.7528	17.3846	17.3846		18.9978	0.219075	0.222006	0.222187	7.66222		2.59560
Thermal Conductivity	Btu/(h*ft*°F	0.0155190	0.0155190	0.0157371	0.0157371		0.112147	0.0225694	0.0226582	0.0226512	0.115341		0.115099?
Surface Tension	lbf/ft						0.00300898				0.00285030		0.00262002?
Net Ideal Gas Heating Value	Btu/ft^3	0	0	0	0	3502.96	3745.75	1161.85	1163.79	1163.79	2645.11	2645.11	2645.11
Net Liquid Heating Value	Btu/lb	0	0	0	0	9192.77	9274.43	20297.3	20337.9	20337.9	9041.61	9041.61	9041.61
Gross Ideal Gas Heating Valu	Btu/ft^3	0	0	0	0	3832.80	4095.08	1279.74	1281.80	1281.80	2903.10	2903.10	2903.10
Gross Liquid Heating Value	Btu/lb	0	0	0	0	10083.5	10163.6	22363.9	22407.1	22407.1	9952.17	9952.17	9952.17

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
Mole Fraction		%	%	%	%			%	%	%		%	
H2S		0	0	0	0			2.48883E-06	2.47108E-06	2.47108E-06		2.76575E-06	
N2		79	79	79	79			1.72279	1.72743	1.72743		1.60098	
CO2		0	0	0	0			2.18354E-05	2.18448E-05	2.18448E-05		2.38350E-05	
C1		0	0	0	0			75.8856	76.0757	76.0757		75.0780	
C2		0	0	0	0			12.2761	12.3012	12.3012		12.7085	
C3		0	0	0	0			5.83804	5.84753	5.84753		6.15402	
iC4		0	0	0	0			0.758023	0.759126	0.759126		0.804149	
nC4		0	0	0	0			1.79582	1.79737	1.79737		1.92630	
iC5		0	0	0	0			0.427295	0.427454	0.427454		0.460732	
nC5		0	0	0	0			0.443287	0.443227	0.443227		0.485181	
Neohexane		0	0	0	0			0	0	0		0	
Cyclopentane		0	0	0	0			0	0	0		0	
2,3-Dimethylbutane		0	0	0	0			0.157810	0.157587	0.157587		0.167664	
nC6		0	0	0	0			0.0898139	0.0896466	0.0896466		0.0966696	
Benzene		0	0	0	0			0.0518786	0.0474342	0.0474342		0.0643442	
Cyclohexane		0	0	0	0			0.0756470	0.0747386	0.0747386		0.0864285	
3,3-Dimethylpentane		0	0	0	0			0.101163	0.100743	0.100743		0.113769	
C7		0	0	0	0			0.0199528	0.0198685	0.0198685		0.0228928	
Toluene		0	0	0	0			0.0288023	0.0249928	0.0249928		0.0363072	
i-Octane		0	0	0	0			0.0714809	0.0712278	0.0712278		0.0820212	
C8		0	0	0	0			0.00436171	0.00433116	0.00433116		0.00511537	
Ethylbenzene		0	0	0	0			0.00228688	0.00186620	0.00186620		0.00290998	
m-Xylene		0	0	0	0			0.00636862	0.00525353	0.00525353		0.00810326	
C9		0	0	0	0			0.00650340	0.00643030	0.00643030		0.00787092	
C10		0	0	0	0			0.00396045	0.00389279	0.00389279		0.00490898	
H2O		0	0	0	0			0.232876	0.0126939	0.0126939		0.0828747	

TEG PStreams

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
TEG		0	0	0	0			7.76636E-13	0.000131868	0.000131868		0.000184685	
UCARSOL™ AP-814		0	0	0	0			9.56428E-05	7.18925E-05	7.18925E-05		7.22779E-05	
Oxygen		21	21	21	21			0	0	0		0	
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h			lbmol/h	lbmol/h	lbmol/h		lbmol/h	
H2S		0	0	0	0			0.000548104	0.000542695	0.000542695		1.34967E-09	
N2		20612.9	10952.7	20612.9	10952.7			379.403	379.375	379.375		0.000781269	
CO2		0	0	0	0			0.00480870	0.00479753	0.00479753		1.16314E-08	
C1		0	0	0	0			16711.9	16707.6	16707.6		0.0366377	
C2		0	0	0	0			2703.50	2701.57	2701.57		0.00620167	
C3		0	0	0	0			1285.69	1284.22	1284.22		0.00300313	
iC4		0	0	0	0			166.936	166.718	166.718		0.000392420	
nC4		0	0	0	0			395.485	394.735	394.735		0.000940024	
iC5		0	0	0	0			94.1011	93.8767	93.8767		0.000224835	
nC5		0	0	0	0			97.6231	97.3408	97.3408		0.000236766	
Neohexane		0	0	0	0			0	0	0		0	
Cyclopentane		0	0	0	0			0	0	0		0	
2,3-Dimethylbutane		0	0	0	0			34.7538	34.6091	34.6091		8.18190E-05	
nC6		0	0	0	0			19.7793	19.6880	19.6880		4.71743E-05	
Benzene		0	0	0	0			11.4250	10.4174	10.4174		3.13996E-05	
Cyclohexane		0	0	0	0			16.6594	16.4140	16.4140		4.21767E-05	
3,3-Dimethylpentane		0	0	0	0			22.2786	22.1250	22.1250		5.55189E-05	
C7		0	0	0	0			4.39412	4.36350	4.36350		1.11716E-05	
Toluene		0	0	0	0			6.34300	5.48888	5.48888		1.77177E-05	
i-Octane		0	0	0	0			15.7419	15.6429	15.6429		4.00259E-05	
C8		0	0	0	0			0.960558	0.951202	0.951202		2.49627E-06	
Ethylbenzene		0	0	0	0			0.503630	0.409853	0.409853		1.42006E-06	
m-Xylene		0	0	0	0			1.40253	1.15377	1.15377		3.95435E-06	
C9		0	0	0	0			1.43221	1.41221	1.41221		3.84097E-06	
C10		0	0	0	0			0.872192	0.854927	0.854927		2.39556E-06	
H2O		0	0	0	0			51.2852	2.78781	2.78781		4.04424E-05	
TEG		0	0	0	0			1.71035E-10	0.0289605	0.0289605		9.01253E-08	
UCARSOL™ AP-814		0	0	0	0			0.0210630	0.0157889	0.0157889		3.52712E-08	
Oxygen		5479.38	2911.48	5479.38	2911.48			0	0	0		0	
Mass Fraction		%	%	%	%			%	%	%		%	
H2S		0	0	0	0			3.91750E-06	3.89047E-06	3.89047E-06		4.29192E-06	
N2		76.7082	76.7082	76.7082	76.7082			2.22896	2.23548	2.23548		2.04211	
CO2		0	0	0	0			4.43823E-05	4.44120E-05	4.44120E-05		4.77628E-05	
C1		0	0	0	0			56.2255	56.3796	56.3796		54.8417	
C2		0	0	0	0			17.0484	17.0872	17.0872		17.3996	
C3		0	0	0	0			11.8896	11.9117	11.9117		12.3561	
iC4		0	0	0	0			2.03483	2.03827	2.03827		2.12817	
nC4		0	0	0	0			4.82067	4.82597	4.82597		5.09792	
iC5		0	0	0	0			1.42383	1.42470	1.42470		1.51358	
nC5		0	0	0	0			1.47713	1.47727	1.47727		1.59390	
Neohexane		0	0	0	0			0	0	0		0	
Cyclopentane		0	0	0	0			0	0	0		0	
2,3-Dimethylbutane		0	0	0	0			0.628089	0.627350	0.627350		0.657884	
nC6		0	0	0	0			0.357462	0.356880	0.356880		0.379315	
Benzene		0	0	0	0			0.187158	0.171165	0.171165		0.228851	
Cyclohexane		0	0	0	0			0.294034	0.290572	0.290572		0.331198	
3,3-Dimethylpentane		0	0	0	0			0.468165	0.466332	0.466332		0.519073	
C7		0	0	0	0			0.0923387	0.0919702	0.0919702		0.104448	
Toluene		0	0	0	0			0.122566	0.106380	0.106380		0.152322	
i-Octane		0	0	0	0			0.377110	0.375862	0.375862		0.426607	
C8		0	0	0	0			0.0230109	0.0228551	0.0228551		0.0266059	
Ethylbenzene		0	0	0	0			0.0112132	0.00915262	0.00915262		0.0140669	
m-Xylene		0	0	0	0			0.0312270	0.0257655	0.0257655		0.0391714	
C9		0	0	0	0			0.0385228	0.0380988	0.0380988		0.0459650	
C10		0	0	0	0			0.0260254	0.0255867	0.0255867		0.0318030	
H2O		0	0	0	0			0.193762	0.0105643	0.0105643		0.0679814	
TEG		0	0	0	0			5.38657E-12	0.000914818	0.000914818		0.00126285	
UCARSOL™ AP-814		0	0	0	0			0.000382846	0.000286478	0.000286478		0.000284198	
Oxygen		23.2918	23.2918	23.2918	23.2918			0	0	0		0	
Mass Flow		lb/h	lb/h	lb/h	lb/h			lb/h	lb/h	lb/h		lb/h	
H2S		0	0	0	0			0.0186799	0.0184955	0.0184955		4.59980E-08	
N2		577437	306823	577437	306823			10628.4	10627.6	10627.6		0.0218860	
CO2		0	0	0	0			0.211629	0.211137	0.211137		5.11891E-07	
C1		0	0	0	0			268101	268031	268031		0.587758	
C2		0	0	0	0			81291.8	81233.5	81233.5		0.186478	
C3		0	0	0	0			56693.1	56628.7	56628.7		0.132425	
iC4		0	0	0	0			9702.68	9690.02	9690.02		0.0228083	
nC4		0	0	0	0			22986.5	22942.9	22942.9		0.0546362	
iC5		0	0	0	0			6789.28	6773.09	6773.09		0.0162216	
nC5		0	0	0	0			7043.39	7023.02	7023.02		0.0170824	
Neohexane		0	0	0	0			0	0	0		0	
Cyclopentane		0	0	0	0			0	0	0		0	
2,3-Dimethylbutane		0	0	0	0			2994.92	2982.45	2982.45		0.00705078	
nC6		0	0	0	0			1704.49	1696.62	1696.62		0.00406526	
Benzene		0	0	0	0			892.427	813.724	813.724		0.00245268	
Cyclohexane		0	0	0	0			1402.05	1381.39	1381.39		0.00354957	
3,3-Dimethylpentane		0	0	0	0			2232.36	2216.96	2216.96		0.00556310	
C7		0	0	0	0			440.299	437.231	437.231		0.00111941	
Toluene		0	0	0	0			584.434	505.736	505.736		0.00163249	
i-Octane		0	0	0	0			1798.17	1786.87	1786.87		0.00457210	
C8		0	0	0	0			109.723	108.654	108.654		0.000285146	
Ethylbenzene		0	0	0	0			53.4679	43.5120	43.5120		0.000150760	
m-Xylene		0	0	0	0			148.900	122.490	122.490		0.000419814	
C9		0	0	0	0			183.689	181.123	181.123		0.000492624	
C10		0	0	0	0			124.097	121.640	121.640		0.000340844	
H2O		0	0	0	0			923.917	50.2231	50.2231		0.000728581	
TEG		0	0	0	0			2.56848E-08	4.34909	4.34909		1.35344E-05	
UCARSOL™ AP-814		0	0	0	0			1.82553	1.36193	1.36193		3.04585E-06	
Oxygen		175334	93163.9	175334	93163.9			0	0	0		0	

TEG PStreams

Process Streams		AI-1	AI-2	AO-1	AO-2	Blowdown	TEG	202	204	207	210	211	212
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
Process Streams		**AI-1**	**AI-2**	**AO-1**	**AO-2**	**Blowdown**	**TEG**	**202**	**204**	**207**	**210**	**211**	**212**
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	--	--	XCHG-101	BTEX AIR	TEG Makeup	--	GAS TO TEG DEHY	TEG ABSORBER	DEHY AFTER SCRUBBER	TEG ABSORBER	REFLUX COIL	L/R EXCH COLD
	To Block:	XCHG-101	BTEX AIR	--	--	--	TEG Makeup	TEG ABSORBER	DEHY AFTER SCRUBBER	Cryo	REFLUX COIL	L/R EXCH COLD	LV-101
Property	Units												
Temperature	°F	105	105	115	115			121.577	124.625	124.563		139.233	
Pressure	psia	14.7959	14.7959	14.6959	14.6959			905.696	903.696	902.696		903.696	
Mole Fraction Vapor	%	100	100	100	100			100	100	100		100	
Mole Fraction Light Liquid	%	0	0	0	0			0	0	0		0	
Mole Fraction Heavy Liquid	%	0	0	0	0			0	0	0		0	
Phase Mole Fraction	%	100	100	100	100			100	100	100		0.0226690	
Molecular Weight	lb/lbmol	28.8503	28.8503	28.8503	28.8503			21.6519	21.6469	21.6469		21.9620	
Mass Density	lb/ft^3	0.0704562	0.0704562	0.0687589	0.0687589			3.76009	3.71409	3.71002		3.63560	
Molar Flow	lbmol/h	26092.3	13864.2	26092.3	13864.2			22022.5	21961.8	21961.8		0.0487995	
Mass Flow	lb/h	752771	399987	752771	399987			476831	475405	475405		1.07174	
Vapor Volumetric Flow	ft^3/h	#########	#########	#########	#########			126814	128000	128141		0.294789	
Liquid Volumetric Flow	gpm	#########	707794	#########	725266			15810.5	15958.5	15976.0		0.0367529	
Std Vapor Volumetric Flow	MMSCFD	237.638	126.270	237.638	126.270			200.573	200.020	200.020		0.000444447	
Std Liquid Volumetric Flow	sgpm	1737.46	923.203	1737.46	923.203			2687.78	2684.03	2684.03		0.00600486	
Compressibility		0.999807	0.999807	0.999856	0.999856			0.836097	0.839981	0.840061		0.849373	
Specific Gravity		0.996127	0.996127	0.996127	0.996127			0.747585	0.747410	0.747410		0.758292	
API Gravity													
Enthalpy	Btu/h	#########	#########	#########	#########			-7.54954E+08	-7.48600E+08	-7.48600E+08		-1665.36	
Mass Enthalpy	Btu/lb	6.64581	6.64581	9.06480	9.06480			-1583.28	-1574.66	-1574.66		-1553.89	
Mass Cp	Btu/(lb*°F)	0.241809	0.241809	0.241845	0.241845			0.620026	0.618561	0.618409		0.615332	
Ideal Gas CpCv Ratio		1.39902	1.39902	1.39890	1.39890			1.22934	1.22850	1.22852		1.22166	
Dynamic Viscosity	cP	0.0189072	0.0189072	0.0191476	0.0191476			0.0131951	0.0132080	0.0132043		0.0133535	
Kinematic Viscosity	cSt	16.7528	16.7528	17.3846	17.3846			0.219075	0.222006	0.222187		0.229296	
Thermal Conductivity	Btu/(h*ft*°F	0.0155190	0.0155190	0.0157371	0.0157371			0.0225694	0.0226582	0.0226512		0.0230571	
Surface Tension	lbf/ft												
Net Ideal Gas Heating Value	Btu/ft^3	0	0	0	0			1161.85	1163.79	1163.79		1180.60	
Net Liquid Heating Value	Btu/lb	0	0	0	0			20297.3	20337.9	20337.9		20332.3	
Gross Ideal Gas Heating Valu	Btu/ft^3	0	0	0	0			1279.74	1281.80	1281.80		1299.82	
Gross Liquid Heating Value	Btu/lb	0	0	0	0			22363.9	22407.1	22407.1		22392.7	

TEG PStreams

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
Mole Fraction		%	%	%	%	%	%	%	%	%	%	%	%	%
H2S		2.51274E-06	2.51274E-06	1.73958E-06	1.73958E-06	1.73958E-06	1.73958E-06	1.73958E-06	1.38459E-09	1.38459E-09	1.38459E-09	1.38459E-09	##########	##########
N2		0.0132610	0.0132610	0.000325235	0.000325235	0.000325235	0.000325235	0.000325235	3.08359E-10	3.08359E-10	3.08359E-10	3.08359E-10	##########	##########
CO2		5.19027E-06	5.19027E-06	1.72114E-06	1.72114E-06	1.72114E-06	1.72114E-06	1.72114E-06	1.32400E-10	1.32400E-10	1.32400E-10	1.32400E-10	##########	##########
C1		2.00421	2.00421	0.145312	0.145312	0.145312	0.145312	0.145312	7.84653E-07	7.84653E-07	7.84653E-07	7.84653E-07	##########	##########
C2		0.899753	0.899753	0.162339	0.162339	0.162339	0.162339	0.162339	4.94999E-06	4.94999E-06	4.94999E-06	4.94999E-06	##########	##########
C3		0.678771	0.678771	0.188680	0.188680	0.188680	0.188680	0.188680	1.58482E-05	1.58482E-05	1.58482E-05	1.58482E-05	##########	##########
iC4		0.101200	0.101200	0.0337373	0.0337373	0.0337373	0.0337373	0.0337373	5.08261E-06	5.08261E-06	5.08261E-06	5.08261E-06	##########	##########
nC4		0.348216	0.348216	0.143747	0.143747	0.143747	0.143747	0.143747	3.66985E-05	3.66985E-05	3.66985E-05	3.66985E-05	##########	##########
iC5		0.104258	0.104258	0.0533508	0.0533508	0.0533508	0.0533508	0.0533508	2.94546E-05	2.94546E-05	2.94546E-05	2.94546E-05	##########	##########
nC5		0.131200	0.131200	0.0720901	0.0720901	0.0720901	0.0720901	0.0720901	4.80842E-05	4.80842E-05	4.80842E-05	4.80842E-05	##########	##########
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.0673086	0.0673086	0.0473059	0.0473059	0.0473059	0.0473059	0.0473059	0.000125769	0.000125769	0.000125769	0.000125769	##########	##########
nC6		0.0424611	0.0424611	0.0308127	0.0308127	0.0308127	0.0308127	0.0308127	9.14881E-05	9.14881E-05	9.14881E-05	9.14881E-05	##########	##########
Benzene		0.475701	0.475701	0.469005	0.469005	0.469005	0.469005	0.469005	0.0108061	0.0108061	0.0108061	0.0108061	0.0108061	0.0108061
Cyclohexane		0.114472	0.114472	0.0998297	0.0998297	0.0998297	0.0998297	0.0998297	0.000678281	0.000678281	0.000678281	0.000678281	##########	##########
3,3-Dimethylpentane		0.0714775	0.0714775	0.0558378	0.0558378	0.0558378	0.0558378	0.0558378	0.000185708	0.000185708	0.000185708	0.000185708	##########	##########
C7		0.0142500	0.0142500	0.0111869	0.0111869	0.0111869	0.0111869	0.0111869	3.55208E-05	3.55208E-05	3.55208E-05	3.55208E-05	##########	##########
Toluene		0.409699	0.409699	0.412430	0.412430	0.412430	0.412430	0.412430	0.0184203	0.0184203	0.0184203	0.0184203	0.0184203	0.0184203
i-Octane		0.0460612	0.0460612	0.0357217	0.0357217	0.0357217	0.0357217	0.0357217	0.000111856	0.000111856	0.000111856	0.000111856	##########	##########
C8		0.00436128	0.00436128	0.00373705	0.00373705	0.00373705	0.00373705	0.00373705	2.07331E-05	2.07331E-05	2.07331E-05	2.07331E-05	##########	##########
Ethylbenzene		0.0459746	0.0459746	0.0468000	0.0468000	0.0468000	0.0468000	0.0468000	0.00374662	0.00374662	0.00374662	0.00374662	0.00374662	0.00374662
m-Xylene		0.122473	0.122473	0.124731	0.124731	0.124731	0.124731	0.124731	0.0101495	0.0101495	0.0101495	0.0101495	0.0101495	0.0101495
C9		0.00935137	0.00935137	0.00853917	0.00853917	0.00853917	0.00853917	0.00853917	8.55745E-05	8.55745E-05	8.55745E-05	8.55745E-05	##########	##########
C10		0.00812160	0.00812160	0.00776657	0.00776657	0.00776657	0.00776657	0.00776657	0.000144024	0.000144024	0.000144024	0.000144024	##########	##########
H2O		27.7346	27.7346	28.6734	28.6734	28.6734	28.6734	28.6734	7.24932	7.24932	7.24932	7.24932	7.24932	7.24932
TEG		66.4972	66.4972	69.1156	69.1156	69.1156	69.1156	69.1156	92.6331	92.6331	92.6331	92.6331	92.6331	92.6331
UCARSOL™ AP-814		0.0555766	0.0555766	0.0577036	0.0577036	0.0577036	0.0577036	0.0577036	0.0728328	0.0728328	0.0728328	0.0728328	0.0728328	0.0728328
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		5.40917E-06	5.40917E-06	3.60292E-06	3.60292E-06	3.60292E-06	3.60292E-06	3.60292E-06	2.13963E-09	2.13963E-09	2.13963E-09	2.13963E-09	##########	##########
N2		0.0285470	0.0285470	0.000673607	0.000673607	0.000673607	0.000673607	0.000673607	4.76510E-10	4.76510E-10	4.76510E-10	4.76510E-10	##########	##########
CO2		1.11731E-05	1.11731E-05	3.56472E-06	3.56472E-06	3.56472E-06	3.56472E-06	3.56472E-06	2.04599E-10	2.04599E-10	2.04599E-10	2.04599E-10	##########	##########
C1		4.31447	4.31447	0.300961	0.300961	0.300961	0.300961	0.300961	1.21253E-06	1.21253E-06	1.21253E-06	1.21253E-06	##########	##########
C2		1.93690	1.93690	0.336227	0.336227	0.336227	0.336227	0.336227	7.64926E-06	7.64926E-06	7.64926E-06	7.64926E-06	##########	##########
C3		1.46119	1.46119	0.390783	0.390783	0.390783	0.390783	0.390783	2.44904E-05	2.44904E-05	2.44904E-05	2.44904E-05	##########	##########
iC4		0.217852	0.217852	0.0698748	0.0698748	0.0698748	0.0698748	0.0698748	7.85420E-06	7.85420E-06	7.85420E-06	7.85420E-06	##########	##########
nC4		0.749604	0.749604	0.297720	0.297720	0.297720	0.297720	0.297720	5.67105E-05	5.67105E-05	5.67105E-05	5.67105E-05	##########	##########
iC5		0.224437	0.224437	0.110497	0.110497	0.110497	0.110497	0.110497	4.55164E-05	4.55164E-05	4.55164E-05	4.55164E-05	##########	##########
nC5		0.282434	0.282434	0.149309	0.149309	0.149309	0.149309	0.149309	7.43050E-05	7.43050E-05	7.43050E-05	7.43050E-05	##########	##########
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.144895	0.144895	0.0979771	0.0979771	0.0979771	0.0979771	0.0979771	0.000194352	0.000194352	0.000194352	0.000194352	##########	##########
nC6		0.0914060	0.0914060	0.0638174	0.0638174	0.0638174	0.0638174	0.0638174	0.000141377	0.000141377	0.000141377	0.000141377	##########	##########
Benzene		1.02404	1.02404	0.971375	0.971375	0.971375	0.971375	0.971375	0.0166988	0.0166988	0.0166988	0.0166988	0.0166988	0.0166988
Cyclohexane		0.246424	0.246424	0.206761	0.206761	0.206761	0.206761	0.206761	0.00104815	0.00104815	0.00104815	0.00104815	0.00104815	0.00104815
3,3-Dimethylpentane		0.153869	0.153869	0.115648	0.115648	0.115648	0.115648	0.115648	0.000286976	0.000286976	0.000286976	0.000286976	##########	##########
C7		0.0306761	0.0306761	0.0231696	0.0231696	0.0231696	0.0231696	0.0231696	5.48906E-05	5.48906E-05	5.48906E-05	5.48906E-05	##########	##########
Toluene		0.881959	0.881959	0.854199	0.854199	0.854199	0.854199	0.854199	0.0284651	0.0284651	0.0284651	0.0284651	0.0284651	0.0284651
i-Octane		0.0991558	0.0991558	0.0739846	0.0739846	0.0739846	0.0739846	0.0739846	0.000172852	0.000172852	0.000172852	0.000172852	##########	##########
C8		0.00938853	0.00938853	0.00773994	0.00773994	0.00773994	0.00773994	0.00773994	3.20390E-05	3.20390E-05	3.20390E-05	3.20390E-05	##########	##########
Ethylbenzene		0.0989694	0.0989694	0.0969294	0.0969294	0.0969294	0.0969294	0.0969294	0.00578969	0.00578969	0.00578969	0.00578969	0.00578969	0.00578969
m-Xylene		0.263647	0.263647	0.258335	0.258335	0.258335	0.258335	0.258335	0.0156842	0.0156842	0.0156842	0.0156842	0.0156842	0.0156842
C9		0.0201307	0.0201307	0.0176858	0.0176858	0.0176858	0.0176858	0.0176858	0.000132239	0.000132239	0.000132239	0.000132239	##########	##########
C10		0.0174834	0.0174834	0.0160857	0.0160857	0.0160857	0.0160857	0.0160857	0.000222561	0.000222561	0.000222561	0.000222561	##########	##########
H2O		59.7042	59.7042	59.3867	59.3867	59.3867	59.3867	59.3867	11.2024	11.2024	11.2024	11.2024	11.2024	11.2024
TEG		143.149	143.149	143.148	143.148	143.148	143.148	143.148	143.147	143.147	143.147	143.147	143.147	143.147
UCARSOL™ AP-814		0.119640	0.119640	0.119512	0.119512	0.119512	0.119512	0.119512	0.112549	0.112549	0.112549	0.112549	0.112549	0.112549
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%	%	%	%	%	%	%
H2S		7.96460E-07	7.96460E-07	5.36163E-07	5.36163E-07	5.36163E-07	5.36163E-07	5.36163E-07	3.35798E-10	3.35798E-10	3.35798E-10	3.35798E-10	##########	##########
N2		0.00345500	0.00345500	8.23957E-05	8.23957E-05	8.23957E-05	8.23957E-05	8.23957E-05	6.14705E-11	6.14705E-11	6.14705E-11	6.14705E-11	##########	##########
CO2		2.12443E-06	2.12443E-06	6.85020E-07	6.85020E-07	6.85020E-07	6.85020E-07	6.85020E-07	4.14647E-11	4.14647E-11	4.14647E-11	4.14647E-11	##########	##########
C1		0.299034	0.299034	0.0210821	0.0210821	0.0210821	0.0210821	0.0210821	8.95762E-08	8.95762E-08	8.95762E-08	8.95762E-08	##########	##########
C2		0.251622	0.251622	0.0441453	0.0441453	0.0441453	0.0441453	0.0441453	1.05918E-06	1.05918E-06	1.05918E-06	1.05918E-06	##########	##########
C3		0.278372	0.278372	0.0752426	0.0752426	0.0752426	0.0752426	0.0752426	4.97303E-06	4.97303E-06	4.97303E-06	4.97303E-06	##########	##########
iC4		0.0547050	0.0547050	0.0177335	0.0177335	0.0177335	0.0177335	0.0177335	2.10220E-06	2.10220E-06	2.10220E-06	2.10220E-06	##########	##########
nC4		0.188233	0.188233	0.0755582	0.0755582	0.0755582	0.0755582	0.0755582	1.51787E-05	1.51787E-05	1.51787E-05	1.51787E-05	##########	##########
iC5		0.0699594	0.0699594	0.0348106	0.0348106	0.0348106	0.0348106	0.0348106	1.51226E-05	1.51226E-05	1.51226E-05	1.51226E-05	##########	##########
nC5		0.0880378	0.0880378	0.0470377	0.0470377	0.0470377	0.0470377	0.0470377	2.46874E-05	2.46874E-05	2.46874E-05	2.46874E-05	##########	##########
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.0539460	0.0539460	0.0368672	0.0368672	0.0368672	0.0368672	0.0368672	7.71259E-05	7.71259E-05	7.71259E-05	7.71259E-05	##########	##########
nC6		0.0340314	0.0340314	0.0240134	0.0240134	0.0240134	0.0240134	0.0240134	5.61038E-05	5.61038E-05	5.61038E-05	5.61038E-05	##########	##########
Benzene		0.345586	0.345586	0.331311	0.331311	0.331311	0.331311	0.331311	0.00600664	0.00600664	0.00600664	0.00600664	0.00600664	0.00600664
Cyclohexane		0.0896001	0.0896001	0.0759808	0.0759808	0.0759808	0.0759808	0.0759808	0.000406216	0.000406216	0.000406216	0.000406216	##########	##########
3,3-Dimethylpentane		0.0666118	0.0666118	0.0505994	0.0505994	0.0505994	0.0505994	0.0505994	0.000132419	0.000132419	0.000132419	0.000132419	##########	##########
C7		0.0132800	0.0132800	0.0101374	0.0101374	0.0101374	0.0101374	0.0101374	2.53281E-05	2.53281E-05	2.53281E-05	2.53281E-05	##########	##########
Toluene		0.351085	0.351085	0.343662	0.343662	0.343662	0.343662	0.343662	0.0120776	0.0120776	0.0120776	0.0120776	0.0120776	0.0120776
i-Octane		0.0489345	0.0489345	0.0369018	0.0369018	0.0369018	0.0369018	0.0369018	9.09239E-05	9.09239E-05	9.09239E-05	9.09239E-05	##########	##########
C8		0.00463335	0.00463335	0.00386051	0.00386051	0.00386051	0.00386051	0.00386051	1.68532E-05	1.68532E-05	1.68532E-05	1.68532E-05	##########	##########
Ethylbenzene		0.0453947	0.0453947	0.0449334	0.0449334	0.0449334	0.0449334	0.0449334	0.00283052	0.00283052	0.00283052	0.00283052	0.00283052	0.00283052
m-Xylene		0.120928	0.120928	0.119756	0.119756	0.119756	0.119756	0.119756	0.00766782	0.00766782	0.00766782	0.00766782	0.00766782	0.00766782
C9		0.0111547	0.0111547	0.00990448	0.00990448	0.00990448	0.00990448	0.00990448	7.81022E-05	7.81022E-05	7.81022E-05	7.81022E-05	##########	##########
C10		0.0107472	0.0107472	0.00999355	0.00999355	0.00999355	0.00999355	0.00999355	0.000145824	0.000145824	0.000145824	0.000145824	##########	##########
H2O		4.64696	4.64696	4.67156	4.67156	4.67156	4.67156	4.67156	0.929357	0.929357	0.929357	0.929357	0.929357	0.929357
TEG		92.8755	92.8755	93.8662	93.8662	93.8662	93.8662	93.8662	98.9925	98.9925	98.9925	98.9925	98.9925	98.9925
UCARSOL™ AP-814		0.0481635	0.0481635	0.0486294	0.0486294	0.0486294	0.0486294	0.0486294	0.0484641	0.0484641	0.0484641	0.0484641	0.0484641	0.0484641
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.000184349	0.000184349	0.000122791	0.000122791	0.000122791	0.000122791	0.000122791	7.29203E-08	7.29203E-08	7.29203E-08	7.29203E-08	##########	##########
N2		0.799698	0.799698	0.0188700	0.0188700	0.0188700	0.0188700	0.0188700	1.33487E-08	1.33487E-08	1.33487E-08	1.33487E-08	##########	##########
CO2		0.000491722	0.000491722	0.000156881	0.000156881	0.000156881	0.000156881	0.000156881	9.00429E-09	9.00429E-09	9.00429E-09	9.00429E-09	##########	##########

TEG PStreams

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
C1		69.2146	69.2146	4.82816	4.82816	4.82816	4.82816	4.82816	1.94520E-05	1.94520E-05	1.94520E-05	1.94520E-05	##########	##########
C2		58.2407	58.2407	10.1100	10.1100	10.1100	10.1100	10.1100	0.000230006	0.000230006	0.000230006	0.000230006	##########	##########
C3		64.4321	64.4321	17.2318	17.2318	17.2318	17.2318	17.2318	0.00107992	0.00107992	0.00107992	0.00107992	0.00107992	0.00107992
iC4		12.6621	12.6621	4.06127	4.06127	4.06127	4.06127	4.06127	0.000456504	0.000456504	0.000456504	0.000456504	##########	##########
nC4		43.5686	43.5686	17.3041	17.3041	17.3041	17.3041	17.3041	0.00329614	0.00329614	0.00329614	0.00329614	0.00329614	0.00329614
iC5		16.1928	16.1928	7.97223	7.97223	7.97223	7.97223	7.97223	0.00328395	0.00328395	0.00328395	0.00328395	0.00328395	0.00328395
nC5		20.3773	20.3773	10.7724	10.7724	10.7724	10.7724	10.7724	0.00536101	0.00536101	0.00536101	0.00536101	0.00536101	0.00536101
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		12.4864	12.4864	8.44321	8.44321	8.44321	8.44321	8.44321	0.0167483	0.0167483	0.0167483	0.0167483	0.0167483	0.0167483
nC6		7.87694	7.87694	5.49949	5.49949	5.49949	5.49949	5.49949	0.0121832	0.0121832	0.0121832	0.0121832	0.0121832	0.0121832
Benzene		79.9897	79.9897	75.8759	75.8759	75.8759	75.8759	75.8759	1.30438	1.30438	1.30438	1.30438	1.30438	1.30438
Cyclohexane		20.7389	20.7389	17.4009	17.4009	17.4009	17.4009	17.4009	0.0882121	0.0882121	0.0882121	0.0882121	0.0882121	0.0882121
3,3-Dimethylpentane		15.4180	15.4180	11.5881	11.5881	11.5881	11.5881	11.5881	0.0287556	0.0287556	0.0287556	0.0287556	0.0287556	0.0287556
C7		3.07380	3.07380	2.32164	2.32164	2.32164	2.32164	2.32164	0.00550015	0.00550015	0.00550015	0.00550015	0.00550015	0.00550015
Toluene		81.2623	81.2623	78.7046	78.7046	78.7046	78.7046	78.7046	2.62272	2.62272	2.62272	2.62272	2.62272	2.62272
i-Octane		11.3264	11.3264	8.45115	8.45115	8.45115	8.45115	8.45115	0.0197446	0.0197446	0.0197446	0.0197446	0.0197446	0.0197446
C8		1.07244	1.07244	0.884122	0.884122	0.884122	0.884122	0.884122	0.00365977	0.00365977	0.00365977	0.00365977	0.00365977	0.00365977
Ethylbenzene		10.5071	10.5071	10.2905	10.2905	10.2905	10.2905	10.2905	0.614663	0.614663	0.614663	0.614663	0.614663	0.614663
m-Xylene		27.9901	27.9901	27.4261	27.4261	27.4261	27.4261	27.4261	1.66511	1.66511	1.66511	1.66511	1.66511	1.66511
C9		2.58186	2.58186	2.26830	2.26830	2.26830	2.26830	2.26830	0.0169603	0.0169603	0.0169603	0.0169603	0.0169603	0.0169603
C10		2.48756	2.48756	2.28869	2.28869	2.28869	2.28869	2.28869	0.0316664	0.0316664	0.0316664	0.0316664	0.0316664	0.0316664
H2O		1075.59	1075.59	1069.87	1069.87	1069.87	1069.87	1069.87	201.815	201.815	201.815	201.815	201.815	201.815
TEG		21497.0	21497.0	21497.0	21497.0	21497.0	21497.0	21497.0	21496.8	21496.8	21496.8	21496.8	21496.8	21496.8
UCARSOL™ AP-814		11.1480	11.1480	11.1370	11.1370	11.1370	11.1370	11.1370	10.5242	10.5242	10.5242	10.5242	10.5242	10.5242
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0	0

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
Property	Units													
Temperature	°F	209.397	209.397	209.391	209.394	209.399	275*	270.022	400.000	332.227	262.197	262.401	119.995	120*
Pressure	psia	89.6959*	89.6959	88.6959	87.6959	85.6959	80.6959	16.6959*	15.6959	15.1959	14.6959	79.6959*	74.6959	73.6959
Mole Fraction Vapor	%	3.77749	3.77749	0	0.00535416	0.0162403	0.165550	3.02153	0	0	0	0	0	0
Mole Fraction Light Liquid	%	96.2225	96.2225	100	99.9946	99.9838	99.8344	96.9785	100	100	100	100	100	100
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	107.521	107.521	110.575	110.575	110.575	110.575	110.575	140.526	140.526	140.526	140.526	140.526	140.526
Mass Density	lb/ft^3	23.4116	23.4116	64.9373	64.7767	64.4411	57.4930	6.99713	58.0560	60.7176	63.3880	63.3871	68.5965	68.5963
Molar Flow	lbmol/h	215.270	215.270	207.114	207.114	207.114	207.114	207.114	154.531	154.531	154.531	154.531	154.531	154.531
Mass Flow	lb/h	23146.1	23146.1	22901.7	22901.7	22901.7	22901.7	22901.7	21715.6	21715.6	21715.6	21715.6	21715.6	21715.6
Vapor Volumetric Flow	ft^3/h	988.659	988.659	352.674	353.549	355.390	398.339	3273.02	374.045	357.649	342.582	342.586	316.569	316.571
Liquid Volumetric Flow	gpm	123.261	123.261	43.9698	44.0788	44.3083	49.6631	408.064	46.6342	44.5899	42.7115	42.7121	39.4684	39.4685
Std Vapor Volumetric Flow	MMSCFD	1.96060	1.96060	1.88631	1.88631	1.88631	1.88631	1.88631	1.40741	1.40741	1.40741	1.40741	1.40741	1.40741
Std Liquid Volumetric Flow	sgpm	42.2493	42.2493	41.1052	41.1052	41.1052	41.1052	41.1052	38.4883	38.4883	38.4883	38.4883	38.4883	38.4883
Compressibility		0.0573724	0.0573724	0.0210348	0.0208491	0.0204796	0.0196852	0.0336936	0.00411814	0.00413844	0.00420558	0.0228007	0.0245986	0.0242691
Specific Gravity				1.04118					0.930851	0.973526	1.01634	1.01633	1.09985	1.09985
API Gravity				-4.88538					-6.67486	-6.67479	-6.67472	-6.68395	-6.68324	-6.68309
Enthalpy	Btu/h	-5.56405E+07	-5.56405E+07	-5.53260E+07	-5.53260E+07	-5.53260E+07	-5.43691E+07	-5.43691E+07	-4.67735E+07	-4.77304E+07	-4.86856E+07	-4.86793E+07	##########	##########
Mass Enthalpy	Btu/lb	-2403.88	-2403.88	-2415.80	-2415.80	-2415.80	-2374.02	-2374.02	-2153.92	-2197.98	-2241.97	-2241.68	-2325.53	-2325.53
Mass Cp	Btu/(lb*°F)	0.622632	0.622632	0.623822	0.623821	0.623819	0.648353	0.642923	0.660483	0.639612	0.616217	0.616152	0.558599	0.558602
Ideal Gas CpCv Ratio		1.04367	1.04367	1.04247	1.04247	1.04247	1.04014	1.04029	1.02882	1.03000	1.03157	1.03156	1.03673	1.03673
Dynamic Viscosity	cP			3.07548					0.747446	1.18770	2.10544	2.10787	13.8191	13.8173
Kinematic Viscosity	cSt			2.95664					0.803733	1.22116	2.07355	2.07598	12.5765	12.5748
Thermal Conductivity	Btu/(h*ft*°F			0.117204?					0.106455?	0.110049?	0.112498?	0.112493?	0.113507	0.113507
Surface Tension	lbf/ft			0.00271515?					0.00200905?	0.00225015?	0.00249067?	0.00249007?	0.00294732	0.00294731
Net Ideal Gas Heating Value	Btu/ft^3	2645.11	2645.11	2688.00	2688.00	2688.00	2688.00	2688.00	3503.08	3503.08	3503.08	3503.08	3503.08	3503.08
Net Liquid Heating Value	Btu/lb	9041.61	9041.61	8929.23	8929.23	8929.23	8929.23	8929.23	9192.86	9192.86	9192.86	9192.86	9192.86	9192.86
Gross Ideal Gas Heating Valu	Btu/ft^3	2903.10	2903.10	2950.41	2950.41	2950.41	2950.41	2950.41	3832.92	3832.92	3832.92	3832.92	3832.92	3832.92
Gross Liquid Heating Value	Btu/lb	9952.17	9952.17	9829.82	9829.82	9829.82	9829.82	9829.82	10083.6	10083.6	10083.6	10083.6	10083.6	10083.6

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
Mole Fraction		%	%		%	%	%	%						
H2S		2.20062E-05	2.20062E-05		2.23780E-05	2.28555E-05	3.30578E-05	4.24762E-05						
N2		0.342652	0.342652		0.327069	0.300683	0.118565	0.0106892						
CO2		9.31405E-05	9.31405E-05		9.40606E-05	9.56384E-05	0.000114774	5.22184E-05						
C1		49.3060	49.3060		48.8723	48.1826	32.1530	4.72013						
C2		19.6359	19.6359		19.7154	19.8929	19.0290	5.13364						
C3		13.1144	13.1144		13.2185	13.4095	14.6540	5.79693						
iC4		1.81174	1.81174		1.82867	1.85785	2.12533	1.01609						
nC4		5.52688	5.52688		5.58873	5.68738	7.02466	4.20489						
iC5		1.39190	1.39190		1.40984	1.43619	1.89327	1.48627						
nC5		1.62550	1.62550		1.64756	1.67904	2.26891	1.96547						
Neohexane		0	0		0	0	0	0						
Cyclopentane		0	0		0	0	0	0						
2,3-Dimethylbutane		0.571805	0.571805		0.580917	0.592578	0.779643	1.10050						
nC6		0.336149	0.336149		0.341593	0.348460	0.475415	0.700919						
Benzene		0.639589	0.639589		0.652507	0.666505	1.46305	4.60500						
Cyclohexane		0.482370	0.482370		0.491270	0.501530	0.838820	1.77880						
3,3-Dimethylpentane		0.465420	0.465420		0.473272	0.482841	0.754403	1.20992						
C7		0.0914073	0.0914073		0.0929414	0.0948082	0.154246	0.243495						
Toluene		0.337096	0.337096		0.343882	0.351166	0.833184	2.89017						
i-Octane		0.306558	0.306558		0.311637	0.317855	0.497949	0.781969						
C8		0.0200605	0.0200605		0.0204116	0.0208211	0.0365930	0.0707355						
Ethylbenzene		0.0247740	0.0247740		0.0252684	0.0257969	0.0649340	0.238334						
m-Xylene		0.0645114	0.0645114		0.0657912	0.0671586	0.169520	0.622788						
C9		0.0297361	0.0297361		0.0302678	0.0308693	0.0594044	0.135763						
C10		0.0169944	0.0169944		0.0173017	0.0176415	0.0362049	0.0971462						
H2O		3.85138	3.85138		3.93749	4.02834	14.5070	60.9526						

TEG PStreams

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
TEG		0.00557085	0.00557085		0.00567570	0.00578933	0.0568668	0.212660						
UCARSOL™ AP-814		0.00154665	0.00154665		0.00157888	0.00161301	0.00591701	0.0250064						
Oxygen		0	0		0	0	0	0						
Molar Flow		lbmol/h	lbmol/h		lbmol/h	lbmol/h	lbmol/h	lbmol/h						
H2S		1.78950E-06	1.78950E-06		2.48154E-09	7.68764E-09	1.13348E-07	2.65817E-06						
N2		0.0278637	0.0278637		3.62693E-05	0.000101138	0.000406531	0.000668930						
CO2		7.57400E-06	7.57400E-06		1.04306E-08	3.21689E-08	3.93533E-07	3.26784E-06						
C1		4.00947	4.00947		0.00541955	0.0162067	0.110245	0.295387						
C2		1.59675	1.59675		0.00218629	0.00669115	0.0652460	0.321264						
C3		1.06643	1.06643		0.00146582	0.00451039	0.0502453	0.362773						
iC4		0.147327	0.147327		0.000202785	0.000624904	0.00728729	0.0635872						
nC4		0.449435	0.449435		0.000619746	0.00191300	0.0240860	0.263143						
iC5		0.113187	0.113187		0.000156340	0.000483076	0.00649161	0.0930111						
nC5		0.132182	0.132182		0.000182701	0.000564761	0.00777959	0.123000						
Neohexane		0	0		0	0	0	0						
Cyclopentane		0	0		0	0	0	0						
2,3-Dimethylbutane		0.0464981	0.0464981		6.44190E-05	0.000199319	0.00267322	0.0688695						
nC6		0.0273349	0.0273349		3.78799E-05	0.000117208	0.00163009	0.0438637						
Benzene		0.0520101	0.0520101		7.23579E-05	0.000224185	0.00501646	0.288182						
Cyclohexane		0.0392254	0.0392254		5.44779E-05	0.000168694	0.00287612	0.111317						
3,3-Dimethylpentane		0.0378470	0.0378470		5.24821E-05	0.000162408	0.00258668	0.0757170						
C7		0.00743306	0.00743306		1.03065E-05	3.18896E-05	0.000528876	0.0152380						
Toluene		0.0274120	0.0274120		3.81338E-05	0.000118118	0.00285680	0.180868						
i-Octane		0.0249287	0.0249287		3.45581E-05	0.000106914	0.00170735	0.0489358						
C8		0.00163128	0.00163128		2.26348E-06	7.00337E-06	0.000125469	0.00442664						
Ethylbenzene		0.00201458	0.00201458		2.80207E-06	8.67703E-06	0.000222644	0.0149150						
m-Xylene		0.00524594	0.00524594		7.29572E-06	2.25894E-05	0.000581244	0.0389742						
C9		0.00241808	0.00241808		3.35646E-06	1.03832E-05	0.000203684	0.00849604						
C10		0.00138195	0.00138195		1.91862E-06	5.93388E-06	0.000124138	0.00607943						
H2O		0.313187	0.313187		0.000436637	0.00135497	0.0497413	3.81442						
TEG		0.000453010	0.000453010		6.29391E-07	1.94730E-06	0.000194983	0.0133083						
UCARSOL™ AP-814		0.000125771	0.000125771		1.75085E-07	5.42551E-07	2.02881E-05	0.00156490						
Oxygen		0	0		0	0	0	0						
Mass Fraction		%	%		%	%	%	%						
H2S		2.50617E-05	2.50617E-05		2.53654E-05	2.57213E-05	3.31405E-05	4.17507E-05						
N2		0.320755	0.320755		0.304730	0.278142	0.0977001	0.00863607						
CO2		0.000136975	0.000136975		0.000137678	0.000138986	0.000148581	6.62791E-05						
C1		26.4317	26.4317		26.0762	25.5243	15.1728	2.18390						
C2		19.7299	19.7299		19.7168	19.7519	16.8310	4.45197						
C3		19.3240	19.3240		19.3859	19.5253	19.0075	7.37225						
iC4		3.51879	3.51879		3.53498	3.56569	3.63365	1.70326						
nC4		10.7344	10.7344		10.8035	10.9156	12.0100	7.04862						
iC5		3.35578	3.35578		3.38306	3.42163	4.01806	3.09267						
nC5		3.91895	3.91895		3.95349	4.00020	4.81527	4.08980						
Neohexane		0	0		0	0	0	0						
Cyclopentane		0	0		0	0	0	0						
2,3-Dimethylbutane		1.64659	1.64659		1.66497	1.68624	1.97630	2.73514						
nC6		0.967986	0.967986		0.979043	0.991580	1.20512	1.74204						
Benzene		1.66945	1.66945		1.69517	1.71914	3.36163	10.3742						
Cyclohexane		1.35656	1.35656		1.37510	1.39377	2.07657	4.31754						
3,3-Dimethylpentane		1.55839	1.55839		1.57724	1.59761	2.22359	3.49655						
C7		0.306064	0.306064		0.309739	0.313699	0.454638	0.703676						
Toluene		1.03789	1.03789		1.05380	1.06843	2.25817	7.68018						
i-Octane		1.17015	1.17015		1.18395	1.19894	1.67315	2.57615						
C8		0.0765722	0.0765722		0.0775463	0.0785362	0.122955	0.233034						
Ethylbenzene		0.0878887	0.0878887		0.0892214	0.0904359	0.202781	0.729750						
m-Xylene		0.228861	0.228861		0.232305	0.235437	0.529390	1.90690						
C9		0.127442	0.127442		0.129112	0.130735	0.224113	0.502182						
C10		0.0807996	0.0807996		0.0818744	0.0828850	0.151527	0.398641						
H2O		2.31853	2.31853		2.35923	2.39640	7.68765	31.6694						
TEG		0.0279555	0.0279555		0.0283479	0.0287086	0.251203	0.921051						
UCARSOL™ AP-814		0.00446425	0.00446425		0.00453585	0.00460074	0.0150627	0.0623925						
Oxygen		0	0		0	0	0	0						
Mass Flow		lb/h	lb/h		lb/h	lb/h	lb/h	lb/h						
H2S		6.09878E-05	6.09878E-05		8.45732E-08	2.62002E-07	3.86300E-06	9.05928E-05						
N2		0.780558	0.780558		0.00101603	0.00283321	0.0113883	0.0187390						
CO2		0.000333328	0.000333328		4.59045E-07	1.41574E-06	1.73192E-05	0.000143816						
C1		64.3217	64.3217		0.0869430	0.259995	1.76860	4.73873						
C2		48.0128	48.0128		0.0657395	0.201197	1.96188	9.66011						
C3		47.0250	47.0250		0.0646364	0.198889	2.21560	15.9967						
iC4		8.56298	8.56298		0.0117863	0.0363208	0.423553	3.69583						
nC4		26.1221	26.1221		0.0360210	0.111188	1.39993	15.2945						
iC5		8.16630	8.16630		0.0112798	0.0348533	0.468362	6.71064						
nC5		9.53678	9.53678		0.0131817	0.0407468	0.561288	8.87427						
Neohexane		0	0		0	0	0	0						
Cyclopentane		0	0		0	0	0	0						
2,3-Dimethylbutane		4.00699	4.00699		0.00555133	0.0171764	0.230366	5.93485						
nC6		2.35560	2.35560		0.00326431	0.0101004	0.140474	3.77997						
Benzene		4.06261	4.06261		0.00565201	0.0175115	0.391845	22.5104						
Cyclohexane		3.30119	3.30119		0.00458483	0.0141972	0.242053	9.36842						
3,3-Dimethylpentane		3.79235	3.79235		0.00525881	0.0162736	0.259190	7.58699						
C7		0.744807	0.744807		0.00103273	0.00319540	0.0529944	1.52687						
Toluene		2.52570	2.52570		0.00351359	0.0108832	0.263221	16.6649						
i-Octane		2.84757	2.84757		0.00394752	0.0122126	0.195029	5.58986						
C8		0.186339	0.186339		0.000258554	0.000799984	0.0143321	0.505649						
Ethylbenzene		0.213877	0.213877		0.000297481	0.000921197	0.0236370	1.58345						
m-Xylene		0.556935	0.556935		0.000774550	0.00239821	0.0617078	4.13769						
C9		0.310131	0.310131		0.000430483	0.00133169	0.0261235	1.08966						
C10		0.196626	0.196626		0.000272985	0.000844282	0.0176626	0.864992						
H2O		5.64214	5.64214		0.00786614	0.0244102	0.896103	68.7179						
TEG		0.0680299	0.0680299		9.45174E-05	0.000292431	0.0292812	1.99854						
UCARSOL™ AP-814		0.0108638	0.0108638		1.51234E-05	4.68640E-05	0.00175576	0.135383						
Oxygen		0	0		0	0	0	0						

TEG PStreams

Process Streams		213	214	215	216	217	218	219	220	221	222	223	224	225
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
Process Streams		**213**	**214**	**215**	**216**	**217**	**218**	**219**	**220**	**221**	**222**	**223**	**224**	**225**
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	LV-101	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG REBOILER	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER
	To Block:	MIX-100	FLASH TK	PRE FILTER	CARBON FILT	L/R EXCH HOT	LV-102	TEG STILL	L/R EXCH HOT	L/R EXCH COLD	BOOSTER PUMP	FAXR-100	LEAN FILTER	RCYL-2
Property	Units													
Temperature	°F	209.397	209.397		209.394	209.399	275	270.022						
Pressure	psia	89.6959	89.6959		87.6959	85.6959	80.6959	16.6959						
Mole Fraction Vapor	%	100	100		100	100	100	100						
Mole Fraction Light Liquid	%	0	0		0	0	0	0						
Mole Fraction Heavy Liquid	%	0	0		0	0	0	0						
Phase Mole Fraction	%	3.77749	3.77749		0.00535416	0.0162403	0.165550	3.02153						
Molecular Weight	lb/lbmol	29.9258	29.9258		30.0670	30.2837	33.9958	34.6732						
Mass Density	lb/ft^3	0.382655	0.382655		0.375786	0.369801	0.355368	0.0744780						
Molar Flow	lbmol/h	8.13180	8.13180		0.0110892	0.0336359	0.342877	6.25802						
Mass Flow	lb/h	243.350	243.350		0.333419	1.01862	11.6564	216.985						
Vapor Volumetric Flow	ft^3/h	635.952	635.952		0.887258	2.75451	32.8009	2913.41						
Liquid Volumetric Flow	gpm	79.2875	79.2875		0.110619	0.343419	4.08946	363.231						
Std Vapor Volumetric Flow	MMSCFD	0.0740613	0.0740613		0.000100996	0.000306343	0.00312280	0.0569956						
Std Liquid Volumetric Flow	sgpm	1.14050	1.14050		0.00155825	0.00474233	0.0480155	0.609627						
Compressibility		0.976961	0.976961		0.977233	0.977386	0.979135	0.992598						
Specific Gravity		1.03326	1.03326		1.03814	1.04562	1.17379	1.19717						
API Gravity														
Enthalpy	Btu/h	-313274	-313274		-428.432	-1304.54	-15689.4	-466346						
Mass Enthalpy	Btu/lb	-1287.34	-1287.34		-1284.97	-1280.69	-1345.99	-2149.21						
Mass Cp	Btu/(lb*°F)	0.510239	0.510239		0.509635	0.508884	0.523951	0.464301						
Ideal Gas CpCv Ratio		1.15241	1.15241		1.15174	1.15070	1.12732	1.14135						
Dynamic Viscosity	cP	0.0119337	0.0119337		0.0119173	0.0118921	0.0127365	0.0129301						
Kinematic Viscosity	cSt	1.94692	1.94692		1.97977	2.00757	2.23744	10.8381						
Thermal Conductivity	Btu/(h*ft*°F	0.0201105	0.0201105		0.0200557	0.0199755	0.0210610	0.0160230						
Surface Tension	lbf/ft													
Net Ideal Gas Heating Value	Btu/ft^3	1554.74	1554.74		1561.05	1571.24	1644.77	1177.52						
Net Liquid Heating Value	Btu/lb	19580.8	19580.8		19566.9	19552.4	18158.1	12445.2						
Gross Ideal Gas Heating Valu	Btu/ft^3	1700.31	1700.31		1707.06	1717.97	1796.35	1294.26						
Gross Liquid Heating Value	Btu/lb	21427.3	21427.3		21410.2	21391.5	19850.5	13723.0						

TEG PStreams

Process Streams	225R	226	227	228	230i	231i	232i	234	235	236	237	238
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
Mole Fraction	%	%	%	%	%	%	%	%	%	%	%	%
H2S	##########	0	0	0	5.78991E-06	5.78991E-06	1.33074E-08	6.84779E-06	6.84779E-06	0.000148784	0.000148784	#########
N2	##########	0	0	0	0.00108275	0.00108275	3.42596E-08	0.00128103	0.00128103	0.0293506	0.0293506	0.0293506
CO2	##########	0	0	0	5.73013E-06	5.73013E-06	3.69872E-09	6.77882E-06	6.77882E-06	0.000152906	0.000152906	#########
C1	##########	7.88496E-07	7.88496E-07	7.88496E-07	0.483766	0.483766	3.42886E-05	0.572352	0.572352	13.0806	13.0806	13.0806
C2	##########	4.97385E-06	4.97385E-06	4.97385E-06	0.540445	0.540445	5.89535E-05	0.639406	0.639406	14.4104	14.4104	14.4104
C3	##########	1.59244E-05	1.59244E-05	1.59244E-05	0.628114	0.628114	7.54838E-05	0.743127	0.743127	16.2245	16.2245	16.2245
iC4	##########	5.14254E-06	5.14254E-06	5.14254E-06	0.112305	0.112305	9.58445E-06	0.132870	0.132870	2.73946	2.73946	2.73946
nC4	##########	3.68669E-05	3.68669E-05	3.68669E-05	0.478473	0.478473	7.78277E-05	0.566081	0.566081	11.1244	11.1244	11.1244
iC5	##########	2.96775E-05	2.96775E-05	2.96775E-05	0.177542	0.177542	2.33592E-05	0.210051	0.210051	3.44183	3.44183	3.44183
nC5	##########	4.84842E-05	4.84842E-05	4.84842E-05	0.239883	0.239883	3.27178E-05	0.283807	0.283807	4.32535	4.32535	4.32535
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	##########	##########	##########	0.000122792	0.157179	0.157179	2.67891E-05	0.185959	0.185959	2.09260	2.09260	2.09260
nC6	##########	8.96770E-05	8.96770E-05	8.96770E-05	0.102354	0.102354	1.42343E-05	0.121096	0.121096	1.11086	1.11086	1.11086
Benzene	0.0106639	0.0106617	0.0106617	0.0106617	1.53597	1.53597	0.00927207	1.81556	1.81556	10.7209	10.7209	10.7209
Cyclohexane	##########	##########	##########	0.000652539	0.330690	0.330690	0.000186404	0.391215	0.391215	2.67400	2.67400	2.67400
3,3-Dimethylpentane	##########	##########	##########	0.000176326	0.185436	0.185436	3.99926E-05	0.219388	0.219388	1.33341	1.33341	1.33341
C7	##########	3.56005E-05	3.56005E-05	3.56005E-05	0.0371550	0.0371550	4.33241E-06	0.0439584	0.0439584	0.187423	0.187423	0.187423
Toluene	0.0180101	0.0180065	0.0180065	0.0180065	1.32879	1.32879	0.00979227	1.57034	1.57034	3.86939	3.86939	3.86939
i-Octane	##########	##########	##########	0.000115477	0.118647	0.118647	1.61826E-05	0.140372	0.140372	0.658587	0.658587	0.658587
C8	##########	2.08785E-05	2.08785E-05	2.08785E-05	0.0123898	0.0123898	1.47104E-06	0.0146585	0.0146585	0.0260565	0.0260565	0.0260565
Ethylbenzene	0.00335981	0.00335914	0.00335914	0.00335914	0.146665	0.146665	0.00108454	0.173325	0.173325	0.146356	0.146356	0.146356
m-Xylene	0.00963409	0.00963217	0.00963217	0.00963217	0.390491	0.390491	0.00294845	0.461462	0.461462	0.408348	0.408348	0.408348
C9	##########	8.41895E-05	8.41895E-05	8.41895E-05	0.0282158	0.0282158	2.04954E-06	0.0333825	0.0333825	0.0291467	0.0291467	0.0291467
C10	##########	##########	##########	0.000141560	0.0254984	0.0254984	1.50028E-06	0.0301677	0.0301677	0.00931173	0.00931173	#########
H2O	7.25181	7.25053	7.25053	7.25053	92.0230	92.0230	94.1448	91.6345	91.6345	11.3573	11.3573	11.3573
TEG	92.6309	92.6322	92.6322	92.6322	0.860347	0.860347	5.54515	0.00241643	0.00241643	1.65687E-08	1.65687E-08	#########
UCARSOL™ AP-814	0.0740065	0.0739917	0.0739917	0.0739917	0.0555077	0.0555077	0.286302	0.0132422	0.0132422	0.000164261	0.000164261	#########
Oxygen	0	0	0	0	0	0	0	0	0	0	0	0
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	##########	0	0	0	3.60206E-06	3.60206E-06	1.28144E-09	3.60078E-06	3.60078E-06	3.41116E-06	3.41116E-06	#########
N2	##########	0	0	0	##########	0.000673610	3.29905E-09	0.000673607	0.000673607	0.000672919	0.000672919	#########
CO2	##########	0	0	0	3.56487E-06	3.56487E-06	3.56171E-10	3.56451E-06	3.56451E-06	3.50566E-06	3.50566E-06	#########
C1	##########	1.21874E-06	1.21874E-06	1.21874E-06	0.300964	0.300964	3.30185E-06	0.300960	0.300960	0.299899	0.299899	0.299899
C2	##########	7.68785E-06	7.68785E-06	7.68785E-06	0.336225	0.336225	5.67697E-06	0.336219	0.336219	0.330386	0.330386	0.330386
C3	##########	2.46137E-05	2.46137E-05	2.46137E-05	0.390766	0.390766	7.26877E-06	0.390759	0.390759	0.371978	0.371978	0.371978
iC4	##########	7.94860E-06	7.94860E-06	7.94860E-06	0.0698678	0.0698678	9.22942E-07	0.0698669	0.0698669	0.0628074	0.0628074	0.0628074
nC4	##########	5.69835E-05	5.69835E-05	5.69835E-05	0.297671	0.297671	7.49448E-06	0.297663	0.297663	0.255048	0.255048	0.255048
iC5	##########	4.58712E-05	4.58712E-05	4.58712E-05	0.110454	0.110454	2.24939E-06	0.110452	0.110452	0.0789107	0.0789107	0.0789107
nC5	##########	7.49398E-05	7.49398E-05	7.49398E-05	0.149238	0.149238	3.15058E-06	0.149234	0.149234	0.0991671	0.0991671	0.0991671
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	##########	##########	##########	0.000189794	0.0977854	0.0977854	2.57967E-06	0.0977828	0.0977828	0.0479768	0.0479768	0.0479768
nC6	##########	##########	##########	0.000138610	0.0636774	0.0636774	1.37071E-06	0.0636761	0.0636761	0.0254687	0.0254687	0.0254687
Benzene	0.0164794	0.0164794	0.0164794	0.0164794	0.955569	0.955569	0.000892861	0.954676	0.954676	0.245797	0.245797	0.245797
Cyclohexane	0.00100860	0.00100860	0.00100860	0.00100860	0.205731	0.205731	1.79499E-05	0.205713	0.205713	0.0613067	0.0613067	0.0613067
3,3-Dimethylpentane	##########	##########	##########	0.000272540	0.115365	0.115365	3.85111E-06	0.115361	0.115361	0.0305711	0.0305711	0.0305711
C7	##########	5.50261E-05	5.50261E-05	5.50261E-05	0.0231151	0.0231151	4.17192E-07	0.0231147	0.0231147	0.00429704	0.00429704	#########
Toluene	0.0278319	0.0278319	0.0278319	0.0278319	0.826677	0.826677	0.000942954	0.825734	0.825734	0.0887133	0.0887133	0.0887133
i-Octane	##########	##########	##########	0.000178488	0.0738133	0.0738133	1.55831E-06	0.0738118	0.0738118	0.0150994	0.0150994	0.0150994
C8	##########	3.22710E-05	3.22710E-05	3.22710E-05	0.00770805	0.00770805	1.41655E-07	0.00770790	0.00770790	0.000597396	0.000597396	#########
Ethylbenzene	0.00519207	0.00519207	0.00519207	0.00519207	0.0912441	0.0912441	0.000104436	0.0911397	0.0911397	0.00335549	0.00335549	#########
m-Xylene	0.0148880	0.0148880	0.0148880	0.0148880	0.242935	0.242935	0.000283923	0.242651	0.242651	0.00936218	0.00936218	#########
C9	##########	##########	##########	0.000130128	0.0175538	0.0175538	1.97362E-07	0.0175536	0.0175536	0.000668244	0.000668244	#########
C10	##########	##########	##########	0.000218802	0.0158632	0.0158632	1.44470E-07	0.0158631	0.0158631	0.000213490	0.000213490	#########
H2O	11.2066	11.2068	11.2068	11.2068	57.2500	57.2500	9.06575	48.1842	48.1842	0.260388	0.260388	0.260388
TEG	143.147	143.177	143.177	143.177	0.535244	0.535244	0.533974	0.00127064	0.00127064	3.79870E-10	3.79870E-10	#########
UCARSOL™ AP-814	0.114366	0.114366	0.114366	0.114366	0.0345328	0.0345328	0.0275696	0.00696318	0.00696318	3.76600E-06	3.76600E-06	#########
Oxygen	0	0	0	0	0	0	0	0	0	0	0	0
Mass Fraction	%	%	%	%	%	%	%	%	%	%	%	%
H2S	##########	0	0	0	8.57125E-06	8.57125E-06	1.77465E-08	1.03458E-05	1.03458E-05	0.000103066	0.000103066	#########
N2	##########	0	0	0	0.00131752	0.00131752	3.75541E-08	0.00159086	0.00159086	0.0167122	0.0167122	0.0167122
CO2	##########	0	0	0	1.09540E-05	1.09540E-05	6.36954E-09	1.32253E-05	1.32253E-05	0.000136779	0.000136779	#########
C1	##########	9.00160E-08	9.00160E-08	9.00160E-08	0.337107	0.337107	2.15244E-05	0.407042	0.407042	4.26530	4.26530	4.26530
C2	##########	1.06429E-06	1.06429E-06	1.06429E-06	0.705882	0.705882	6.93647E-05	0.852317	0.852317	8.80734	8.80734	8.80734
C3	##########	4.99699E-06	4.99699E-06	4.99699E-06	1.20308	1.20308	0.000130244	1.45266	1.45266	14.5417	14.5417	14.5417
iC4	##########	2.12701E-06	2.12701E-06	2.12701E-06	0.283532	0.283532	2.17981E-05	0.342352	0.342352	3.23636	3.23636	3.23636
nC4	##########	1.52485E-05	1.52485E-05	1.52485E-05	1.20798	1.20798	0.000177005	1.45857	1.45857	13.1422	13.1422	13.1422
iC5	##########	1.52372E-05	1.52372E-05	1.52372E-05	0.556406	0.556406	6.59472E-05	0.671830	0.671830	5.04741	5.04741	5.04741
nC5	##########	2.48931E-05	2.48931E-05	2.48931E-05	0.751778	0.751778	9.23681E-05	0.907731	0.907731	6.34309	6.34309	6.34309
Neohexane	0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane	0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane	##########	7.53011E-05	7.53011E-05	7.53011E-05	0.588355	0.588355	9.03338E-05	0.710402	0.710402	3.66538	3.66538	3.66538
nC6	##########	5.49937E-05	5.49937E-05	5.49937E-05	0.383134	0.383134	4.79987E-05	0.462613	0.462613	1.94578	1.94578	1.94578
Benzene	0.00592769	0.00592644	0.00592644	0.00592644	5.21148	5.21148	0.0283402	6.28683	6.28683	17.0215	17.0215	17.0215
Cyclohexane	##########	##########	##########	0.000390804	1.20889	1.20889	0.000613858	1.45957	1.45957	4.57420	4.57420	4.57420
3,3-Dimethylpentane	##########	##########	##########	0.000125731	0.807108	0.807108	0.000156807	0.974526	0.974526	2.71575	2.71575	2.71575
C7	##########	2.53852E-05	2.53852E-05	2.53852E-05	0.161717	0.161717	1.69869E-05	0.195264	0.195264	0.381724	0.381724	0.381724
Toluene	0.0118090	0.0118065	0.0118065	0.0118065	5.31813	5.31813	0.0353048	6.41416	6.41416	7.24659	7.24659	7.24659
i-Octane	##########	9.38686E-05	9.38686E-05	9.38686E-05	0.588697	0.588697	7.23322E-05	0.710819	0.710819	1.52911	1.52911	1.52911
C8	##########	1.69716E-05	1.69716E-05	1.69716E-05	0.0614754	0.0614754	6.57518E-06	0.0742284	0.0742284	0.0604980	0.0604980	0.0604980
Ethylbenzene	0.00253835	0.00253781	0.00253781	0.00253781	0.676346	0.676346	0.00450541	0.815733	0.815733	0.315821	0.315821	0.315821
m-Xylene	0.00727858	0.00727704	0.00727704	0.00727704	1.80075	1.80075	0.0122486	2.17181	2.17181	0.881175	0.881175	0.881175
C9	##########	7.68390E-05	7.68390E-05	7.68390E-05	0.157191	0.157191	1.02859E-05	0.189801	0.189801	0.0759825	0.0759825	0.0759825
C10	##########	##########	##########	0.000143330	0.157588	0.157588	8.35275E-06	0.190281	0.190281	0.0269296	0.0269296	0.0269296
H2O	0.929698	0.929523	0.929523	0.929523	72.0110	72.0110	66.3662	73.1821	73.1821	4.15879	4.15879	4.15879
TEG	98.9925	98.9927	98.9927	98.9927	5.61211	5.61211	32.5847	0.0160869	0.0160869	5.05744E-08	5.05744E-08	#########
UCARSOL™ AP-814	0.0492014	0.0491910	0.0491910	0.0491910	0.208941	0.208941	0.967051	0.0516552	0.0516552	0.000393995	0.000393995	#########
Oxygen	0	0	0	0	0	0	0	0	0	0	0	0
Mass Flow	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S	##########	0	0	0	##########	0.000122761	4.36727E-08	0.000122718	0.000122718	0.000116255	0.000116255	#########
N2	##########	0	0	0	0.0188701	0.0188701	9.24176E-08	0.0188700	0.0188700	0.0188508	0.0188508	0.0188508
CO2	##########	0	0	0	##########	0.000156888	1.56749E-08	0.000156872	0.000156872	0.000154282	0.000154282	#########

TEG PStreams

Process Streams		225R	226	227	228	230i	231i	232i	234	235	236	237	238
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
C1		##########	1.95516E-05	1.95516E-05	1.95516E-05	4.82820	4.82820	5.29697E-05	4.82814	4.82814	4.81111	4.81111	4.81111
C2		##########	##########	##########	0.000231166	10.1100	10.1100	0.000170701	10.1098	10.1098	9.93439	9.93439	9.93439
C3		0.00108536	0.00108536	0.00108536	0.00108536	17.2311	17.2311	0.000320521	17.2308	17.2308	16.4026	16.4026	16.4026
iC4		##########	##########	##########	0.000461990	4.06087	4.06087	5.36434E-05	4.06082	4.06082	3.65050	3.65050	3.65050
nC4		0.00331201	0.00331201	0.00331201	0.00331201	17.3013	17.3013	0.000435596	17.3008	17.3008	14.8239	14.8239	14.8239
iC5		0.00330955	0.00330955	0.00330955	0.00330955	7.96911	7.96911	0.000162291	7.96894	7.96894	5.69331	5.69331	5.69331
nC5		0.00540682	0.00540682	0.00540682	0.00540682	10.7673	10.7673	0.000227311	10.7671	10.7671	7.15479	7.15479	7.15479
Neohexane		0	0	0	0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.0163555	0.0163555	0.0163555	0.0163555	8.42669	8.42669	0.000222304	8.42647	8.42647	4.13442	4.13442	4.13442
nC6		0.0119447	0.0119447	0.0119447	0.0119447	5.48743	5.48743	0.000118121	5.48731	5.48731	2.19477	2.19477	2.19477
Benzene		1.28723	1.28723	1.28723	1.28723	74.6412	74.6412	0.0697430	74.5715	74.5715	19.1997	19.1997	19.1997
Cyclohexane		0.0848833	0.0848833	0.0848833	0.0848833	17.3142	17.3142	0.00151066	17.3127	17.3127	5.15954	5.15954	5.15954
3,3-Dimethylpentane		0.0273090	0.0273090	0.0273090	0.0273090	11.5598	11.5598	0.000385889	11.5594	11.5594	3.06328	3.06328	3.06328
C7		0.00551372	0.00551372	0.00551372	0.00551372	2.31618	2.31618	4.18035E-05	2.31614	2.31614	0.430572	0.430572	0.430572
Toluene		2.56439	2.56439	2.56439	2.56439	76.1687	76.1687	0.0868823	76.0819	76.0819	8.17391	8.17391	8.17391
i-Octane		0.0203884	0.0203884	0.0203884	0.0203884	8.43159	8.43159	0.000178004	8.43141	8.43141	1.72478	1.72478	1.72478
C8		0.00368626	0.00368626	0.00368626	0.00368626	0.880479	0.880479	1.61810E-05	0.880463	0.880463	0.0682397	0.0682397	0.0682397
Ethylbenzene		0.551217	0.551217	0.551217	0.551217	9.68693	9.68693	0.0110875	9.67585	9.67585	0.356236	0.356236	0.356236
m-Xylene		1.58059	1.58059	1.58059	1.58059	25.7912	25.7912	0.0301427	25.7610	25.7610	0.993936	0.993936	0.993936
C9		0.0166896	0.0166896	0.0166896	0.0166896	2.25136	2.25136	2.53127E-05	2.25134	2.25134	0.0857057	0.0857057	0.0857057
C10		0.0311316	0.0311316	0.0311316	0.0311316	2.25705	2.25705	2.05555E-05	2.25703	2.25703	0.0303757	0.0303757	0.0303757
H2O		201.889	201.894	201.894	201.894	1031.37	1031.37	163.322	868.052	868.052	4.69097	4.69097	4.69097
TEG		21496.8	21501.4	21501.4	21501.4	80.3792	80.3792	80.1884	0.190815	0.190815	5.70463E-08	5.70463E-08	#########
UCARSOL™ AP-814		10.6844	10.6844	10.6844	10.6844	2.99254	2.99254	2.37983	0.612710	0.612710	0.000444413	0.000444413	#########
Oxygen		0	0	0	0	0	0	0	0	0	0	0	0

Process Streams		225R	226	227	228	230i	231i	232i	234	235	236	237	238
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
Property	Units												
Temperature	°F	120	119.996	120.396	121.232	250.369	212.640	212.640	212.640	120*	119.508	121.186	121.186
Pressure	psia	73.6959	73.6959	1073.70	905.696*	15.6959	15.6959	15.6959	15.6959	15.1959	14.6959	14.9850	14.9850
Mole Fraction Vapor	%	0	0	0	0	100	84.5215	0	100	4.29502	100	100	100
Mole Fraction Light Liquid	%	100	100	100	100	0	15.4785	100	0	4.53136	0	0	0
Mole Fraction Heavy Liquid	%	0	0	0	0	0	0	0	0	91.1736	0	0	0
Phase Mole Fraction	%	100	100	100	100	100	100	100	100	100	100	100	100
Molecular Weight	lb/lbmol	140.522	140.524	140.524	140.524	23.0218	23.0218	25.5559	22.5577	22.5577	49.1983	49.1983	49.1983
Mass Density	lb/ft^3	68.5963	68.5965	68.6681	68.6241	0.0478218	0.0597912	62.3967	0.0495259	1.27845	0.118200	0.120199	0.120199
Molar Flow	lbmol/h	154.535	154.565	154.565	154.565	62.2127	62.2127	9.62957	52.5831	52.5831	2.29269	2.29269	2.29269
Mass Flow	lb/h	21715.6	21720.2	21720.2	21720.2	1432.25	1432.25	246.092	1186.15	1186.15	112.797	112.797	112.797
Vapor Volumetric Flow	ft^3/h	316.571	316.637	316.306	316.510	29949.6	23954.1	3.94399	23950.2	927.809	954.285	938.414	938.414
Liquid Volumetric Flow	gpm	39.4685	39.4768	39.4356	39.4609	3733.98	2986.49	0.491718	2986.00	115.675	118.976	116.997	116.997
Std Vapor Volumetric Flow	MMSCFD	1.40744	1.40772	1.40772	1.40772	0.566609	0.566609	0.0877025	0.478907	0.478907	0.0208810	0.0208810	0.0208810
Std Liquid Volumetric Flow	sgpm	38.4884	38.4966*	38.4966	38.4966	3.09229	3.09229	0.475454	2.61683	2.61683	0.379399	0.379399	0.379399
Compressibility		0.0242686	0.0242690	0.352968	0.297502	0.991642	0.837638	0.000891012	0.990871	0.0431018	0.984133	0.983948	0.983948
Specific Gravity		1.09985	1.09985	1.10100	1.10030	0.794882		1.00045	0.778859		1.69869	1.69869	1.69869
API Gravity		-6.68315	-6.68323	-6.82448	-6.80084			3.05051					
Enthalpy	Btu/h	##########	##########	##########	-5.04463E+07	##########	-6.28548E+06	-1.27448E+06	-5.01100E+06	##########	-95083.3	-95011.0	-95011.0
Mass Enthalpy	Btu/lb	-2325.56	-2325.55	-2322.55	-2322.55	-4245.27	-4388.55	-5178.88	-4224.58	-5040.29	-842.962	-842.321	-842.321
Mass Cp	Btu/(lb*°F)	0.558608	0.558604	0.557798	0.558345	0.448342	0.526116	0.946426	0.438914	0.827842	0.393617	0.394582	0.394582
Ideal Gas CpCv Ratio		1.03673	1.03673	1.03671	1.03667	1.24011	1.24487	1.20800	1.25309	1.26618	1.11512	1.11482	1.11482
Dynamic Viscosity	cP	13.8178	13.8190	14.1295	13.8379	0.0132678		0.554652	0.0125696		0.00909561	0.00912197	#########
Kinematic Viscosity	cSt	12.5753	12.5763	12.8455	12.5885	17.3202		0.554930	15.8441		4.80389	4.73768	4.73768
Thermal Conductivity	Btu/(h*ft*°F	0.113508	0.113507	0.113512	0.113522	0.0156325		0.267220?	0.0146443		0.0115220	0.0115812	0.0115812
Surface Tension	lbf/ft	0.00294731	0.00294732	0.00294732	0.00294457			0.00369831?					
Net Ideal Gas Heating Value	Btu/ft^3	3502.96	3503.01	3503.01	3503.01	281.320	281.320	219.527	292.636	292.636	2382.13	2382.13	2382.13
Net Liquid Heating Value	Btu/lb	9192.77	9192.78	9192.78	9192.78	3822.20	3822.20	2469.30	4102.89	4102.89	18183.2	18183.2	18183.2
Gross Ideal Gas Heating Valu	Btu/ft^3	3832.80	3832.85	3832.85	3832.85	346.125	346.125	287.166	356.922	356.922	2567.77	2567.77	2567.77
Gross Liquid Heating Value	Btu/lb	10083.5	10083.5	10083.5	10083.5	4890.40	4890.40	3473.69	5184.33	5184.33	19615.5	19615.5	19615.5

Process Streams		225R	226	227	228	230i	231i	232i	234	235	236	237	238
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
Mole Fraction						%	%		%	%	%	%	%
H2S						5.78991E-06	6.84779E-06		6.84779E-06	0.000150627	0.000148784	0.000148784	#########
N2						0.00108275	0.00128103		0.00128103	0.0297937	0.0293506	0.0293506	0.0293506
CO2						5.73013E-06	6.77882E-06		6.77882E-06	0.000155088	0.000152906	0.000152906	#########
C1						0.483766	0.572352		0.572352	13.2761	13.0806	13.0806	13.0806
C2						0.540445	0.639406		0.639406	14.6140	14.4104	14.4104	14.4104
C3						0.628114	0.743127		0.743127	16.4253	16.2245	16.2245	16.2245
iC4						0.112305	0.132870		0.132870	2.76525	2.73946	2.73946	2.73946
nC4						0.478473	0.566081		0.566081	11.2040	11.1244	11.1244	11.1244
iC5						0.177542	0.210051		0.210051	3.44109	3.44183	3.44183	3.44183
nC5						0.239883	0.283807		0.283807	4.31353	4.32535	4.32535	4.32535
Neohexane						0	0		0	0	0	0	0
Cyclopentane						0	0		0	0	0	0	0
2,3-Dimethylbutane						0.157179	0.185959		0.185959	2.06891	2.09260	2.09260	2.09260
nC6						0.102354	0.121096		0.121096	1.09376	1.11086	1.11086	1.11086
Benzene						1.53597	1.81556		1.81556	10.5080	10.7209	10.7209	10.7209
Cyclohexane						0.330690	0.391215		0.391215	2.62173	2.67400	2.67400	2.67400
3,3-Dimethylpentane						0.185436	0.219388		0.219388	1.30462	1.33341	1.33341	1.33341
C7						0.0371550	0.0439584		0.0439584	0.182810	0.187423	0.187423	0.187423
Toluene						1.32879	1.57034		1.57034	3.77067	3.86939	3.86939	3.86939
i-Octane						0.118647	0.140372		0.140372	0.642552	0.658587	0.658587	0.658587
C8						0.0123898	0.0146585		0.0146585	0.0253183	0.0260565	0.0260565	0.0260565
Ethylbenzene						0.146665	0.173325		0.173325	0.142335	0.146356	0.146356	0.146356
m-Xylene						0.390491	0.461462		0.461462	0.397266	0.408348	0.408348	0.408348
C9						0.0282158	0.0333825		0.0333825	0.0282853	0.0291467	0.0291467	0.0291467
C10						0.0254984	0.0301677		0.0301677	0.00904911	0.00931173	0.00931173	#########
H2O						92.0230	91.6345		91.6345	11.1350	11.3573	11.3573	11.3573

Process Streams		225R	226	227	228	230l	231l	232l	234	235	236	237	238
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
TEG						0.860347	0.00241643		0.00241643	1.66504E-08	1.65687E-08	1.65687E-08	#########
UCARSOL™ AP-814						0.0555077	0.0132422		0.0132422	0.000160666	0.000164261	0.000164261	#########
Oxygen						0	0		0	0	0	0	0
Molar Flow						lbmol/h	lbmol/h		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S						3.60206E-06	3.60078E-06		3.60078E-06	3.40185E-06	3.41116E-06	3.41116E-06	#########
N2						##########	0.000673607		0.000673607	0.000672877	0.000672919	0.000672919	#########
CO2						3.56487E-06	3.56451E-06		3.56451E-06	3.50258E-06	3.50566E-06	3.50566E-06	#########
C1						0.300964	0.300960		0.300960	0.299835	0.299899	0.299899	0.299899
C2						0.336225	0.336219		0.336219	0.330051	0.330386	0.330386	0.330386
C3						0.390766	0.390759		0.390759	0.370957	0.371978	0.371978	0.371978
iC4						0.0698678	0.0698669		0.0698669	0.0624518	0.0628074	0.0628074	0.0628074
nC4						0.297671	0.297663		0.297663	0.253038	0.255048	0.255048	0.255048
iC5						0.110454	0.110452		0.110452	0.0777155	0.0789107	0.0789107	0.0789107
nC5						0.149238	0.149234		0.149234	0.0974191	0.0991671	0.0991671	0.0991671
Neohexane						0	0		0	0	0	0	0
Cyclopentane						0	0		0	0	0	0	0
2,3-Dimethylbutane						0.0977854	0.0977828		0.0977828	0.0467255	0.0479768	0.0479768	0.0479768
nC6						0.0636774	0.0636761		0.0636761	0.0247020	0.0254687	0.0254687	0.0254687
Benzene						0.955569	0.954676		0.954676	0.237319	0.245797	0.245797	0.245797
Cyclohexane						0.205731	0.205713		0.205713	0.0592104	0.0613067	0.0613067	0.0613067
3,3-Dimethylpentane						0.115365	0.115361		0.115361	0.0294642	0.0305711	0.0305711	0.0305711
C7						0.0231151	0.0231147		0.0231147	0.00412869	0.00429704	0.00429704	#########
Toluene						0.826677	0.825734		0.825734	0.0851588	0.0887133	0.0887133	0.0887133
i-Octane						0.0738133	0.0738118		0.0738118	0.0145117	0.0150994	0.0150994	0.0150994
C8						0.00770805	0.00770790		0.00770790	0.000571802	0.000597396	0.000597396	#########
Ethylbenzene						0.0912441	0.0911397		0.0911397	0.00321457	0.00335549	0.00335549	#########
m-Xylene						0.242935	0.242651		0.242651	0.00897206	0.00936218	0.00936218	#########
C9						0.0175538	0.0175536		0.0175536	0.000638811	0.000668244	0.000668244	#########
C10						0.0158632	0.0158631		0.0158631	0.000204370	0.000213490	0.000213490	#########
H2O						57.2500	48.1842		48.1842	0.251479	0.260388	0.260388	0.260388
TEG						0.535244	0.00127064		0.00127064	3.76041E-10	3.79870E-10	3.79870E-10	#########
UCARSOL™ AP-814						0.0345328	0.00696318		0.00696318	3.62858E-06	3.76600E-06	3.76600E-06	#########
Oxygen						0	0		0	0	0	0	0
Mass Fraction						%	%		%	%	%	%	%
H2S						8.57125E-06	1.03458E-05		1.03458E-05	0.000104797	0.000103066	0.000103066	#########
N2						0.00131752	0.00159086		0.00159086	0.0170383	0.0167122	0.0167122	0.0167122
CO2						1.09540E-05	1.32253E-05		1.32253E-05	0.000139334	0.000136779	0.000136779	#########
C1						0.337107	0.407042		0.407042	4.34788	4.26530	4.26530	4.26530
C2						0.705882	0.852317		0.852317	8.97067	8.80734	8.80734	8.80734
C3						1.20308	1.45266		1.45266	14.7858	14.5417	14.5417	14.5417
iC4						0.283532	0.342352		0.342352	3.28103	3.23636	3.23636	3.23636
nC4						1.20798	1.45857		1.45857	13.2939	13.1422	13.1422	13.1422
iC5						0.556406	0.671830		0.671830	5.06828	5.04741	5.04741	5.04741
nC5						0.751778	0.907731		0.907731	6.35327	6.34309	6.34309	6.34309
Neohexane						0	0		0	0	0	0	0
Cyclopentane						0	0		0	0	0	0	0
2,3-Dimethylbutane						0.588355	0.710402		0.710402	3.63966	3.66538	3.66538	3.66538
nC6						0.383134	0.462613		0.462613	1.92415	1.94578	1.94578	1.94578
Benzene						5.21148	6.28683		6.28683	16.7561	17.0215	17.0215	17.0215
Cyclohexane						1.20889	1.45957		1.45957	4.50428	4.57420	4.57420	4.57420
3,3-Dimethylpentane						0.807108	0.974526		0.974526	2.66867	2.71575	2.71575	2.71575
C7						0.161717	0.195264		0.195264	0.373949	0.381724	0.381724	0.381724
Toluene						5.31813	6.41416		6.41416	7.09242	7.24659	7.24659	7.24659
i-Octane						0.588697	0.710819		0.710819	1.49837	1.52911	1.52911	1.52911
C8						0.0614754	0.0742284		0.0742284	0.0590397	0.0604980	0.0604980	0.0604980
Ethylbenzene						0.676346	0.815733		0.815733	0.308481	0.315821	0.315821	0.315821
m-Xylene						1.80075	2.17181		2.17181	0.860989	0.881175	0.881175	0.881175
C9						0.157191	0.189801		0.189801	0.0740578	0.0759825	0.0759825	0.0759825
C10						0.157588	0.190281		0.190281	0.0262839	0.0269296	0.0269296	0.0269296
H2O						72.0110	73.1821		73.1821	4.09512	4.15879	4.15879	4.15879
TEG						5.61211	0.0160869		0.0160869	5.10447E-08	5.05744E-08	5.05744E-08	#########
UCARSOL™ AP-814						0.208941	0.0516552		0.0516552	0.000386981	0.000393995	0.000393995	#########
Oxygen						0	0		0	0	0	0	0
Mass Flow						lb/h	lb/h		lb/h	lb/h	lb/h	lb/h	lb/h
H2S						##########	0.000122718		0.000122718	0.000115938	0.000116255	0.000116255	#########
N2						0.0188701	0.0188700		0.0188700	0.0188496	0.0188508	0.0188508	0.0188508
CO2						##########	0.000156872		0.000156872	0.000154147	0.000154282	0.000154282	#########
C1						4.82820	4.82814		4.82814	4.81009	4.81111	4.81111	4.81111
C2						10.1100	10.1098		10.1098	9.92433	9.93439	9.93439	9.93439
C3						17.2311	17.2308		17.2308	16.3576	16.4026	16.4026	16.4026
iC4						4.06087	4.06082		4.06082	3.62983	3.65050	3.65050	3.65050
nC4						17.3013	17.3008		17.3008	14.7071	14.8239	14.8239	14.8239
iC5						7.96911	7.96894		7.96894	5.60708	5.69331	5.69331	5.69331
nC5						10.7673	10.7671		10.7671	7.02867	7.15479	7.15479	7.15479
Neohexane						0	0		0	0	0	0	0
Cyclopentane						0	0		0	0	0	0	0
2,3-Dimethylbutane						8.42669	8.42647		8.42647	4.02658	4.13442	4.13442	4.13442
nC6						5.48743	5.48731		5.48731	2.12870	2.19477	2.19477	2.19477
Benzene						74.6412	74.5715		74.5715	18.5374	19.1997	19.1997	19.1997
Cyclohexane						17.3142	17.3127		17.3127	4.98312	5.15954	5.15954	5.15954
3,3-Dimethylpentane						11.5598	11.5594		11.5594	2.95237	3.06328	3.06328	3.06328
C7						2.31618	2.31614		2.31614	0.413702	0.430572	0.430572	0.430572
Toluene						76.1687	76.0819		76.0819	7.84640	8.17391	8.17391	8.17391
i-Octane						8.43159	8.43141		8.43141	1.65765	1.72478	1.72478	1.72478
C8						0.880479	0.880463		0.880463	0.0653161	0.0682397	0.0682397	0.0682397
Ethylbenzene						9.68693	9.67585		9.67585	0.341275	0.356236	0.356236	0.356236
m-Xylene						25.7912	25.7610		25.7610	0.952518	0.993936	0.993936	0.993936
C9						2.25136	2.25134		2.25134	0.0819307	0.0857057	0.0857057	0.0857057
C10						2.25705	2.25703		2.25703	0.0290781	0.0303757	0.0303757	0.0303757
H2O						1031.37	868.052		868.052	4.53046	4.69097	4.69097	4.69097
TEG						80.3792	0.190815		0.190815	5.64712E-08	5.70463E-08	5.70463E-08	#########
UCARSOL™ AP-814						2.99254	0.612710		0.612710	0.000428120	0.000444413	0.000444413	#########
Oxygen						0	0		0	0	0	0	0

TEG PStreams

Process Streams		225R	226	227	228	230l	231i	232l	234	235	236	237	238
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
Process Streams		**225R**	**226**	**227**	**228**	**230l**	**231i**	**232l**	**234**	**235**	**236**	**237**	**238**
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	RCYL-2	TEG Makeup	HP PUMP A/B	VLVE-101	TEG STILL	REFLUX COIL	REFLUX DRUM (INTEGRAL)	REFLUX DRUM (INTEGRAL)	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103
	To Block:	TEG Makeup	HP PUMP A/B	VLVE-101	TEG ABSORBER	REFLUX COIL	REFLUX DRUM (INTEGRAL)	TEG STILL	BTEX COND	BTEX ACCUM	BTEX BLOWER	PCV-103	DEHY BTEX
Property	Units												
Temperature	°F					250.369	212.640		212.640	120	119.508	121.186	121.186
Pressure	psia					15.6959	15.6959		15.6959	15.1959	14.6959	14.9850	14.9850
Mole Fraction Vapor	%					100	100		100	100	100	100	100
Mole Fraction Light Liquid	%					0	0		0	0	0	0	0
Mole Fraction Heavy Liquid	%					0	0		0	0	0	0	0
Phase Mole Fraction	%					100	84.5215		100	4.29502	100	100	100
Molecular Weight	lb/lbmol					23.0218	22.5577		22.5577	48.9852	49.1983	49.1983	49.1983
Mass Density	lb/ft^3					0.0478218	0.0495259		0.0495259	0.121634	0.118200	0.120199	0.120199
Molar Flow	lbmol/h					62.2127	52.5831		52.5831	2.25845	2.29269	2.29269	2.29269
Mass Flow	lb/h					1432.25	1186.15		1186.15	110.631	112.797	112.797	112.797
Vapor Volumetric Flow	ft^3/h					29949.6	23950.2		23950.2	909.535	954.285	938.414	938.414
Liquid Volumetric Flow	gpm					3733.98	2986.00		2986.00	113.397	118.976	116.997	116.997
Std Vapor Volumetric Flow	MMSCFD					0.566609	0.478907		0.478907	0.0205691	0.0208810	0.0208810	0.0208810
Std Liquid Volumetric Flow	sgpm					3.09229	2.61683		2.61683	0.373757	0.379399	0.379399	0.379399
Compressibility						0.991642	0.990871		0.990871	0.983766	0.984133	0.983948	0.983948
Specific Gravity						0.794882	0.778859		0.778859	1.69133	1.69869	1.69869	1.69869
API Gravity													
Enthalpy	Btu/h					##########	-5.01100E+06		-5.01100E+06	-93739.8	-95083.3	-95011.0	-95011.0
Mass Enthalpy	Btu/lb					-4245.27	-4224.58		-4224.58	-847.321	-842.962	-842.321	-842.321
Mass Cp	Btu/(lb*°F)					0.448342	0.438914		0.438914	0.394790	0.393617	0.394582	0.394582
Ideal Gas CpCv Ratio						1.24011	1.25309		1.25309	1.11532	1.11512	1.11482	1.11482
Dynamic Viscosity	cP					0.0132678	0.0125696		0.0125696	0.00911164	0.00909561	0.00912197	#########
Kinematic Viscosity	cSt					17.3202	15.8441		15.8441	4.67648	4.80389	4.73768	4.73768
Thermal Conductivity	Btu/(h*ft*°F					0.0156325	0.0146443		0.0146443	0.0115838	0.0115220	0.0115812	0.0115812
Surface Tension	lbf/ft												
Net Ideal Gas Heating Value	Btu/ft^3					281.320	292.636		292.636	2375.24	2382.13	2382.13	2382.13
Net Liquid Heating Value	Btu/lb					3822.20	4102.89		4102.89	18210.5	18183.2	18183.2	18183.2
Gross Ideal Gas Heating Valu	Btu/ft^3					346.125	356.922		356.922	2560.83	2567.77	2567.77	2567.77
Gross Liquid Heating Value	Btu/lb					4890.40	5184.33		5184.33	19648.6	19615.5	19615.5	19615.5

Process Streams		240i	241i	260	261	262	263	264	270	271
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
Mole Fraction		%	%	%	%	%	%	%		
H2S		2.08339E-07	6.03566E-08	#########	##########	3.77052E-07	##########	##########		
N2		8.93266E-07	2.54758E-07	0.341758	0.341758	1.36767E-06	##########	##########		
CO2		5.89298E-08	1.68868E-08	#########	##########	1.17025E-07	##########	##########		
C1		0.00107507	0.000306903	49.2100	49.2100	0.00211105	0.00211105	0.00211105		
C2		0.00340494	0.000973781	19.6260	19.6260	0.0115997	0.0115997	0.0115997		
C3		0.00728901	0.00208834	13.1244	13.1244	0.0373452	0.0373452	0.0373452		
iC4		0.00184949	0.000530650	1.81437	1.81437	0.0140375	0.0140375	0.0140375		
nC4		0.0111420	0.00320117	5.54060	5.54060	0.0847383	0.0847383	0.0847383		
iC5		0.00652137	0.00187933	1.39703	1.39703	0.0627175	0.0627175	0.0627175		
nC5		0.00979095	0.00282432	1.63227	1.63227	0.0995564	0.0995564	0.0995564		
Neohexane		0	0	0	0	0	0	0		
Cyclopentane		0	0	0	0	0	0	0		
2,3-Dimethylbutane		0.0122788	0.00358879	0.575266	0.575266	0.0990367	0.0990367	0.0990367		
nC6		0.00857123	0.00250780	0.338266	0.338266	0.0759735	0.0759735	0.0759735		
Benzene		0.385460	0.117564	0.645742	0.645742	1.40957	1.40957	1.40957		
Cyclohexane		0.0440236	0.0130296	0.486307	0.486307	0.287145	0.287145	0.287145		
3,3-Dimethylpentane		0.0184359	0.00538613	0.468639	0.468639	0.168600	0.168600	0.168600		
C7		0.00367876	0.00107367	0.0920376	0.0920376	0.0374180	0.0374180	0.0374180		
Toluene		0.476295	0.148892	0.340361	0.340361	1.46553	1.46553	1.46553		
i-Octane		0.0121013	0.00352826	0.308627	0.308627	0.116747	0.116747	0.116747		
C8		0.00169248	0.000497100	0.0202135	0.0202135	0.0141389	0.0141389	0.0141389		
Ethylbenzene		0.0710807	0.0229335	0.0250130	0.0250130	0.174555	0.174555	0.174555		
m-Xylene		0.192778	0.0621896	0.0651303	0.0651303	0.463883	0.463883	0.463883		
C9		0.00518589	0.00153891	0.0299769	0.0299769	0.0335757	0.0335757	0.0335757		
C10		0.00633839	0.00190912	0.0171374	0.0171374	0.0311185	0.0311185	0.0311185		
H2O		90.8353	31.0672	3.89360	3.89360	95.2942	95.2942	95.2942		
TEG		7.68511	68.4271	#########	0.00562076	0.00252660	0.00252660	0.00252660		
UCARSOL™ AP-814		0.200614	0.109244	#########	0.00156239	0.0138385	0.0138385	0.0138385		
Oxygen		0	0	0	0	0	0	0		
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S		1.28298E-07	1.30438E-07	#########	##########	1.89621E-07	##########	##########	0	0
N2		5.50086E-07	5.50563E-07	0.0278734	0.0278734	6.87807E-07	##########	##########	0	0
CO2		3.62898E-08	3.64944E-08	#########	##########	5.88521E-08	##########	##########	0	0
C1		0.000662042	0.000663254	4.01350	4.01350	0.00106165	0.00106165	0.00106165	0	0
C2		0.00209681	0.00210446	1.60067	1.60067	0.00583354	0.00583354	0.00583354	0	0
C3		0.00448867	0.00451316	1.07041	1.07041	0.0187810	0.0187810	0.0187810	0	0
iC4		0.00113894	0.00114680	0.147978	0.147978	0.00705950	0.00705950	0.00705950	0	0
nC4		0.00686140	0.00691811	0.451884	0.451884	0.0426152	0.0426152	0.0426152	0	0
iC5		0.00401595	0.00406147	0.113940	0.113940	0.0315409	0.0315409	0.0315409	0	0
nC5		0.00602940	0.00610371	0.133125	0.133125	0.0500673	0.0500673	0.0500673	0	0
Neohexane		0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.00756146	0.00775581	0.0469179	0.0469179	0.0498059	0.0498059	0.0498059	0	0
nC6		0.00527829	0.00541966	0.0275885	0.0275885	0.0382074	0.0382074	0.0382074	0	0
Benzene		0.237372	0.254070	0.0526658	0.0526658	0.708878	0.708878	0.708878	0	0
Cyclohexane		0.0271104	0.0281585	0.0396626	0.0396626	0.144406	0.144406	0.144406	0	0
3,3-Dimethylpentane		0.0113531	0.0116401	0.0382216	0.0382216	0.0847898	0.0847898	0.0847898	0	0
C7		0.00226543	0.00232032	#########	0.00750647	0.0188177	0.0188177	0.0188177	0	0
Toluene		0.293309	0.321774	0.0277594	0.0277594	0.737021	0.737021	0.737021	0	0
i-Octane		0.00745215	0.00762500	0.0251712	0.0251712	0.0587124	0.0587124	0.0587124	0	0
C8		0.00104225	0.00107429	#########	0.00164858	0.00711051	0.00711051	0.00711051	0	0
Ethylbenzene		0.0437725	0.0495622	#########	0.00204002	0.0877842	0.0877842	0.0877842	0	0
m-Xylene		0.118715	0.134399	#########	0.00531194	0.233289	0.233289	0.233289	0	0
C9		0.00319354	0.00332578	#########	0.00244488	0.0168853	0.0168853	0.0168853	0	0
C10		0.00390327	0.00412583	#########	0.00139771	0.0156496	0.0156496	0.0156496	0	0
H2O		55.9377	67.1401	0.317557	0.317557	47.9238	47.9238	47.9238	0	0
TEG		4.73260	147.879	#########	##########	0.00127063	0.00127063	0.00127063	0	0
UCARSOL™ AP-814		0.123541	0.236090	#########	##########	0.00695941	0.00695941	0.00695941	0	0
Oxygen		0	0	0	0	0	0	0	0	0
Mass Fraction		%	%	%	%	%	%	%		
H2S		2.42897E-07	1.89041E-08	#########	##########	6.02078E-07	##########	##########		
N2		8.56025E-07	6.55865E-08	0.319542	0.319542	1.79510E-06	##########	##########		
CO2		8.87200E-08	6.82990E-09	#########	##########	2.41304E-07	##########	##########		
C1		0.000589992	4.52473E-05	26.3492	26.3492	0.00158675	0.00158675	0.00158675		
C2		0.00350243	0.000269093	19.6967	19.6967	0.0163421	0.0163421	0.0163421		
C3		0.0109952	0.000846289	19.3160	19.3160	0.0771562	0.0771562	0.0771562		
iC4		0.00367735	0.000283447	3.51973	3.51973	0.0382271	0.0382271	0.0382271		
nC4		0.0221537	0.00170990	10.7483	10.7483	0.230761	0.230761	0.230761		
iC5		0.0160956	0.00124610	3.36416	3.36416	0.212011	0.212011	0.212011		
nC5		0.0241654	0.00187268	3.93063	3.93063	0.336542	0.336542	0.336542		
Neohexane		0	0	0	0	0	0	0		
Cyclopentane		0	0	0	0	0	0	0		
2,3-Dimethylbutane		0.0361975	0.00284218	1.65460	1.65460	0.399871	0.399871	0.399871		
nC6		0.0252677	0.00198608	0.972934	0.972934	0.306751	0.306751	0.306751		
Benzene		1.03000	0.0843943	1.68352	1.68352	5.15875	5.15875	5.15875		
Cyclohexane		0.126744	0.0100775	1.36602	1.36602	1.13226	1.13226	1.13226		
3,3-Dimethylpentane		0.0631948	0.00495991	1.56732	1.56732	0.791545	0.791545	0.791545		
C7		0.0126101	0.000988705	0.307811	0.307811	0.175670	0.175670	0.175670		
Toluene		1.50126	0.126076	1.04670	1.04670	6.32669	6.32669	6.32669		
i-Octane		0.0472875	0.00370387	1.17666	1.17666	0.624827	0.624827	0.624827		
C8		0.00661361	0.000521842	0.0770651	0.0770651	0.0756712	0.0756712	0.0756712		
Ethylbenzene		0.258150	0.0223755	0.0886317	0.0886317	0.868267	0.868267	0.868267		
m-Xylene		0.700129	0.0606765	0.230785	0.230785	2.30744	2.30744	2.30744		
C9		0.0227530	0.00181389	0.128323	0.128323	0.201762	0.201762	0.201762		
C10		0.0308509	0.00249633	0.0813837	0.0813837	0.207447	0.207447	0.207447		
H2O		55.9803	5.14357	2.34118	2.34118	80.4356	80.4356	80.4356		
TEG		39.4804	94.4368	0.0281727	0.0281727	0.0177774	0.0177774	0.0177774		
UCARSOL™ AP-814		0.597021	0.0904567	#########	0.00450434	0.0570421	0.0570421	0.0570421		
Oxygen		0	0	0	0	0	0	0		
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		4.37252E-06	4.44544E-06	#########	##########	6.46245E-06	##########	##########	0	0
N2		1.54098E-05	1.54231E-05	0.780828	0.780828	1.92678E-05	##########	##########	0	0
CO2		1.59710E-06	1.60610E-06	#########	##########	2.59005E-06	##########	##########	0	0

TEG PStreams

Process Streams		240i	241i	260	261	262	263	264	270	271
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
C1		0.0106208	0.0106402	64.3865	64.3865	0.0170315	0.0170315	0.0170315	0	0
C2		0.0630491	0.0632791	48.1306	48.1306	0.175409	0.175409	0.175409	0	0
C3		0.197931	0.199011	47.2002	47.2002	0.828162	0.828162	0.828162	0	0
iC4		0.0661980	0.0666545	8.60078	8.60078	0.410314	0.410314	0.410314	0	0
nC4		0.398800	0.402096	26.2645	26.2645	2.47689	2.47689	2.47689	0	0
iC5		0.289746	0.293030	8.22062	8.22062	2.27563	2.27563	2.27563	0	0
nC5		0.435014	0.440375	9.60484	9.60484	3.61230	3.61230	3.61230	0	0
Neohexane		0	0	0	0	0	0	0	0	0
Cyclopentane		0	0	0	0	0	0	0	0	0
2,3-Dimethylbutane		0.651612	0.668360	4.04317	4.04317	4.29204	4.29204	4.29204	0	0
nC6		0.454858	0.467042	2.37745	2.37745	3.29253	3.29253	3.29253	0	0
Benzene		18.5415	19.8459	4.11383	4.11383	55.3718	55.3718	55.3718	0	0
Cyclohexane		2.28159	2.36981	3.33798	3.33798	12.1532	12.1532	12.1532	0	0
3,3-Dimethylpentane		1.13760	1.16636	3.82987	3.82987	8.49610	8.49610	8.49610	0	0
C7		0.227001	0.232501	0.752163	0.752163	1.88557	1.88557	1.88557	0	0
Toluene		27.0251	29.6478	2.55771	2.55771	67.9080	67.9080	67.9080	0	0
i-Octane		0.851248	0.870993	2.87527	2.87527	6.70663	6.70663	6.70663	0	0
C8		0.119055	0.122715	0.188315	0.188315	0.812223	0.812223	0.812223	0	0
Ethylbenzene		4.64711	5.26177	0.216579	0.216579	9.31961	9.31961	9.31961	0	0
m-Xylene		12.6034	14.2685	0.563942	0.563942	24.7671	24.7671	24.7671	0	0
C9		0.409588	0.426549	0.313568	0.313568	2.16563	2.16563	2.16563	0	0
C10		0.555364	0.587030	0.198868	0.198868	2.22665	2.22665	2.22665	0	0
H2O		1007.73	1209.55	5.72088	5.72088	863.361	863.361	863.361	0	0
TEG		710.708	22207.5	0.0688426	0.0688426	0.190815	0.190815	0.190815	0	0
UCARSOL™ AP-814		10.7473	21.2715	0.0110067	0.0110067	0.612266	0.612266	0.612266	0	0
Oxygen		0	0	0	0	0	0	0	0	0

Process Streams		240i	241i	260	261	262	263	264	270	271
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
Property	Units									
Temperature	°F	400.000	287.970	209.391	209.014	119.508	119.560	119.575		
Pressure	psia	15.6959	16.6959	88.6959	83.6959	14.6959	39.6959	34.6959	902.696	######
Mole Fraction Vapor	%	100	0.244390	100	100	0	0	0		
Mole Fraction Light Liquid	%	0	99.7556	0	0	4.68740	4.68739	4.68740		
Mole Fraction Heavy Liquid	%	0	0	0	0	95.3126	95.3126	95.3126		
Phase Mole Fraction	%	100	100	100	100	100	100	100		
Molecular Weight	lb/lbmol	29.2321	108.812	29.9611	29.9611	21.3432	21.3432	21.3432		
Mass Density	lb/ft^3	0.0500926	37.4768	0.378763	0.357158	58.8972	58.9010	58.8997		
Molar Flow	lbmol/h	61.5814	216.112	8.15587	8.15587	50.2904	50.2904	50.2904	0	0
Mass Flow	lb/h	1800.15	23515.7	244.359	244.359	1073.36	1073.36	1073.36	0	0
Vapor Volumetric Flow	ft^3/h	35936.5	627.473	645.150	684.175	18.2242	18.2231	18.2235	0	0
Liquid Volumetric Flow	gpm	4480.40	78.2304	80.4342	85.2998	2.27211	2.27197	2.27202	0	0
Std Vapor Volumetric Flow	MMSCFD	0.560860	1.96827	0.0742805	0.0742805	0.458026	0.458026	0.458026	0	0
Std Liquid Volumetric Flow	sgpm	3.46891	41.9572	1.14416	1.14416	2.23743	2.23743	2.23743	0	0
Compressibility		0.992839	0.00604186	0.977158	0.978402	0.000856815	0.00231403	0.00202255		
Specific Gravity		1.00931		1.03448	1.03448	0.944339	0.944399	0.944379		
API Gravity						15.7576	15.7478	15.7498		
Enthalpy	Btu/h	-7.01080E+06	-5.65741E+07	-314506	-314506	##########	##########	##########		
Mass Enthalpy	Btu/lb	-3894.56	-2405.80	-1287.07	-1287.07	-5481.38	-5481.27	-5481.27		
Mass Cp	Btu/(lb*°F)	0.484219	0.656556	0.510002	0.509319	0.873033	0.872972	0.872988		
Ideal Gas CpCv Ratio		1.16411	1.04038	1.15226	1.15233	1.28320	1.28319	1.28319		
Dynamic Viscosity	cP	0.0157709		0.0119297	0.0119159	0.536546	0.536690	0.536536		
Kinematic Viscosity	cSt	19.6546		1.96627	2.08280	0.568710	0.568826	0.568676		
Thermal Conductivity	Btu/(h*ft*°F	0.0183031		0.0200951	0.0200627	0.298099	0.298125	0.298125		
Surface Tension	lbf/ft					0.00394412?	##########	##########		
Net Ideal Gas Heating Value	Btu/ft^3	350.550	2604.76	1556.04	1556.04	197.378	197.378	197.378		
Net Liquid Heating Value	Btu/lb	3846.51	8783.59	19573.6	19573.6	2623.23	2623.23	2623.23		
Gross Ideal Gas Heating Valu	Btu/ft^3	426.522	2862.26	1701.69	1701.69	256.131	256.131	256.131		
Gross Liquid Heating Value	Btu/lb	4832.74	9681.61	21419.0	21419.0	3667.79	3667.79	3667.79		

Process Streams		240i	241i	260	261	262	263	264	270	271
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
Mole Fraction		%	%	%	%					
H2S		2.08339E-07	4.90398E-06	#########	##########					
N2		8.93266E-07	9.54713E-05	0.341758	0.341758					
CO2		5.89298E-08	3.33848E-06	#########	##########					
C1		0.00107507	0.101508	49.2100	49.2100					
C2		0.00340494	0.255515	19.6260	19.6260					
C3		0.00728901	0.447558	13.1244	13.1244					
iC4		0.00184949	0.100854	1.81437	1.81437					
nC4		0.0111420	0.520134	5.54060	5.54060					
iC5		0.00652137	0.245312	1.39703	1.39703					
nC5		0.00979095	0.337830	1.63227	1.63227					
Neohexane		0	0	0	0					
Cyclopentane		0	0	0	0					
2,3-Dimethylbutane		0.0122788	0.252649	0.575266	0.575266					
nC6		0.00857123	0.167593	0.338266	0.338266					
Benzene		0.385460	1.90023	0.645742	0.645742					
Cyclohexane		0.0440236	0.520463	0.486307	0.486307					
3,3-Dimethylpentane		0.0184359	0.325579	0.468639	0.468639					
C7		0.00367876	0.0665008	0.0920376	0.0920376					
Toluene		0.476295	1.58593	0.340361	0.340361					
i-Octane		0.0121013	0.217355	0.308627	0.308627					
C8		0.00169248	0.0228277	0.0202135	0.0202135					
Ethylbenzene		0.0710807	0.169868	0.0250130	0.0250130					
m-Xylene		0.192778	0.450194	0.0651303	0.0651303					
C9		0.00518589	0.0520949	0.0299769	0.0299769					
C10		0.00633839	0.0445486	0.0171374	0.0171374					
H2O		90.8353	91.7966	3.89360	3.89360					

TEG PStreams

Process Streams		240i	241i	260	261	262	263	264	270	271
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
TEG		7.68511	0.349102	#########	0.00562076					
UCARSOL™ AP-814		0.200614	0.0696528	#########	0.00156239					
Oxygen		0	0	0	0					
Molar Flow		lbmol/h	lbmol/h	lbmol/h	lbmol/h					
H2S		1.28298E-07	2.59007E-08	#########	##########					
N2		5.50086E-07	5.04238E-07	0.0278734	0.0278734					
CO2		3.62898E-08	1.76324E-08	#########	##########					
C1		0.000662042	0.000536118	4.01350	4.01350					
C2		0.00209681	0.00134952	1.60067	1.60067					
C3		0.00448867	0.00236381	1.07041	1.07041					
iC4		0.00113894	0.000532665	0.147978	0.147978					
nC4		0.00686140	0.00274712	0.451884	0.451884					
iC5		0.00401595	0.00129563	0.113940	0.113940					
nC5		0.00602940	0.00178427	0.133125	0.133125					
Neohexane		0	0	0	0					
Cyclopentane		0	0	0	0					
2,3-Dimethylbutane		0.00756146	0.00133438	0.0469179	0.0469179					
nC6		0.00527829	0.000885152	0.0275885	0.0275885					
Benzene		0.237372	0.0100362	0.0526658	0.0526658					
Cyclohexane		0.0271104	0.00274886	0.0396626	0.0396626					
3,3-Dimethylpentane		0.0113531	0.00171957	0.0382216	0.0382216					
C7		0.00226543	0.000351228	#########	0.00750647					
Toluene		0.293309	0.00837617	0.0277594	0.0277594					
i-Octane		0.00745215	0.00114798	0.0251712	0.0251712					
C8		0.00104225	0.000120566	#########	0.00164858					
Ethylbenzene		0.0437725	0.000897169	#########	0.00204002					
m-Xylene		0.118715	0.00237773	#########	0.00531194					
C9		0.00319354	0.000275143	#########	0.00244488					
C10		0.00390327	0.000235286	#########	0.00139771					
H2O		55.9377	0.484830	0.317557	0.317557					
TEG		4.73260	0.00184380	#########	##########					
UCARSOL™ AP-814		0.123541	0.000367876	#########	##########					
Oxygen		0	0	0	0					
Mass Fraction		%	%	%	%					
H2S		2.42897E-07	7.14379E-06	#########	##########					
N2		8.56025E-07	0.000114316	0.319542	0.319542					
CO2		8.87200E-08	6.28007E-06	#########	##########					
C1		0.000589992	0.0696047	26.3492	26.3492					
C2		0.00350243	0.328402	19.6967	19.6967					
C3		0.0109952	0.843557	19.3160	19.3160					
iC4		0.00367735	0.250555	3.51973	3.51973					
nC4		0.0221537	1.29219	10.7483	10.7483					
iC5		0.0160956	0.756513	3.36416	3.36416					
nC5		0.0241654	1.04183	3.93063	3.93063					
Neohexane		0	0	0	0					
Cyclopentane		0	0	0	0					
2,3-Dimethylbutane		0.0361975	0.930615	1.65460	1.65460					
nC6		0.0252677	0.617316	0.972934	0.972934					
Benzene		1.03000	6.34443	1.68352	1.68352					
Cyclohexane		0.126744	1.87224	1.36602	1.36602					
3,3-Dimethylpentane		0.0631948	1.39445	1.56732	1.56732					
C7		0.0126101	0.284821	0.307811	0.307811					
Toluene		1.50126	6.24587	1.04670	1.04670					
i-Octane		0.0472875	1.06124	1.17666	1.17666					
C8		0.00661361	0.111457	0.0770651	0.0770651					
Ethylbenzene		0.258150	0.770836	0.0886317	0.0886317					
m-Xylene		0.700129	2.04292	0.230785	0.230785					
C9		0.0227530	0.285588	0.128323	0.128323					
C10		0.0308509	0.270927	0.0813837	0.0813837					
H2O		55.9803	70.6866	2.34118	2.34118					
TEG		39.4804	2.24085	0.0281727	0.0281727					
UCARSOL™ AP-814		0.597021	0.257115	#########	0.00450434					
Oxygen		0	0	0	0					
Mass Flow		lb/h	lb/h	lb/h	lb/h					
H2S		4.37252E-06	8.82718E-07	#########	##########					
N2		1.54098E-05	1.41254E-05	0.780828	0.780828					
CO2		1.59710E-06	7.75994E-07	#########	##########					
C1		0.0106208	0.00860066	64.3865	64.3865					
C2		0.0630491	0.0405788	48.1306	48.1306					
C3		0.197931	0.104234	47.2002	47.2002					
iC4		0.0661980	0.0309597	8.60078	8.60078					
nC4		0.398800	0.159669	26.2645	26.2645					
iC5		0.289746	0.0934781	8.22062	8.22062					
nC5		0.435014	0.128733	9.60484	9.60484					
Neohexane		0	0	0	0					
Cyclopentane		0	0	0	0					
2,3-Dimethylbutane		0.651612	0.114991	4.04317	4.04317					
nC6		0.454858	0.0762783	2.37745	2.37745					
Benzene		18.5415	0.783946	4.11383	4.11383					
Cyclohexane		2.28159	0.231342	3.33798	3.33798					
3,3-Dimethylpentane		1.13760	0.172304	3.82987	3.82987					
C7		0.227001	0.0351937	0.752163	0.752163					
Toluene		27.0251	0.771767	2.55771	2.55771					
i-Octane		0.851248	0.131132	2.87527	2.87527					
C8		0.119055	0.0137721	0.188315	0.188315					
Ethylbenzene		4.64711	0.0952480	0.216579	0.216579					
m-Xylene		12.6034	0.252432	0.563942	0.563942					
C9		0.409588	0.0352885	0.313568	0.313568					
C10		0.555364	0.0334769	0.198868	0.198868					
H2O		1007.73	8.73434	5.72088	5.72088					
TEG		710.708	0.276889	0.0688426	0.0688426					
UCARSOL™ AP-814		10.7473	0.0317703	0.0110067	0.0110067					
Oxygen		0	0	0	0					

TEG PStreams

Process Streams		240i	241i	260	261	262	263	264	270	271
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
Process Streams		**240i**	**241i**	**260**	**261**	**262**	**263**	**264**	**270**	**271**
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Vapor	From Block:	TEG REBOILER	TEG STILL	FLASH TK	PV-101	BTEX ACCUM	BTEX PUMP	VLVE-100	DEHY AFTER SCRUBBER	LV-203
	To Block:	TEG STILL	TEG REBOILER	PV-101	DEHY FLASH	BTEX PUMP	VLVE-100	--	LV-203	MIX-100
Property	Units									
Temperature	°F	400.000	287.970	209.391	209.014					
Pressure	psia	15.6959	16.6959	88.6959	83.6959					
Mole Fraction Vapor	%	100	100	100	100					
Mole Fraction Light Liquid	%	0	0	0	0					
Mole Fraction Heavy Liquid	%	0	0	0	0					
Phase Mole Fraction	%	100	0.244390	100	100					
Molecular Weight	lb/lbmol	29.2321	23.3954	29.9611	29.9611					
Mass Density	lb/ft^3	0.0500926	0.0490563	0.378763	0.357158					
Molar Flow	lbmol/h	61.5814	0.528157	8.15587	8.15587					
Mass Flow	lb/h	1800.15	12.3564	244.359	244.359					
Vapor Volumetric Flow	ft^3/h	35936.5	251.883	645.150	684.175					
Liquid Volumetric Flow	gpm	4480.40	31.4036	80.4342	85.2998					
Std Vapor Volumetric Flow	MMSCFD	0.560860	0.00481025	0.0742805	0.0742805					
Std Liquid Volumetric Flow	sgpm	3.46891	0.0268045	1.14416	1.14416					
Compressibility		0.992839	0.992410	0.977158	0.978402					
Specific Gravity		1.00931	0.807783	1.03448	1.03448					
API Gravity										
Enthalpy	Btu/h	-7.01080E+06	-50513.0	-314506	-314506					
Mass Enthalpy	Btu/lb	-3894.56	-4087.99	-1287.07	-1287.07					
Mass Cp	Btu/(lb*°F)	0.484219	0.453289	0.510002	0.509319					
Ideal Gas CpCv Ratio		1.16411	1.23204	1.15226	1.15233					
Dynamic Viscosity	cP	0.0157709	0.0139699	0.0119297	0.0119159					
Kinematic Viscosity	cSt	19.6546	17.7777	1.96627	2.08280					
Thermal Conductivity	Btu/(h*ft*°F	0.0183031	0.0165262	0.0200951	0.0200627					
Surface Tension	lbf/ft									
Net Ideal Gas Heating Value	Btu/ft^3	350.550	318.198	1556.04	1556.04					
Net Liquid Heating Value	Btu/lb	3846.51	4361.19	19573.6	19573.6					
Gross Ideal Gas Heating Valu	Btu/ft^3	426.522	384.341	1701.69	1701.69					
Gross Liquid Heating Value	Btu/lb	4832.74	5434.03	21419.0	21419.0					

Certificate of Analysis

Number: 6030-22120250-002A

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

Dec. 21, 2022

Ed McCasland
Durango Midstream
10077 Grogans Mill Rd Suite 300
The Woodlands, TX 77380

Station Name:	Parkchester/Rattle Snake A	Sampled By:	JQ
Station Number:	631338	Sample Of:	Gas Spot
Station Location:	Durango	Sample Date:	12/21/2022
Type of Sample:	Spot-Cylinder	Sample Conditions:	81 psig, @ 54 °F
Heat Trace Used:	N/A	Effective Date:	12/21/2022
Sampling Method:	Fill and Purge	Method:	GPA 2286
Last Inst. Cal.:	12/15/2022 8:05 AM	Cylinder No:	030
Analyzed:	12/21/2022 13:05:41	Instrument:	6030_GC2 (Agilent GC-7890B)

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.927	1.93721	2.565		GPM TOTAL C2+	5.617
Methane	77.512	77.92266	59.082		GPM TOTAL C3+	2.598
Carbon Dioxide	0.250	0.25132	0.523		GPM TOTAL iC5+	0.517
Ethane	11.253	11.31262	16.077	3.019		
Propane	5.081	5.10792	10.645	1.405		
Iso-butane	0.631	0.63434	1.743	0.207		
n-Butane	1.482	1.48985	4.093	0.469		
Iso-pentane	0.341	0.34281	1.169	0.125		
n-Pentane	0.348	0.34984	1.193	0.127		
Hexanes Plus	0.648	0.65143	2.910	0.265		
	99.473	100.00000	100.000	5.617		

Calculated Physical Properties	**Total**	**C6+**
Relative Density Real Gas	0.7328	3.2628
Calculated Molecular Weight	21.16	94.50
Compressibility Factor	0.9965	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1246	5023
Water Sat. Gas Base BTU	1224	4935
Ideal, Gross HV - Dry at 14.65 psia	1241.6	5022.7
Ideal, Gross HV - Wet	1219.9	0.000

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Powered By SURECHEM

Certificate of Analysis

Number: 6030-22120250-002A

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

Dec. 21, 2022

Ed McCasland
Durango Midstream
10077 Grogans Mill Rd Suite 300
The Woodlands, TX 77380

Station Name:	Parkchester/Rattle Snake A	Sampled By:	JQ
Station Number:	631338	Sample Of:	Gas Spot
Station Location:	Durango	Sample Date:	12/21/2022
Type of Sample:	Spot-Cylinder	Sample Conditions:	81 psig, @ 54 °F
Heat Trace Used:	N/A	Method:	GPA 2286
Sampling Method:	Fill and Purge	Cylinder No:	030
		Analyzed:	12/21/2022 14:06:37

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.00000	0.000	
Nitrogen	1.93721	2.565	
Methane	77.92266	59.082	
Carbon Dioxide	0.25132	0.523	
Ethane	11.31262	16.077	3.019
Propane	5.10792	10.645	1.405
Iso-Butane	0.63434	1.743	0.207
n-Butane	1.48985	4.093	0.469
Iso-Pentane	0.34281	1.169	0.125
n-Pentane	0.34984	1.193	0.127
i-Hexanes	0.13123	0.523	0.052
n-Hexane	0.07400	0.303	0.030
Benzene	0.04256	0.157	0.012
Cyclohexane	0.06956	0.277	0.024
i-Heptanes	0.09973	0.437	0.040
n-Heptane	0.02743	0.130	0.013
Toluene	0.03809	0.166	0.013
i-Octanes	0.09320	0.460	0.041
n-Octane	0.00837	0.045	0.004
Ethylbenzene	0.00460	0.023	0.002
Xylenes	0.01332	0.066	0.005
i-Nonanes	0.02002	0.113	0.010
n-Nonane	0.00624	0.038	0.004
Decanes Plus	0.02308	0.172	0.015
	100.00000	100.000	5.617

Certificate of Analysis

Number: 6030-22120250-002A

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

Dec. 21, 2022

Ed McCasland
Durango Midstream
10077 Grogans Mill Rd Suite 300
The Woodlands, TX 77380

Station Name:	Parkchester/Rattle Snake A	Sampled By:	JQ
Station Number:	631338	Sample Of:	Gas Spot
Station Location:	Durango	Sample Date:	12/21/2022
Type of Sample:	Spot-Cylinder	Sample Conditions:	81 psig, @ 54 °F
Heat Trace Used:	N/A	Method:	GPA 2286
Sampling Method:	Fill and Purge	Cylinder No:	030
		Analyzed:	12/21/2022 14:06:37

Calculated Physical Properties	**Total**	**C10+**
Calculated Molecular Weight	21.16	158.53
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1246.0	8517.2
Water Sat. Gas Base BTU	1224.2	8338.6
Relative Density Real Gas	0.7328	5.4737
Compressibility Factor	0.9965	
Ideal, Gross HV - Wet	1219.9	
Ideal, Gross HV - Dry at 14.65 psia	1241.6	
Net BTU Dry Gas - real gas	1131	
Net BTU Wet Gas - real gas	1111	

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

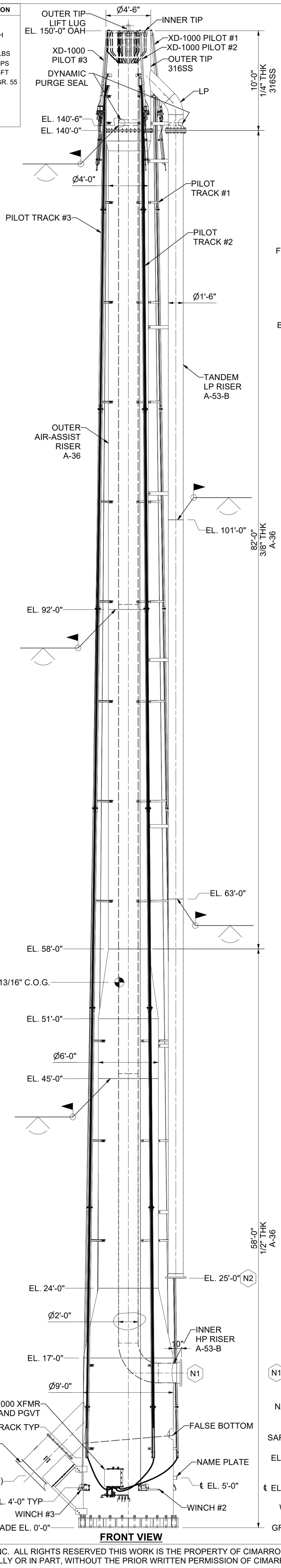
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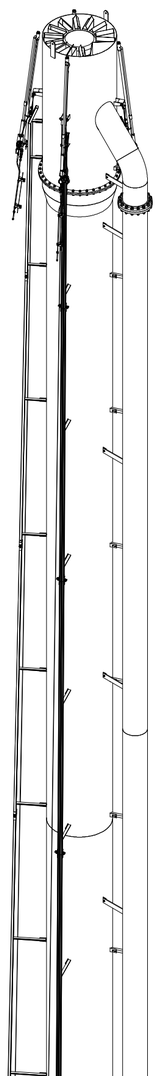
ENGINEERING DESIGN INFORMATION

FREE STANDING STACK

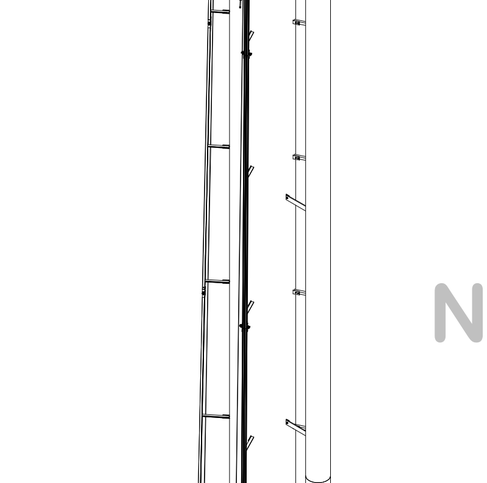
DESIGNED WIND SPEED:	110 MPH
EXPOSURE:	C
DEAD WEIGHT:	72,420 LBS
MAX. SHEAR ON BASE:	20.29 KIPS
MAX. MOMENT ON BASE:	1,717 K-FT
ANCHOR BOLT MATERIAL:	F1554 GR. 55
ANCHOR BOLT SIZE:	1-3/8"
ANCHOR BOLT QUANTITY:	24
BOLT CIRCLE:	114"
CORROSION ALLOWANCE:	1/16"



FRONT VIEW



ISO VIEW



SIDE VIEW

NOZZLE SCHEDULE					
ITEM	TYPE	SERVICE	SIZE	RATING	SPEC.
N1	RF	HP GAS	24"	150#	A-105
N2	RF	LP GAS	18"	150#	A-105
N3	RF	PILOT GAS	1"	150#	316SS

NOTES: ***UNLESS OTHERWISE SPECIFIED***

1. *ALL BOLT HOLES SHALL STRADDLE COMMON CENTERLINES.*
2. *SEE PLAN VIEW FOR TRUE ORIENTATIONS.*
3. *PAINT SPECIFICATIONS DO NOT APPLY TO STAINLESS STEEL MATERIALS. PAINT SPECIFICATIONS FOR CARBON STEEL:*
   SURFACE PREP: SSPC-SP3
   PRIMER: SW 2.8 EPOXY, 1.8-2.2 TOTAL DFT (MILS)
   TOP COAT: SW POLANE 8890, ACRYLIC POLYURETHANE,1.5-3.0 DFT (MILS) ENVIRO GREEN, GLOSS
4. *ALL NOZZLES AND COUPLINGS TO BE CAPPED OR PLUGGED PRIOR TO SHIPPING.*
5. *FOR ALLOWABLE FORCES & MOMENTS FOR FLARE GAS INLET NOZZLE REFER TO API 537, THIRD EDITION 2017, TABLE 2 "ALLOWABLE FORCES AND MOMENTS FOR FLARE NOZZLES".*
6. *FLARE TO BE LIFTED IN 3 PARTS.*

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CREATING A CLEANER ENVIRONMENT®

AUSTIN, TEXAS, U.S.A. WWW.CIMARRON.COM

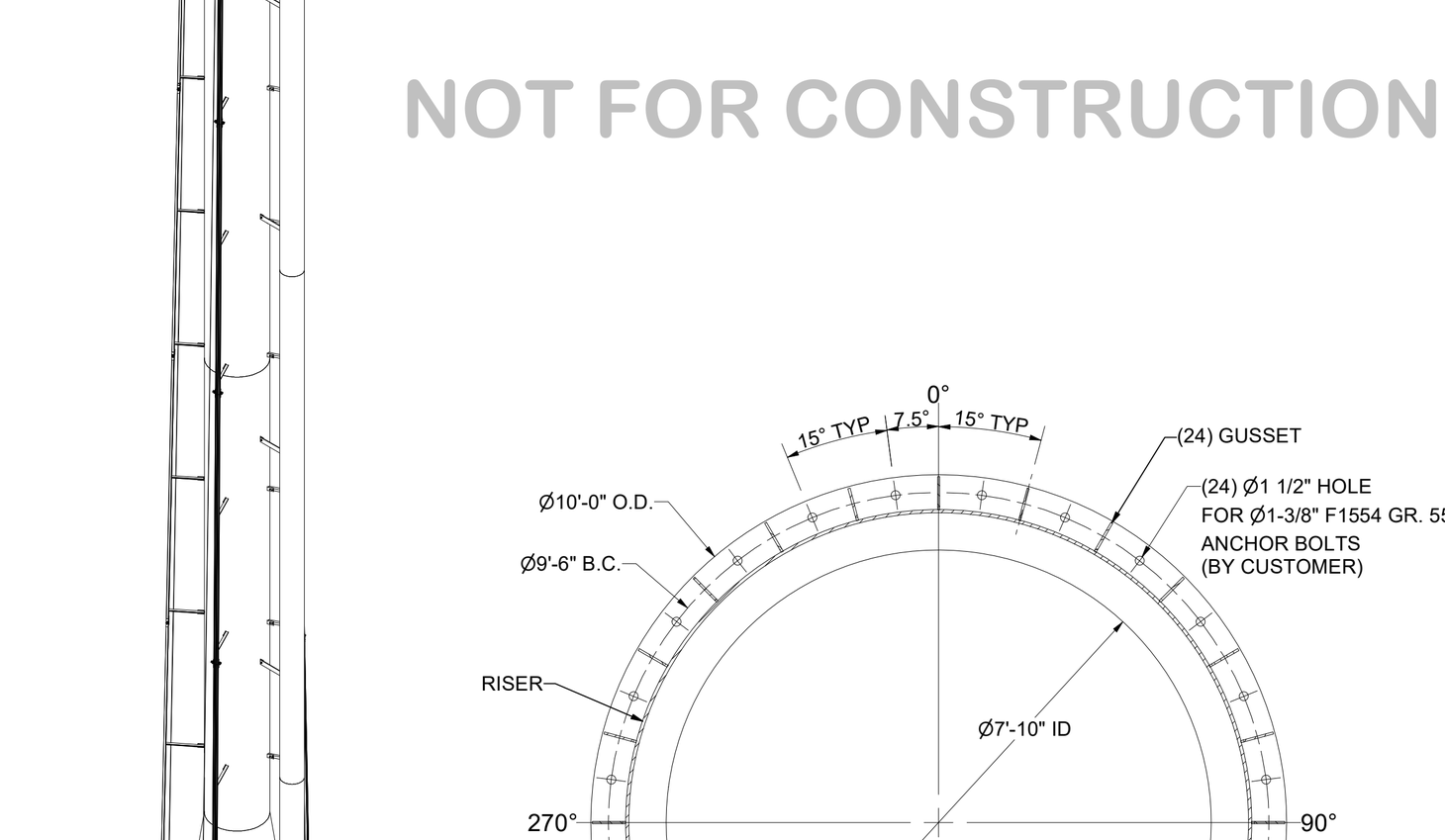
MANUFACTURED FOR: INTERSTATE TREATING

JOB NUMBER:	SERIAL NUMBER:	TAG NUMBER:
23315		FL-3015

MODEL NUMBER / YEAR BUILT: SFVP-2454 X 150' OAH/2024

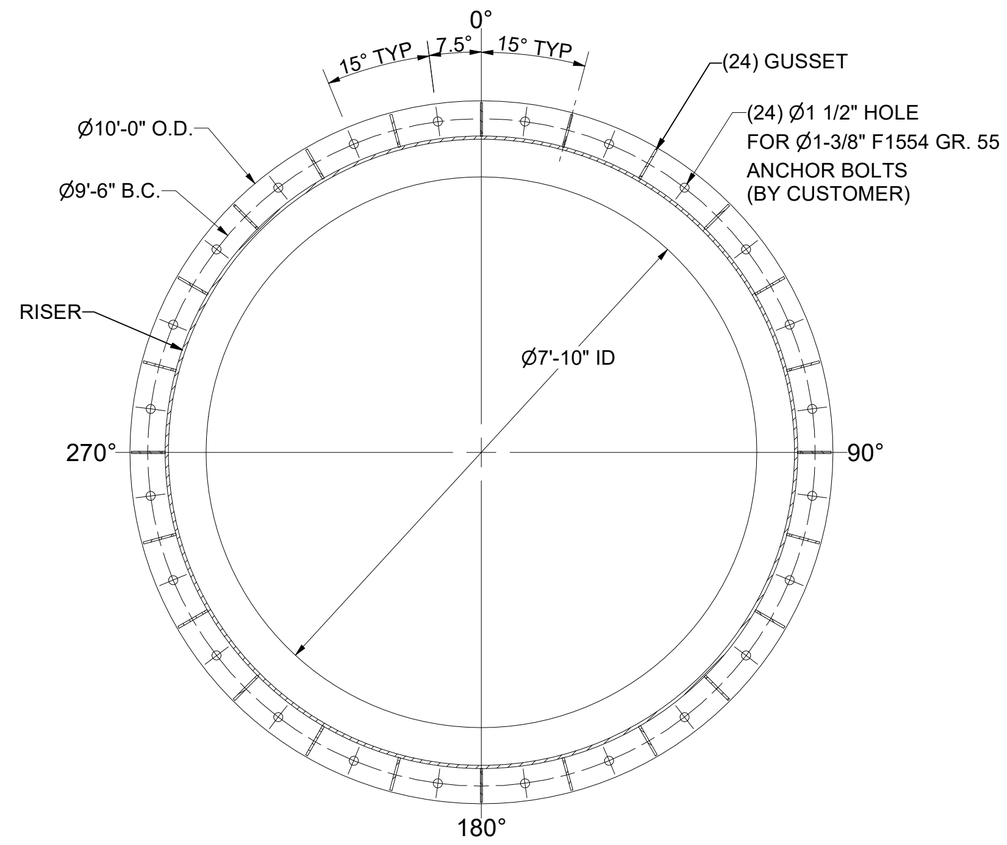
NAME PLATE

PILOT TIP DTL
(TYP)

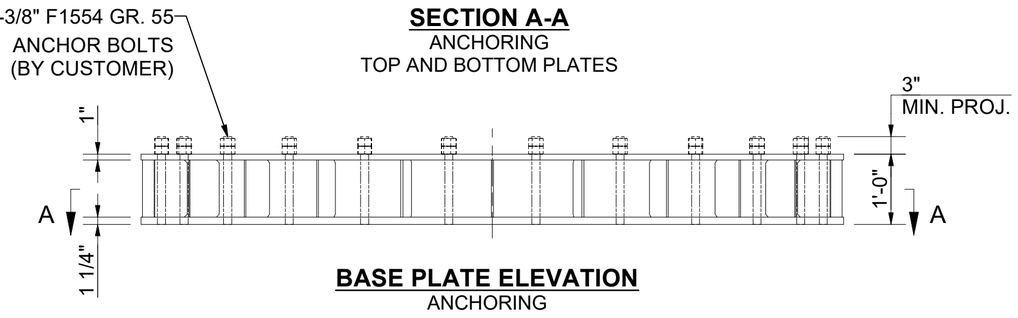


PLAN VIEW

NOT FOR CONSTRUCTION



SECTION A-A
ANCHORING
TOP AND BOTTOM PLATES



BASE PLATE ELEVATION
ANCHORING

ISO VIEW

FL-3015

REV	DATE	DESCRIPTION	BY	CHK'D	APPR
A	05/21/24	ISSUED FOR APPROVAL	STB	JF	FB

REVISION HISTORY

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES

TOLERANCE

OVERALL ELEVATION	±1"
NOZZLE ELEVATION	±1/2"
GUYWIRE ELEVATION	±1"
FRACTIONS	±1/16"
DECIMALS .XX	±.06
DECIMALS .XXX	±.030
ANGLE	±1°
SQUARENESS ACROSS FACE	±1/16"
FLANGE ROTATION	±1/16" MAX.

SCALE: NONE
APPROX WEIGHT/LBS: SEE EDI TABLE

CUSTOMER/LOCATION
INTERSTATE TREATING
WO 8219 DURANGO, KING'S LANDING
CARLSBAD, NM

TITLE
GENERAL ARRANGEMENT
SFVP-2454 X 150 FT OAH
(4) XD-1000 PILOTS

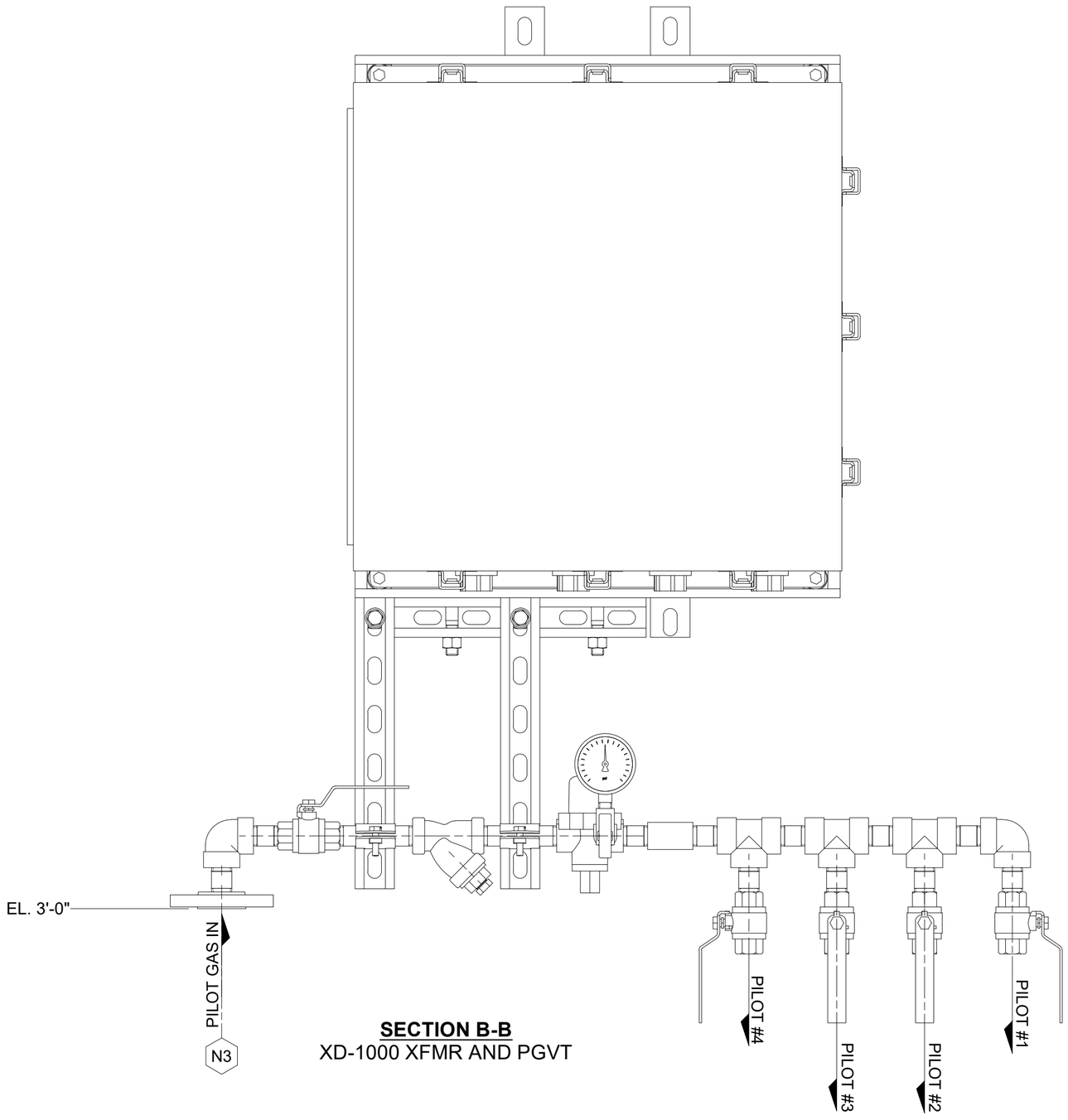
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P/N	PROJECT NO.
2331501G001	23315

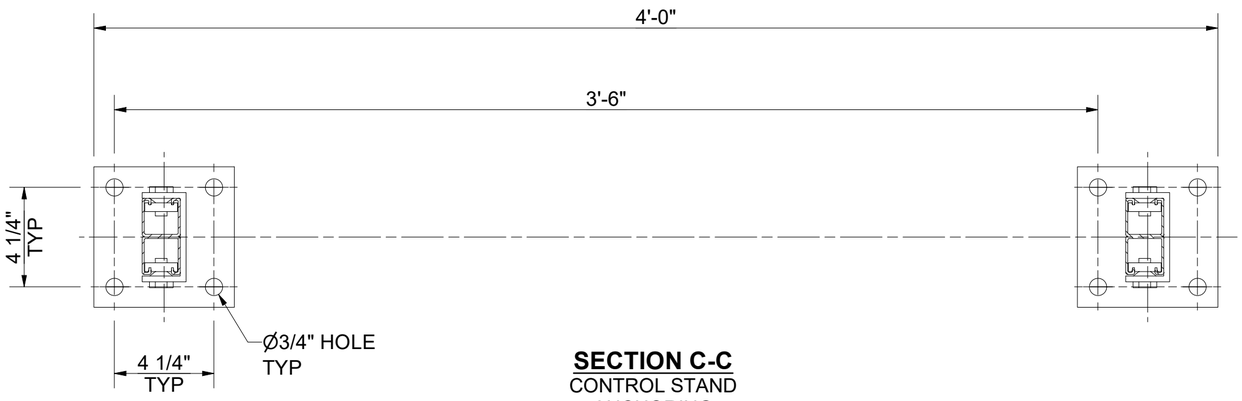
SHEET	DWG NO.	REV
1 OF 2	***23315-01-G001***	A

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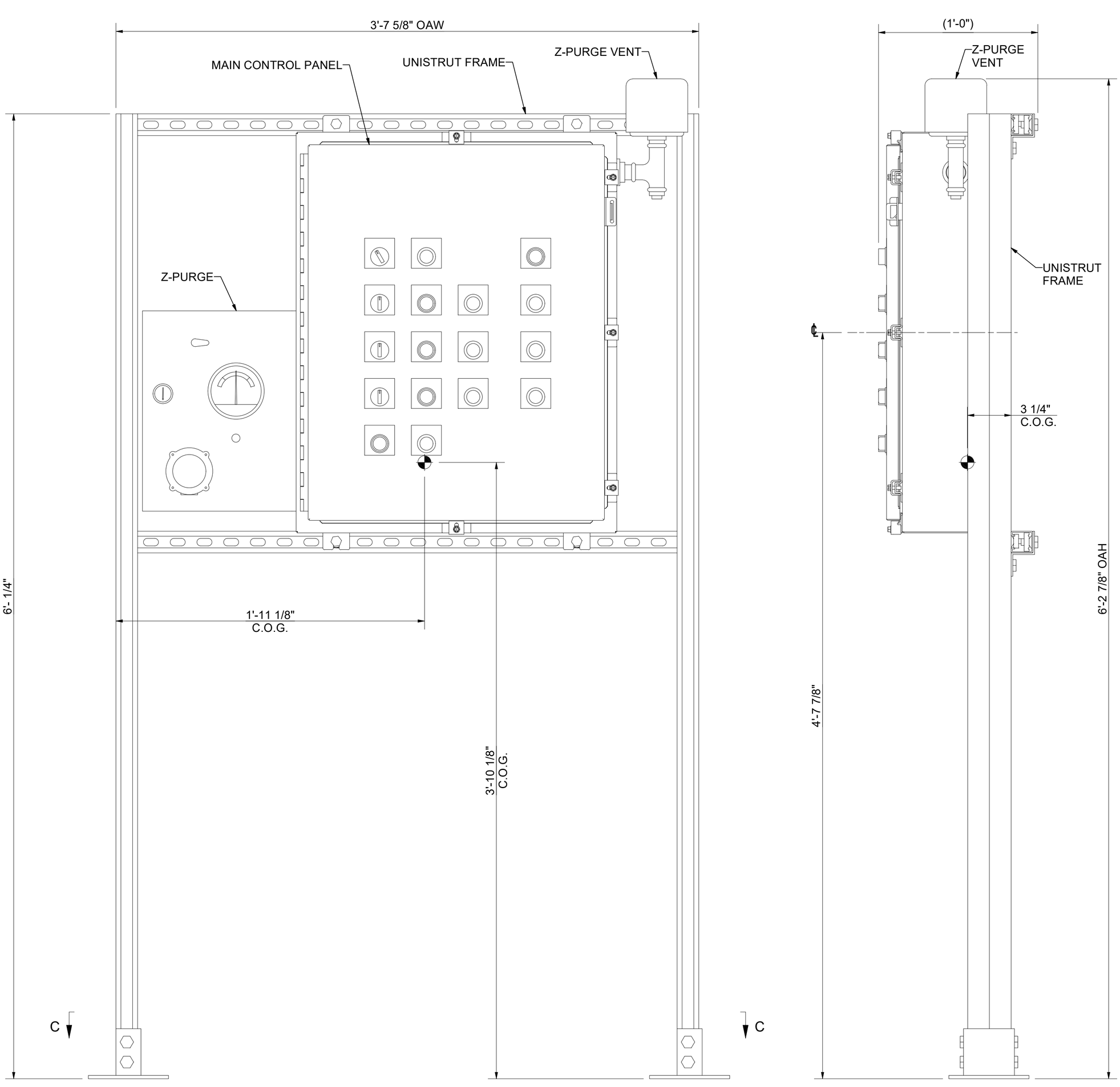
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SECTION B-B
XD-1000 XFMR AND PGVT



SECTION C-C
CONTROL STAND
ANCHORING



FRONT VIEW
CONTROL STAND
MAIN CONTROL PANEL W/ Z-PURGE

SIDE VIEW
CONTROL STAND

P/N 2331501G001	PROJECT NO. 23315
SHEET 2 OF 2	DWG NO. 23315-01-G001
	REV A

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FL-1318

14842 N Maple Drive
Kellyville, OK 74039
918 941 2157
www.heroflare.com

Frontier Field Services

Rev 0: 1/22/25
Flare Technology: Utility
Smokeless: Yes
Flare Model: F60U20

Project Reference: Acid Gas Flare

Thank you for giving Hero Flare an opportunity to provide a firm proposal for the supply of a flare system for your application. Hero Flare has a strong reputation in the industry for supplying economical flare systems that are reliable and fully compliant with all EPA guidelines.

All of our flare systems are provided with stainless steel for those components that are located in the heat effective zone to ensure a long service life. All of our flare systems are provided with a well proven pilot ignition system that ensures a continously monitored ignition source is present at all times.

The Hero Flare system offers the following:

- 40 CFR 60.18 EPA Compliant
- 98% Destruction Efficency
- Continously Monitored Pilot Ignition System
- We can supply these flares quickly and will meet your project schedule.

We look forward to working with you as this project progresses.

Design Data Sheet

Design Flow Rate

Flow Rate Case	Flow Rate (MMSCFD)	Molecular Weight	LHV (Btu/SCF)	Pressure (Psig)	Temp. (°F)
Acid Gas	5	42	8	<5	110
Enrichment Gas	2.5*	17	900	<5	Amb.

*Enrichment gas to be injected into the flare header to achieve an LHV of 300 Btu/scf.

Site Conditions

Wind	120 MPH	Temperature	0 to 120 °F	Elevation	14.5 Psi

Site Utilities Required

Pilot Gas (per pilot)	Natural Gas: 55 scfh @ 18 psig OR Propane: 25 scfh @ 9 psig (Clean, dry gas)	
Plant Air	No Plant Air Required	
Pilot Panel Electricity	120V / 1 Phase / 10 Amps is required to operate pilot ignition system	
Blower / VFD Electricity	No blower included with this offer	Blower Size: N/A

Emission / Flare Performance

Destruction	A 98% or greater hydrocarbon destruction efficiency will be achieved
Smokeless Rate	100% Smokeless
Max Radiation	Less than 500 Btu/hr/SF at normal & 1500 Btu/hr at max flow rates
Tip Velocity	Meets EPA regulations over full operating range

Pilot

Electrical / Classification	120VAC / Non-Classified Area
Control Panel Type	Nema 4 (Painted)
Pilot(s)	Two (2) Stainless Steel Gas Pilot with Easy Glide Retraction System
Pilot Construction	Stainless Steel
Pilot Monitoring	Type K Thermcouple
Pilot Gas Connection	½" FNPT Located at Base of Flare

Flare Construction

Component	Dimension	Material
Stack Height	60'	Carbon Steel
Flare Tip Diameter	20"	Stainless
Flare Inlet	10"	Carbon – 150# Ansi Flange

UOP RUSSELL, LLC

Tulsa, Oklahoma

JOB NO: TRJ-421 DATE: 8/22/11
CLIENT: UOP Russell BY: DDO
SUBJECT: 4500 HP Refrigeration

SCREW COMPRESSOR

Tag No.		C-161, 162, & 163		Ethane Recovery Mode			
Service		Refrigerant Compressor					
		Stage 1		Interstage Feed		Stage 2	
Inlet	PSIA / °F	14.4	-25	46.9	9.439	46.9	59.9
Discharge	PSIA / °F	46.9	100.1			275.6	192
FLOW	MMSCFD (14.7 & 60° F)	12.14		10.45		22.59	
	Lbs/Hr	59136		49880		109016	
Mol Wt.		44.36		43.49		43.96	
Composition	Mol %						
Ethane		1.15		5.15		3.00	
Propane		95.85		94.02		95.00	
i-Butane		1.44		0.48		1.00	
n-Butane		1.56		0.35		1.00	
Efficiency	%	52 est.				52 est.	
BHP		1067 est.				3383 est.	
Total BHP						4450 est.	
Case Material		▲ Nodular Iron		Chiller Duty (Mbtu/hr)		9206	
Rotor Material		Carbon Steel		Chiller °F & psia		-35 @ 16.4 psia	
Shaft Material		Carbon Steel					
Shaft Seal Type		Single, end face, mechanical					
Oil Cooler Type		Air Cooler (one per compr.)		Condenser Temp (°F)		125	
Fan Motor	HP	2 @ 15		**SEE ATTACHED PFD**			
Cooling Water	Lbs./Hr	N / A					
Cooling Water In / Out	°F	N / A	N / A				
Lube Oil Pump	Mfg./Model	Viking /LS4124					
Lube Oil Pump Motor	HP @ RPM	10 @ 1200		460 V / 3 ph / 60 hz			
Lube Oil Heater	# @ KW	3 @ 1.2		120 V / 1 ph / 60 hz			
Suction	Size / Rating	12"	300				
Interstage	Size / Rating	6"	300				
Discharge	Size / Rating	8"	300				
Driver Type		Electric Motor					
Motor HP @ RPM		1600 @ 3600		4160 V / 3 ph / 60 hz			
Service Factor / Enclosure		1.15 / WP II					
Altitude	Ft.	1650					
Ambient Temp. Min. / Max.	°F	-20	110				
Wind Code		ASCE 7-10, Cat III, Exp C, 120mph					
Seismic Code		ASCE 7-10, Soil D, I=1.25, Ss=100%, S1=40%					
Manufacturer		GEA FES, Inc.		Compressor Unit		Oil Cooler	
Model No.		Grasso XC-1210GLE		14'L x 7'W x 12'H		Smithco: 1F20-092-2	
Motor Manufacturer		Siemens		35000 lbs		9.2' X 20'	
Frame		*				16,220 lbs	

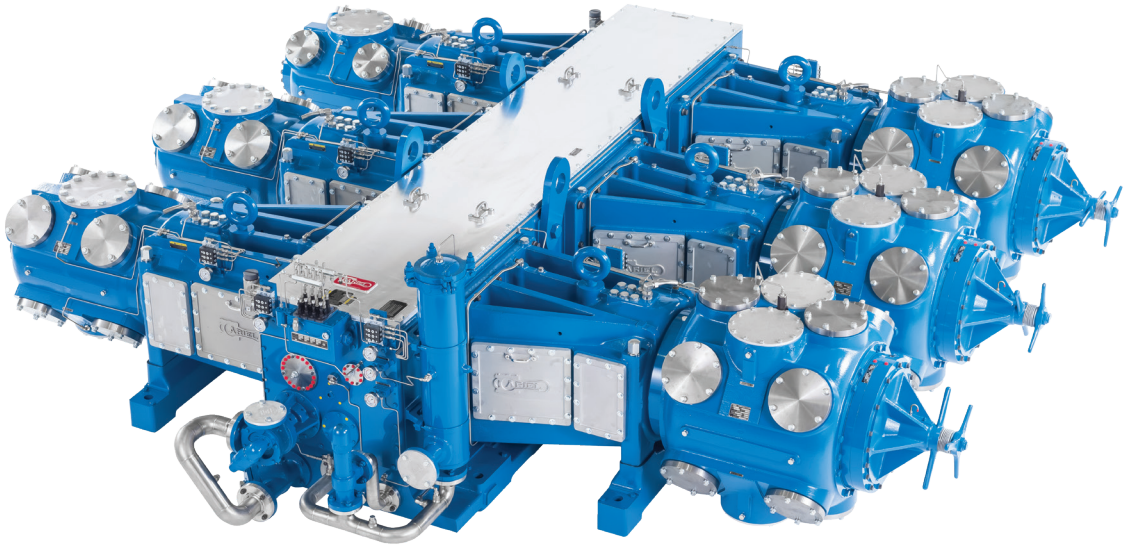
NOTES: (1) See attached "Scope of Supply".
(2) Add 5% to horsepower and flow. Design for no negative tolerance.
(3) Design: Rec Case 2.hsc Off-Design: Rej 125°F.hsc

REVISION		2		▲ 3		1	
ENGINEER/DATE		DDO	8/22/11	JRG	12/8/14	TKF	4/29/13
ISSUED FOR		Check Rate		Revised		Revised	

ARIEL CORPORATION

WORLD STANDARD COMPRESSORS

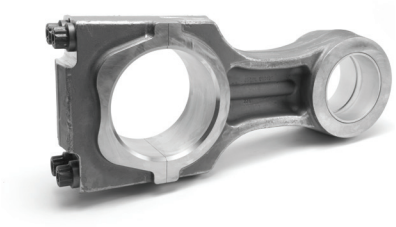
KBU/KBZ



	KBU			KBZ		
Number of Throws	2	4	6	2	4	6
Rated Power (BHP)	2,600	5,200	7,800	2,600	5,200	7,800
Rated Power (kW)	1,939	3,878	5,816	1,939	3,878	5,816
Stroke (in)	5.75			6.75		
Stroke (mm)	146			171		
Maximum RPM	1,200			1,000		
Piston Speed (FPM)	1,150			1,125		
Piston Speed (m/s)	5.84			5.71		
Total Rod Load (lbs)	150,000					
Total Rod Load (kN)	667					
Rod Load Tension (lbs)	75,000					
Rod Load Tension (kN)	334					
Rod Load Compression (lbs)	80,000					
Road Load Compression (kN)	356					
Rod Diameter (in)	2.875					
Rod Diameter (mm)	73					
Crankshaft Centerline, from bottom (in)	24					
Crankshaft Centerline, from bottom (mm)	610					

FEATURES

Ariel's large medium-speed separable reciprocating compressors are capable of handling high rod loads of 150,000 lbs. The KBU and KBZ have proven to be the most cost effective method of compression for applications requiring large-horsepower drivers and high-compression capacity.



Rigid Conrod With Steel Backed Bronze Bushing



Application-Specifc Efficient Valves



Rugged One-Piece Crosshead



Ariel "Necked-Down" Piston Rod Design

Precision Bearing Shells:

Every Ariel compressor features precision-machined tri-metal main and connecting rod bearings.

Versatile Unloading Devices:

Ariel offers manual, head-end variable volume clearance pockets on most cylinders. Pneumatic suction valve un-loaders are available on a limited basis.

Efficient Valving:

Plate-type valves are designed for modern speeds, utilizing non-metallic sealing elements as standard. Valves are selected to comply with established low-valve velocity standards.

Heavy-Duty Crankshafts:

The KBU/KBZ compressors feature forged steel, precision-machined crankshafts with integral counter-weights manufactured by Ariel Corporation.

High-Efficiency Canister Type Oil Filters:

Ariel KBU/KBZ compressors feature high-efficiency canister filters rated at 1 micron nominal and 12 micron absolute.

Rugged Crankcases:

Ariel crankcases are designed for long service life and ease of access during maintenance. Our crankcases feature a heavily-ribbed, high-strength cast iron base with a removable lightweight aluminum top cover.

Full Pressure Lubrication:

A frame-driven lube oil pump provides cooled oil through a full-flow oil filter to all moving parts in the frame. A divider-block system supplies metered oil to cylinder bores and rod packings.

High-Strength Bolting:

Durable Grade 8 bolting on all loaded joints, combined with specially designed fatigue-fighting bolts on all valve caps ensure ultimate holding strength.

Rigid Connecting Rods:

The KBU/KBZ compressors feature durable connecting rods manufactured from forged steel with 4 bolts and a heavy-duty "I" section.

Rugged Crossheads: One-piece, long-life crossheads with hardened, ground stee

l crosshead pins feature direct, full-pressure lubrication at the top and bottom for minimum wear.

Innovative Cylinders:

Ariel's double-acting non-cooled cylinders eliminate the cost and maintenance associated with water cooling.

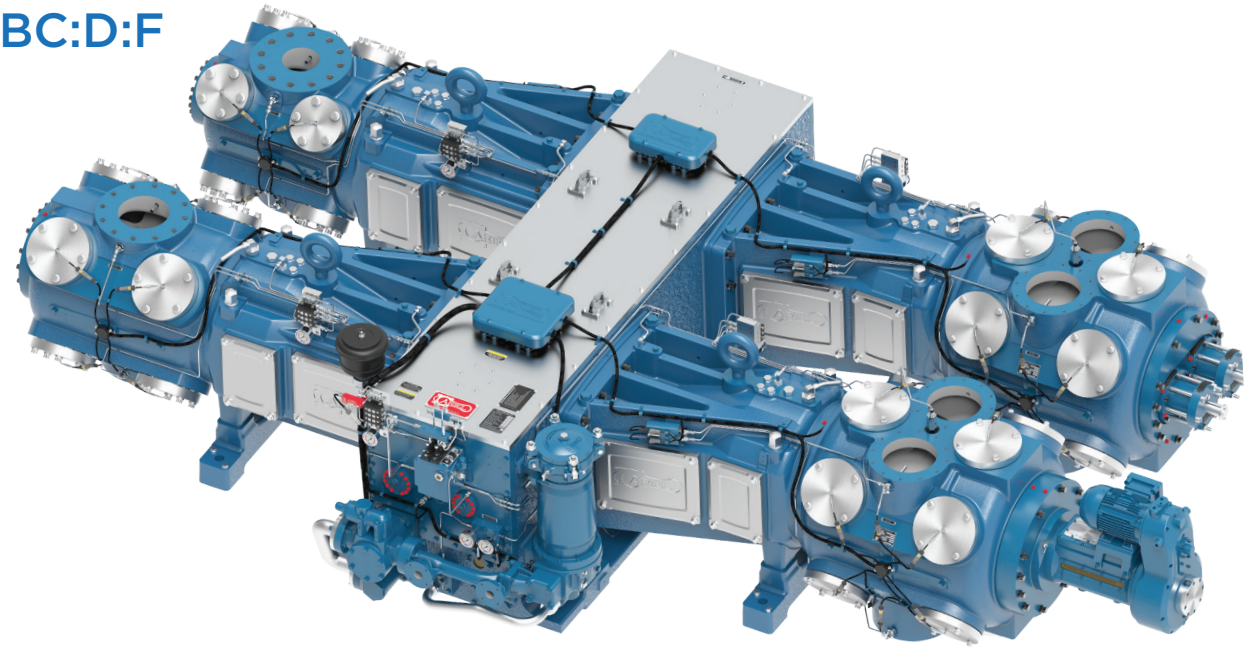
Durable Pistons and Rods:

KBU/KBZ compressors feature wear-resistant ductile or gray iron pistons and precision-ground alloy steel piston rods with locking crosshead nuts. Rolled threads are 1/4" under rod diameter for easy installation.

ARIEL CORPORATION

WORLD STANDARD COMPRESSORS

KBC:D:F



	KBC			KBD			KBF		
Number of Throws	2	4	6	2	4	6	2	4	6
Rated Power (BHP)	2,400	4,800	7,200	2,400	4,800	7,200	2,400	4,800	7,200
Rated Power (kW)	1,790	3,579	5,369	1,790	3,579	5,369	1,790	3,579	5,369
Stroke (in)	7.0			6.0			5.0		
Stroke (mm)	178			152			127		
Maximum RPM	1,000			1,200			1,400		
Piston Speed (FPM)	1,167			1,200			1,167		
Piston Speed (m/s)	5.9			6.1			5.9		
Total Rod Load (lbs)	132,000								
Total Rod Load (kN)	588								
Rod Load Tension (lbs)	66,000								
Rod Load Tension (kN)	294								
Rod Load Compression (lbs)	69,000								
Road Load Compression (kN)	307								
Rod Diameter (in)	2.5								
Rod Diameter (mm)	63.5								
Crankshaft Centerline, from bottom (in)	21								
Crankshaft Centerline, from bottom (mm)	533								

SEC Energy
PRODUCTS & SERVICES

Date: 10/26/2023
Proposal Number: OPPTY-0009710-00003978
Revision: 03

Driver Summary

General Description of the AC Motor:



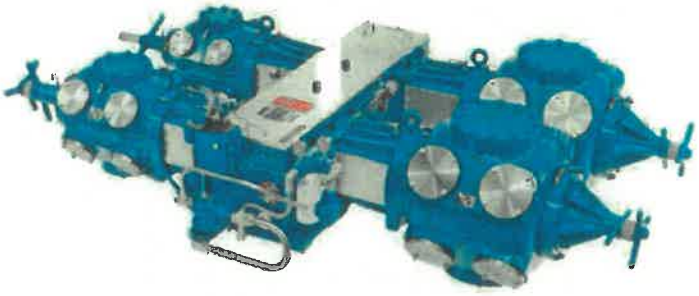
GE INDUSTRIAL MOTORS
a WOLONG company

- Output = 500 HP
- Phase = 3
- NEMA Design = NA
- Product Name= Quantum - Severe Duty - Cast Iron
- Synch RPM = 1200
- Frequency = 60
- DE E/S & Mtg= Standard E/S & Foot Mounted
- GEIM Type = Premium - Efficiency – NEMA - Standard Torque, KS
- Voltage = 460
- Shaft Orientation = Horiz. Shaft
- C-face Dia. = NA
- Ambient Temp. = 44 C
- Enclosure = TEFC
- Hazardous Loc.= Division 2 GEIM Self declared
- Frame Material = Cast Iron
- Insulation Class = F
- IP & IC Code = IP55, IC411
- Class and Group = CL I, 200 C - Auto Ignition Temp (T3) at 1.0 - Service factor only
- Estimated Frame= 5013
- Service Factor = 1.0
- Load Type =N/A
- DE Shaft Extension = Custom
- Load Connection= Direct
- Motor Application= Non-Nuclear
- Est. Weight = 7150 LB

Motor Adders:

- Custom DE Shaft Extension
- Altitude - High (Feet); 3520
- Ambient Temperature - High (Deg C); 44
- Nameplate, additional data; Vt Load, 10:1 Speed Range
- Access Box; Accessory Box
- Brg. Temp. Detector; 100 Ohm Platinum, Qty & Location (Detector); 1 In Each End
- J-Box Size; Oversize
- Space Heater Type; Thermostat Controlled; 110 - 120 V
- Steel Spec.; Aisi 4142 High Fatigue Strength Steel
- Resist. Temp. Detectors; Set Of 6 100 Ohm Platinum
- Insulated bearings on both sides.
- One (1) Metrix ST5484E Vibration Transducer

Compressor Summary



Frame	KBE
Number of Throws	2
Rated Power (BHP)	1340
Stroke (inch)	5
Maximum RPM	1400
Piston Speed (FPM)	1166.7
Total Rod Load (lbs)	74000
Tension (lbs)	37000
Compression (lbs)	40000
Average Weight without Cylinders (lbs)	4900
Maximum Length (inch)	54
Nominal Width (inch)	133
Crankshaft Centerline, from bottom (inch)	17

Compressor Details

- An Ariel KBE/2 – a single stage reciprocating compressor is proposed for this service
  - Two (2) 6-3/8E:21, Bore: 6.375", MAWP 1650 psig, with VVCPs
- Options included with the compressor frame:
  - Two (2) variable volume clearance pockets
  - Standard distance pieces (STD)
  - Standard Ariel valves
  - Carbon steel ion nitride piston rods
  - Lubricator no oil flow devices: Whitlock Proximity Switch
  - Ariel oil thermostatic valve.
  - RTD main bearing temperature devices
  - Ariel standard oil filter
  - Ariel distance piece supports
  - CLO section in main cooler
  - Aluminum coupling guard for coupling
  - One (1) Metrix ST5484E Vibration Transmitter
- Grouted sole plate per each compressor mounting foot.
- Automated pneumatic pre-lube pump.
- Option: Compressor lube oil hot start with automatic prelube functionality
- Compressor utility instrumentation list is provided on pages 16-18.
- Separate cylinder and frame lube oil per Ariel run file.
  - Frame Lube Oil: R&O Oil (ISO 150)
  - Cylinder Lube Oil: ISO 460

Vent/Drain System

- The distance piece and VVCP vents are manifolded and routed to a skid edge connection.
- Pressure packing vents/drains are manifolded into a common header and routed to a skid edge connection.
- The distance piece drains are manifolded into a common header and routed to a skid edge connection.
- Vents and drains to be routed to a skid edge connection.

Ariel Performance Summary

Case	Available BHP	Calc BHP	% Max BHP	RPM	Stgs	Stg1-Calc,	Ps, psig	Pd, psig	Ts, F
1	500	500	100.00	1200.0	1	7.595	275.00	900.00	90.00
2	500	500	100.00	1200.0	1	8.225	300.00	900.00	90.00
3	500	500	100.00	1200.0	1	7.004	275.00	1000.00	90.00
4	500	500	100.00	1200.0	1	7.552	300.00	1000.00	90.00
5	500	500	100.00	1200.0	1	7.090	275.00	900.00	120.00
6	500	500	100.00	1200.0	1	7.670	300.00	900.00	120.00
7	500	500	100.00	1200.0	1	6.532	275.00	1000.00	120.00
8	500	500	100.00	1200.0	1	7.035	300.00	1000.00	120.00

Ariel guarantees a single design point as calculated by the current version of the Ariel Performance Program for each compressor manufactured. All other performance is "expected" and not guaranteed. A gas analysis is required to validate this guarantee. At this guarantee design point, performance is based on gas conditions at the cylinder flanges free of pulsation effects. Rated capacity and power can be guaranteed to a tolerance of ± 3% for:

1. Specific gravity between 0.50 and 0.80 (14.48 to 23.17 molecular weight)
2. Suction pressure greater than 10 psig (0.7 barg)
3. Discharge pressure less than 2500 psig (172 barg)
4. Compression ratio greater than 1.8
5. Compression ratio less than 4.0, else suction VE > 50%)

Rated capacity and power can be guaranteed to a tolerance of ± 6% for conditions outside those listed above.

NOTE: Performance predictions are not guaranteed for unloading configurations including single acting or non-acting cylinder, deactivated stage, or blow thru operation.

Prepared For:
Jared Harrison
SNC-Lavalin

Date: May 22, 2017

APPLICATION INFORMATION

DRIVER

Make:	Waukesha
Model:	L7044GSI
Horsepower:	1848
RPM:	1200
Compression Ratio:	8
Exhaust Flow Rate:	9301
Exhaust Temperature:	1209
Reference:	N/A
Fuel:	Custom
Annual Operating Hours:	8760

UNCONTROLLED EMISSIONS DATA

	g/bhp-hr	lb/hr	Tons/Year
NO_x:	12.58	51.25	224.49
CO:	11.95	48.69	213.24
THC:	2.43	9.90	43.36
NMHC:	0.50	2.04	8.92
NMNEHC:	0.02	0.08	0.33
HCHO:	0.05	0.20	0.89
Oxygen:	0.30%	0.01	0.05

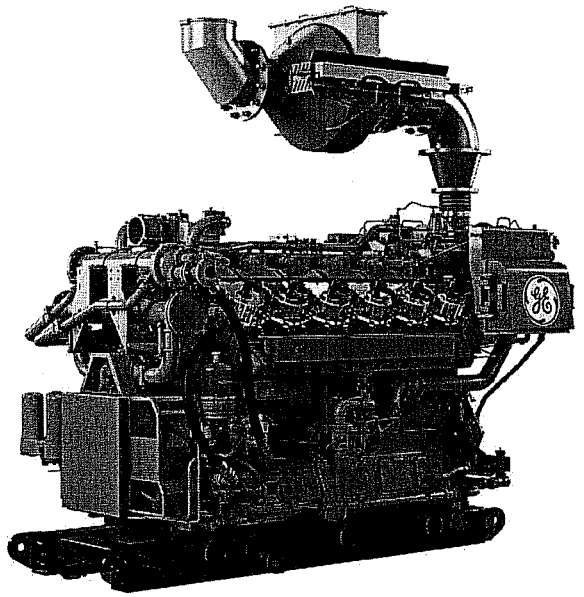
CATALYST ELEMENT

Model:	RT-2415-T
Catalyst Type:	NSCR, Standard Precious Metals Group
Substrate Type:	Brazed
Element Size:	Rectangle, 24" x 15" x 3.5"
Element Quantity:	4

POST CATALYST EMISSIONS DATA

	g/bhp-hr	lb/hr
NO_x:	< 0.36	1.47
CO	< 0.45	1.83
VOC	< 0.010	0.04
HCHO	< 0.006	0.02

GE Power & Water



Engine supplied with 3-way catalyst but without exhaust piping. Engine-out and catalyst-out exhaust piping shown for illustrative purposes only

Waukesha* gas engines VHP* Series Four*

L7044GSI

with **emPact Emission Control System**

1120 - 1680 BHP (835 - 1253 kWb)

GE's Waukesha Series Four rich-burn engines are the engines of choice for the harshest and most demanding gas compression, power generation and mechanical drive applications. The Series Four engines can reliably produce more power on hot field gases, at high altitudes, and in remote locations, all while delivering low emissions when paired with a 3-way catalyst (NSCR).

Waukesha's emPact Emission Control System combines an engine, catalyst, and air/fuel ratio control, factory-designed for optimal interaction and maximum performance. It consists of a GE-supplied catalyst, pre- and post-catalyst oxygen sensing, and differential temperature and pressure sensors. emPact's closed-loop control system measures the engine exhaust and automatically adjusts the air/fuel ratio to keep the catalyst operating at maximum efficiency, even as speed, load, fuel, and ambient conditions change.

The emPact display panel provides real-time engine operating parameters, including faults, alarms, and shutdowns. A logging function allows all data—including catalyst temperature and pressure differential—to be saved to a USB device to simplify emissions reporting.

Waukesha's emPact Emission Control System provides a one-stop shop for compliance and the simplest method of obtaining and meeting emission permits.

technical data

Cylinders	V12
Piston displacement	7040 cu. in. (115 L)
Compression ratio	8:1
Bore & stroke	9.375" x 8.5" (238 x 216)
Jacket water system capacity	100 gal. (379 L)
Lube oil capacity	190 gal. (719 L)
Starting system	125 - 150 psi air/gas 24V electric

Dimensions l x w x h inch (mm)
147 (3734) x 85 (2159) x 97.83 (2485)

Weights lb (kg)
21,000 (9,525)

imagination at work

*Trademark of General Electric Company

performance data

Intercooler Water Temperature 130°F (54°C)		1200 RPM	1000 RPM
	Power bhp (kWb)	1680 (1253)	1400 (1044)
	BSFC (LHV) Btu/bhp-hr (kJ/kWh)	7881 (11149)	7693 (10882)
	Fuel Consumption Btu/hr x 1000 (kW)	13240 (3881)	10781 (3156)
emPact Catalyst-Out Emissions	NOx g/bhp-hr (mg/Nm³ @ 5% O_2)	0.5 (185)	
	CO g/bhp-hr (mg/Nm³ @ 5% O_2)	1.0 (370)	
	NMHC g/bhp-hr (mg/Nm³ @ 5% O_2)	0.18 (67)	
	THC g/bhp-hr (mg/Nm³ @ 5% O_2)	1.68 (626)	
Engine-Out Emissions	NOx g/bhp-hr (mg/Nm³ @ 5% O_2)	13.30 (4922)	12.90 (4782)
	CO g/bhp-hr (mg/Nm³ @ 5% O_2)	11.20 (4140)	9.40 (3477)
	NMHC g/bhp-hr (mg/Nm³ @ 5% O_2)	0.35 (131)	0.34 (127)
	THC g/bhp-hr (mg/Nm³ @ 5% O_2)	2.40 (873)	2.30 (844)
Heat Balance	Heat to Jacket Water Btu/hr x 1000 (kW)	3849 (1128)	3227 (946)
	Heat to Lube Oil Btu/hr x 1000 (kW)	567 (166)	462 (135)
	Heat to Intercooler Btu/hr x 1000 (kW)	179 (53)	122 (36)
	Heat to Radiation Btu/hr x 1000 (kW)	724 (212)	642 (188)
	Total Exhaust Heat Btu/hr x 1000 (kW)	3900 (1143)	2962 (868)
Intake/ Exhaust System	Induction Air Flow scfm (Nm³/hr)	2424 (3651)	1972 (2970)
	Exhaust Flow lb/hr (kg/hr)	11273 (5113)	9171 (4160)
	Exhaust Temperature °F (°C)	1179 (637)	1112 (600)

All data according to full load and subject to technical development and modification.

emPact catalyst-out emissions valid from 100% - 75% load and 1200 rpm to 900 rpm and assume proper engine/catalyst maintenance and manual adjustment as necessary

Consult your local GE Power & Water's representative for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.

imagination at work

GE Power & Water
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Waukesha, WI 53188-4999
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Visit us online at:
www.ge-waukesha.com

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0214 GEA-18926

5.7MW Turbine Power

SMT60 Powered by Solar® Taurus™ 60

Application

Solaris 5.7MW Turbine is a compact, mobile power solution designed for projects where fast setup and reliable operation are critical. With a compact footprint for high-power density, it can be transported via highway or rugged terrain, and is based on the industry proven standard Taurus™ 60 Gas Turbine.

Features and Benefits

- Park, plug and power: less than four hours setup
- No concrete foundation nor crane lifts required
- Wide fuel flexibility: field gas, CNG, LPG etc.
- 13.8KV/12.47KV (60Hz) generator
- Temperature range from -18°C to 49°C (0°F to 120°F)
- Internal and optional external 120V outlets
- Utility grade switchgear and protective relay module
- Enhanced sound attenuation
- Complete electrical equipment compartment with motor control center and HVAC

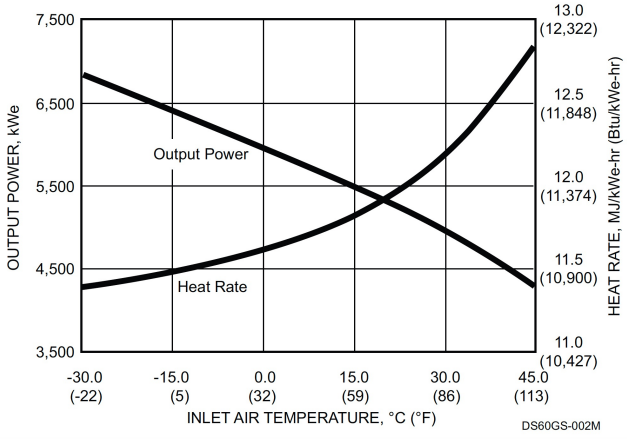


SOLARIS™
ENERGY INFRASTRUCTURE

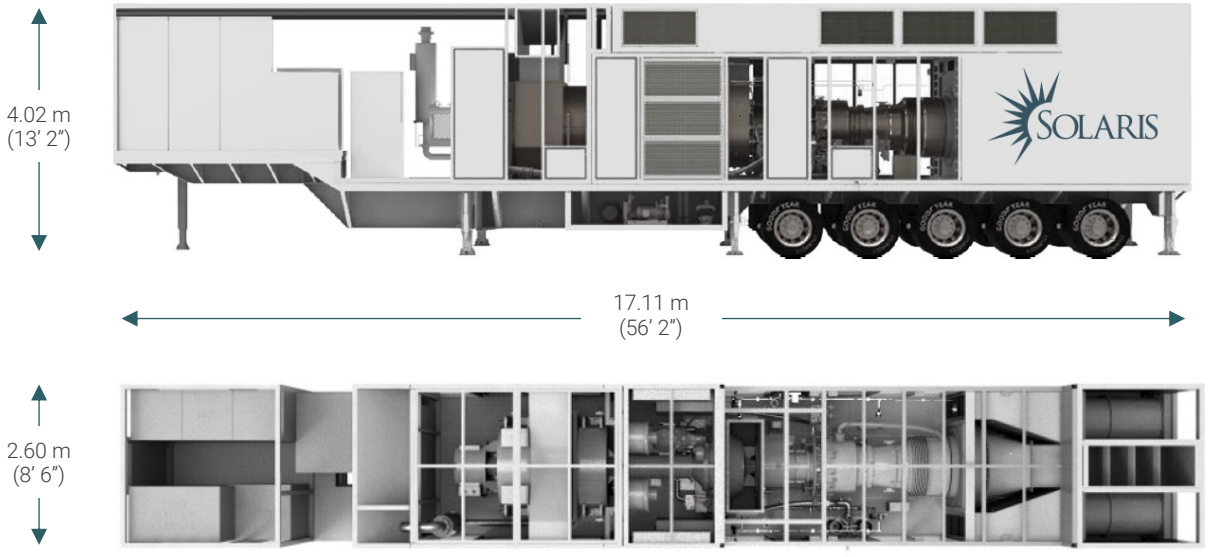
5.7MW Turbine Power

Performance and Available Power

Power Output	5.7 MW at ISO
Voltages Output	13.8 kV +/- 10%
Heat Rate	9800 btu/kW-hr
Fuel Consumption - Natural Gas	9.8 scf/kW-hr
Noise (5 ft.)	85 dBA
Emission NOx	9 ppm
Emission CO	<2 ppm
Emission VOC	<2 ppm



Layout and Dimensions



Package weight without tractor: 50,330 kg (110,960 lbs)

Solar and Taurus is a trademark of Solar Turbines Incorporated.

SOLARIS™ ENERGY INFRASTRUCTURE

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of August 23, 2017

Title 40: Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
Subpart C—General Stationary Fuel Combustion Sources

Table C-1 to Subpart C of Part 98—Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel

Link to an amendment published at 81 FR 89252, Dec. 9, 2016.

Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel

Fuel type	Default high heat value	Default CO_2 emission factor
Coal and coke	mmBtu/short ton	kg CO_2/mmBtu
Anthracite	25.09	103.69
Bituminous	24.93	93.28
Subbituminous	17.25	97.17
Lignite	14.21	97.72
Coal Coke	24.80	113.67
Mixed (Commercial sector)	21.39	94.27
Mixed (Industrial coking)	26.28	93.90
Mixed (Industrial sector)	22.35	94.67
Mixed (Electric Power sector)	19.73	95.52
Natural gas	mmBtu/scf	kg CO_2/mmBtu
(Weighted U.S. Average)	1.026×10^{-3}	53.06
Petroleum products	mmBtu/gallon	kg CO_2/mmBtu
Distillate Fuel Oil No. 1	0.139	73.25
Distillate Fuel Oil No. 2	0.138	73.96
Distillate Fuel Oil No. 4	0.146	75.04
Residual Fuel Oil No. 5	0.140	72.93
Residual Fuel Oil No. 6	0.150	75.10
Used Oil	0.138	74.00
Kerosene	0.135	75.20
Liquefied petroleum gases (LPG)[1]	0.092	61.71
Propane[1]	0.091	62.87
Propylene[2]	0.091	67.77
Ethane[1]	0.068	59.60
Ethanol	0.084	68.44
Ethylene[2]	0.058	65.96
Isobutane[1]	0.099	64.94
Isobutylene[1]	0.103	68.86
Butane[1]	0.103	64.77
Butylene[1]	0.105	68.72
Naphtha (<401 deg F)	0.125	68.02
Natural Gasoline	0.110	66.88
Other Oil (>401 deg F)	0.139	76.22
Pentanes Plus	0.110	70.02
Petrochemical Feedstocks	0.125	71.02
Petroleum Coke	0.143	102.41
Special Naphtha	0.125	72.34
Unfinished Oils	0.139	74.54
Heavy Gas Oils	0.148	74.92
Lubricants	0.144	74.27
Motor Gasoline	0.125	70.22
Aviation Gasoline	0.120	69.25
Kerosene-Type Jet Fuel	0.135	72.22
Asphalt and Road Oil	0.158	75.36
Crude Oil	0.138	74.54
Other fuels—solid	mmBtu/short ton	kg CO_2/mmBtu
Municipal Solid Waste	9.95[3]	90.7
Tires	28.00	85.97
Plastics	38.00	75.00

Petroleum Coke	30.00	102.41
Other fuels—gaseous	mmBtu/scf	kg CO_2/mmBtu
Blast Furnace Gas	0.092×10^{-3}	274.32
Coke Oven Gas	0.599×10^{-3}	46.85
Propane Gas	2.516×10^{-3}	61.46
Fuel Gas[4]	1.388×10^{-3}	59.00
Biomass fuels—solid	mmBtu/short ton	kg CO_2/mmBtu
Wood and Wood Residuals (dry basis)[5]	17.48	93.80
Agricultural Byproducts	8.25	118.17
Peat	8.00	111.84
Solid Byproducts	10.39	105.51
Biomass fuels—gaseous	mmBtu/scf	kg CO_2/mmBtu
Landfill Gas	0.485×10^{-3}	52.07
Other Biomass Gases	0.655×10^{-3}	52.07
Biomass Fuels—Liquid	mmBtu/gallon	kg CO_2/mmBtu
Ethanol	0.084	68.44
Biodiesel (100%)	0.128	73.84
Rendered Animal Fat	0.125	71.06
Vegetable Oil	0.120	81.55

[1]The HHV for components of LPG determined at 60 °F and saturation pressure with the exception of ethylene.

[2]Ethylene HHV determined at 41 °F (5 °C) and saturation pressure.

[3]Use of this default HHV is allowed only for: (a) Units that combust MSW, do not generate steam, and are allowed to use Tier 1; (b) units that derive no more than 10 percent of their annual heat input from MSW and/or tires; and (c) small batch incinerators that combust no more than 1,000 tons of MSW per year.

[4]Reporters subject to subpart X of this part that are complying with §98.243(d) or subpart Y of this part may only use the default HHV and the default CO_2 emission factor for fuel gas combustion under the conditions prescribed in §98.243(d)(2)(i) and (d)(2)(ii) and §98.252(a)(1) and (a)(2), respectively. Otherwise, reporters subject to subpart X or subpart Y shall use either Tier 3 (Equation C-5) or Tier 4.

[5]Use the following formula to calculate a wet basis HHV for use in Equation C-1: $HHV_w = ((100 - M)/100)*HHV_d$ where HHV_w = wet basis HHV, M = moisture content (percent) and HHV_d = dry basis HHV from Table C-1.

[78 FR 71950, Nov. 29, 2013]

Need assistance?

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of August 23, 2017

Title 40: Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
Subpart C—General Stationary Fuel Combustion Sources

TABLE C-2 TO SUBPART C OF PART 98—DEFAULT CH_4 AND N_2O EMISSION FACTORS FOR VARIOUS TYPES OF FUEL

Link to an amendment published at 81 FR 89252, Dec. 9, 2016.

Fuel type	Default CH_4 emission factor (kg CH_4/mmBtu)	Default N_2O emission factor (kg N_2O/mmBtu)
Coal and Coke (All fuel types in Table C-1)	1.1×10^{-02}	1.6×10^{-03}
Natural Gas	1.0×10^{-03}	1.0×10^{-04}
Petroleum (All fuel types in Table C-1)	3.0×10^{-03}	6.0×10^{-04}
Fuel Gas	3.0×10^{-03}	6.0×10^{-04}
Municipal Solid Waste	3.2×10^{-02}	4.2×10^{-03}
Tires	3.2×10^{-02}	4.2×10^{-03}
Blast Furnace Gas	2.2×10^{-05}	1.0×10^{-04}
Coke Oven Gas	4.8×10^{-04}	1.0×10^{-04}
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residuals)	3.2×10^{-02}	4.2×10^{-03}
Wood and wood residuals	7.2×10^{-03}	3.6×10^{-03}
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2×10^{-03}	6.3×10^{-04}
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1×10^{-03}	1.1×10^{-04}

Note: Those employing this table are assumed to fall under the IPCC definitions of the “Energy Industry” or “Manufacturing Industries and Construction”. In all fuels except for coal the values for these two categories are identical. For coal combustion, those who fall within the IPCC “Energy Industry” category may employ a value of 1g of CH_4/mmBtu.

[78 FR 71952, Nov. 29, 2013]

Need assistance?



October 2000
RG-109 (Draft)

Air Permit Technical Guidance for Chemical Sources:

Flares and Vapor Oxidizers

printed on recycled paper

Air Permits Division

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION



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Technical Disclaimer

This document is intended as guidance to explain the specific requirements for new source review permitting of flares and vapor oxidizers; it does not supersede or replace any state or federal law, regulation, or rule. References to abatement equipment technologies are not intended to represent minimum or maximum levels of Best Available Control Technology (BACT). Determinations of BACT are made on a case-by-case basis as part of the New Source Review of permit applications. BACT determinations are always subject to adjustment in consideration of specific process requirements, air quality concerns, and recent developments in abatement technology. Additionally, specific health effects concerns may indicate stricter abatement than required by the BACT determination.

The represented calculation methods are intended as an aid in the completion of acceptable submittals; alternate calculation methods may be equally acceptable if they are based upon, and adequately demonstrate, sound engineering assumptions or data.

These guidelines are applicable as of this document's publication date but are subject to revision during the permit application preparation and review period. It is the responsibility of the applicants to remain abreast of any guideline or regulation developments that may affect their industries.

The electronic version of this document may not contain attachments or forms (such as the PI-1, Standard Exemptions, or tables) that can be obtained electronically elsewhere on the TNRCC Web site.

The special conditions included with these guidelines are for purposes of example only. Special conditions included in an actual permit are written by the reviewing engineer to address specific permit requirements and operating conditions.

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This document provides guidance for two classes of vapor combustion control devices: flares and vapor oxidizers. While there may be some overlap between the two, flares have generally been treated separately by the EPA and the TNRCC, in large part because flares have an open flame and often cannot be sampled, so emissions are estimated based on the results of flare testing performed in the early 1980s. Each of the two classes will be dealt with separately in each of the chapters of this document.

Combustion Control Devices NOT Discussed. This document will not cover permitting of RCRA or BIF units because the requirements for these units often go beyond the requirements for state air permitting. Incinerators used to treat solid wastes are covered in another technical guidance document, *Incinerators*. Guidance for combustion control devices associated with spray paint booths, coatings operations, and semiconductor facilities should be obtained by calling the TNRCC New Source Review Permits Division at (512) 239-1250.

Flares

Flare systems generally are open-flame control devices used for disposing of waste gas streams during both routine process and emergency or upset conditions. In addition to simple, unassisted flares, typical smokeless flare systems include, but are not limited to, the following:

- ***Enclosed Flares/Vapor Combustors.*** Enclosed flares are used in disposing of waste gas streams in instances where a visible flame is unacceptable. Applications include chemical processing, petroleum refining and production, and municipal waste gas treatment. These may be referred to as vapor combustors and can have more than one burner in the stack.

- ***Steam-Assisted Flares***. Steam-assisted flares are used in disposing of low-pressure waste gas streams when steam is available and practical to minimize smoking from the flare. Applications are similar to those of enclosed flares. Flares might also be assisted with natural gas if readily available on site; these flares would undergo a case-by-case review.

- ***Air-Assisted Flares.*** Air-assisted flares are used in disposing of low-pressure waste gas streams when practical or when steam utilities are not available to minimize smoking from the flare. Applications include chemical processing, petroleum refining and production, and pipeline transportation.

- ***Sonic Flares.*** Sonic flares are used in disposing of high-pressure waste gas streams. Applications include gas production, pipeline transportation, and treatment plants.

- ***Multipoint Flare Systems.*** Multipoint flare systems are used in disposing of both high- and low-pressure waste gas streams. Multiple burner tips in conjunction with a staged control system provide for controlled combustion. Applications are similar to those of air-assisted flares.

Vapor Oxidizers

These devices generally do not have an open flame but have an exhaust stack which allows for sampling and monitoring of exhaust emissions. The most common type, thermal, relies on the combustion heat of the waste gas and assist fuel (if required) to oxidize the waste gas air contaminants. Other types include:

- ***Recuperative.*** In this case, the waste gas is directed to a heat exchanger to be preheated by the exhaust gas, to minimize the need for additional assist fuel. Recuperative oxidizers are considered a subset of thermal oxidizers in this document.

- ***Regenerative***. Combustion takes place in a chamber with a heat sink, such as ceramic saddles, which retains the heat of combustion, allowing for combustion of more dilute vapor streams (which have a low heat of combustion) at a lower cost. These units generally have multiple chambers, which allow for the preheat of one chamber by exhaust gases while combustion takes place in another chamber.

- ***Catalytic.*** Combustion takes place over a catalyst that allows for combustion at a lower temperature (in the range of 600 to 800°F as opposed to greater than 1400°F for many thermal oxidizers). Catalytic oxidizers function best with a waste stream with constant flow and composition.

This chapter provides detailed instructions for the calculations necessary to verify BACT and estimate emissions from flares and vapor oxidizers. Flares must be checked to determine whether they will satisfy the flow and thermal requirements of 40 CFR § 60.18, and their emissions are determined by the use of emission factors. Example calculations are provided for these flare calculations.

Oxidizer emissions are determined by using previous sampling results or emission factors from the manufacturer or AP-42. These calculations are very similar to the flare calculations and are only discussed in general terms.

Flares: Introduction

Although emissions from emergency flares are not included in a permit when it is issued, emissions should be estimated for both routine process flares and emergency flares. Sometimes, emissions of routine pilot gas combustion may be included in an issued permit for emergency flares (although not required).

In this section, the *flare* emission factors and destruction efficiencies are presented first. This information is followed by sample *calculations* that demonstrate how to ensure that the requirements of 40 CFR § 60.18 are satisfied and how to estimate emissions from a flare. Flare data in Attachment B (typical refinery flare) will be used as a basis in most of the following calculations. Flare data in Attachment C (acid gas flare) will be used as a basis in the example calculations for SO_2 emissions.

Flare Emission Factors

The usual flare destruction efficiencies and emission factors are provided in Table 4. The high-Btu waste streams referred to in the table have a heating value greater than 1,000 Btu/scf.

Flare Destruction Efficiencies

Claims for destruction efficiencies greater than those listed in Table 4 will be considered on a case-by-case basis. The applicant may make one of the three following demonstrations to justify the higher destruction efficiency: (1) general method, (2) 99.5 percent justification, or (3) flare stack sampling.

Table 4. Flare Factors

Waste Stream	Destruction/Removal Efficiency (DRE)		
VOC	98 percent (generic) 99 percent for compounds containing no more than 3 carbons that contain no elements other than carbon and hydrogen in addition to the following compounds: methanol, ethanol, propanol, ethylene oxide and propylene oxide		
H_2S	98 percent		
NH_3	case by case		
CO	case by case		
Air Contaminants	**Emission Factors**		
thermal NO_x	steam-assist:	high Btu	0.0485 lb/MMBtu
		low Btu	0.068 lb/MMBtu
	other:	high Btu	0.138 lb/MMBtu
		low Btu	0.0641 lb/MMBtu
fuel NO_x	NO_x is 0.5 wt percent of inlet NH_3, other fuels case by case		
CO	steam-assist:	high Btu	0.3503 lb/MMBtu
		low Btu	0.3465 lb/MMBtu
	other:	high Btu	0.2755 lb/MMBtu
		low Btu	0.5496 lb/MMBtu
PM	none, required to be smokeless		
SO_2	100 percent S in fuel to SO_2		

*The only exeption ot this is if inorganics might be emitted from the flare. In the case of landfills, the AP-42 PM factor may be used. In other cases, the emissions should be based on the composition of the waste stream routed to the flare.

1.4 Natural Gas Combustion

1.4.1 General[1-2]

Natural gas is one of the major combustion fuels used throughout the country. It is mainly used to generate industrial and utility electric power, produce industrial process steam and heat, and heat residential and commercial space. Natural gas consists of a high percentage of methane (generally above 85 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). The average gross heating value of natural gas is approximately 1,020 British thermal units per standard cubic foot (Btu/scf), usually varying from 950 to 1,050 Btu/scf.

1.4.2 Firing Practices[3-5]

There are three major types of boilers used for natural gas combustion in commercial, industrial, and utility applications: watertube, firetube, and cast iron. Watertube boilers are designed to pass water through the inside of heat transfer tubes while the outside of the tubes is heated by direct contact with the hot combustion gases and through radiant heat transfer. The watertube design is the most common in utility and large industrial boilers. Watertube boilers are used for a variety of applications, ranging from providing large amounts of process steam, to providing hot water or steam for space heating, to generating high-temperature, high-pressure steam for producing electricity. Furthermore, watertube boilers can be distinguished either as field erected units or packaged units.

Field erected boilers are boilers that are constructed on site and comprise the larger sized watertube boilers. Generally, boilers with heat input levels greater than 100 MMBtu/hr, are field erected. Field erected units usually have multiple burners and, given the customized nature of their construction, also have greater operational flexibility and NO_x control options. Field erected units can also be further categorized as wall-fired or tangential-fired. Wall-fired units are characterized by multiple individual burners located on a single wall or on opposing walls of the furnace while tangential units have several rows of air and fuel nozzles located in each of the four corners of the boiler.

Package units are constructed off-site and shipped to the location where they are needed. While the heat input levels of packaged units may range up to 250 MMBtu/hr, the physical size of these units are constrained by shipping considerations and generally have heat input levels less than 100 MMBtu/hr. Packaged units are always wall-fired units with one or more individual burners. Given the size limitations imposed on packaged boilers, they have limited operational flexibility and cannot feasibly incorporate some NO_x control options.

Firetube boilers are designed such that the hot combustion gases flow through tubes, which heat the water circulating outside of the tubes. These boilers are used primarily for space heating systems, industrial process steam, and portable power boilers. Firetube boilers are almost exclusively packaged units. The two major types of firetube units are Scotch Marine boilers and the older firebox boilers. In cast iron boilers, as in firetube boilers, the hot gases are contained inside the tubes and the water being heated circulates outside the tubes. However, the units are constructed of cast iron rather than steel. Virtually all cast iron boilers are constructed as package boilers. These boilers are used to produce either low-pressure steam or hot water, and are most commonly used in small commercial applications.

Natural gas is also combusted in residential boilers and furnaces. Residential boilers and furnaces generally resemble firetube boilers with flue gas traveling through several channels or tubes with water or air circulated outside the channels or tubes.

1.4.3 Emissions[3-4]

The emissions from natural gas-fired boilers and furnaces include nitrogen oxides (NO_x), carbon monoxide (CO), and carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), volatile organic compounds (VOCs), trace amounts of sulfur dioxide (SO_2), and particulate matter (PM).

Nitrogen Oxides -

Nitrogen oxides formation occurs by three fundamentally different mechanisms. The principal mechanism of NO_x formation in natural gas combustion is thermal NO_x. The thermal NO_x mechanism occurs through the thermal dissociation and subsequent reaction of nitrogen (N_2) and oxygen (O_2) molecules in the combustion air. Most NO_x formed through the thermal NO_x mechanism occurs in the high temperature flame zone near the burners. The formation of thermal NO_x is affected by three furnace-zone factors: (1) oxygen concentration, (2) peak temperature, and (3) time of exposure at peak temperature. As these three factors increase, NO_x emission levels increase. The emission trends due to changes in these factors are fairly consistent for all types of natural gas-fired boilers and furnaces. Emission levels vary considerably with the type and size of combustor and with operating conditions (e.g., combustion air temperature, volumetric heat release rate, load, and excess oxygen level).

The second mechanism of NO_x formation, called prompt NO_x, occurs through early reactions of nitrogen molecules in the combustion air and hydrocarbon radicals from the fuel. Prompt NO_x reactions occur within the flame and are usually negligible when compared to the amount of NO_x formed through the thermal NO_x mechanism. However, prompt NO_x levels may become significant with ultra-low-NO_x burners.

The third mechanism of NO_x formation, called fuel NO_x, stems from the evolution and reaction of fuel-bound nitrogen compounds with oxygen. Due to the characteristically low fuel nitrogen content of natural gas, NO_x formation through the fuel NO_x mechanism is insignificant.

Carbon Monoxide -

The rate of CO emissions from boilers depends on the efficiency of natural gas combustion. Improperly tuned boilers and boilers operating at off-design levels decrease combustion efficiency resulting in increased CO emissions. In some cases, the addition of NO_x control systems such as low NO_x burners and flue gas recirculation (FGR) may also reduce combustion efficiency, resulting in higher CO emissions relative to uncontrolled boilers.

Volatile Organic Compounds -

The rate of VOC emissions from boilers and furnaces also depends on combustion efficiency. VOC emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. Trace amounts of VOC species in the natural gas fuel (e.g., formaldehyde and benzene) may also contribute to VOC emissions if they are not completely combusted in the boiler.

Sulfur Oxides -

Emissions of SO_2 from natural gas-fired boilers are low because pipeline quality natural gas typically has sulfur levels of 2,000 grains per million cubic feet. However, sulfur-containing odorants are added to natural gas for detecting leaks, leading to small amounts of SO_2 emissions. Boilers combusting unprocessed natural gas may have higher SO_2 emissions due to higher levels of sulfur in the natural gas. For these units, a sulfur mass balance should be used to determine SO_2 emissions.

Particulate Matter -

Because natural gas is a gaseous fuel, filterable PM emissions are typically low. Particulate matter from natural gas combustion has been estimated to be less than 1 micrometer in size and has filterable and condensable fractions. Particulate matter in natural gas combustion are usually larger molecular weight hydrocarbons that are not fully combusted. Increased PM emissions may result from poor air/fuel mixing or maintenance problems.

Greenhouse Gases -[6-9]

CO_2, CH_4, and N_2O emissions are all produced during natural gas combustion. In properly tuned boilers, nearly all of the fuel carbon (99.9 percent) in natural gas is converted to CO_2 during the combustion process. This conversion is relatively independent of boiler or combustor type. Fuel carbon not converted to CO_2 results in CH_4, CO, and/or VOC emissions and is due to incomplete combustion. Even in boilers operating with poor combustion efficiency, the amount of CH_4, CO, and VOC produced is insignificant compared to CO_2 levels.

Formation of N_2O during the combustion process is affected by two furnace-zone factors. N_2O emissions are minimized when combustion temperatures are kept high (above 1475°F) and excess oxygen is kept to a minimum (less than 1 percent).

Methane emissions are highest during low-temperature combustion or incomplete combustion, such as the start-up or shut-down cycle for boilers. Typically, conditions that favor formation of N_2O also favor emissions of methane.

1.4.4 Controls[4,10]

NO_x Controls -

Currently, the two most prevalent combustion control techniques used to reduce NO_x emissions from natural gas-fired boilers are flue gas recirculation (FGR) and low NO_x burners. In an FGR system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the recirculated gas is mixed with combustion air prior to being fed to the burner. The recycled flue gas consists of combustion products which act as inerts during combustion of the fuel/air mixture. The FGR system reduces NO_x emissions by two mechanisms. Primarily, the recirculated gas acts as a dilutent to reduce combustion temperatures, thus suppressing the thermal NO_x mechanism. To a lesser extent, FGR also reduces NO_x formation by lowering the oxygen concentration in the primary flame zone. The amount of recirculated flue gas is a key operating parameter influencing NO_x emission rates for these systems. An FGR system is normally used in combination with specially designed low NO_x burners capable of sustaining a stable flame with the increased inert gas flow resulting from the use of FGR. When low NO_x burners and FGR are used in combination, these techniques are capable of reducing NO_x emissions by 60 to 90 percent.

Low NO_x burners reduce NO_x by accomplishing the combustion process in stages. Staging partially delays the combustion process, resulting in a cooler flame which suppresses thermal NO_x formation. The two most common types of low NO_x burners being applied to natural gas-fired boilers are staged air burners and staged fuel burners. NO_x emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners.

Other combustion control techniques used to reduce NO_x emissions include staged combustion and gas reburning. In staged combustion (e.g., burners-out-of-service and overfire air), the degree of staging is a key operating parameter influencing NO_x emission rates. Gas reburning is similar to the use of overfire in the use of combustion staging. However, gas reburning injects additional amounts of natural gas in the upper furnace, just before the overfire air ports, to provide increased reduction of NO_x to NO_2.

Two postcombustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions are selective noncatalytic reduction (SNCR) and selective catalytic reduction (SCR). The SNCR system injects ammonia (NH_3) or urea into combustion flue gases (in a specific temperature zone) to reduce NO_x emission. The Alternative Control Techniques (ACT) document for NO_x emissions from utility boilers, maximum SNCR performance was estimated to range from 25 to 40 percent for natural gas-fired boilers.[12] Performance data available from several natural gas fired utility boilers with SNCR show a 24 percent reduction in NO_x for applications on wall-fired boilers and a 13 percent reduction in NO_x for applications on tangential-fired boilers.[11] In many situations, a boiler may have an SNCR system installed to trim NO_x emissions to meet permitted levels. In these cases, the SNCR system may not be operated to achieve maximum NO_x reduction. The SCR system involves injecting NH_3 into the flue gas in the presence of a catalyst to reduce NO_x emissions. No data were available on SCR performance on natural gas fired boilers at the time of this publication. However, the ACT Document for utility boilers estimates NO_x reduction efficiencies for SCR control ranging from 80 to 90 percent.[12]

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.[11] Tables in this section present emission factors on a volume basis ($lb/10^6$ scf). To convert to an energy basis (lb/MMBtu), divide by a heating value of 1,020 MMBtu/10^6 scf. For the purposes of developing emission factors, natural gas combustors have been organized into three general categories: large wall-fired boilers with greater than 100 MMBtu/hr of heat input, boilers and residential furnaces with less than 100 MMBtu/hr of heat input, and tangential-fired boilers. Boilers within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas.

Emission factors are rated from A to E to provide the user with an indication of how "good" the factor is, with "A" being excellent and "E" being poor. The criteria that are used to determine a rating for an emission factor can be found in the Emission Factor Documentation for AP-42 Section 1.4 and in the introduction to the AP-42 document.

1.4.5 Updates Since the Fifth Edition

The Fifth Edition was released in January 1995. Revisions to this section are summarized below. For further detail, consult the Emission Factor Documentation for this section. These and other documents can be found on the Emission Factor and Inventory Group (EFIG) home page (http://www.epa.gov/ttn/chief).

Supplement D, March 1998

- Text was revised concerning Firing Practices, Emissions, and Controls.
- All emission factors were updated based on 482 data points taken from 151 source tests. Many new emission factors have been added for speciated organic compounds, including hazardous air pollutants.

July 1998 - minor changes

- Footnote D was added to table 1.4-3 to explain why the sum of individual HAP may exceed VOC or TOC, the web address was updated, and the references were reordered.

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 $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from $lb/10^6$ 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 NO_2. 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_2O (Uncontrolled)	2.2	E
N_2O (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 $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. To convert from $lb/10^6$ scf to 1b/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 CO_2. $CO_2[lb/10^6 \text{ scf}] = (3.67)(CON)(C)(D)$, where CON = fractional conversion of fuel carbon to CO_2, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2×10^4 $lb/10^6$ scf.

[c] All PM (total, condensible, 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 PM_{10}, $PM_{2.5}$ or PM_1 emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible 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 SO_2. Assumes sulfur content is natural gas of 2,000 grains/10^6 scf. The SO_2 emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf.

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-Methylcholanthrene[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
207-08-9	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
74-98-6	Propane	1.6E+00	E

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
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 $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. To convert from $1b/10^6$ scf to lb/MMBtu, divide by 1,020. Emission Factors preceeded 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 1.4-4. EMISSION FACTORS FOR METALS FROM NATURAL GAS COMBUSTION[a]

CAS No.	Pollutant	Emission Factor ($lb/10^6$ scf)	Emission Factor Rating
7440-38-2	Arsenic[b]	2.0E-04	E
7440-39-3	Barium	4.4E-03	D
7440-41-7	Beryllium[b]	<1.2E-05	E
7440-43-9	Cadmium[b]	1.1E-03	D
7440-47-3	Chromium[b]	1.4E-03	D
7440-48-4	Cobalt[b]	8.4E-05	D
7440-50-8	Copper	8.5E-04	C
7439-96-5	Manganese[b]	3.8E-04	D
7439-97-6	Mercury[b]	2.6E-04	D
7439-98-7	Molybdenum	1.1E-03	D
7440-02-0	Nickel[b]	2.1E-03	C
7782-49-2	Selenium[b]	<2.4E-05	E
7440-62-2	Vanadium	2.3E-03	D
7440-66-6	Zinc	2.9E-02	E

[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. Emission factors preceeded by a less-than symbol are based on method detection limits. To convert from $lb/10^6$ scf to $kg/10^6$ m^3, multiply by l6. To convert from $lb/10^6$ scf to 1b/MMBtu, divide by 1,020.

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

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Research Triangle Park NC 27711

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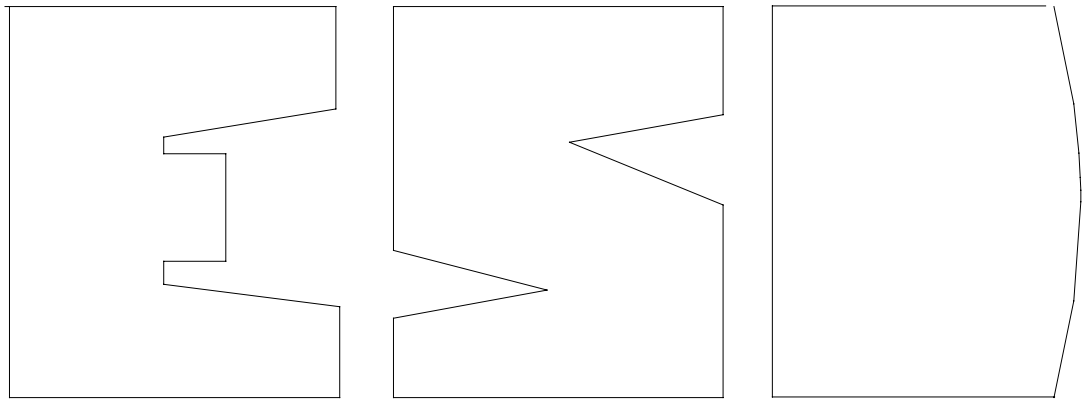


TABLE 2-4. OIL AND GAS PRODUCTION OPERATIONS AVERAGE EMISSION FACTORS (kg/hr/source)

Equipment Type	Service[a]	Emission Factor (kg/hr/source)[b]
Valves	Gas	4.5E-03
	Heavy Oil	8.4E-06
	Light Oil	2.5E-03
	Water/Oil	9.8E-05
Pump seals	Gas	2.4E-03
	Heavy Oil	NA
	Light Oil	1.3E-02
	Water/Oil	2.4E-05
Others[c]	Gas	8.8E-03
	Heavy Oil	3.2E-05
	Light Oil	7.5E-03
	Water/Oil	1.4E-02
Connectors	Gas	2.0E-04
	Heavy Oil	7.5E-06
	Light Oil	2.1E-04
	Water/Oil	1.1E-04
Flanges	Gas	3.9E-04
	Heavy Oil	3.9E-07
	Light Oil	1.1E-04
	Water/Oil	2.9E-06
Open-ended lines	Gas	2.0E-03
	Heavy Oil	1.4E-04
	Light Oil	1.4E-03
	Water/Oil	2.5E-04

[a]Water/Oil emission factors apply to water streams in oil service with a water content greater than 50%, from the point of origin to the point where the water content reaches 99%. For water streams with a water content greater than 99%, the emission rate is considered negligible.

[b]These factors are for total organic compound emission rates (including non-VOC's such as methane and ethane) and apply to light crude, heavy crude, gas plant, gas production, and off shore facilities. "NA" indicates that not enough data were available to develop the indicated emission factor.

[c]The "other" equipment type was derived from compressors, diaphrams, drains, dump arms, hatches, instruments, meters, pressure relief valves, polished rods, relief valves, and vents. This "other" equipment type should be applied for any equipment type other than connectors, flanges, open-ended lines, pumps, or valves.

13.2.2 Unpaved Roads

13.2.2.1 General

When a vehicle travels an unpaved road, the force of the wheels on the road surface causes pulverization of surface material. Particles are lifted and dropped from the rolling wheels, and the road surface is exposed to strong air currents in turbulent shear with the surface. The turbulent wake behind the vehicle continues to act on the road surface after the vehicle has passed.

The particulate emission factors presented in the previous draft version of this section of AP-42, dated October 2001, implicitly included the emissions from vehicles in the form of exhaust, brake wear, and tire wear as well as resuspended road surface material[25]. EPA included these sources in the emission factor equation for unpaved public roads (equation 1b in this section) since the field testing data used to develop the equation included both the direct emissions from vehicles and emissions from resuspension of road dust.

This version of the unpaved public road emission factor equation only estimates particulate emissions from resuspended road surface material [23, 26]. The particulate emissions from vehicle exhaust, brake wear, and tire wear are now estimated separately using EPA's MOBILE6.2 [24]. This approach eliminates the possibility of double counting emissions. Double counting results when employing the previous version of the emission factor equation in this section and MOBILE6.2 to estimate particulate emissions from vehicle traffic on unpaved public roads. It also incorporates the decrease in exhaust emissions that has occurred since the unpaved public road emission factor equation was developed. The previous version of the unpaved public road emission factor equation includes estimates of emissions from exhaust, brake wear, and tire wear based on emission rates for vehicles in the 1980 calendar year fleet. The amount of PM released from vehicle exhaust has decreased since 1980 due to lower new vehicle emission standards and changes in fuel characteristics.

13.2.2.2 Emissions Calculation And Correction Parameters[1-6]

The quantity of dust emissions from a given segment of unpaved road varies linearly with the volume of traffic. Field investigations also have shown that emissions depend on source parameters that characterize the condition of a particular road and the associated vehicle traffic. Characterization of these source parameters allow for "correction" of emission estimates to specific road and traffic conditions present on public and industrial roadways.

Dust emissions from unpaved roads have been found to vary directly with the fraction of silt (particles smaller than 75 micrometers [μm] in diameter) in the road surface materials.[1] The silt fraction is determined by measuring the proportion of loose dry surface dust that passes a 200-mesh screen, using the ASTM-C-136 method. A summary of this method is contained in Appendix C of AP-42. Table 13.2.2-1 summarizes measured silt values for industrial unpaved roads. Table 13.2.2-2 summarizes measured silt values for public unpaved roads. It should be noted that the ranges of silt content vary over two orders of magnitude. Therefore, the use of data from this table can potentially introduce considerable error. Use of this data is strongly discouraged when it is feasible to obtain locally gathered data.

Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions. As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles.

Other variables are important in addition to the silt content of the road surface material. For example, at industrial sites, where haul trucks and other heavy equipment are common, emissions are highly correlated with vehicle weight. On the other hand, there is far less variability in the weights of cars and pickup trucks that commonly travel publicly accessible unpaved roads throughout the United States. For those roads, the moisture content of the road surface material may be more dominant in determining differences in emission levels between, for example a hot, desert environment and a cool, moist location.

The PM-10 and TSP emission factors presented below are the outcomes from stepwise linear regressions of field emission test results of vehicles traveling over unpaved surfaces. Due to a limited amount of information available for PM-2.5, the expression for that particle size range has been scaled against the result for PM-10. Consequently, the quality rating for the PM-2.5 factor is lower than that for the PM-10 expression.

Table 13.2.2-1. TYPICAL SILT CONTENT VALUES OF SURFACE MATERIAL ON INDUSTRIAL UNPAVED ROADS[a]

Industry	Road Use Or Surface Material	Plant Sites	No. Of Samples	Silt Content (%)	
				Range	Mean
Copper smelting	Plant road	1	3	16 - 19	17
Iron and steel production	Plant road	19	135	0.2 - 19	6.0
Sand and gravel processing	Plant road	1	3	4.1 - 6.0	4.8
	Material storage area	1	1	-	7.1
Stone quarrying and processing	Plant road	2	10	2.4 - 16	10
	Haul road to/from pit	4	20	5.0-15	8.3
Taconite mining and processing	Service road	1	8	2.4 - 7.1	4.3
	Haul road to/from pit	1	12	3.9 - 9.7	5.8
Western surface coal mining	Haul road to/from pit	3	21	2.8 - 18	8.4
	Plant road	2	2	4.9 - 5.3	5.1
	Scraper route	3	10	7.2 - 25	17
	Haul road (freshly graded)	2	5	18 - 29	24
Construction sites	Scraper routes	7	20	0.56-23	8.5
Lumber sawmills	Log yards	2	2	4.8-12	8.4
Municipal solid waste landfills	Disposal routes	4	20	2.2 - 21	6.4

[a]References 1,5-15.

The following empirical expressions may be used to estimate the quantity in pounds (lb) of size-specific particulate emissions from an unpaved road, per vehicle mile traveled (VMT):

For vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

$$E = k\,(s/12)^a (W/3)^b \quad (1a)$$

and, for vehicles traveling on publicly accessible roads, dominated by light duty vehicles, emissions may be estimated from the following:

$$E = \frac{k\,(s/12)^a (S/30)^d}{(M/0.5)^c} - C \quad (1b)$$

where k, a, b, c and d are empirical constants (Reference 6) given below and

E = size-specific emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)
M = surface material moisture content (%)
S = mean vehicle speed (mph)
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

The source characteristics s, W and M are referred to as correction parameters for adjusting the emission estimates to local conditions. The metric conversion from lb/VMT to grams (g) per vehicle kilometer traveled (VKT) is as follows:

1 lb/VMT = 281.9 g/VKT

The constants for Equations 1a and 1b based on the stated aerodynamic particle sizes are shown in Tables 13.2.2-2 and 13.2.2-4. The PM-2.5 particle size multipliers (k-factors) are taken from Reference 27.

Table 13.2.2-2. CONSTANTS FOR EQUATIONS 1a AND 1b

Constant	Industrial Roads (Equation 1a)			Public Roads (Equation 1b)		
	PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9	0.18	1.8	6.0
a	0.9	0.9	0.7	1	1	1
b	0.45	0.45	0.45	-	-	-
c	-	-	-	0.2	0.2	0.3
d	-	-	-	0.5	0.5	0.3
Quality Rating	B	B	B	B	B	B

*Assumed equivalent to total suspended particulate matter (TSP)
"-" = not used in the emission factor equation

Table 13.2.2-2 also contains the quality ratings for the various size-specific versions of Equation 1a and 1b. The equation retains the assigned quality rating, if applied within the ranges of source conditions, shown in Table 13.2.2-3, that were tested in developing the equation:

Table 13.2.2-3. RANGE OF SOURCE CONDITIONS USED IN DEVELOPING EQUATION 1a AND 1b

Emission Factor	Surface Silt Content, %	Mean Vehicle Weight		Mean Vehicle Speed		Mean No. of Wheels	Surface Moisture Content, %
		Mg	ton	km/hr	mph		
Industrial Roads (Equation 1a)	1.8-25.2	1.8-260	2-290	8-69	5-43	4-17[a]	0.03-13
Public Roads (Equation 1b)	1.8-35	1.4-2.7	1.5-3	16-88	10-55	4-4.8	0.03-13

[a] See discussion in text.

As noted earlier, the models presented as Equations 1a and 1b were developed from tests of traffic on unpaved surfaces. Unpaved roads have a hard, generally nonporous surface that usually dries quickly after a rainfall or watering, because of traffic-enhanced natural evaporation. (Factors influencing how fast a road dries are discussed in Section 13.2.2.3, below.) The quality ratings given above pertain to the mid-range of the measured source conditions for the equation. A higher mean vehicle weight and a higher than normal traffic rate may be justified when performing a worst-case analysis of emissions from unpaved roads.

The emission factors for the exhaust, brake wear and tire wear of a 1980's vehicle fleet (*C*) was obtained from EPA's MOBILE6.2 model [23]. The emission factor also varies with aerodynamic size range

as shown in Table 13.2.2-4

Table 13.2.2-4. EMISSION FACTOR FOR 1980'S VEHICLE FLEET EXHAUST, BRAKE WEAR AND TIRE WEAR

Particle Size Range[a]	*C*, Emission Factor for Exhaust, Brake Wear and Tire Wear[b] lb/VMT
$PM_{2.5}$	0.00036
PM_{10}	0.00047
PM_{30}[c]	0.00047

[a] Refers to airborne particulate matter (PM-x) with an aerodynamic diameter equal to or less than x micrometers.
[b] Units shown are pounds per vehicle mile traveled (lb/VMT).
[c] PM-30 is sometimes termed "suspendable particulate" (SP) and is often used as a surrogate for TSP.

It is important to note that the vehicle-related source conditions refer to the average weight, speed, and number of wheels for all vehicles traveling the road. For example, if 98 percent of traffic on the road are 2-ton cars and trucks while the remaining 2 percent consists of 20-ton trucks, then the mean weight is 2.4 tons. More specifically, Equations 1a and 1b are *not* intended to be used to calculate a separate emission factor for each vehicle class within a mix of traffic on a given unpaved road. That is, in the example, one should *not* determine one factor for the 2-ton vehicles and a second factor for the 20-ton trucks. Instead, only one emission factor should be calculated that represents the "fleet" average of 2.4 tons for all vehicles traveling the road.

Moreover, to retain the quality ratings when addressing a group of unpaved roads, it is necessary that reliable correction parameter values be determined for the road in question. The field and laboratory procedures for determining road surface silt and moisture contents are given in AP-42 Appendices C.1 and C.2. Vehicle-related parameters should be developed by recording visual observations of traffic. In some cases, vehicle parameters for industrial unpaved roads can be determined by reviewing maintenance records or other information sources at the facility.

In the event that site-specific values for correction parameters cannot be obtained, then default values may be used.In the absence of site-specific silt content information, an appropriate mean value from Table 13.2.2-1 may be used as a default value, but the quality rating of the equation is reduced by two letters. Because of significant differences found between different types of road surfaces and between different areas of the country, use of the default moisture content value of 0.5 percent in Equation 1b is discouraged. The quality rating should be downgraded two letters when the default moisture content value is used. (It is assumed that readers addressing industrial roads have access to the information needed to develop average vehicle information in Equation 1a for their facility.)

The effect of routine watering to control emissions from unpaved roads is discussed below in Section 13.2.2.3, “Controls”. However, all roads are subject to some natural mitigation because of rainfall and other precipitation. The Equation 1a and 1b emission factors can be extrapolated to annual

average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual average emissions are inversely proportional to the number of days with measurable (more than 0.254 mm [0.01 inch]) precipitation:

$$E_{ext} = E\ [(365 - P)/365] \quad (2)$$

where:

E_{ext} = annual size-specific emission factor extrapolated for natural mitigation, lb/VMT

E = emission factor from Equation 1a or 1b

P = number of days in a year with at least 0.254 mm (0.01 in) of precipitation (see below)

Figure 13.2.2-1 gives the geographical distribution for the mean annual number of "wet" days for the United States.

Equation 2 provides an estimate that accounts for precipitation on an annual average basis for the purpose of inventorying emissions. It should be noted that Equation 2 does not account for differences in the temporal distributions of the rain events, the quantity of rain during any event, or the potential for the rain to evaporate from the road surface. In the event that a finer temporal and spatial resolution is desired for inventories of public unpaved roads, estimates can be based on a more complex set of assumptions. These assumptions include:

1. The moisture content of the road surface material is increased in proportion to the quantity of water added;
2. The moisture content of the road surface material is reduced in proportion to the Class A pan evaporation rate;
3. The moisture content of the road surface material is reduced in proportion to the traffic volume; and
4. The moisture content of the road surface material varies between the extremes observed in the area. The CHIEF Web site (http://www.epa.gov/ttn/chief/ap42/ch13/related/c13s02-2.html) has a file which contains a spreadsheet program for calculating emission factors which are temporally and spatially resolved. Information required for use of the spreadsheet program includes monthly Class A pan evaporation values, hourly meteorological data for precipitation, humidity and snow cover, vehicle traffic information, and road surface material information.

It is emphasized that the simple assumption underlying Equation 2 and the more complex set of assumptions underlying the use of the procedure which produces a finer temporal and spatial resolution have not been verified in any rigorous manner. For this reason, the quality ratings for either approach should be downgraded one letter from the rating that would be applied to Equation 1.

13.2.2.3 Controls[18-22]

A wide variety of options exist to control emissions from unpaved roads. Options fall into the following three groupings:

1. Vehicle restrictions that limit the speed, weight or number of vehicles on the road;

2. Surface improvement, by measures such as (a) paving or (b) adding gravel or slag to a dirt road; and
3. Surface treatment, such as watering or treatment with chemical dust suppressants.

Available control options span broad ranges in terms of cost, efficiency, and applicability. For example, traffic controls provide moderate emission reductions (often at little cost) but are difficult to enforce. Although paving is highly effective, its high initial cost is often prohibitive. Furthermore, paving is not feasible for industrial roads subject to very heavy vehicles and/or spillage of material in transport. Watering and chemical suppressants, on the other hand, are potentially applicable to most industrial roads at moderate to low costs. However, these require frequent reapplication to maintain an acceptable level of control. Chemical suppressants are generally more cost-effective than water but not in cases of temporary roads (which are common at mines, landfills, and construction sites). In summary, then, one needs to consider not only the type and volume of traffic on the road but also how long the road will be in service when developing control plans.

Vehicle restrictions. These measures seek to limit the amount and type of traffic present on the road or to lower the mean vehicle speed. For example, many industrial plants have restricted employees from driving on plant property and have instead instituted bussing programs. This eliminates emissions due to employees traveling to/from their worksites. Although the heavier average vehicle weight of the busses increases the base emission factor, the decrease in vehicle-miles-traveled results in a lower overall emission rate.

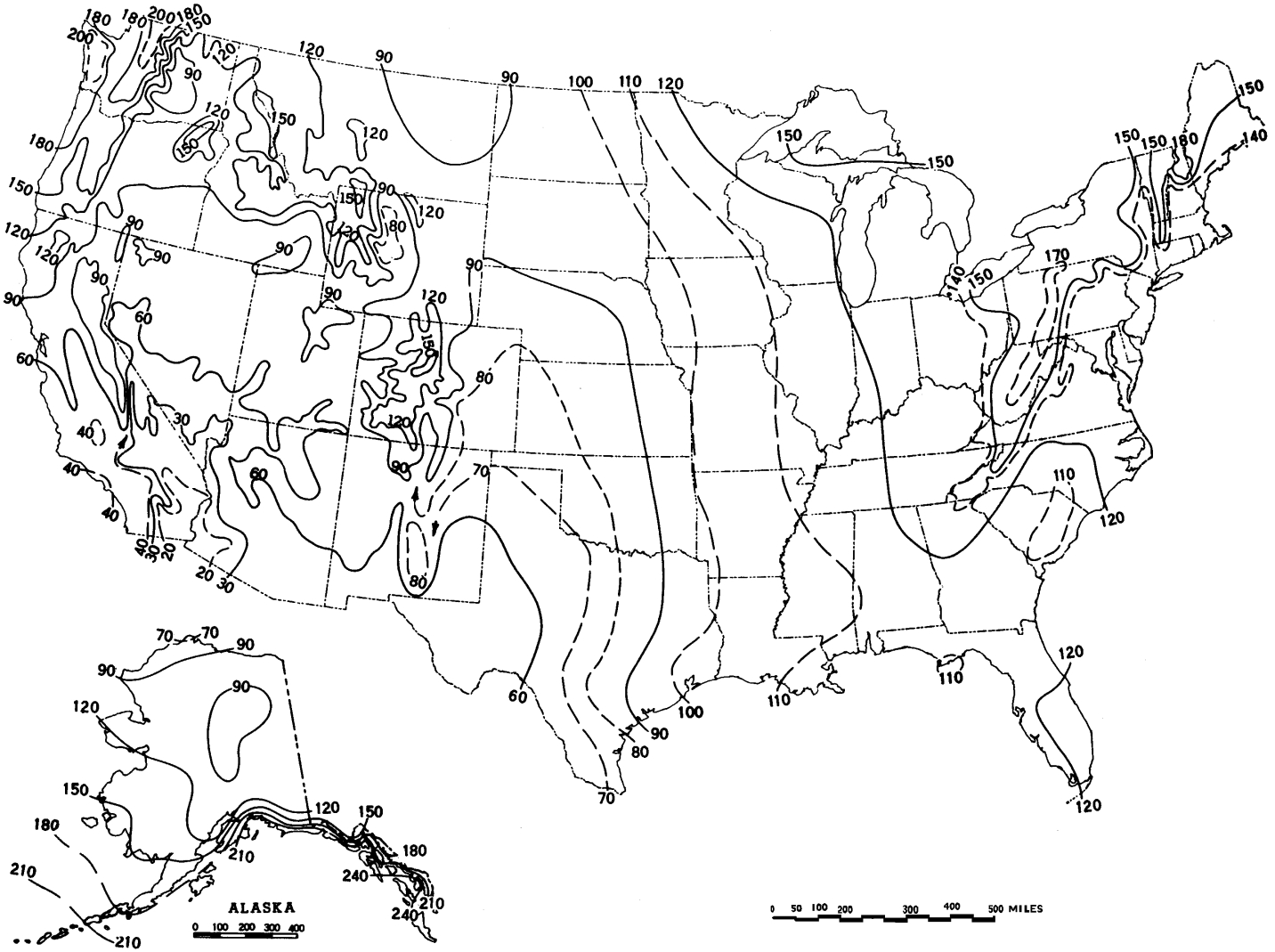


Figure 13.2.2-1. Mean number of days with 0.01 inch or more of precipitation in United States.

Surface improvements. Control options in this category alter the road surface. As opposed to the "surface treatments" discussed below, improvements are relatively "permanent" and do not require periodic retreatment.

The most obvious surface improvement is paving an unpaved road. This option is quite expensive and is probably most applicable to relatively short stretches of unpaved road with at least several hundred vehicle passes per day. Furthermore, if the newly paved road is located near unpaved areas or is used to transport material, it is essential that the control plan address routine cleaning of the newly paved road surface.

The control efficiencies achievable by paving can be estimated by comparing emission factors for unpaved and paved road conditions. The predictive emission factor equation for paved roads, given in Section 13.2.1, requires estimation of the silt loading on the traveled portion of the paved surface, which in turn depends on whether the pavement is periodically cleaned. Unless curbing is to be installed, the effects of vehicle excursion onto unpaved shoulders (berms) also must be taken into account in estimating the control efficiency of paving.

Other improvement methods cover the road surface with another material that has a lower silt content. Examples include placing gravel or slag on a dirt road. Control efficiency can be estimated by comparing the emission factors obtained using the silt contents before and after improvement. The silt content of the road surface should be determined after 3 to 6 months rather than immediately following placement. Control plans should address regular maintenance practices, such as grading, to retain larger aggregate on the traveled portion of the road.

Surface treatments refer to control options which require periodic reapplication. Treatments fall into the two main categories of (a) "wet suppression" (i. e., watering, possibly with surfactants or other additives), which keeps the road surface wet to control emissions and (b) "chemical stabilization/ treatment", which attempts to change the physical characteristics of the surface. The necessary reapplication frequency varies from several minutes for plain water under summertime conditions to several weeks or months for chemical dust suppressants.

Watering increases the moisture content, which conglomerates particles and reduces their likelihood to become suspended when vehicles pass over the surface. The control efficiency depends on how fast the road dries after water is added. This in turn depends on (a) the amount (per unit road surface area) of water added during each application; (b) the period of time between applications; (c) the weight, speed and number of vehicles traveling over the watered road during the period between applications; and (d) meteorological conditions (temperature, wind speed, cloud cover, etc.) that affect evaporation during the period.

Figure 13.2.2-2 presents a simple bilinear relationship between the instantaneous control efficiency due to watering and the resulting increase in surface moisture. The moisture ratio "M" (i.e., the x-axis in Figure 13.2.2-2) is found by dividing the surface moisture content of the watered road by the surface moisture content of the uncontrolled road. As the watered road surface dries, both the ratio M and the predicted instantaneous control efficiency (i.e., the y-axis in the figure) decrease. The figure shows that between the uncontrolled moisture content and a value twice as large, a small increase in moisture content results in a large increase in control efficiency. Beyond that, control efficiency grows slowly with increased moisture content.

Given the complicated nature of how the road dries, characterization of emissions from watered roadways is best done by collecting road surface material samples at various times between water truck passes. (Appendices C.1 and C.2 present the sampling and analysis procedures.) The moisture content measured can then be associated with a control efficiency by use of Figure 13.2.2-2. Samples that reflect average conditions during the watering cycle can take the form of either a series of samples between water applications or a single sample at the midpoint. It is essential that samples be collected during periods with active traffic on the road. Finally, because of different evaporation rates, it is recommended that samples be collected at various times during the year. If only one set of samples is to be collected, these must be collected during hot, summertime conditions.

When developing watering control plans for roads that do not yet exist, it is strongly recommended that the moisture cycle be established by sampling similar roads in the same geographic area. If the moisture cycle cannot be established by similar roads using established watering control plans, the more complex methodology used to estimate the mitigation of rainfall and other precipitation can be used to estimate the control provided by routine watering. An estimate of the maximum daytime Class A pan evaporation (based upon daily evaporation data published in the monthly Climatological Data for the state by the National Climatic Data Center) should be used to insure that adequate watering capability is available during periods of highest evaporation. The hourly precipitation values in the spreadsheet should be replaced with the equivalent inches of precipitation (where the equivalent of 1 inch of precipitation is provided by an application of 5.6 gallons of water per square yard of road). Information on the long term average annual evaporation and on the percentage that occurs between May and October was published in the Climatic Atlas (Reference 16). Figure 13.2.2-3 presents the geographical distribution for "Class A pan evaporation" throughout the United States. Figure 13.2.2-4 presents the geographical distribution of the percentage of this evaporation that occurs between May and October. The U. S. Weather Bureau Class A evaporation pan is a cylindrical metal container with a depth of 10 inches and a diameter of 48 inches. Periodic measurements are made of the changes of the water level.

The above methodology should be used only for prospective analyses and for designing watering programs for existing roadways. The quality rating of an emission factor for a watered road that is based on this methodology should be downgraded two letters. Periodic road surface samples should be collected and analyzed to verify the efficiency of the watering program.

As opposed to watering, chemical dust suppressants have much less frequent reapplication requirements. These materials suppress emissions by changing the physical characteristics of the existing road surface material. Many chemical unpaved road dust suppressants form a hardened surface that binds particles together. After several applications, a treated road often resembles a paved road except that the surface is not uniformly flat. Because the improved surface results in more grinding of small particles, the silt content of loose material on a highly controlled surface may be substantially higher than when the surface was uncontrolled. For this reason, the models presented as Equations 1a and 1b cannot be used to estimate emissions from chemically stabilized roads. Should the road be allowed to return to an

uncontrolled state with no visible signs of large-scale cementing of material, the Equation 1a and 1b emission factors could then be used to obtain conservatively high emission estimates.

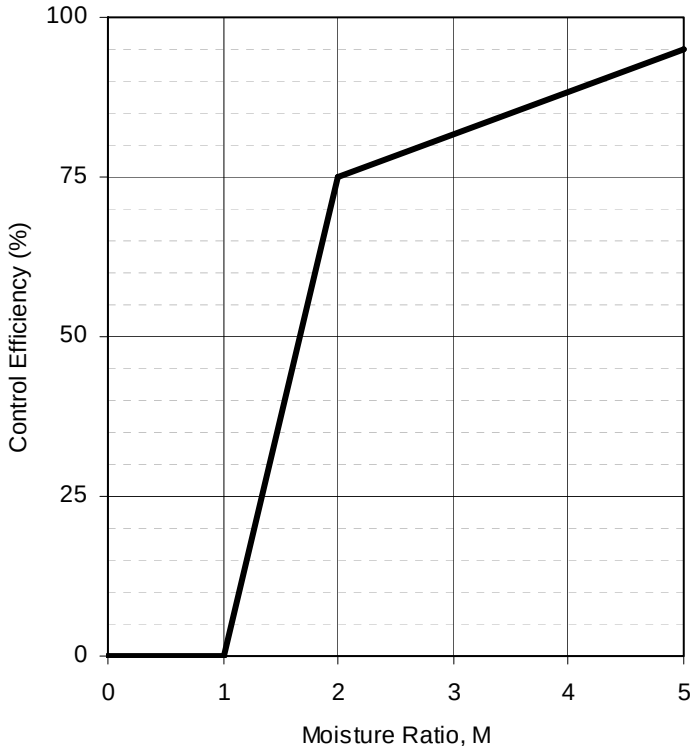


Figure 13.2.2-2. Watering control effectiveness for unpaved travel surfaces

The control effectiveness of chemical dust suppressants appears to depend on (a) the dilution rate used in the mixture; (b) the application rate (volume of solution per unit road surface area); (c) the time between applications; (d) the size, speed and amount of traffic during the period between applications; and (e) meteorological conditions (rainfall, freeze/thaw cycles, etc.) during the period. Other factors that affect the performance of dust suppressants include other traffic characteristics (e. g., cornering, track-on from unpaved areas) and road characteristics (e. g., bearing strength, grade). The variabilities in the above factors and differences between individual dust control products make the control efficiencies of chemical dust suppressants difficult to estimate. Past field testing of emissions from controlled unpaved roads has shown that chemical dust suppressants provide a PM-10 control efficiency of about 80 percent when applied at regular intervals of 2 weeks to 1 month.

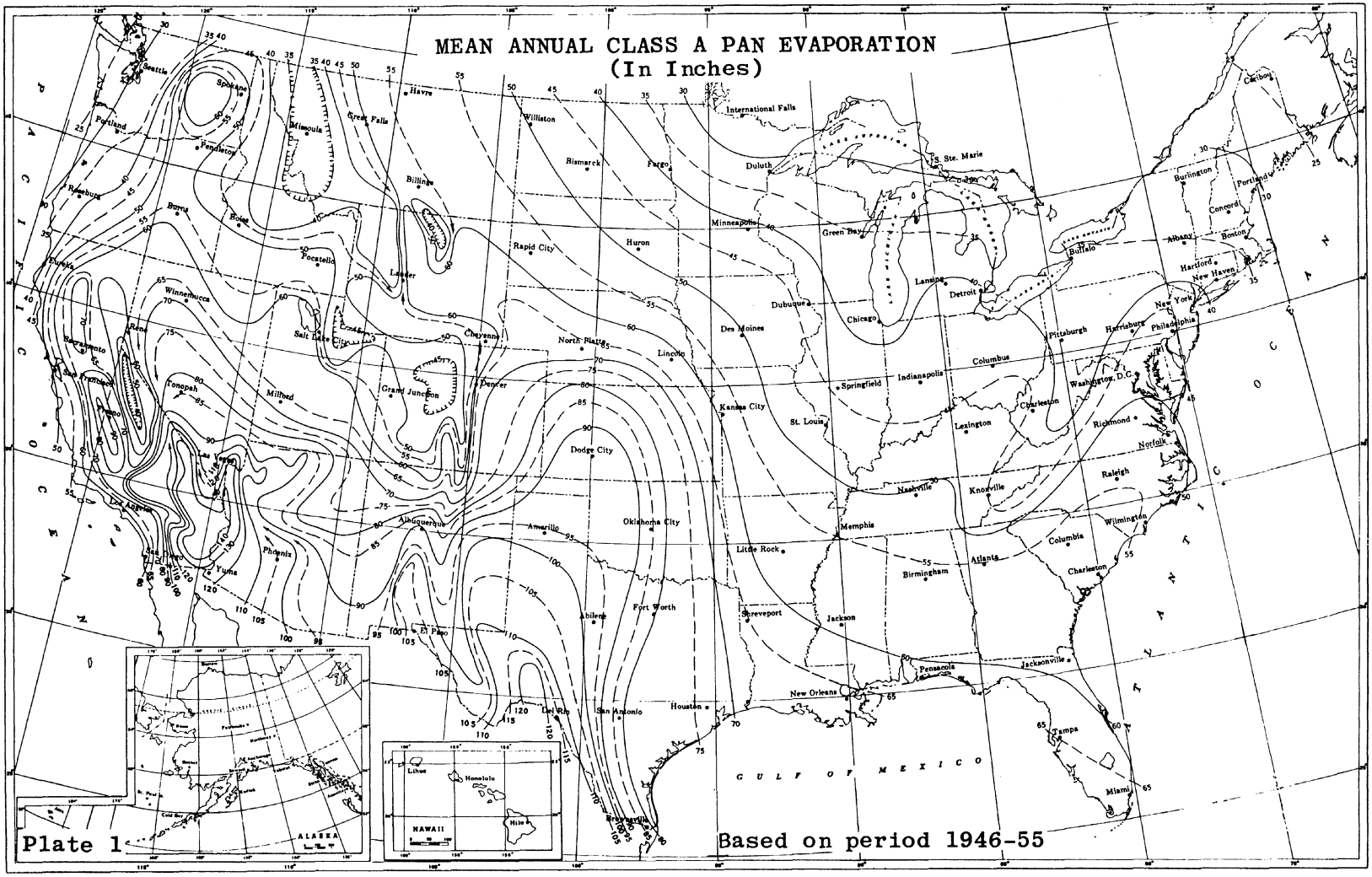


Figure 13.2.2-3. Annual evaporation data.

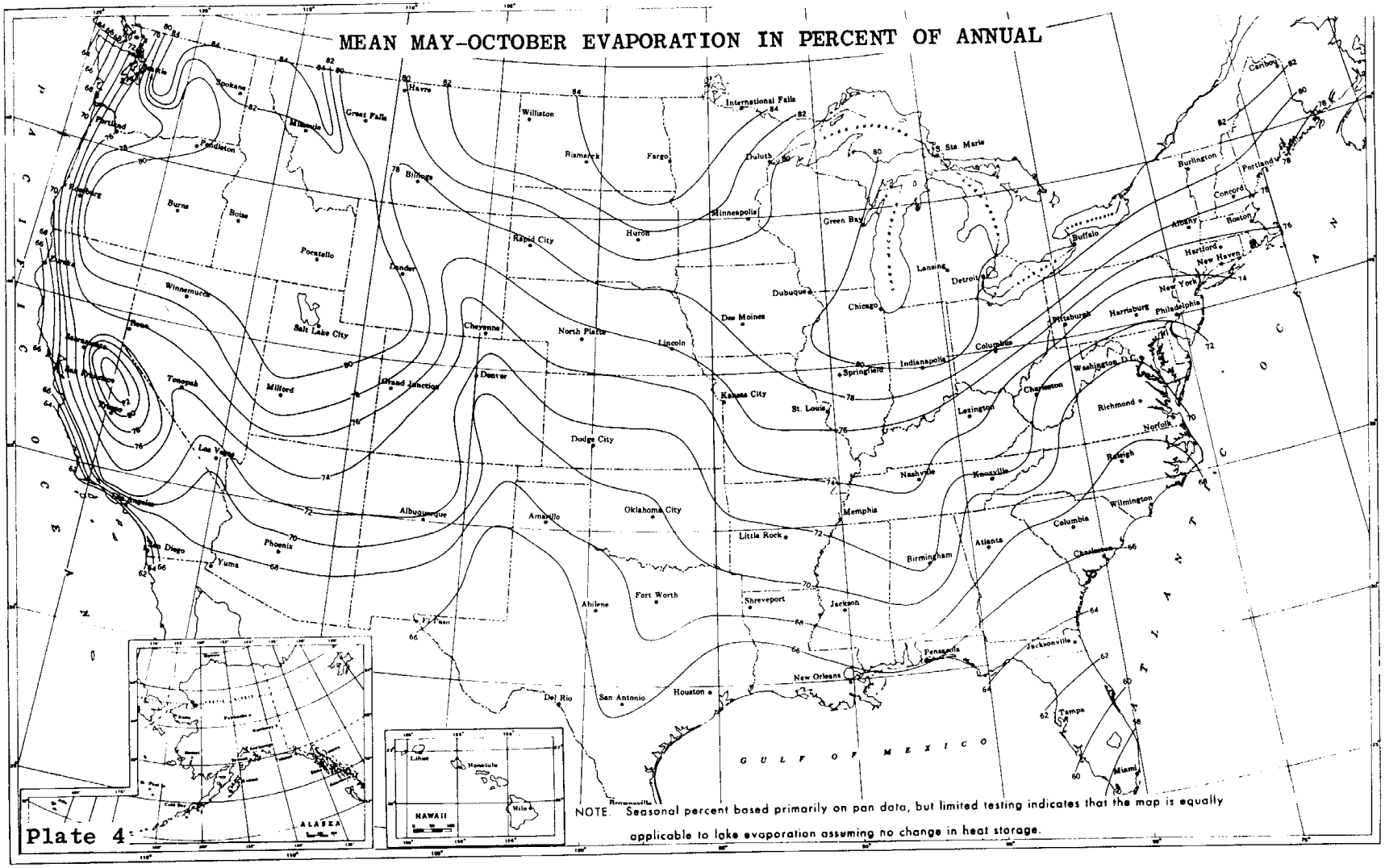


Figure 13.2.2-4. Geographical distribution of the percentage of evaporation occurring between May and October.

Petroleum resin products historically have been the dust suppressants (besides water) most widely used on industrial unpaved roads. Figure 13.2.2-5 presents a method to estimate average control efficiencies associated with petroleum resins applied to unpaved roads.[20] Several items should be noted:

1. The term "ground inventory" represents the total volume (per unit area) of petroleum resin concentrate (*not solution*) applied since the start of the dust control season.

2. Because petroleum resin products must be periodically reapplied to unpaved roads, the use of a time-averaged control efficiency value is appropriate. Figure 13.2.2-5 presents control efficiency values averaged over two common application intervals, 2 weeks and 1 month. Other application intervals will require interpolation.

3. Note that zero efficiency is assigned until the ground inventory reaches 0.05 gallon per square yard (gal/yd^2). Requiring a minimum ground inventory ensures that one must apply a reasonable amount of chemical dust suppressant to a road before claiming credit for emission control. Recall that the ground inventory refers to the amount of petroleum resin concentrate rather than the total solution.

As an example of the application of Figure 13.2.2-5, suppose that Equation 1a was used to estimate an emission factor of 7.1 lb/VMT for PM-10 from a particular road. Also, suppose that, starting on May 1, the road is treated with 0.221 gal/yd^2 of a solution (1 part petroleum resin to 5 parts water) on the first of each month through September. Then, the average controlled emission factors, shown in Table 13.2.2-5, are found.

Table 13.2-2-5. EXAMPLE OF AVERAGE CONTROLLED EMISSION FACTORS FOR SPECIFIC CONDITIONS

Period	Ground Inventory, gal/yd^2	Average Control Efficiency, %[a]	Average Controlled Emission Factor, lb/VMT
May	0.037	0	7.1
June	0.073	62	2.7
July	0.11	68	2.3
August	0.15	74	1.8
September	0.18	80	1.4

[a] From Figure 13.2.2-5, $\leq$10 µm. Zero efficiency assigned if ground inventory is less than 0.05 gal/yd^2. 1 lb/VMT = 281.9 g/VKT. 1 gal/yd^2 = 4.531 L/m^2.

Besides petroleum resins, other newer dust suppressants have also been successful in controlling emissions from unpaved roads. Specific test results for those chemicals, as well as for petroleum resins and watering, are provided in References 18 through 21.

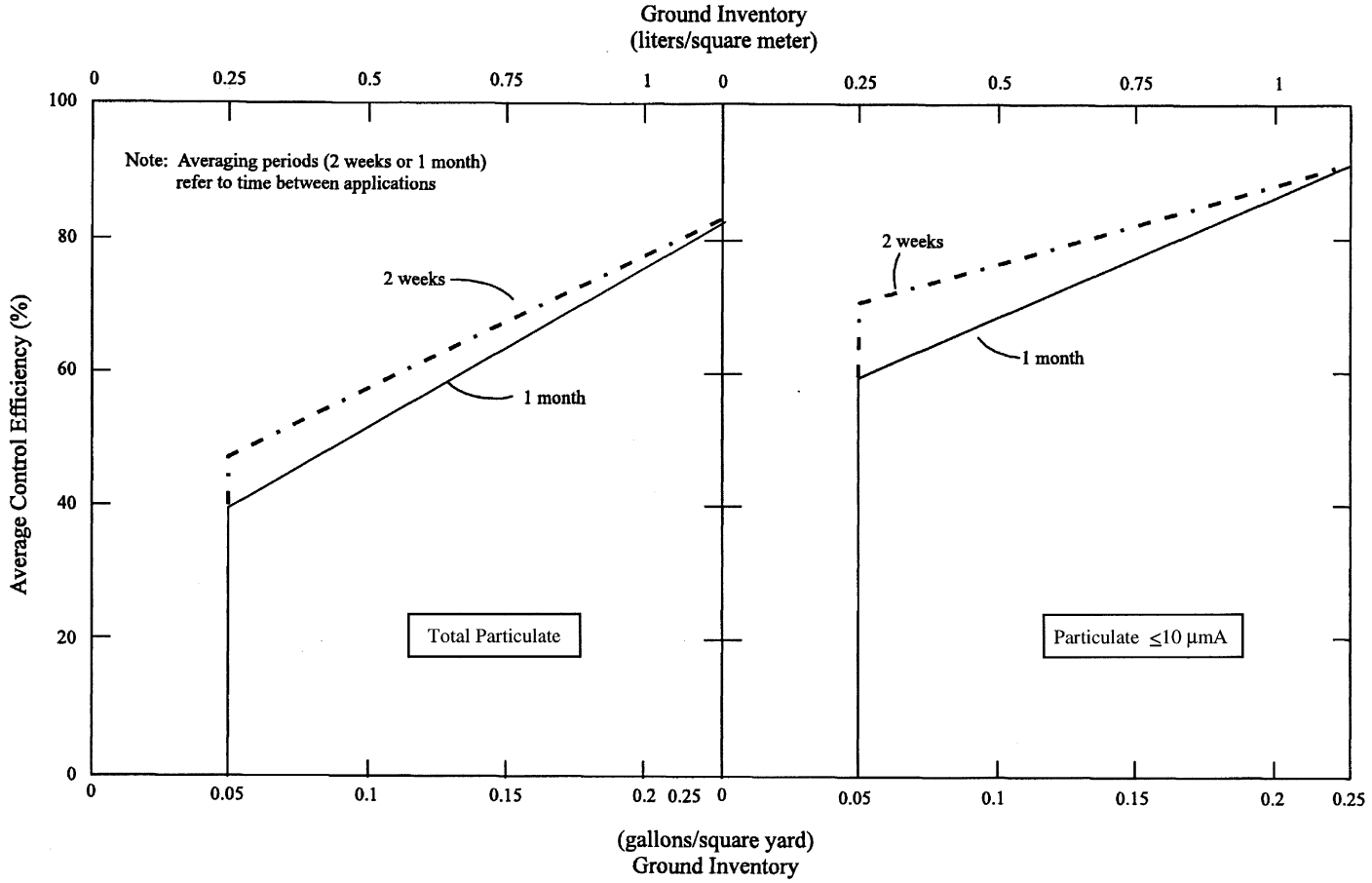


Figure 13.2.2-5. Average control efficiencies over common application intervals.

13.2.2.4 Updates Since The Fifth Edition

The Fifth Edition was released in January 1995. Revisions to this section since that date are summarized below. For further detail, consult the background report for this section (Reference 6).

October 1998 (Supplement E)– This was a major revision of this section. Significant changes to the text and the emission factor equations were made.

October 2001 – Separate emission factors for unpaved surfaces at industrial sites and publicly accessible roads were introduced. Figure 13.2.2-2 was included to provide control effectiveness estimates for watered roads.

December 2003 – The public road emission factor equation (equation 1b) was adjusted to remove the component of particulate emissions from exhaust, brake wear, and tire wear. The parameter C in the new equation varies with aerodynamic size range of the particulate matter. Table 13.2.2-4 was added to present the new coefficients.

January 2006 – The PM-2.5 particle size multipliers (i.e., factors) in Table 13.2.2-2 were modified and the quality ratings were upgraded from C to B based on the wind tunnel studies of a variety of dust emitting surface materials.

References For Section 13.2.2

1. C. Cowherd, Jr., *et al., Development Of Emission Factors For Fugitive Dust Sources*, EPA-450/3-74-037, U. S. Environmental Protection Agency, Research Triangle Park, NC, June 1974.

2. R. J. Dyck and J. J. Stukel, "Fugitive Dust Emissions From Trucks On Unpaved Roads", *Environmental Science And Technology, 10*(10):1046-1048, October 1976.

3. R. O. McCaldin and K. J. Heidel, "Particulate Emissions From Vehicle Travel Over Unpaved Roads", Presented at the 71st Annual Meeting of the Air Pollution Control Association, Houston, TX, June 1978.

4. C. Cowherd, Jr, *et al., Iron And Steel Plant Open Dust Source Fugitive Emission Evaluation*, EPA-600/2-79-013, U. S. Environmental Protection Agency, Cincinnati, OH, May 1979.

5. G. Muleski, *Unpaved Road Emission Impact*, Arizona Department of Environmental Quality, Phoenix, AZ, March 1991.

6. *Emission Factor Documentation For AP-42, Section 13.2.2, Unpaved Roads, Final Report*, Midwest Research Institute, Kansas City, MO, September 1998.

7. T. Cuscino, Jr., *et al., Taconite Mining Fugitive Emissions Study*, Minnesota Pollution Control Agency, Roseville, MN, June 1979.

8. *Improved Emission Factors For Fugitive Dust From Western Surface Coal Mining Sources*, 2 Volumes, EPA Contract No. 68-03-2924, Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency, Research Triangle Park, NC.

9. T. Cuscino, Jr., *et al., Iron And Steel Plant Open Source Fugitive Emission Control Evaluation*, EPA-600/2-83-110, U. S. Environmental Protection Agency, Cincinnati, OH, October 1983.

10. *Size Specific Emission Factors For Uncontrolled Industrial And Rural Roads*, EPA Contract No. 68-02-3158, Midwest Research Institute, Kansas City, MO, September 1983.

11. C. Cowherd, Jr., and P. Englehart, *Size Specific Particulate Emission Factors For Industrial And Rural Roads*, EPA-600/7-85-038, U. S. Environmental Protection Agency, Cincinnati, OH, September 1985.

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13. *Chicago Area Particulate Matter Emission Inventory — Sampling And Analysis*, EPA Contract No. 68-02-4395, Work Assignment 1, Midwest Research Institute, Kansas City, MO, May 1988.

14. *PM-10 Emissions Inventory Data For The Maricopa And Pima Planning Areas*, EPA Contract No. 68-02-3888, Engineering-Science, Pasadena, CA, January 1987.

15. *Oregon Fugitive Dust Emission Inventory*, EPA Contract 68-D0-0123, Midwest Research Institute, Kansas City, MO, January 1992.

16. *Climatic Atlas Of The United States*, U. S. Department Of Commerce, Washington, DC, June 1968.

17. National Climatic Data Center, *Solar And Meteorological Surface Observation Network 1961-1990*; 3 Volume CD-ROM. Asheville, NC, 1993.

18. C. Cowherd, Jr. *et al., Control Of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1988.

19. G. E. Muleski, *et al., Extended Evaluation Of Unpaved Road Dust Suppressants In The Iron And Steel Industry*, EPA-600/2-84-027, U. S. Environmental Protection Agency, Cincinnati, OH, February 1984.

20. C. Cowherd, Jr., and J. S. Kinsey, *Identification, Assessment And Control Of Fugitive Particulate Emissions*, EPA-600/8-86-023, U. S. Environmental Protection Agency, Cincinnati, OH, August 1986.

21. G. E. Muleski and C. Cowherd, Jr., *Evaluation Of The Effectiveness Of Chemical Dust Suppressants On Unpaved Roads*, EPA-600/2-87-102, U. S. Environmental Protection Agency, Cincinnati, OH, November 1986.

22. *Fugitive Dust Background Document And Technical Information Document For Best Available Control Measures*, EPA-450/2-92-004, Office Of Air Quality Planning And Standards, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1992.

23. Written communication (Technical Memorandum) from P. Hemmer, E.H. Pechan & Associates, Inc., Durham, NC to B. Kuykendal, U. S. Environmental Protection Agency, Research Triangle Park, NC, August, 21, 2003.

24. MOBILE6 User Guide, United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA420-R-02-028, October 2002.

25. Written communication (Technical Memorandum) from G. Muleski, Midwest Research Institute, Kansas City, MO, to B. Kuykendal, U. S. Environmental Protection Agency, Research Triangle Park, NC, Subject "Unpaved Roads", September 27, 2001.

26. Written communication (Technical Memorandum) from W. Kuykendal, U. S. Environmental Protection Agency, to File, Subject "Decisions on Final AP-42 Section 13.2.2 Unpaved Roads", November 24, 2003.

27. C. Cowherd, *Background Document for Revisions to Fine Fraction Ratios &sed for AP-42 Fugitive Dust Emission Factors*. Prepared by Midwest Research Institute for Western Governors Association, Western Regional Air Partnership, Denver, CO, February 1, 2006.

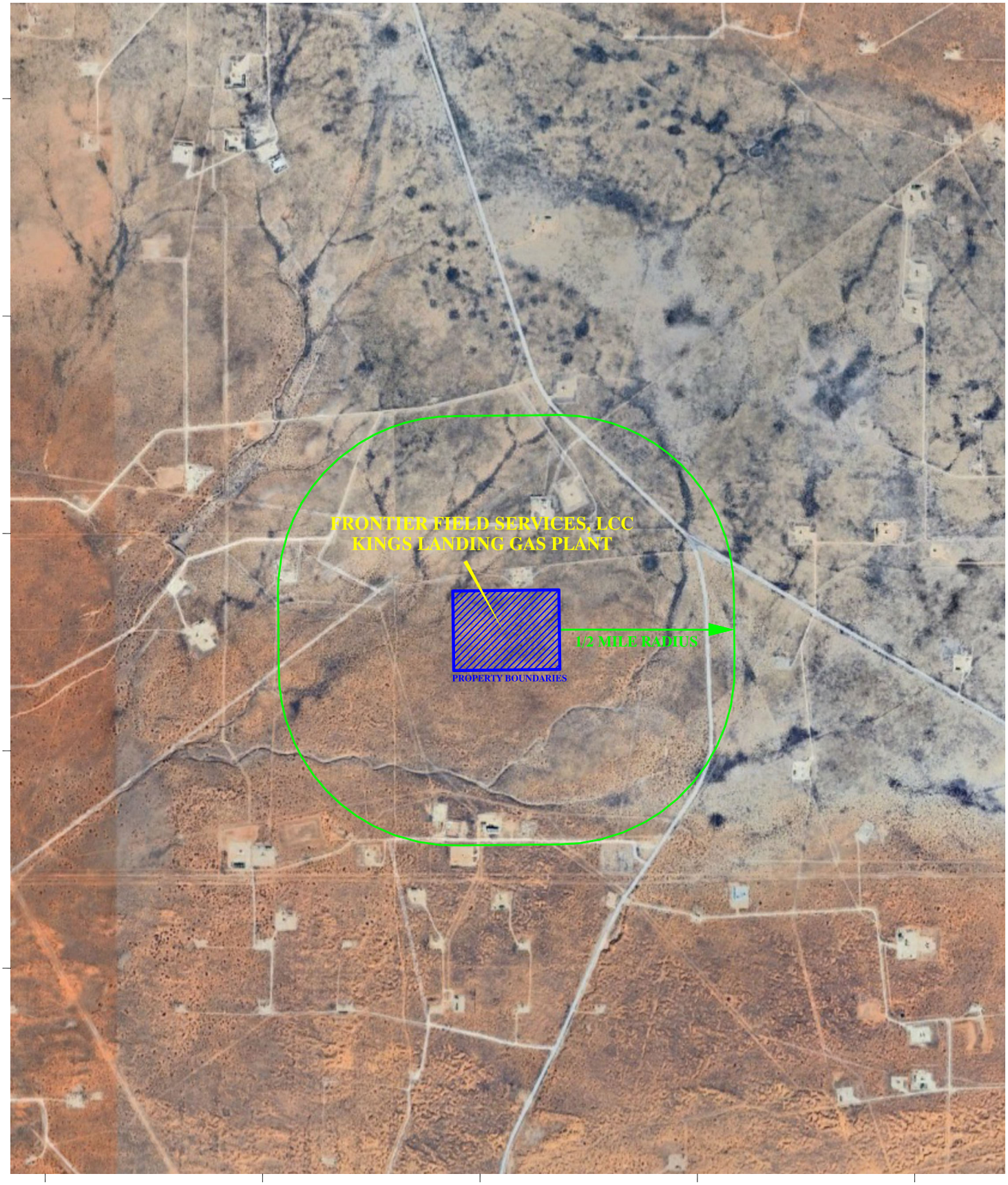
Section 8

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	

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



TRUE NORTH

NEW MEXICO

32.663476, -103.868425 WGS84
EDDY COUNTY, NEW MEXICO

0 1000 FT. 2000 FT.

1 1/2 0 1 MILE

Trinity Consultants

KINETIK\TX MIDLAND\KINGS LANDING\244404.0648
08/06/25
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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.

General Posting of Notices – Certification

I, ____Teffanie Fawks_____, the undersigned, certify that on **08/05/2025,** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the **Loco Hills** of **Eddy** County, State of New Mexico on the following dates:

1. Facility entrance 08/05/2025
2. Loco Hills Post Office, 3 Goat Ropers Rd, Loco Hills, NM 88255 08/05/2025
3. Loco Hills Supply Store, 132445 Lovington Hwy, Loco Hills, NM 88255 08/05/2025
4. Loco Hills General Store, 132205 Lovington Hwy, Loco Hills, NM 88255 08/05/2025

Signed this 5th day of August, 2025,



Signature

08/05/2025
Date

__Teffanie Fawks_____
Printed Name

__Environmental Specialist_____
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

NOTICE

Frontier Field Services, LLC announces its application to the New Mexico Environment Department for an air quality permit for the **modification** of its **gas plant** facility. The expected date of application submittal to the Air Quality Bureau is **August 8, 2025.**

The exact location for the proposed facility, known as **Kings Landing Gas Plant**, is at **32.663476°, -103.868425°**. The approximate location of this facility is **12.73** miles **southwest** of **Loco Hills** in **Eddy** County.

The proposed **modification** consists of authorizing an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	3	11
PM_{10}	3	11
$PM_{2.5}$	3	11
Sulfur Dioxide (SO_2)	150	249
Nitrogen Oxides (NO_x)	381	150
Carbon Monoxide (CO)	779	249
Volatile Organic Compounds (VOC)	650	213
Total sum of all Hazardous Air Pollutants (HAPs)	22	13
Hydrogen Sulfide (H_2S)	4	4
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO_2e	N/A	2,630,894

The standard and maximum operating schedules of the facility will be from 24 hours per day, 7 days per week, and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is: **Frontier Field Services, LLC, 303 Veterans Airpark Lane, Suite 2000, Midland, Texas, 79705**

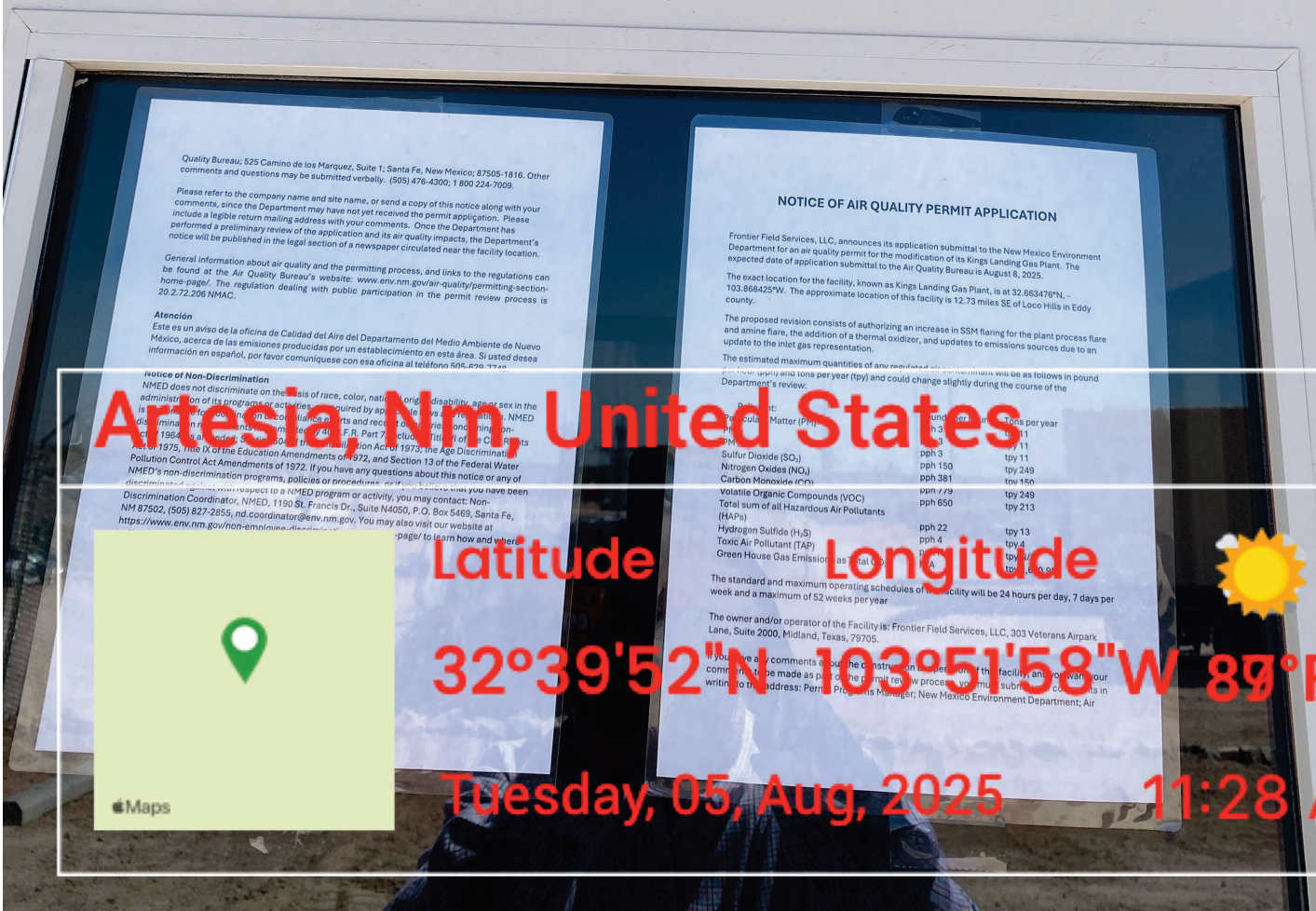
If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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

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

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





Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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

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

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NOTICE OF AIR QUALITY PERMIT APPLICATION

Frontier Field Services, LLC, announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Kings Landing Gas Plant. The expected date of application submittal to the Air Quality Bureau is August 8, 2025.

The exact location for the facility, known as Kings Landing Gas Plant, is at 32.663476°N, -103.868425°W. The approximate location of this facility is 12.73 miles SE of Loco Hills in Eddy county.

The proposed revision consists of authorizing an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation.

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

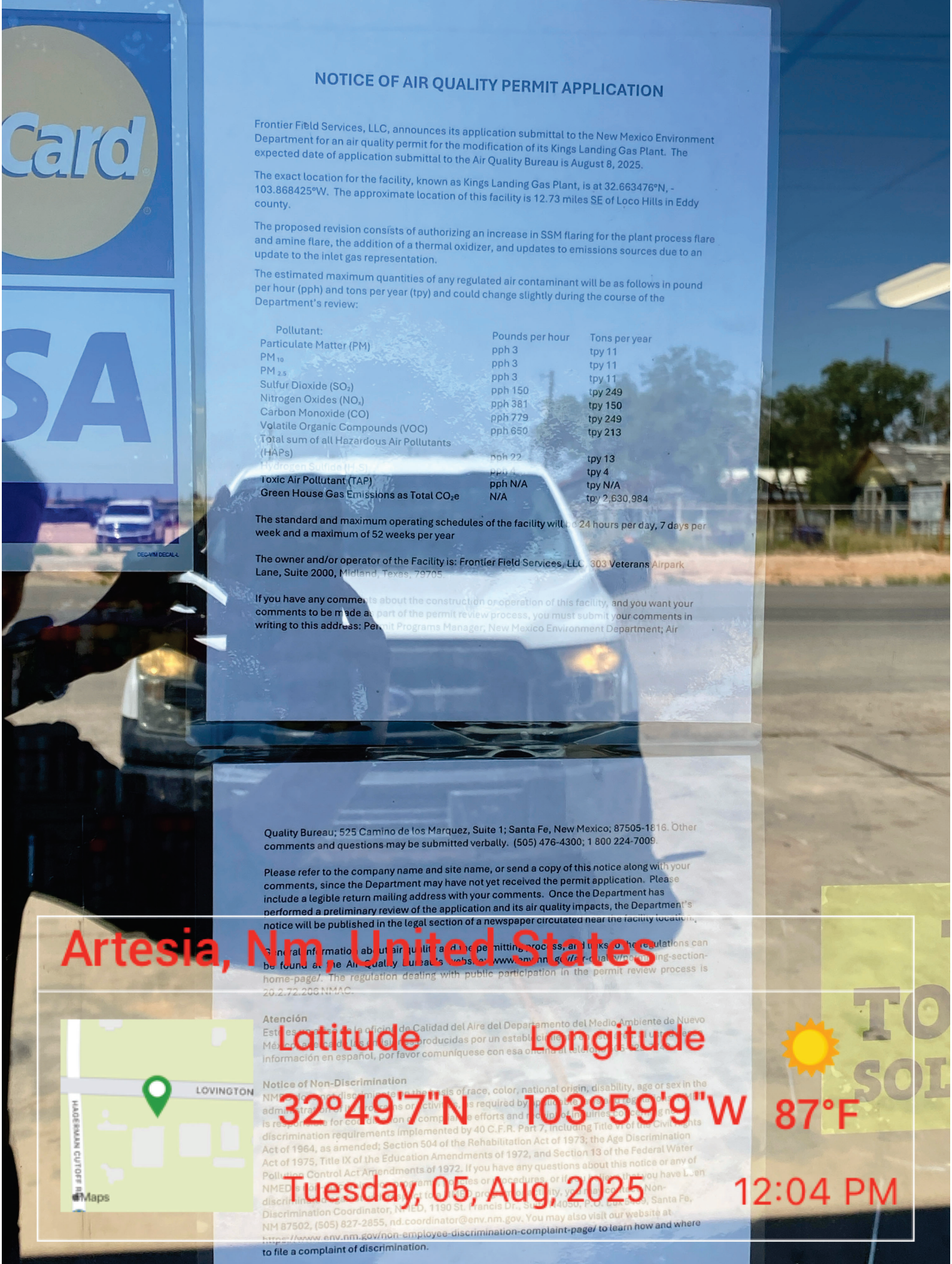
Pollutant	lbs/hr	Tons per year
Particulate Matter (PM)	lbs/hr 3	tpy 11
PM$_{10}$	lbs/hr 3	tpy 11
Sulfur Dioxide (SO_2)	pph 3	tpy 11
Nitrogen Oxides (NO_x)	pph 150	tpy 249
Carbon Monoxide (CO)	pph 381	tpy 150
Volatile Organic Compounds (VOC)	pph 779	tpy 249
Total sum of all Hazardous Air Pollutants (HAPs)	pph 650	tpy 213
Hydrogen Sulfide (H_2S)	pph 22	tpy 13
Toxic Air Pollutant (TAP)	pph 4	tpy 4
Green House Gas Emissions as Total CO$_2$e	N/A	tpy [illegible]

The standard and maximum operating schedules of the facility will be 24 hours per day, 7 days per week and a maximum of 52 weeks per year

The owner and/or operator of the Facility is: Frontier Field Services, LLC, 303 Veterans Airpark Lane, Suite 2000, Midland, Texas, 79705.

If you have any comments about the construction or operation of this facility, or want your comments to be made as part of the permit review process, you must submit your comments in writing to the address: Permits Programs Manager; New Mexico Environment Department; Air

Artesia, New United States
Latitude Longitude
32°39'52"N 104°51'58"W 89°F
Tuesday, 05, Aug, 2025 11:28 AM
Maps



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Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	pph 3	tpy 11
PM_{10}	pph 3	tpy 11
$PM_{2.5}$	pph 3	tpy 11
Sulfur Dioxide (SO_2)	pph 150	tpy 249
Nitrogen Oxides (NO_x)	pph 381	tpy 150
Carbon Monoxide (CO)	pph 779	tpy 249
Volatile Organic Compounds (VOC)	pph 650	tpy 213
Total sum of all Hazardous Air Pollutants (HAPs)	pph 22	tpy 13
Hydrogen Sulfide (H_2S)	pph 1	tpy 4
Toxic Air Pollutant (TAP)	pph N/A	tpy N/A
Green House Gas Emissions as Total CO_2e	N/A	tpy 2,630,984

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

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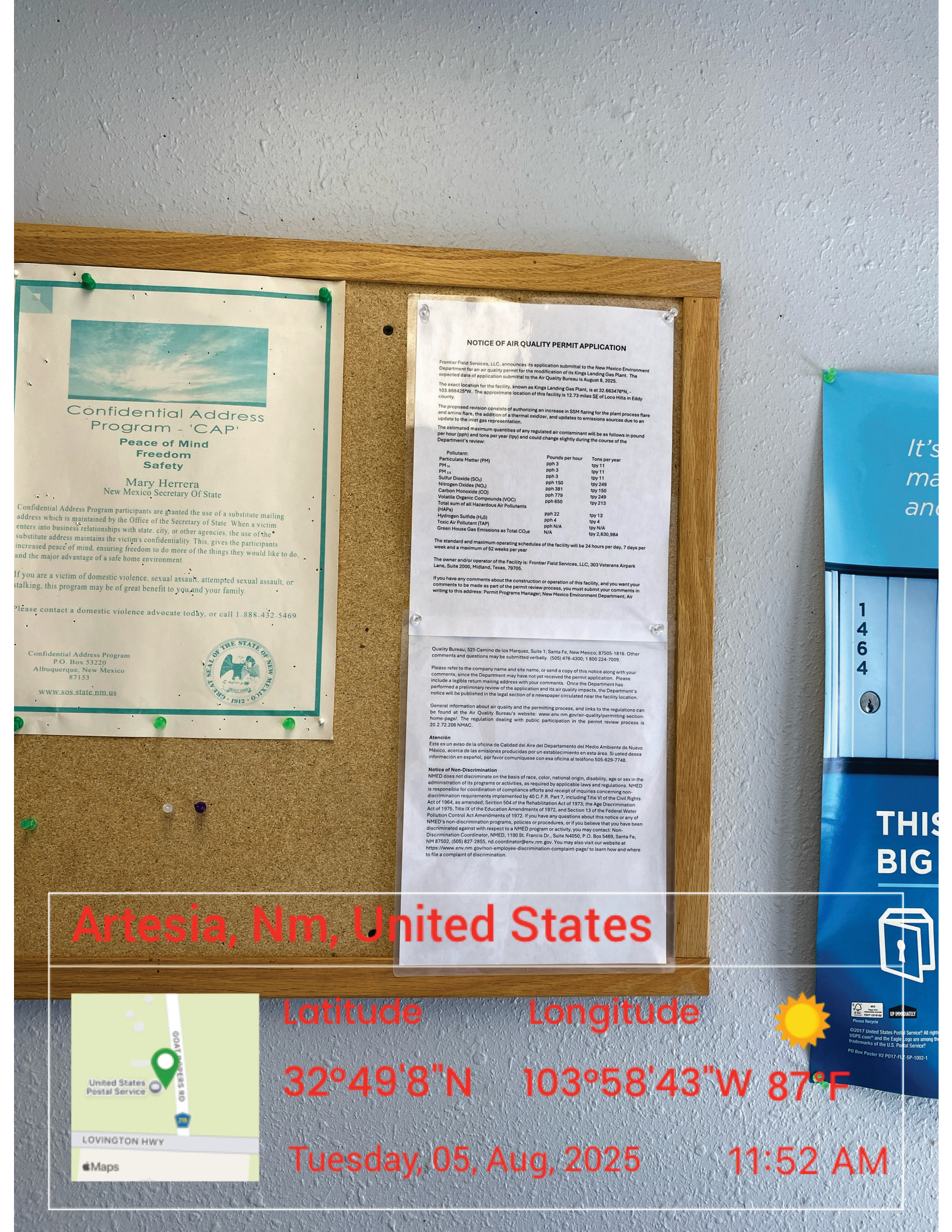
Atención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México [illegible] producidas por un establecimiento [illegible] información en español, por favor comuníquese con esa oficina al teléfono [illegible]

Notice of Non-Discrimination

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

Artesia, Nm, United States
Latitude Longitude
32°49'7"N 103°59'9"W
87°F
Tuesday, 05, Aug, 2025 12:04 PM
LOVINGTON
HAGERMAN CUTOFF R
Maps


Confidential Address Program - 'CAP'
Peace of Mind
Freedom
Safety
Mary Herrera
New Mexico Secretary Of State
Confidential Address Program participants are granted the use of a substitute mailing address which is maintained by the Office of the Secretary of State. When a victim enters into business relationships with state, city, or other agencies, the use of the substitute address maintains the victim's confidentiality. This, gives the participants increased peace of mind, ensuring freedom to do more of the things they would like to do, and the major advantage of a safe home environment.
If you are a victim of domestic violence, sexual assault, attempted sexual assault, or stalking, this program may be of great benefit to you and your family.
Please contact a domestic violence advocate today, or call 1-888-432-5469.
Confidential Address Program
P.O. Box 53220
Albuquerque, New Mexico
87153
www.sos.state.nm.us
SEAL OF THE STATE OF NEW MEXICO
1912
NOTICE OF AIR QUALITY PERMIT APPLICATION
Frontier Field Services, LLC, announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Kings Landing Gas Plant. The expected date of application submittal to the Air Quality Bureau is August 8, 2025.
The exact location for the facility, known as Kings Landing Gas Plant, is at 32.663476°N, -103.668425°W. The approximate location of this facility is 12.73 miles SE of Loco Hills in Eddy county.
The proposed revision consists of authorizing an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation.
The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:
Pollutant: | Pounds per hour | Tons per year
Particulate Matter (PM) | pph 3 | tpy 11
PM10 | pph 3 | tpy 11
PM2.5 | pph 3 | tpy 11
Sulfur Dioxide (SO2) | pph 150 | tpy 249
Nitrogen Oxides (NOx) | pph 381 | tpy 150
Carbon Monoxide (CO) | pph 779 | tpy 249
Volatile Organic Compounds (VOC) | pph 650 | tpy 213
Total sum of all Hazardous Air Pollutants (HAPs) | pph 22 | tpy 13
Hydrogen Sulfide (H2S) | pph 4 | tpy 4
Toxic Air Pollutant (TAP) | pph N/A | tpy N/A
Green House Gas Emissions as Total CO2e | N/A | tpy 2,630,984
The standard and maximum operating schedules of the facility will be 24 hours per day, 7 days per week and a maximum of 52 weeks per year
The owner and/or operator of the Facility is: Frontier Field Services, LLC, 303 Veterans Airpark Lane, Suite 2000, Midland, Texas, 79705.
If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager, New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally: (505) 476-4300; 1 800 224-7009.
Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.
General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: www.env.nm.gov/air-quality/permitting-section-home-page/. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.
Atención
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1464
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LOVINGTON HWY
Maps
Artesia, Nm, United States
Latitude
Longitude
32°49'8"N 103°58'43"W 87°F
Tuesday, 05, Aug, 2025
11:52 AM

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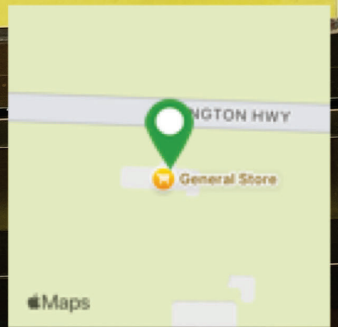
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CAUTION: RISK OF FIRE OR EXPLOSION DUE TO PUNCTURE OF REFRIGERANT TUBING; FOLLOW HANDLING INSTRUCTIONS CAREFULLY. FLAMMABLE REFRIGERANT USED.



Artesia, Nm, United States

Latitude Longitude

32°49'7"N 103°59'23"W 87°F

Tuesday, 05 Aug, 2025 12:02 PM

Submittal of Public Service Announcement – Certification

I, Daniel Dolce, the undersigned, certify that on **August 6, 2025**, submitted a public service announcement to **FM-KBIM** that serves the City\Town\Village of **Loco Hills**, **Eddy** County, New Mexico, in which the source is or is proposed to be located and that **FM-KBIM RESPONDED THAT IT WOULD AIR THE ANNOUNCEMENT.**

Signed this 6 day of August, 2025,

Daniel Dolce
Signature

8/6/2025
Date

Daniel Dolce
Printed Name

Consultant - Trinity Consultants
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Dawna Allen

From: Daniel Dolce
Sent: Wednesday, August 6, 2025 2:11 PM
To: Aaron Forrister; Tina Purington
Cc: Dawna Allen
Subject: RE: In Need of Public Service Announcement
Attachments: Public Service Announcement.docx

Hi Aaron,

Tina is out of the office so I am helping with the PSA. Attached is a script of the PSA. Can you please air it on KBIM FM which covers Loco Hills, Eddy County, NM, on Thursday August 7th. It needs to be aired once.

Thank you and regards,
Daniel Dolce

Daniel Dolce
Consultant

P 505.266.6611 x3208 M 505.818.8761
Email: Daniel.Dolce@trinityconsultants.com
9400 Holly Avenue NE, Building 3, Suite B, Albuquerque, NM 87122

Want to meet? Book a meeting with Daniel Dolce at Trinity Consultants.



Connect with us: LinkedIn / YouTube / trinityconsultants.com
View our capabilities in the Environmental Consulting, Built Environment, Life Sciences, and Water & Ecology markets.

From: Aaron Forrister <aaron@noalmark.com>
Sent: Thursday, July 31, 2025 4:04 PM
To: Tina Purington <tina.purington@trinityconsultants.com>
Subject: Re: In Need of Public Service Announcement

Perfect. We can do it.

When ready, send over the literature and we will get it done.

Aaron Forrister, CRMC
New Mexico Market Manager
KZOR-KIXN-KPZA-KEJL-KLEA-KBIM FM-KBIM
575-318-7217 mobile
575-397-4969 office
575-393-4310 fax
619 North Turner
Hobbs, NM 88240

PUBLIC SERVICE ANNOUNCEMENT

NOTICE OF AIR QUALITY PERMIT APPLICATION

Frontier Field Services, LLC, announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its Kings Landing Gas Plant.

The exact location for the facility is at latitude 32 degrees, 39 minutes, 48.5 seconds N and longitude -103 degrees, 52 minutes, 6.3 seconds W. The approximate location of this facility is 12.3 miles southeast of Loco Hills, Eddy County, New Mexico.

The proposed revision intends to authorize an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation. proposed with this application.

Notices have been posted at the facility entrance, 12.73 miles Southeast of Loco Hills, the Loco Hills USPS at 3 Goat Ropers Road, the Loco Hills Supply Store at 132445 Lovington Highway, and the Loco Hills General Store at 132205 Lovington Highway.

If you have any questions regarding this application, please contact the New Mexico Environmental Department, Air Quality Bureau located at 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico 87505-1816; (505) 476-4300; 1-800-224-7009.

Kings Landing Gas Plant - Public Notice

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

Table of Noticed Citizens (within 0.5 miles of facility)

Parcel Number	Notices Citizens	Address	City	State	ZIP
4-183-111-263-263	State of New Mexico	310 Old Santa Fe Trail	Santa Fe	NM	87504
4-184-111-263-263, 4-183-110-263-263, 4-184-110-263-263	Bureau of Land Management	620 E. Greene Street	Carlsbad	NM	88220

Table of Noticed Municipalities (within 10 miles of facility)

Municipality	Address	City	State	ZIP
N/A - No municipalities within 10-mile radius of this facility.				

Table of Noticed Counties (within 10 miles of facility)

County	Address	City	State	ZIP
Lea County	100 North Main	Lovington	NM	88260
Eddy County	101 W Greene St.	Carlsbad	NM	88220

Table of Noticed Tribes (within 10 miles of facility)

Tribe	Address	City	State	ZIP
N/A - No tribes within 10-mile radius of this facility.				


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$0.00
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8/6/2025 IMI
063S12395454
87113
000034859
7014 2870 0001 4718 6763
Sent To
Street & Apt.
or PO Box Nc
City, State, Zl
PS Form 380
LEA COUNTY MANAGER
100 NORTH MAIN
LOVINGTON, NM 88260


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Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
$0.00
US POSTAGE
8/6/2025 IMI
063S12395454
87113
000034860
7014 2870 0001 4718 6749
Sent To
Street & Apt. N
or PO Box No.
City, State, ZIF
PS Form 380
BUREAU OF LAND MANAGEMENT
620 E. GREENE STREET
CARLSBAD, NM 88220


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For delivery information, visit our website
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Postage $
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Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
$0.00
US POSTAGE
8/6/2025 IMI
063S12395454
87113
000034861
7014 2870 0001 4718 6855
Sent To
Street & Apt. No
or PO Box No.
City, State, ZIP+
PS Form 3800,
STATE OF NEW MEXICO
310 OLD SANTA FE TRAIL
SANTA FE, NM 87504


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Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
$0.00
US POSTAGE
8/6/2025 IMI
063S12395454
87113
000034862
7014 2870 0001 4718 6756
Sent To
Street & Ap
or PO Box
City, State,
PS Form 3
EDDY COUNTY MANAGER
101 W GREENE ST.
CARLSBAD, NM 88220

August 6, 2025

CERTIFIED MAIL 7014 2870 0001 4718 6855
RETURN RECEIPT REQUESTED *(certified mail is required, **return receipt is optional**)*

Dear **Neighbor,**
Frontier Field Services, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the **modification** of its **gas plant** facility. The expected date of application submittal to the Air Quality Bureau is **August 8, 2025.**

The exact location for the proposed facility known as, **Kings Landing Gas Plant**, is at **32.663476°**, **-103.868425°.** The approximate location of this facility is **12.73** miles **southwest** of **Loco Hills** in **Eddy** county.

The proposed **modification** consists of authorizing an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	3	11
PM_{10}	3	11
$PM_{2.5}$	3	11
Sulfur Dioxide (SO_2)	150	249
Nitrogen Oxides (NO_x)	381	150
Carbon Monoxide (CO)	779	249
Volatile Organic Compounds (VOC)	650	213
Total sum of all Hazardous Air Pollutants (HAPs)	22	13
Hydrogen Sulfide (H_2S)	4	4
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO_2e	N/A	2,630,894

The standard and maximum operating schedules of the facility will be 24 hours per day, 7 days per week and a maximum of 52 weeks per year.

Owners and operators of the facility include:
Attention: Molly Greer
Frontier Field Services, LLC
303 Veterans Airpark Lane, Suite 2000,
Midland, Texas, 79705

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

Please refer to the company name and facility name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the

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Sincerely,
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August 6, 2025

CERTIFIED MAIL 7014 2870 0001 4718 6756
RETURN RECEIPT REQUESTED *(certified mail is required, **return receipt is optional**)*

Dear **County Official,**
Frontier Field Services, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the **modification** of its **gas plant** facility. The expected date of application submittal to the Air Quality Bureau is **August 8, 2025.**

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Kings Landing Gas Plant

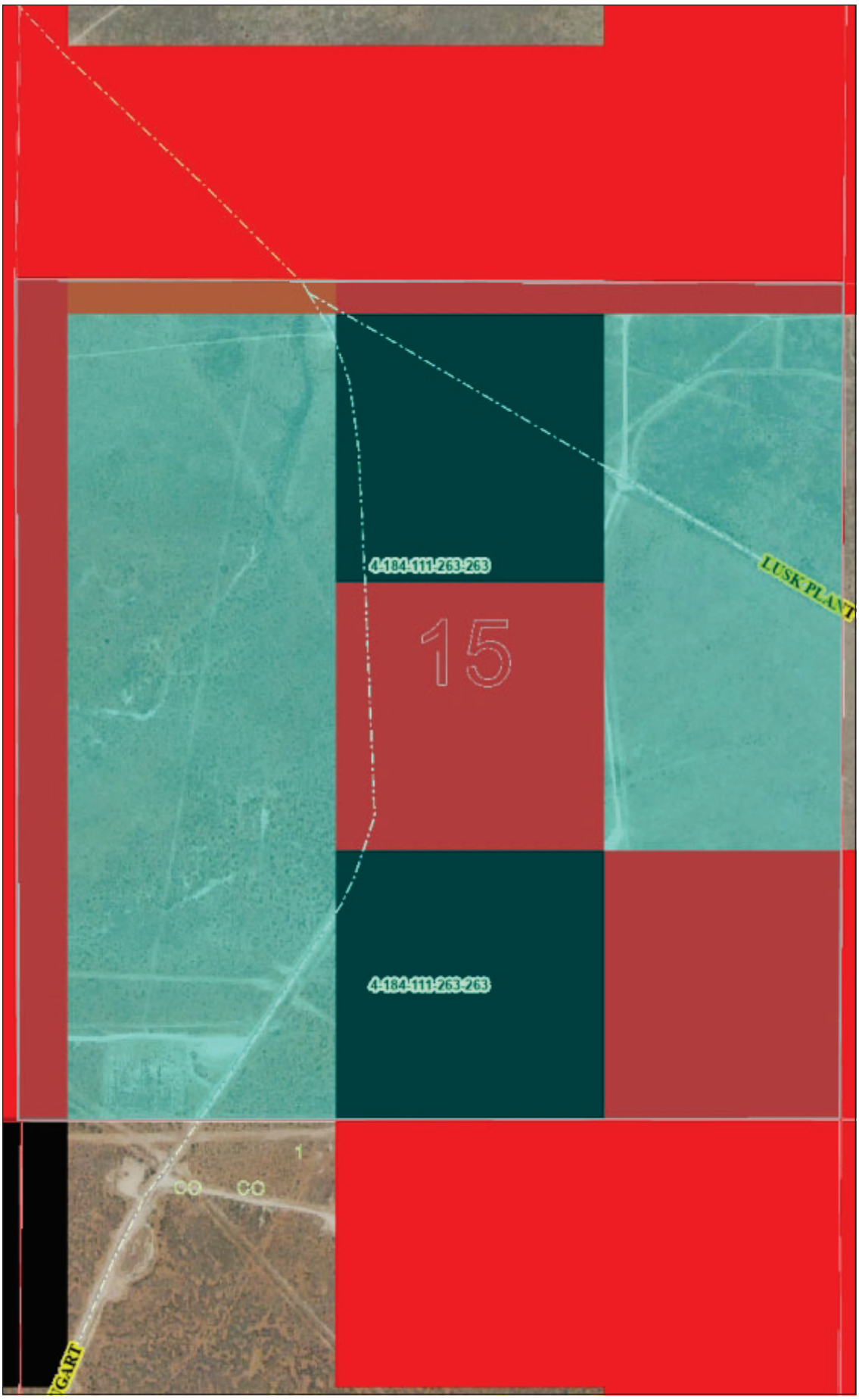
Web Print: 08/06/2025

0 1,505

Feet

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.

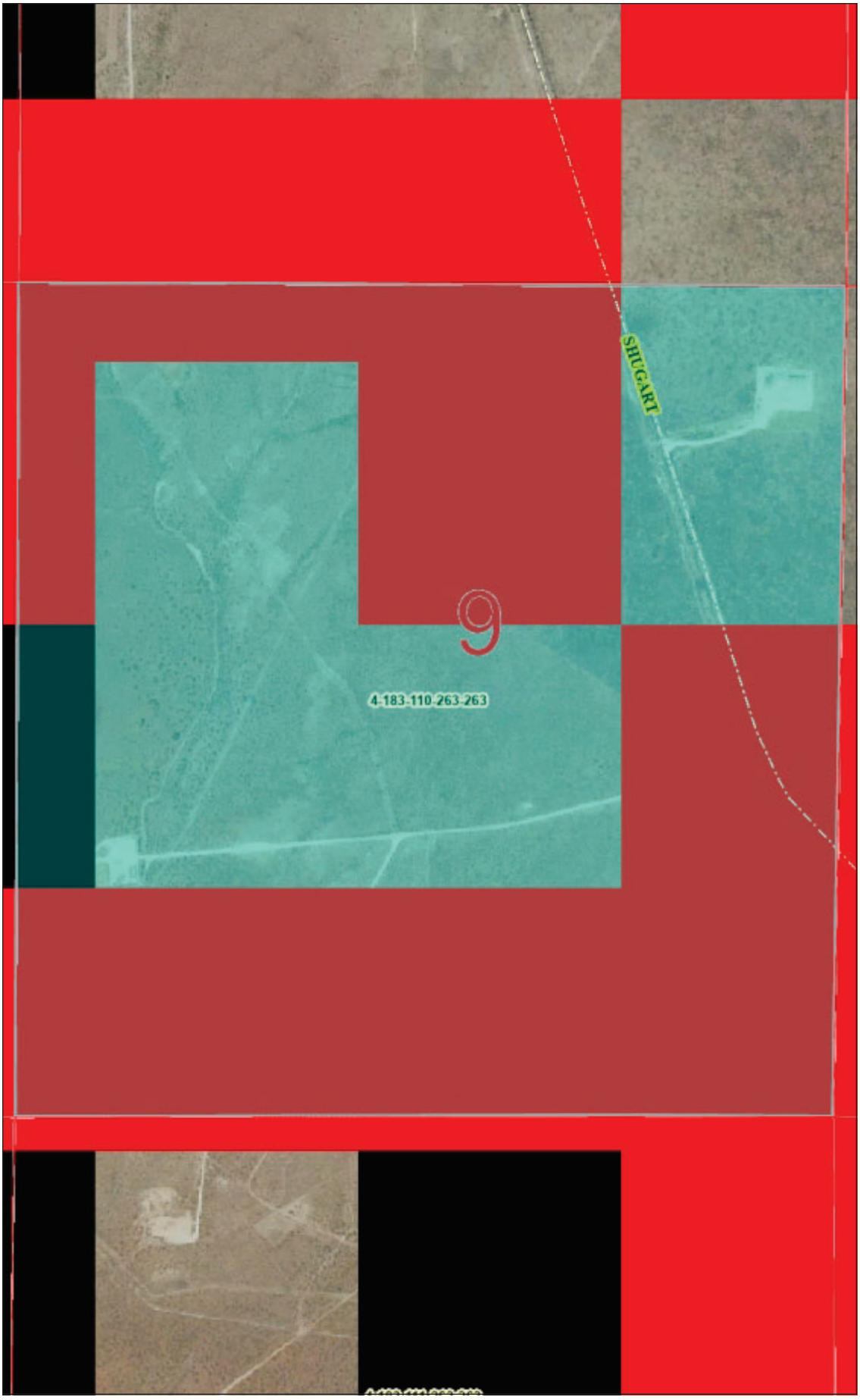
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OBJECTID_12_13_14: 4947
UPC: 4-184-111-263-263
UPC_join: 4184111263263
ACCOUNTNUMBER: R094128
LEGALSUMMARY: Quarter: NE S: 15 T: 19S R: 31E Quarter: NW S: 15 T: 19S R: 31E Quarter: SW S: 15 T: 19S R: 31E Quarter: SE S: 15 T: 19S R: 31E ALL MAP# 160-15 LOC LOCO HILLS EXEMPT
OWNERNAME: BUREAU OF LAND MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 64650
TAXYEAR_1: 2021
ACCOUNTNUMBER_1: R094128
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160250195.1609484400000
DOCUMEN_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160250195
OBJECTID_12: 57728
TAXYEAR_12: 2021
ACCOUNTNUMBER_12: R094128
SEQUENCE_R_1: 0
INTERNALID_1: R094128.LAND2766209.1511266773749
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R094128
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: 16O_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511266773749

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.

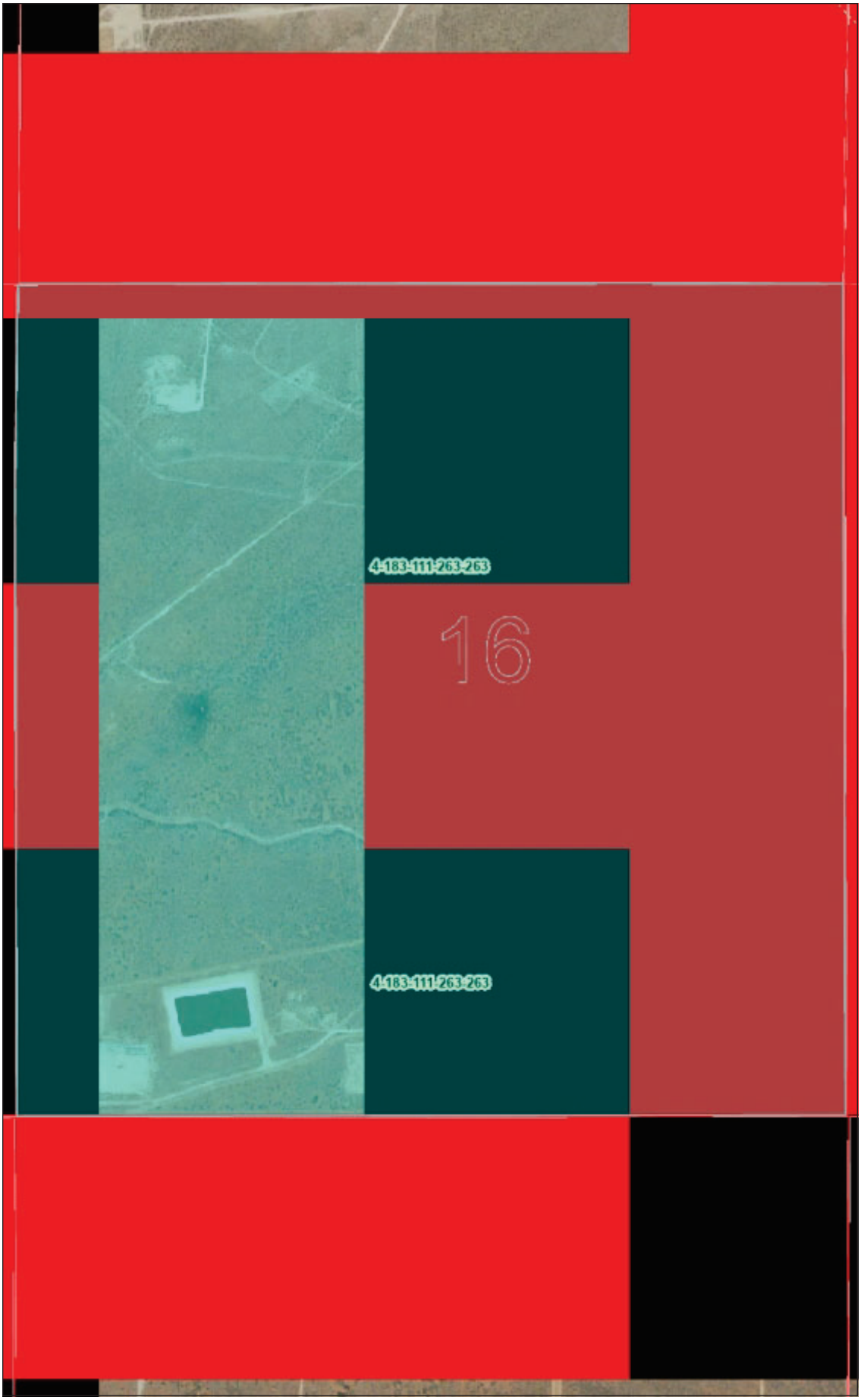
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OBJECTID_12_13_14: 4927
UPC: 4-183-110-263-263
UPC_join: 4183110263263
ACCOUNTNUMBER: R094122
LEGALSUMMARY: Quarter: NE S: 9 T: 19S R: 31E Quarter: NW S: 9 T: 19S R: 31E Quarter: SW S: 9 T: 19S R: 31E Quarter: SE S: 9 T: 19S R: 31E ALL MAP# 160-9 LOC LOCO HILLS EXEMPT
OWNERNAME: BUREAU OF LAND MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 64644
TAXYEAR_1: 2021
ACCOUNTNUMBER_1: R094122
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160250195.1609484400000
DOCUMEN_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160250195
OBJECTID_12: 57722
TAXYEAR_12: 2021
ACCOUNTNUMBER_12: R094122
SEQUENCE_R_1: 0
INTERNALID_1: R094122.LAND2766203.1511266770098
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R094122
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: 16O_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511266770098

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.

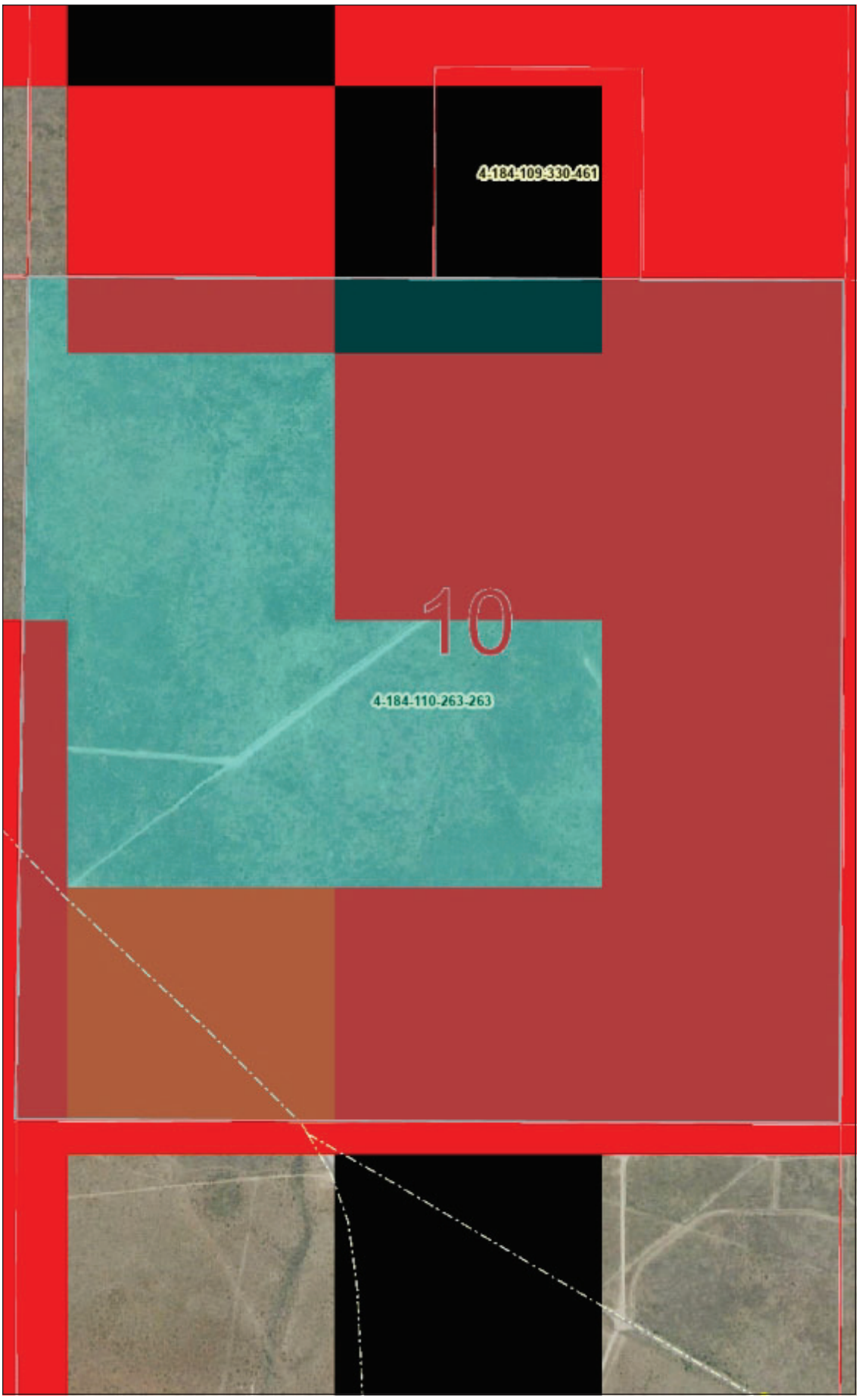
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OBJECTID_12_13_14: 4928
UPC: 4-183-111-263-263
UPC_join: 4183111263263
ACCOUNTNUMBER: R094131
LEGALSUMMARY: Quarter: NE S: 16 T: 19S R: 31E Quarter: NW S: 16 T: 19S R: 31E Quarter: SW S: 16 T: 19S R: 31E Quarter: SE S: 16 T: 19S R: 31E ALL MAP# 160-16 LOC LOCO HILLS EXEMPT
OWNERNAME: STATE OF NEW MEXICO
LANDACTUAL: 2880
OBJECTID_1: 64653
TAXYEAR_1: 2021
ACCOUNTNUMBER_1: R094131
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160250196.1451631600000
DOCUMEN_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERADDRESS_ADDRESS1: 310 OLD SANTA FE TRAIL SANTA FE, NM 87504
OWNERADDRESS_CITY: SANTA FE
OWNERADDRESS_STATE: NM
OWNERADDRESS_ZIP: 87504
OWNERID_1: C20160250196
OBJECTID_12: 57731
TAXYEAR_12: 2021
ACCOUNTNUMBER_12: R094131
SEQUENCE_R_1: 0
INTERNALID_1: R094131.LAND2766856.1511266775250
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R094131
ACTUALAREA: 640
LANDCODE: 153_4_5
TAXAREA: 16O_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511266775250

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OBJECTID_12_13_14: 4946
UPC: 4-184-110-263-263
UPC_join: 4184110263263
ACCOUNTNUMBER: R094123
LEGALSUMMARY: Quarter: NE S: 10 T: 19S R: 31E Quarter: NW S: 10 T: 19S R: 31E Quarter: SW S: 10 T: 19S R: 31E Quarter: SE S: 10 T: 19S R: 31E ALL MAP# 160-10 LOC LOCO HILLS EXEMPT
OWNERNAME: BUREAU OF LAND MANAGEMENT
LANDACTUAL: 2880
OBJECTID_1: 64645
TAXYEAR_1: 2021
ACCOUNTNUMBER_1: R094123
SEQUENCE_R: 0
OWNER_OCCURENCE: 0
INTERNALID: C20160250195.1609484400000
DOCUMEN_TTYPE: Owner
ACTIVE_1: A
CONFIDENTIAL: 0
OWNERID_1: C20160250195
OBJECTID_12: 57723
TAXYEAR_12: 2021
ACCOUNTNUMBER_12: R094123
SEQUENCE_R_1: 0
INTERNALID_1: R094123.LAND2766204.1511266770600
MODEL_TYPE: Land
ACCOUNTNUMBER_12_13: R094123
ACTUALAREA: 640
LANDCODE: 141_4_5
TAXAREA: 16O_NR
VERSIONEND_1: 9223372036854775807
VERSIONSTART_1: 1511266770600

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Affidavit of Publication

No. 57600

State of New Mexico Publisher

County of Eddy:

Adrian Hedden

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

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

Legal Ad

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

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

First Publication August 7, 2025

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Sixth Publication

Seventh Publication

Eighth Publication

Subscribed ans sworn before me this

7th day of August 2025

LATISHA ROMINE
Notary Public, State of New Mexico
Commission No. 1076338
My Commission Expires
05-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

NOTICE OF AIR QUALITY PERMIT APPLICATION

Frontier Field Services, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the **modification** of its gas plant facility. The expected date of application submittal to the Air Quality Bureau is **August 8, 2025.**

The exact location for the facility, known as **Kings Landing Gas Plant,** is at **32.663476°, -103.369425°.** The approximate location of this facility is 12.73 miles **southeast** of **Loco Hills** in **Eddy** County.

The proposed **modification** consists of authorizing an increase in SSM flaring for the plant process flare and amine flare, the addition of a thermal oxidizer, and updates to emissions sources due to an update to the inlet gas representation.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	3	11
PM_{10}	3	11
$PM_{2.5}$	3	11
Sulfur Dioxide (SO_2)	156	249
Nitrogen Oxides (NO_x)	381	150
Carbon Monoxide (CO)	779	249
Volatile Organic Compounds (VOC)	650	213
Total sum of all Hazardous Air Pollutants (HAPs)	22	13
Hydrogen Sulfide (H_2S)	4	4
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO_2e	N/A	2,630,894

The standard and maximum operating schedules of the facility will be 24 hours per day, 7 days per week and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is: **Frontier Field Services, LLC, 303 Veterans Airpark Lane, Suite 2000, Midland, Texas, 79705.**

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to the address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally: (505) 476-4300; 1 800 224-7009.

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

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

Atención
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-7745.

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

August 7, 2025
57600

CURRENT-ARGUS
CLASSIFIEDS

To Advertise:
Classifieds: **classifieds@currentargus.com**
Public Notices/Legals: **legals@currentargus.com**
Phone: **575.628.5501**

All classifieds are subject to applicable rate card, copies of which are available from our Advertising Dept. All ads are subject to approval before publication. Current-Argus reserves the right to edit, refuse, reject, classify or cancel any at any time. Errors must be reported in the first day of publication. Current Argus shall not be liable for any loss or expense that results from an error in or omission of an advertisement. No refunds for early cancellations of order.

Announcements
Displays
Announcements

NOTICE!!!
FREE AD!
Call 888-986-9877.
-If you have an item, asking less than $500, we will publish it in the paper for four weeks for free.
-Five lines or less.
-Must include price and phone number. No websites.
-You may also email: classifieds@currentargus.com
-Private party ads only (no commercial, business, service or pet ads)
-This offer is subject to change without prior notice.

BUSINESS & SERVICES
Tree Services

ROADRUNNERS TREE SERVICES. Fully insured. Quality work. Free estimates. 575-703-1604.

PUBLIC NOTICE
Public Notices

LEGAL NOTICE

The EDDY-LEA ENERGY ALLIANCE will hold a **Special** Meeting on Monday, August 11, 2025 at 9:00 A.M. at the City of Carlsbad, City Council Chambers located at 114 N. Halagueno, New Mexico 88220. A copy of the agenda can be obtained from the Eddy-Lea Energy Alliance Website www.eddyleaenergyalliance.com, seventy-two (72) hours prior to the meeting. If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact Carlsbad City Attorney's Office at 575-887-1191 at least seventy two (72) hours prior to the meeting or as soon as possible. Public documents, including the agenda and minutes, can be provided in various accessible formats. Please contact the Carlsbad City Attorney's Office if a summary or other type of accessible format is needed.
EDDY-LEA
ENERGY ALLIANCE
John Heaton, Chair

Published in the Carlsbad Current-Argus August 7, 2025.
#57290

Classified shoppers aren't desperate... just smart consumers that like to save money.

Public Notices

LEGAL NOTICE OF REQUEST FOR PROPOSAL
City of Carlsbad,
New Mexico
ON-CALL CONSTRUCTION SERVICES

RFP 2025-10

The City of Carlsbad is requesting proposals from qualified licensed contractors for the **On-Call Construction Services** for the following categories:

General Construction
Street Construction and Repair
Low Voltage Electrical and Cabling
Plumbing
HVAC/Mechanical
Exterior/Interior Painting
Electrical
Roofing
Fencing
Landscaping
Structural Demolition
Weed and Brush Control
Excavation and Earthwork
Water and Sewer Systems Construction and Repairs

Proposals must be received by the City of Carlsbad, Purchasing Manager, Room 114, Carlsbad Municipal Building, 101 N. Halagueno, Carlsbad, NM 88220 by **Friday, August 15, 2025 no later than 5:00 p.m. local time**. Proposals submitted after the due date/time will not be accepted.

RFP documents, and all related information is available on the City of Carlsbad website at the following address:

http://www.cityofcarlsbadnm.com/purchasing.cfm

Copies of the RFP can also be obtained by contacting the Purchasing Manager Matt Fletcher, at PO Box 1569, Carlsbad, NM 88221-1569, (575) 887-1191 ext. 7915 or by email request to msfletcher@cityofcarlsbadnm.com.

A pre-bid conference will not be held.

/s/ Matt Fletcher, CPO
City of Carlsbad

Published in the Carlsbad Current-Argus August 7, 2025.
#57530

Qualified buyers don't investigate every ad, just the ones that offer a good deal.

Got a good website? Include the URL in your ad.

Public Notices

Notice of Intent to Award
Sole Source Contract

Southeast New Mexico College (SENMC) 1500 University Dr. Carlsbad NM 88220 intends to make a purchase that has been determined to qualify as a "Sole Source" Purchase. The purpose of this "Notice of Intent to Award" is to publicly announce SENMC's intent to award a Sole Source Contract. Any vendor who does not agree that this service, construction, or item of tangible personal property is available only from the vendor determined to be a sole source may protest the "Notice of Intent to Award" in writing within fifteen (15) calendar days of the date of this notice.

Please submit your protest by emailing purchasing@senmc.edu. You may call Rebecca Silva, Director of Finance at 575-234-9213 with any questions.

Published in the Carlsbad Current-Argus August 7, 14 & 21, 2025.
#57500

Please take notice that a hearing on Kinetik NM Gas Gathering, LLC"s proposed 24" gathering gas line beginning in the SW1/4 of Section 2, Township 22 South, Range 26 East (closest street W. Leah Street State Hwy 524) and terminating at Lots 1 and 2, Lots 3 and 4 South of US Highway 62-180, and the S1/2 NW1/4of Section 4, Township 22 South, Range 27 East (closest street - US Highway 62-180), within the City of Carlsbad, NM, being constructed, placed, and maintained in compliance with all applicable laws, rules, and regulations will be held on August 12, 2025 at 6:00 PM at Carlsbad Municipal Building 114 S Halagueno St, Carlsbad, NM 88220.

For additional information contact:
Kinetik NM
Gas Gathering, LLC
J.C. Cornett
303 Veterans Airpark Ln,
Ste. 2000
Midland, TX 79705
(432) 789-1333

Copies of the application may be obtained at the office of the city clerk.

Published in the Carlsbad Current-Argus July 24, 31 & August 7, 2025.
#56480

Public Notices

STATE OF NEW MEXICO
EDDY COUNTY
FIFTH JUDICIAL DISTRICT COURT
No.: D-503-PB-2025-00077

IN THE MATTER OF THE ESTATE OF LEAH ANGELA MCCOLL, DECEASED

NOTICE TO CREDITORS

Candice Joy Kuykendall has been appointed Personal Representative of the Estate of Leah Angela McColl, deceased. All persons having claims against this estate are required to present their claims within four months after the date of the first publication of this Notice or the claims will be forever barred. Claims must be presented to the Personal Representatives Attorney, Elizabeth Dinkel, Esq. at 1505 15th St, Suite C, Los Alamos, NM, 87544 or filed with the First Judicial District Court Clerk at 2500 Trinity Drive, Suite D, Los Alamos, NM 87544.

7-28-2025
DATE

/s/ Elizabeth Dinkel
Elizabeth Dinkel, Esq.
1505 15th St., Suite C
Los Alamos, NM 87544

Published in the Carlsbad Current-Argus July 31,August 7 & 14, 2025.
#56890

SELL IT
BUY IT
FIND IT
Place your classified ad today.

Classified shoppers aren't desperate... just smart consumers that like to save money.

INVITATION TO SUBMIT SEALED PROPOSAL

On or before Tuesday, September 9, 2025 at 2:00 PM Mountain Time, PROPOSALS for the service listed below must be submitted through the Vendor Registry Electronic Bidding System: https://vrapp.vendorregistry.com/Vendor/Selection/SubscriptionSelection?buyerSource=carlsbadmunicipal-schools-nm-vendor-registration

RFP # 2025-2026-01
On-Site Vehicle Washing Services for CMS Fleet

The Board of Education reserves the right to accept or reject any or all proposals. Specifications and bid forms may be obtained through Vendor Registry or at the District Web site:

https://www.carlsbadschools.net/departments/purchasing

BOARD OF EDUCATION
CARLSBAD MUNICIPAL SCHOOLS
CARLSBAD, NEW MEXICO 88220

ISSUED: Crystal Gonzalez, CMS Chief Procurement Officer
ATTEST: Emily Wirth, CMS Board of Education Secretary

Published in the Carlsbad Current-Argus August 7, 2025.
#57560

EDDY COUNTY, NM
EMPLOYMENT OPPORTUNITIES
101 W. GREENE ST – CARLSBAD, NM 88220
575-887-9511
www.eddycounty.org

OPEN UNTIL FILLED:
HR Generalist I - $22.06 - $24.35 per hour DOE
Detention Officer - $24.95 - $27.54 per hour DOE*
Detention Nurse - FT - $41.87 - $46.21 per hour DOE*
Fire Lieutenant - $23.18 - $25.58 per hour DOE
Light Equipment Operator - Artesia - $21.00 - $23.18 per hour DOE
Light Equipment Operator - Carlsbad - $21.00 - $23.18 per hour DOE
Light Equipment/Roll-Off Operator - Carlsbad - $21.00 - $23.18 per hour DOE
Landfill Laborer - $17.68 - $19.51 per hour DOE

Continuously Accepting Applications:
Deputy Sheriff II - Certified - $29.65 - $32.72 per hour DOE
Firefighter/EMT - Certified - $22.61 - $24.95 per hour DOE
Firefighter/EMT - Uncertified - $21.53 per hour DOE

SIGN ON INCENTIVE BONUS OF $5,000 FOR FULL-TIME DETENTION OFFICERS AND FULL-TIME/PART-TIME DETENTION NURSES

Excellent Benefits - paid vacation, sick leave and holiday pay; 40 hours of personal leave; PERA retirement plans; and health insurance paid at 100% for full-time employees and their dependents.

Detailed job specifications and applications may be obtained **at www.eddycounty.org.**

EQUAL OPPORTUNITY EMPLOYER M/F V/D

SELL IT BUY IT FIND IT
Place your classified ad today.

Hide While You Seek! Our "Blind Boxes" protect your privacy.

Need privacy and speed? Ask about our "blind boxes."

-WANTED-
WATER RIGHTS
WATERBANK
NMREC License No. 13371
NMFID License No 0120
Telephone: 505-843-7643
Email: wturner@waterbank.com
Broker: William Turner, QB, PhD
Albuquerque, NM 87102
ER-ERM56200

City of Carlsbad
Employment Opportunities
101 N. Halagueno, Carlsbad, NM 88220
575-887-1191
www.cityofcarlsbadnm.com

Open until filled (unless otherwise posted)

Patrol Officer, uncertified	$28.77 per hour
Patrol Officer, certified	$32.38 per hour DOQ
Waste Water Foreman	$31.44 - $36.95 per hour DOQ
Transit Driver, on-call	$20.93 per hour
Telecommunicator	$25.01-$33.76 per hour DOQ
Firefighter/EMT	$67,393 - $84,534 annually DOQ
Recreation Center Attendant, on-call	$20.93 per hour
Vactor Operator	$30.92 per hour
Community Service/ Law Enforcement Officer Transition	$25.90 per hour
Electrician	$42.05 per hour
Sports & Recreation Attendant	$20.93 per hour
Golf Course Assistant Manager (Closes August 7, 2025)	$33.50 per hour
Executive Administrator Coordinator (Closes August 8, 2025)	$30.04 per hour
Transit Driver, Part-Time (Closes August 15, 2025)	$20.93 per hour
Senior Recreation Attendant (Closes August 15, 2025)	$20.93 per hour

Excellent Benefits – vacation, sick leave, 13 paid holidays, PERA retirement plan, health insurance (medical, dental, vision).

To apply send applications to hr@cityofcarlsbadnm.com

Detailed job descriptions and applications are available online at www.cityofcarlsbadnm.com/employment-opportunities.

EOE M/F/V/D

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August 7, 2025
57600

Affidavit of Publication

No. 58250

State of New Mexico

County of Eddy:

Adrian Hedden

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

of the Carlsbad Current-Argus a daily newspaper of General circulation, published in English at Eddy, said county and state, and that the hereto attached

Display Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

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

First Publication August 9, 2025

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed ans sworn before me this

11th day of August 2025

LATISHA ROMINE
Notary Public, State of New Mexico
Commission No. 1076338
My Commission Expires
05-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

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Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	3	11
PM_{10}	3	11
$PM_{2.5}$	3	11
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Nitrogen Oxides (NO_x)	381	150
Carbon Monoxide (CO)	779	249
Volatile Organic Compounds (VOC)	650	213
Total sum of all Hazardous Air Pollutants (HAPs)	22	13
Hydrogen Sulfide (H_2S)	4	4
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO_2e	N/A	2,630,894

The standard and maximum operating schedules of the facility will be 24 hours per day, 7 days per week and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is: **Frontier Field Services, LLC, 303 Veterans Airpark Lane, Suite 2000, Midland, Texas, 79705.**

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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

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

Atención

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

Notice of Non-Discrimination

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

The rest of the story: Ozzy's 'World Detour'

K. Jan Wafful
Otero County Film Liaison



COURTESY OF TIM AND CLARISSA MCGINN

Picture of the full cast, crew, owners and employees at the McGinn's Pistachioland visit and spice flavor mix "Nut Showdown" won by Kelly Osbourne against her dad, Ozzy, and brother Jack.

2018 was an interesting year for the Otero County Film Office. Since becoming the film liaison in 2006, the personal office policy that is held most important is never to miss a film call and never let a project opportunity go unanswered for the film office and the sake of countywide economic development. An unexpected call from A&E television producer Dan Hall one morning was answered, as always, on the second ring. He introduced himself and remarked that he was calling film liaisons in smaller communities in New Mexico and was having trouble connecting with anyone. He was delighted that this phone call had scored a quick and lively response. He explained that he was producing a "Reality" TV show in Los Angeles and it was about two guys traveling around the United States in an RV to see local historical sites and to experience the interesting places to go and things to do and they wanted to come to New Mexico. Naturally they wanted things like the Native American culture and art in Northern New Mexico—but they were calling smaller communities with iconic and historic sites as well. He was surprised that, so far, not one small place had responded to his inquiries with any ideas of what people could do there.

Having a background in both tourism and film, we chatted for a while and emailed pictures and he wrote down an avalanche of information, history and places that he could bring his crew to explore on a visit to Otero County. Ranching and modern-day cowboy scenes were of great interest, but also the suggestion to visit nearby pistachio farms and wineries for spiced nut mixes and local wine-tasting. Then White Sands, the Space Museum, the Tularosa Basin History Museum, the zoo, and the attractions of Cloudcroft's Hwy Tunnel, Mexican Trestle and the haunted Victorian Lodge were all written down on the list of noteworthy things to see and do here along with about 40 other ideas. It was brainstorming at its finest. Dan Hall was elated to have all this information and wound up the call with effusive thanks and a promise to get back to the film office if any of these numerous ideas appealed to the director and staff.

About two or three days later, this A&E producer called back himself. He wanted to be the one who called to let the film office know that because of our friendly conversations the director and staff were very pleased with both the pictures and ideas exchanged for their TV show—so much so that they had decided that New Mexico and Otero County would be a perfect smaller community to visit. Then Dan Hall imparted the confidential part of the call: The "Reality" TV show was titled "Ozzy and Jack's World Detour" and the stars would be Ozzy Osbourne and his adult son, Jack Osbourne. The film office quickly sent them a registration, asked where they wanted to go and set about to contact private and government properties of the impending opportunity to host this project. This popular icon heavy metal rocker has not only proven that he had musical star-power and unprecedented showmanship, but also that he is an avid history buff and despite some old catchphrases and subsequent weird public typecasting, he is a great father and the heart of his family.

The film office collaborated with the show and made sure that all the named entities wanted them to visit and would support the show. Two days before the show's arrival to film here, Dan Hall called once again with some added good news. Not only were we going to host Ozzy and Jack, but Kelly Osbourne, Ozzy's famous fashion-review icon daughter who had worked red carpets with Joan and Melissa Rivers, was coming on the shoot as well to spend some time with her dad and brother. That was a surprise that was so welcome. The only family member who would not be present was Ozzy's wife, Sharon, who was scheduled with another TV talk show. The film shoot in every different location was lovely, as were the Osbournes. A director even remarked that the most animated he had seen Ozzy and the family was while they shot here. They were gracious and kind—so lovely.

They visited all the places we agreed upon and when we got out to McGinn's Pistachioland they were excited to compete in creating new and unusual spice flavors of pistachio nuts at the pistachio certified kitchens. Jack concocted "Jack's Nuts," a bourbon BBQ spice blend, while Ozzy made "Ozzy's Nuts," which was a big hit with an exotic curry spice blend that was his favorite. The overall winner was Kelly with a "Kelly's Nuts" blend that was made with garlic and honey and all savory-sweet. They visited the Oliver ranch and made some great friends, with Ozzy even joining the Alamogordo Chamber of Commerce, which G.B. Oliver was the director of at that time.

Then an amazing thing happened when they visited White Sands. All three of them started Instagramming their photos from White Sands and Instagram notified us that White Sands was the #1 Instagrammed photo location shared by the public—in the entire world—that day! No one here could pay for advertising that great on a global scale.

The film office will always be glad that they chose to come here for the historical value and to see the historic sites we have. The film office learned the sad news—that we have lost this amazing rocker. Ozzy has left our earthly world perhaps to play again on a much larger stage in a more spiritual musical dimension. Rest in Peace, Ozzy. And as a film office radio hero, Paul Harvey, would say ... "and now you know the rest of the story."



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ER-ERM57870

Section 10

Written Description of the Routine Operations of the Facility

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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.

Operations Summary: KLGP is a cryogenic natural gas processing facility rated up to 220 MMSCFD. Field gas from area gathering system(s) arrives at the plant inlet at gas processing pressure, thereby eliminating the need for inlet compression. Once the gas arrives at the KLGP, it passes through an inlet separator (harp system) designed to remove liquids including both condensate and produced water. Condensate is sent to a high-pressure condensate stabilizer (non-emitting) and condensate and any slop is sent to the condensate tanks. There is an electric stabilizer overheads compressor (C-1). Over-head vapors from the condensate stabilizer are routed back to the facility inlet. Flashing, working, and breathing vapors from condensate storage tanks (TK 3012A, TK 3020A, TK3020B, and TK 3020C) are collected in a closed vent system and routed to the tanks and loading flare (FL-3030).

Once the field gas leaves the inlet separator it is sent to an amine treating system for removal of carbon dioxide and H2S down to pipeline specifications. Heat needed for regenerating rich amine from the amine treating process is provided by the hot oil heater (H-1400). Both the amine flash tank and amine still overhead vent is sent to a closed vent system and routed to the thermal oxidizer (FL-1317). During periods of FL-1317 downtime, the amine flash tank and amine still overhead vent will be routed to the amine flare (FL-1318). Amine treated rich gas exiting the amine system enters a tri-ethylene (TEG) glycol system to remove water from the saturated gas stream. Heat needed to regenerate rich TEG is provided by a direct fired heater (H-1300). The TEG flash tank is sent to a closed vent system and routed to the plant process flare header (FL-3015). The TEG still vent over-head stream is sent to a BTEX condenser and the non-condensable gas is routed to an enclosed combustor (FL-3042). Once the gas leaves the TEG system, it is routed through mole sieve beds to remove any remaining water prior to entering the cryogenic section of the plant. The mole sieve beds are regenerated with the regen heater (H-741).

Treated, dry gas is now sent to the cryogenic section (CRYO-1) of the plant. Gas enters the demethanizer tower where sub-zero temperatures combined with a large pressure drop facilitate the condensation of natural gas liquids (NGL/Y-Grade) from the gas stream. The NGL product is sent to the plant NGL surge tank then pumped out to markets through a pipeline. There are three electric propane refrigeration compressors (C-2, C-3, and C-4). The overhead stream of the demethanizer tower, consisting predominantly of methane, with some ethane is routed to a suction header where electric powered compressors (C-5 through C-9) recompress the residue gas up to pipeline pressure and sold to various markets. Two engine driven compressors (ENG-1 and ENG-2) are also used for residue gas compression at the facility

Two 5.7 MW turbines are also on-site to generate power for site-wide use, mainly for use due to power supply interruptions.

Startup, Shutdown, and Maintenance (SSM) Emissions: Various equipment blowdowns may occur during SSM events. The current GCP-O&G permit authorizes up to 10 tpy of VOC SSM emission to account for equipment blowdowns vented directly to atmosphere. Flaring of inlet gas to FL-3015 may also occur during SSM events and flaring of acid gas to FL-1318 may occur during FL-1317 downtime. These flaring emissions have been quantified in the attached SSM calculations.

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)**:**
The Kings Landing Gas Plant is located approximately 15 miles southwest of Maljamar, in Eddy County, New Mexico. The gas plant is a cryogenic natural gas processing facility rated up to 220 MMSCFD. The entire facility is the Kings Landing Gas Plant and includes no other nearby sources or properties.

In the vicinity of the Kings Landing Gas Plant to the north and south is a well site; however, they are not owned or operated by Frontier Field Services, LLC, nor are they on the same surface site.

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

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

☑Yes ☐ No

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

☐Yes ☑ No

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

☐ Yes ☑ No

C. Make a determination:

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

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

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

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

B. **This facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions** for this modification are **not significant as the emissions changing with this application do not exceed major stationary thresholds. The "project" emissions listed below do only result from changes described in this permit application, thus no emissions from other revisions or modifications, past or future apply to this facility. Also, specifically discuss whether this project results in "de-bottlenecking", or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:**

a. **NOx: 121.32 TPY**
b. **CO: 239.68 TPY**
c. **VOC: 192.8 TPY**
d. **SOx: 248.25 TPY**
e. **PM: 9.86 TPY**
f. **PM10: 9.67 TPY**
g. **PM2.5: 9.63 TPY**
h. **Fluorides: N/A TPY**
i. **Lead: N/A TPY**
j. **Sulfur compounds (listed in Table 2): 1.47 TPY**
k. **GHG: 2,391,721 TPY**

C. **Netting is not required as this project is not considered a PSD major source by itself.**

D. **BACT** is not required for this modification as this application does not trigger a PSD determination.

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.
This site is not an existing PSD source and this project does not constitute a major stationary source by itself.

Section 13

Determination of State & Federal Air Quality Regulations

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

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

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

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

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

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

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

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

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

Example of a Table for State Regulations:

State Regulation Citation	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 Construction permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
20.2.7 NMAC	Excess Emissions	Yes	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	N/A	This regulation does not apply as the facility has no need to incorporate fugitive dust control measures as the facility does not generate enough emissions. As of January 2019, the only areas of the state subject to a mitigation plan per 40 CFR 51.930 are in Dona Ana and Luna Counties. As this site is located in Eddy County, a mitigation plan is not required.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	**This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers.** This facility does not have gas burning equipment (external combustion emission sources, such as gas fired boilers and heaters) having heat input greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.33.108 NMAC.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No	N/A	**This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers.** This facility does not have oil burning equipment (external combustion emission sources, such as oil fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.34.108 NMAC.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	Yes	N/A	This regulation establishes sulfur emission standards for natural gas processing plants. This facility meets the definition of natural gas processing plant under this regulation and is subject to the requirements of this regulation [20.2.35.7(B) NMAC]. The facility will comply with all applicable requirements under 20.2.35 NMAC.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	**These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.**
20.2.38 NMAC	Hydrocarbon Storage Facility	Yes	TK 3012A, TK 3020A, TK 3020B, TK 3020C	This facility has condensate storage capacity greater than 65,000 gallons. This facility will comply with all applicable requirements under 20.2.38 NMAC.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This site is a natural gas processing facility. As such, this regulation does not apply.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	ENG-1, ENG-2, TURB-1, TURB-2, H-1400, H-741, H-1300, H-781, TK 3012A, TK	This regulation establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for oil and gas production, processing, compression, and transmission sources. 20.2.50 NMAC subparts below: Include the construction status of applicable units as “New”, “Existing”, “Relocation of Existing”, or “Reconstructed” as defined by this Part in your justification:

State Regulation Citation	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.)
			3020A, TK 3020B, TK 3020C, DEHY-1, FUG-1	Check the box for the subparts that are applicable: ☒113 – Engines and Turbines ☒114 – Compressor Seals ☒115 – Control Devices and Closed Vent Systems ☒116 – Equipment Leaks and Fugitive Emissions ☐ 117 – Natural Gas Well Liquid Unloading ☒ 118 – Glycol Dehydrators ☒ 119 – Heaters ☒ 120 – Hydrocarbon Liquid Transfers ☒121 – Pig Launching and Receiving ☒122 – Pneumatic Controllers and Pumps ☒ 123 – Storage Vessels ☐124 – Well Workovers ☐ 125 – Small Business Facilities ☐126 – Produced Water Management Unit ☐127 – Flowback Vessels and Preproduction Operations
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	ENG-1, ENG-2, TURB-1, TURB-2, H-1400, H-741, H-1300, H-781, FL-3030, FL-3042, FL-1317, FL-1318, FL-1315	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	This regulation establishes requirements for obtaining an operating permit. This facility is a Title V major source. An application for Title V permit will be submitted separate from this application.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. The facility is subject to 20.2.70 NMAC and is therefore subject to requirements of this regulation.
20.2.72 NMAC	Construction Permits	Yes	Facility	This regulation establishes the requirements for obtaining a construction permit. This facility is a stationary source with a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Air Quality Standard. This application is for a construction permit under 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	Emissions Inventory Reporting per 20.2.73.300 NMAC applies to the site. All facilities that are a Title V Major Source as defined under 20.2.70.7.R NMAC are subject to Emissions Inventory Reporting.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	Minor NSR site.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation applies since this submittal is an application pursuant to 20.2.72 NMAC.
20.2.77 NMAC	New Source Performance	Yes	Units C-1 through C-9 (Electric Compressors), FUG-1,	This is a stationary source which is subject to the requirements of 40 CFR Part 60.

State Regulation Citation	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.)
			Amine-1, TK 3012A, TK 3020A, TK 3020B, TK 3020C, – NSPS OOOOb applies. ENG-1, ENG-2 – NSPS JJJJ applies. TURB-1, TURB-2 – NSPS KKKK applies.	
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	No units at this site are subject to 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	Site is not located in a nonattainment county.
20.2.80 NMAC	Stack Heights	No	N/A	This regulation does not apply as all stacks at the facility follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	DEHY-1	This facility is subject to the requirements of 40 CFR 63 Subpart HH, which includes requirements applicable to area sources with TEG Dehydrators. The site is not a major source of HAPs, but an area source of HAPs and therefore is subject to this subpart. The dehydrator has the potential to emit less than 1 tpy (0.90 megagram per year) of benzene and is therefore exempt from the requirements of §63.764(d) pursuant to §63.764(e)(1)(ii).

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

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	The facility meets all applicable NAAQS for NOx, CO, SO2, H2S, PM10 and PM2.5 under this regulation.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units C-1 through C-9 (Electric Compressors), FUG-1, Amine-1, TK 3012A, TK 3020A, TK 3020B, TK 3020C, ENG-1, ENG-2, TURB-1, and TURB-2	Applies if any other Subpart in 40 CFR 60 applies. The units listed are subject to other NSPS subparts.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No	N/A	No units are subject to NSPS Subpart Da.
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No	N/A	No units are subject to NSPS Subpart Db.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	Facility heaters are not steam generating units.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for **Storage Vessels for Petroleum Liquids** for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** to July 23, 1984	No	N/A	No storage vessels for petroleum liquids were constructed, reconstructed, or modified after May 18, 1978 and prior to July 23, 1984.
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	No	N/A	No volatile organic liquid storage vessels were constructed, reconstructed, or modified after July 23, 1984 and prior to October 4, 2023.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
	Commenced **After** July 23, 1984			
NSPS 40 CFR 60, Subpart Kc	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** October 4, 2023	Yes	TK 3012A, TK 3020A, TK 3020B, TK 3020C	This facility has storage vessels with capacity greater than or equal to $75m^3$ that are used to store volatile organic liquids for which construction commenced after October 4, 2023.
NSPS 40 CFR 60, Subpart GG	**Stationary Gas Turbines**	No	N/A	Turbines are subject to 40 CFR 60 Subpart KKKK; therefore, are exempt from the requirements of this regulation.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No	N/A	This facility commenced construction after August 23, 2011. Thus, the facility is not subject to this subpart.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	No	N/A	This facility is a natural gas processing plant; however, this is no sulfur recovery plant. Thus, this location does not meet the applicability criteria of 40 CFR 60.640.
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	This facility commenced construction after September 18, 2015.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced **After** September 18, 2015 and On or Before December 6, 2022	No	N/A	This facility commenced construction after December 6, 2022.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR Part 60 Subpart OOOOb	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced **After** December 6, 2022	Yes	Units C-1 through C-9 (Electric Compressors), FUG-1, Amine-1, TK 3012A, TK 3020A, TK 3020B, TK 3020C	This facility commenced construction after December 6, 2022. Affected facilities will comply with all applicable requirements.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	There are no compression ignition internal combustion engines on site.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	ENG-1, ENG-2	Engines ENG-1 and ENG-2 are spark ignition internal combustion engines subject to this subpart and will comply with all applicable standards.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	Stationary combustion turbines were constructed after May 23, 2023.
NSPS 40 CFR 60 Subpart TTTTa	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	Stationary combustion turbines were constructed after May 23, 2023, but have a base load rating of less than 260 gigajoules per hour (250 MMBtu/hr); therefore, are not subject to this subpart.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This facility is not a municipal solid waste landfill. This regulation does not apply.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	No sources at this site are applicable to any Subpart in 40 CFR 61.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No	N/A	The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge. This facility is not subject to this regulation.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No	N/A	This regulation establishes national emission standards for equipment leaks (fugitive emission sources). This facility does not have equipment that operates in volatile hazardous air pollutant (VHAP) service. This facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	DEHY-1, ENG-1, ENG-2	This facility is an area source of HAPs. The listed units are subject to a subpart under 40 CFR 63.

Federal Regulation Citation	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	DEHY-1	This facility is a HAP area source and is subject to the requirements of 40 CFR 63 Subpart HH. The dehydrator has the potential to emit less than 1 tpy (0.90 megagram per year) of benzene and is therefore exempt from the requirements of §63.764(d) pursuant to §63.764(e)(1)(ii).
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	N/A	This facility is not a natural gas transmission or storage facility; therefore, this subpart does not apply.
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	This facility is an area source of HAPs; therefore, this regulation 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	This facility does contain an affected source under this regulation; therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	ENG-1, ENG-2	Engines ENG-1 and ENG-2 are stationary RICE subject to this subpart. These units will comply with ZZZZ by complying with NSPS Subpart JJJJ, per 40 CFR 63.6590(c)(1).
40 CFR 64	**Compliance Assurance Monitoring**	TBD	TBD	CAM will be addressed as part of the initial Title V permit.
40 CFR 68	**Chemical Accident Prevention**	No	N/A	This facility is exempt from being subject to this chapter as it handles naturally occurring hydrocarbon mixtures as stated in 40 CFR 68.115(b)(2)(iii).
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	No	N/A	This part does not apply because the facility is not covered by this regulation (40 CFR Part 72.6).
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No	N/A	This part does not apply because the facility is not covered by this regulation (40 CFR Part 72.6).
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No	N/A	This part does not apply because the facility is not covered by this regulation (40 CFR Part 72.6).

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No	N/A	This part does not apply because the facility is not covered by this regulation (40 CFR Part 72.6).
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	This regulation is not applicable because this facility does not “service”, “maintain”, or “repair” class I or class II appliances nor “disposes” of the appliances.

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.

Frontier keeps the above-mentioned required plans and documentation on site.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

There are no alternative operating scenarios being requested with this application.

Section 16

Air Dispersion Modeling

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

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

Check each box that applies:

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

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

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

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

☐ No modeling is required.

Universal Application 4

Air Dispersion Modeling Report

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

16-A: Identification

1	Name of facility:	Kings Landing Gas Plant
2	Name of company:	Frontier Field Services, LLC
3	Current Permit number:	9868
4	Name of applicant's modeler:	Jon Taliaferro
5	Phone number of modeler:	361-215-9994
6	E-mail of modeler:	Jon.taliaferro@trinityconsultants.com

16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes☒	No☐
2	Why is the modeling being done?	Adding New Equipment	
3	Describe the permit changes relevant to the modeling.		
	Changes with the NSR permit application include: the addition of SSM to the plant process flare (FL-1) and amine flare (FL-2), the addition of a thermal oxidizer (TO-1) for the amine train acid gas, and updates to emissions sources due to an update to the inlet gas representation and process flow modeling for the plant.		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	More than one year	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes☐	No☒

7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	
8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2	3/16/1988	
	SO2	7/28/1978	
	PM10	2/20/1979	
	PM2.5	11/13/2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	Carlsbad Caverns National Park 70.6 km from the facility.		
10	Is the facility located in a non-attainment area? If so describe below	Yes☐	No☒
	N/A		
11	Describe any special modeling requirements, such as streamline permit requirements.		
	N/A		

16-C: Modeling History of Facility

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

Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
CO	N/A	N/A	
NO_2	N/A	N/A	
SO_2	N/A	N/A	
H_2S	N/A	N/A	
PM2.5	N/A	N/A	
PM10	N/A	N/A	
Lead	N/A	N/A	
Ozone (PSD only)	N/A	N/A	
NM Toxic Air Pollutants (20.2.72.402 NMAC)	N/A	N/A	

16-D: Modeling performed for this application

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

Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
CO	☒	☐	☐	☐	☐
NO_2	☒	☒	☐	☐	☐

	SO_2	☒	☒	☐	☐	☐
	H_2S	☒	☐	☐	☐	☐
	PM2.5	☒	☒	☐	☐	☐
	PM10	☒	☐	☐	☐	☐
	Lead	☐	☐	☐	☐	☒
	Ozone	☐	☐	☐	☐	☒
	State air toxic(s) (20.2.72.402 NMAC)	☐	☐	☐	☐	☒

16-E: New Mexico toxic air pollutants modeling

1 List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application.
N/A – no emissions were modeled as this facility is not a source of TAPs.

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

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

16-F: Modeling options

1 Was the latest version of AERMOD used with regulatory default options? If not explain below. Yes☐ No☒

AERMOD v23132 was used for this air dispersion modeling analysis. The latest version of AERMOD (v24142) was released November 20, 2024, however, this version of AERMOD was not incorporated into BEEST GUI until February 12, 2025. Development of the current air dispersion modeling occurred before the new release, and therefore, was not incorporated into the final models.

16-G: Surrounding source modeling

1 Date of surrounding source retrieval: 06/18/2025

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

AQB Source ID	Description of Corrections
33628EQPT7	Revised PM2.5 Annual emission rate from 27.875 tpy to sitewide total of 1.87 tpy.
39248EQPT16	Revised PM2.5 Annual emission rate from 125.789 tpy to sitewide total of 2.24 tpy.
39125EQPT1	Revised PM2.5 Annual emission rate from 97.3 tpy to sitewide total of 1.6 tpy.
38088EQPT8	Revised PM2.5 Annual emission rate from 83.363 tpy to sitewide total of 1.2 tpy.

16-H: Building and structure downwash

1	How many buildings are present at the facility?	One, greater than 5 times lesser of width/height dimension.		
2	How many above ground storage tanks are present at the facility?	Six, greater than 5 times lesser of width/height dimension.		
3	Was building downwash modeled for all buildings and tanks? If not explain why below.		Yes☐	No☒
	Building/tanks outside of applicable range.			
4	Building comments			

16-I: Receptors and modeled property boundary

1	"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility. Describe the fence or other physical barrier at the facility that defines the restricted area.		
	Continuous fencing surrounding facility.		
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes☐	No☒
3	Are restricted area boundary coordinates included in the modeling files?	Yes☒	No☐

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

Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments
Very Fine	Circular	50 m	0 m	800 m	
Fine	Circular	100 m	800 m	3,000 m	
Medium	Circular	250 m	3,000 m	6.000 m	
Course	Circular	500 m	6,000	10,000 m	

5 Describe receptor spacing along the fence line.

50 m grid spacing.

6 Describe the PSD Class I area receptors.

N/A

16-J: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).		
	Modeling Scenario 1 (ROUTINE): Routine operation – all sources operating as expected, no SSM. Modeling Scenario 2 (SSM): SSM operation – FL1318 and FL3015 routine operations replaced with SSM emission rates (1318SSM and 3015SSM). All other sources remain routine.		
2	Which scenario produces the highest concentrations? Why?		
	Modeling Scenario 2 (SSM) produces the highest concentrations for NO_X, SO_2, CO, and H_2S as the SSM emission rates are greater than the ROUTINE emission rates. Both Scenario 1 (ROUTINE) and Scenario 2 (SSM) had the same concentrations for PM_{10} and $PM_{2.5}$ as the flares are not a source of PM emissions.		
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes☐	No☒
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources: N/A		

5	Hour of Day	Factor	Hour of Day	Factor								
	1		13									
	2		14									
	3		15									
	4		16									
	5		17									
	6		18									
	7		19									
	8		20									
	9		21									
	10		22									
	11		23									
	12		24									
	If hourly, variable emission rates were used that were not described above, describe them below.											
	N/A											

6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes☒	No☐
	SSM emission rates have limited hours of operation annually.		

16-K: NO_2 Modeling

1	Which types of NO_2 modeling were used? Check all that apply.	
	☐	ARM2
	☒	100% NO_X to NO_2 conversion

	☐	PVMRM
	☐	OLM
	☐	Other:
2	Describe the NO_2 modeling.	
	It was conservatively assumed 100% of NOx was converted to NO2.	
3	Were default NO_2/NO_X ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes☐ No☐
	N/A	
4	Describe the design value used for each averaging period modeled.	
	1-hour: High eighth high Annual One Year Annual Average:	

16-L: Ozone Analysis

1	NMED has performed a generic analysis that demonstrates sources that are minor with respect to PSD do not cause or contribute to any violations of ozone NAAQS. The analysis follows. The basis of the ozone SIL is documented in *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, EPA, April 17, 2018 and associated documents. NMED accepts this SIL basis and incorporates it into this permit record by reference. Complete documentation of the ozone concentration analysis using MERPS is included in the New Mexico Air Quality Bureau Air Dispersion Modeling Guidelines.		
2	The MERP values presented in Table 10 and Table 11 of the NM AQB Modeling Guidelines that produce the highest concentrations indicate that facilities emitting no more than 250 tons/year of NO_X and no more than 250 tons/year of VOCs will cause less formation of O_3 than the O_3 significance level. $$[O_3]_{8-hour} = \left(\frac{250 \frac{ton}{yr}}{340_{ME \quad NOX}} + \frac{250 \frac{ton}{yr}}{4679_{MERP_{VOC}}} \right) \times 1.96\ \mu g/m^3$$ =1.546 µg/m³, which is below the significance level of 1.96 µg/m³. Sources that produce ozone concentrations below the ozone SIL do not cause or contribute to air contaminant levels exceeding the ozone NAAQS.		
3	Does the facility emit at least 250 tons per year of NO_X or at least 250 tons per year of VOCs? Sources that emit at least 250 tons per year of NO_X or at least 250 tons per year of VOCs are covered by the analysis above and require an individual analysis.	Yes☐	No☒

5 For new PSD Major Sources or PSD major modifications, if MERPs were used to account for ozone fill out the information below. If another method was used describe below.

NO_X (ton/yr)	$MERP_{NOX}$	VOCs (ton/yr)	$MERP_{VOC}$	$[O_3]_{8\text{-hour}}$
N/A	N/A	N/A	N/A	N/A

16-M: Particulate Matter Modeling

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

	☐	PM10
	☒	None
2	Describe the particle size distributions used. Include the source of information.	
	N/A - Size distributions were not implemented in this modeling.	
3	Does the facility emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2? Sources that emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2 are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.	Yes☒ No☐
4	Was secondary PM modeled for PM2.5?	Yes☐ No☒

5 If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.

Pollutant	NO_X	SO_2		$[PM2.5]_{24\text{-hour}}$
$MERP_{annual}$	26780	14978		0.170
$MERP_{24\text{-hour}}$	7331	1981		$[PM2.5]_{annual}$
Emission rate (ton/yr)	121.32	248.25		0.004

16-N: Setback Distances

1 Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.

N/A

2 Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.

N/A

16-O: PSD Increment and Source IDs

1 The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below. Yes☒ No☐

Unit Number in UA-2	Unit Number in Modeling Files
ENG-1	ENG1
ENG-2	ENG2
TURB-1	TURB1
TURB-2	TURB2
H-1400	H1400
H-741	H741
H-1300	H1300

	H-781	H781
	FL-3030	FL3030
	FL-3042	FL3042
	FL-1317	FL1317
	FL-1318	FL1318
	FL-3015	FL3015
	FL-3015 SSM	1315SSM
	FL-1318 SSM	3018SSM

2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.	Yes☒	No☐
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?	Yes☐	No☒

4 Which units consume increment for which pollutants?

Unit ID	NO_2	SO_2	PM10	PM2.5
ENG1	YES	YES	YES	YES
ENG2	YES	YES	YES	YES
TURB1	YES	YES	YES	YES
TURB2	YES	YES	YES	YES
H1400	YES	YES	YES	YES
H741	YES	YES	YES	YES
H1300	YES	YES	YES	YES
H781	YES	YES	YES	YES
FL3030	YES	YES	NO	NO
FL3042	YES	YES	NO	NO
FL1317	YES	YES	NO	NO
FL1318	YES	YES	NO	NO
FL3015	YES	YES	NO	NO
1318SSM	YES	YES	NO	NO
3015SSM	YES	YES	NO	NO

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

6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☐	No☒
	This site was constructed after March 7, 2023. Therefore, all sources at this facility are increment consumers.		

16-P: Flare Modeling

1 For each flare or flaring scenario, complete the following

	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	FL1318 (ROUTINE)	16.61	13299.8	0.10343

	FL3015 (ROUTINE)	16.61	347894.148	0.52899
	1318SSM (SSM)	36.91	3297644.529	1.52841
	3015SSM (SSM)	22.11	166403300.9	11.3509

16-Q: Volume and Related Sources

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?	Yes☐	No☒
2	Describe the determination of sigma-Y and sigma-Z for fugitive sources.		
	Fugitive sources are represented by a volume source located at the center of the facility with a length of 100 ft and height of 40 ft.		
3	Describe how the volume sources are related to unit numbers. Or say they are the same.		
	They are the same		
4	Describe any open pits.		
	N/A		
5	Describe emission units included in each open pit.		
	N/A		

16-R: Background Concentrations

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

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Carlsbad	Yes☒	No☐

2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		
	N/A		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes☐	No☒
2	What was the source of the terrain data?		
	N/A		

16-U: Modeling Files

Describe the modeling files:

File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
KKL_NSR_SIL_2017-2021_CO_S	CO	SIL
KKL_NSR_SIL_2017-2021_H2S_S	H2S	SIL
KKL_NSR_SIL_2017-2021_NOX_A	NO2	SIL/NAAQS/PSD Class II
KKL_NSR_SIL_2017-2021_NOX_S	NO2	SIL/NAAQS
KKL_NSR_SIL_2017-2021_PM25_A	PM2.5	SIL
KKL_NSR_SIL_2017-2021_PM25_S	PM2.5	SIL
KKL_NSR_SIL_2017-2021_PM10_S	PM10	SIL
KKL_NSR_SIL_2017-2021_SO2_A	SO2	SIL
KKL_NSR_SIL_2017-2021_SO2_S	SO2	SIL
KKL_NSR_SIL_2017-2021_SO2_S_3_24	SO2	SIL
KKL_CUM_PM25_2017-2021_PM2.5_1	PM2.5	NAAQS/PSD Class II
KKL_CUM_PM25_2017-2021_PM2.5_A	PM2.5	NAAQS/PSD Class II
KKL_CUM_SO2_2017-2021_SO2_A	SO2	NAAQS/PSD Class II
KKL_CIA_SO2_24hr_2017-2021_SO2_1	SO2	NAAQS/PSD Class II
KKL_CIA_SO2_3hr_2017-2021_SO2_1	SO2	NAAQS/PSD Class II
KKL_CUM_SO2_2017-2021_SO2_S_1	SO2	NAAQS/PSD Class II

16-V: PSD New or Major Modification Applications

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes☐	No☒
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes☐	No☒
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
	N/A		

4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
	N/A		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes☐	No☒
	N/A		

16-W: Modeling Results

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

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
CO (8-hour) SIL	90.91	-	-	-	90.91	500	18.18%	606200	3614300	3508.27
CO (1-hour) SIL	135.97	-	-	-	135.97	2000	6.80%	605876	3614597	3509.74
H_2S (1/2-hour) SIL	1.63	-	-	-	1.63	5.0	32.69%	605876	3614597	3509.74
NO_2 (Annual) SIL	2.49	-	-	-	2.49	1.0	Significant	605973	3614736	3519.52
NO_2 (1-hour) SIL	78.40	-	-	-	78.40	7.52	Significant	606366	3614511	3530.25
$PM_{2.5}$ (Annual) SIL	0.39	-	-	-	0.39	0.13	Significant	606100	3614750	3530.87
$PM_{2.5}$ (24-hour) SIL	2.81	-	-	-	2.81	1.2	Significant	606315	3614740	3542.13
PM_{10} (Annual) SIL	0.39	-	-	-	0.39	1.0	39.04%	606100	3614750	3530.87
PM_{10} (24-hour) SIL	3.62	-	-	-	3.62	5.0	72.46%	606400	3614550	3535.27
SO_2 (Annual) SIL	4.13	-	-	-	4.13	1.0	Significant	605950	3614750	3516.37

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
SO_2 (24-hour) SIL	90.86	-	-	-	90.86	5.0	Significant	606400	3614600	3540.16
SO_2 (3-hour) SIL	143.39	-	-	-	143.39	25.0	Significant	605973	3614736	3519.52
SO_2 (1-hour) SIL	157.14	-	-	-	157.14	7.8	Significant	605877	3614551	3506.89
NO_2 (Annual) NMAAQS	2.53	-	-	9.30	11.83	94.02	12.58%	605973	3614736	3519.52
NO_2 (Annual) PSD Increment Class II	2.53	-	-	9.30	11.83	25	47.33%	605973	3614736	3519.52
NO_2 (1-hour) NAAQS	59.02	-	-	65.80	124.82	188.03	66.38%	606366	3614511	3530.25
$PM_{2.5}$ (Annual) NAAQS	0.39	0.77	0.0042	7.10	7.87	9.0	87.50%	606100	3614750	3530.87
$PM_{2.5}$ (Annual) PSD Increment Class II	0.39	0.77	0.0042	-	0.77	4	19.37%	606100	3614750	3530.87
$PM_{2.5}$ (24-hour) NAAQS	1.84	4.59	0.17	16.50	21.26	35	60.73%	606315	3614740	3542.13
$PM_{2.5}$ (24-hour) PSD Increment Class II	2.53	5.70	0.17	-	5.87	9	65.20%	606550	3614650	3548.82
SO_2 (Annual) PSD Increment Class II	4.13	4.72	-	-	4.72	20	23.62%	605950	3614750	3516.37
SO_2 (24-hour) PSD Increment Class II	70.19	70.20	-	-	70.20	91	77.15%	606400	3614650	3541.50

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
SO_2 (3-hour) PSD Increment Class II	133.38	133.90	-	-	133.90	512	26.15%	606123	3614370	3508.73
SO_2 (1-hour) NAAQS	144.20	144.56	-	-	144.56	196.4	73.61%	602500	3624000	3631.46

16-X: Summary/conclusions

1	A statement that modeling requirements have been satisfied and that the permit can be issued.
	Frontier Field Services has demonstrated that the proposed NSR Permit would neither cause nor contribute to an exceedance of the standards for CO, H_2S, NO_2, $PM_{2.5}$, PM_{10}, and SO_2.

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.

To save paper and to standardize the application format, delete this sentence and the samples in the Compliance Test History Table, and begin your submittal for this attachment on this page.

Compliance Test History Table (Modify this sample table to suit your facility)

Unit No.	Test Description	Test Date
	No testing conducted to date.	

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.

There is no relevant information being submitted with this application.

Section 22: Certification

Company Name: Frontier Field Services, LLC

I, Molly Greer, 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 5 day of August, 2025, upon my oath or affirmation, before a notary of the State of Texas.

*Signature

08/05/2025
Date

Molly Greer
Printed Name

Environmental Projects Manager
Title

Scribed and sworn before me on this 5 day of August, 2025.

My authorization as a notary of the State of Texas expires on the 5 day of August, 2025.

Notary's Signature

08/05/2025
Date

Megan Elizabeth Easley
Notary's Printed Name

MEGAN ELIZABETH EASLEY
Notary Public, State of Texas
Comm. Expires 01-19-2027
Notary ID 131819424

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.