Gulfport Energy Corporation

Vozar Well Pad
Harrison County, Ohio

Adequate Design Evaluation

SLR Ref:

January 2021

CONTENTS

I. Adequate Design Report

1.0 STED Model Report

2.0 ProMax Model Report

1.0 STED MODEL REPORT

Vozar Well Pad Facility

Gulfport Energy Corporation
67185 Executive Dr.
St Clairsville, OH 43950

January 2021

Storage Tank Emissions Design Model
Inputs

[redacted]

[redacted]

Storage Tank Emissions Design Model
Output

CBI

[redacted]

[redacted]

CBI

Storage Tank Emissions Design Model
Critical Operating Parameters

Site Name:	**Vozar Well Pad**
Client Name:	**Gulfport**
Location:	**Harrison County, Ohio**
Description:	**Peak Flow STED Model**

Critical Operating Parameters:

Description	Parameter	Verification Frequency	Date of Initial Verification
Number of LP Oil Dumps to Tanks	1	Upon Change	12/21/2020
Number of LP Water Dumps to Tanks	1	Upon Change	12/21/2020
Low Pressure Separator Gas to VCS or Tanks?	Tanks	Upon Change	12/21/2020
HP Sep Oil Dump Valve & Trim Size	1" & 3/4" trim	Upon Change	12/21/2020
HP Sep Water Dump Valve & Trim Size	1" & 3/4" and 2" & 3/4"	Upon Change	12/21/2020
Number of Tanks	10	Upon Change	12/21/2020
Size of Tanks	400 bbl	Upon Change	12/21/2020
Maximum Vapor Line Length	620 ft	Upon Change	12/21/2020
Minimum VCS Diameter Tanks to KO	4"	Upon Change	12/21/2020
Minimum VCS Diameter KO to Comb	3"	Upon Change	12/21/2020
Number of Control Devices	1	Upon Change	12/21/2020
Control Device Make and Model	NOV MEVC 200	Upon Change	12/21/2020
Minimum Thief Hatch/PRD setpoint	12 oz/in2	Upon Change	12/21/2020
Maximum Liquid Volume Stored	65%	Upon Change	12/21/2020
Max Facility Oil Production Rate	97.3 bbl/day	Upon Change	12/21/2020
Max Facility Water Production Rate	37.5 bbl/day	Upon Change	12/21/2020
Well Production Method	Plunger Lift	Upon Change	12/21/2020
Maximum Pressure of HP Separator	288 psig	Upon Change	12/21/2020
Maximum Pressure of LP Separator	20 psig	Upon Change	12/21/2020

Peak Liquid Flow Calculations

Site Name:	**Vozar**
Client Name:	**Gulfport**
Location:	

Peak Flow Calculation	Vessel 1	Vessel 2	Vessel 3	Vessel 4	Vessel 5	Vessel 6	Vessel 7	Vessel 8
Description	**HP Norriseal 1001**	**HP Norriseal 1001**	**HP Norriseal 1001**	**HP Norriseal 1001**	**HP Norriseal 1001**	**HP Norriseal 1001**		
Liquid	**Oil**	**Oil**	**Oil**	**Water**	**Water**	**Water**		
Valve Press Recovery Factor (C_f)	**0.94**	**0.94**	**0.94**	**0.94**	**0.94**	**0.80**		
Valve Coefficent (gpm/psi) (C_v)	**11.00**	**11.00**	**11.00**	**11.00**	**11.00**	**12.90**		
Liquid Critical Pressure (psia)	**886.3**	**886.3**	**886.3**	**3210.5**	**3210.5**	**3210.5**		
Liquid Vapor Pressure (psia)	**302.70**	**302.70**	**302.70**	**302.70**	**302.70**	**302.70**		
Vessel Operating Pressure (psia)	**302.70**	**302.70**	**302.70**	**302.70**	**302.70**	**302.70**		
Valve Downstream Pressure (psia)	**34.70**	**34.70**	**34.70**	**34.70**	**34.70**	**34.70**		
Liquid Specific Gravity	**0.6874**	**0.6874**	**0.6874**	**0.9970**	**0.9970**	**0.9970**		
Critical pressure ratio (F_F)	**0.80**	**0.80**	**0.80**	**0.87**	**0.87**	**0.87**		
Choked Flow?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**		
Peak Flow (gpm)	**97.9**	**97.9**	**97.9**	**63.9**	**63.9**	**63.8**		

Flow Duration Calculations	Vessel 1	Vessel 2	Vessel 3	Vessel 4	Vessel 5	Vessel 6	Vessel 7	Vessel 8
Separator Type	**Vertical**	**Vertical**	**Vertical**	**Vertical**	**Vertical**	**Vertical**		
Separator Diameter (inches)	**36.00**	**36.00**	**36.00**	**36.00**	**36.00**	**36.00**		
Separator Length (inches)	**120**	**120**	**120**	**120**	**120**	**120.0**		
High Level Set Point (inches)	**14.0**	**14.0**	**14.0**	**12.0**	**12.0**	**12.00**		
Low Level Set Point (inches)	**12.0**	**12.0**	**12.0**	**10.0**	**10.0**	**10.00**		
Production Rate (bbl/day)	**32.43**	**32.43**	**32.43**	**12.50**	**12.50**	**12.50**		
Change in separator Volume (gal)	**8.81**	**8.81**	**8.81**	**8.81**	**8.81**	**8.81**		
Dump Volume (gallons)	**8.90**	**8.90**	**8.90**	**8.86**	**8.86**	**8.86**		
Flow Duration (seconds)	**5.45**	**5.45**	**5.45**	**8.32**	**8.32**	**8.33**		

Notes:

-Production Rates provided by Gulfport

-Critical Pressure and Specific Gravity based on promax model for the facility

-Vapor pressure was conservatively assumed to be equal to the vessel pressure.

-Critical Pressure Ratio, Peak Liquid Flow Rates and Choked Flow calculations are based on Equations 1 and Equation 3 of ISA-75.01.01-2007 (60534-2-1 Mod)

-Separator water section dimensions were provided by Sammie Jo Van Grinsven, Leed, via email dated 1/8/2018.

-High and low level set point are based on the maximum span of liquid level controller, 3" for the Norriseal 1001. The controller is assumed to be mounted in the center of the vessel.

-Volume per dump is calculated based on the difference in volume between the high and low level set points.

-Flow Duration is calculated based the following equation (Volume per Dump, gallons) / {(Peak Flow, gpm) / (60 sec/min) - (Production Rate, bbl/day) * (42 gal/bbl) / (86,400 sec/day)}

Site Name:	**Vozar Well Pad**
Client Name:	**Gulfport**
Location:	**Harrison County, Ohio**
Description	**Truck Loadout Vapor Return Calculations**

Equation:

$$L_L = 12.46 \times \frac{S \times TVP \times M}{T}$$ **(Equation 1: from AP-42, section 5.2)**

$$TVP = e^{\left(\left(\left(\frac{2799}{T+459.6}\right)-2.227\right)\times\log_{10}(RVP)-\left(\frac{7261}{T+459.6}\right)+12.82\right)}$$

(Equation 2: from AP-42, section 7.1)

Variable	Value	Unit	Source
L_L =	7.4	10^{-3} lb/gallons	Calculated Loading Vapor Loss
S =	0.6	Dimensionless	AP-42 Table 5.2-1 Factor for Submerged Loading
RVP =	10.8	psia	Reid Vapor Pressure Taken From Sample
TVP =	11.8	psia	True Vapor Pressure Of Loaded Liquids Calculated from Equation 2
M =	45.7	lb/b-mol	Molecular Weight Of Vapor From ProMax Simulation: Oil Flash Vapor Stream
T =	83.1	°F	Temperature Of Vapor From ProMax Simulation: Oil Flash Vapor Stream
	542.8	°R	

Variable	Value	Unit
[a]Condensate Production:	97.3	bbl/d
[b]Loadout Throughput:	180.0	bbl/hr
Gas Molar Volume at 60 F and 14.7 psi:	379.1	scf/mol
Vapor Volume From Loading:	466.2	scfh

Notes:

[a] Annual Average Production Rate for the 70 Ranch 10 West – Western Production Facility

[b] Assumed Truck Loadout Rate

2.0 ProMax Model

Vozar Well Pad Facility

Gulfport Energy Corporation
67185 Executive Dr.
St Clairsville, OH 43950

January 2021

Bryan Research & Engineering, LLC

ProMax® 5.0

Copyright © 2002-2019 BRE Group, Ltd. All Rights Reserved.

Simulation Report

Project: Vozar Model v1.2 Practical Max.pmx

Licensed to SLR International Corporation and Affiliates

Client Name: Gulfport
Location: Vozar
Job:

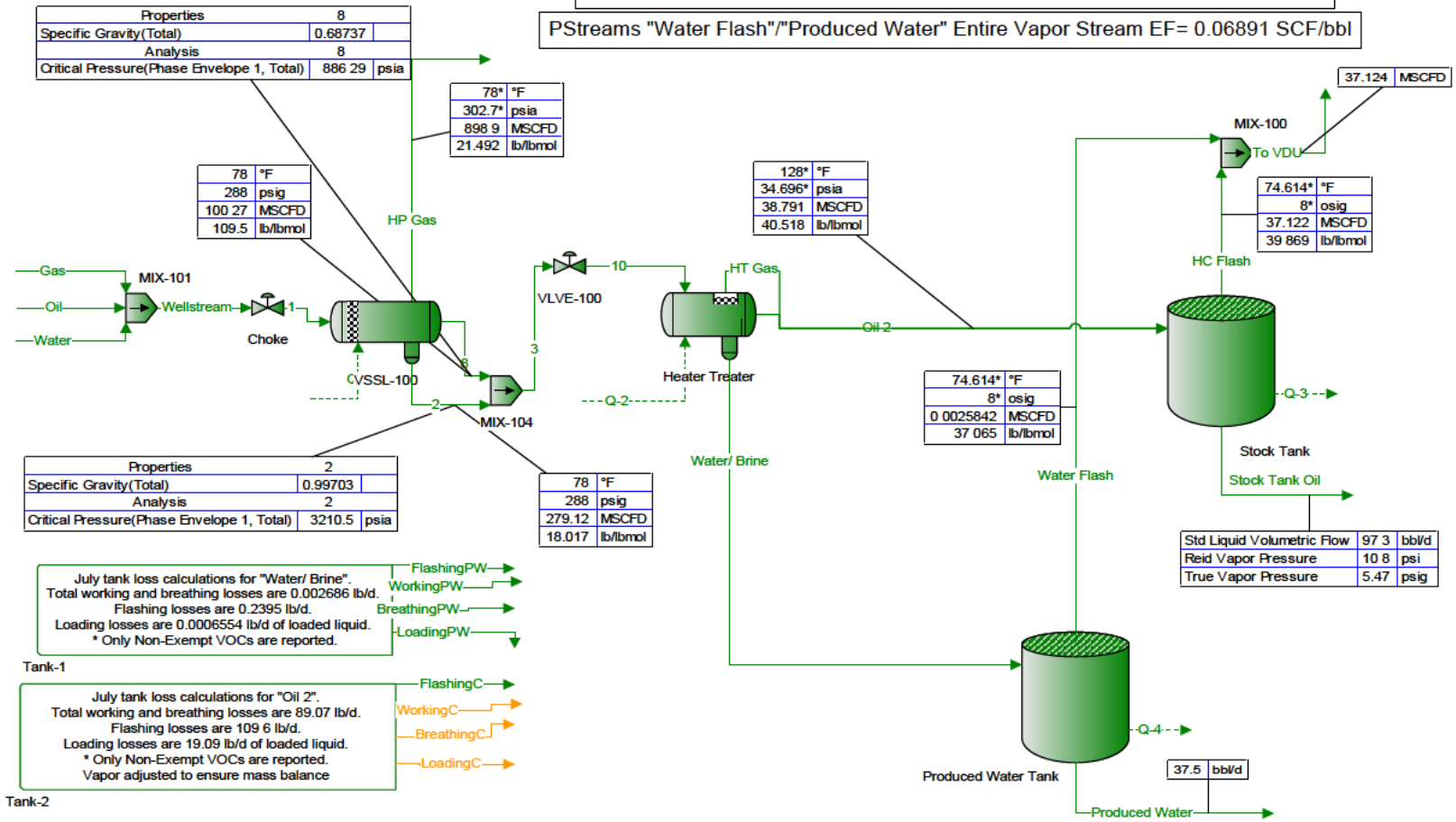
ProMax Filename: N:\West Virginia\Gulfport\Design Analysis\Design Analysis Site Files\Vozar\ProMax\Vozar Model v1.2 Practical Max.pmx
ProMax Version: 5.0.19050.0
Simulation Initiated: 1/25/2021 10:47:49 AM

Bryan Research & Engineering, LLC
Chemical Engineering Consultants
P.O. Box 4747 Bryan, Texas 77805
Office: (979) 776-5220
FAX: (979) 776-4818
mailto sales@bre.com
http://www.bre.com/

Report Navigator can be activated via the ProMax Navigator Toolbar.
An asterisk (*), throughout the report, denotes a user specified value.
A question mark (?) after a value, throughout the report, denotes an extrapolated or approximate value.

PStreams "HC Flash"/"Stock Tank Oil" Entire Vapor Stream EF= 381.4 SCF/bbl

PStreams "Water Flash"/"Produced Water" Entire Vapor Stream EF= 0.06891 SCF/bbl



Process Streams	Gas	HC Flash	HP Gas	HT Gas	LoadingPW	Oil	Oil 2	Produced Water
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total** From Block:		Stock ank	VSSL 100	Heater reater			Heater reater	Produced Water ank
o Block:	MIX 101	MIX 100		Stock ank		MIX 101	Stock ank	
Mole Fraction	%	%	%	%	%	%	%	%
N2	0. *	0.0627580	0. 317	0.0597681	0.000625675	0.0369996*	0.000339821	7 50823E-07
CO2	0.138*	0.1372 5	0.13 630	0.128830	0.176230	0.0259997*	0.00 57 83	8 89362E-05
C1	75.195*	2 .8757	7 .7879	23.5769	0.93 853	7. 8593*	0.302 00	0.000761 5
C2	15.286*	21.19 7	15.2672	19.7622	0.901375	8. 2392*	1.01730	0.0008 0058
C3	5.973*	22.357	6.036 2	20.6121	0.1 1395	10. 8 9*	2.98137	0.000552058
iC	0.795*	5. 3575	0 8019 0	5.08775	0.00559 73	3.03997*	1.60095	6 52055E-05
nC	1.396*	11.9173	1. 6572	11.3162	0.0168752	7.92392*	.65302	0.000272650
Propane, 2,2-Dimethyl-	0.008*	0.0876286	0.00918381	0.0851397	2.27869E-05	0.07 9993*	0.0502106	5 80058E-07
iC5	0.265*	3.3837	0 295201	3.500 3	0.000981103	3.65996*	3.23862	38 73E-05
nC5	0.235*	3.31 6	0 268331	3.56 09	0.000267 37	.2 196*	.07877	1 73766E-05
2-2-Dimethylbu ane	0.00 *	0.0597 83	0.00 0 23	0.0689978	1.833 3E-06	0.109999*	0.126502	2 03127E-07
Cyclopentane	0.009*	0.0378332	0.0028086	0.0 162 9	. 7882E-05	0*	0.0613275	3 65 28E-06
2-3-Dimethylbu ane	0.003*	0.110863	0.007936 8	0.133 91	1.0035 E-05	0.286997*	0.30 0 0	1 33980E-06
2-Methylpentane	0.0 7*	0.767076	0.05 795	0.9 0571	3.85155E-05	1.88798*	2.30766	5 9805 E-06
3-Methylpentane	0.026*	0. 33901	0.030716	0.53 16	6.15199E-05	1.13399*	1. 0 29	9 66208E-06
nC6	0.058*	0.9538 8	0.067 372	1.25818	1.25537E-05	3.10197*	.01363	2 9290 E-06
Methylcyclopentane	0.009*	0.25 9 9	0.017 2 9	0.319796	5.60031E-05	0.815992*	0.979352	1.13328E-05
Benzene	0.002*	0.035 621	0.002 2789	0.0 1097	0.000 97756	0.0999990*	0.12 9 9	0.000126787
Cyclohexane	0.01*	0.2 990	0.0168619	0.319260	9.81109E-05	0.927991*	1.17882	2 61799E-05
2-Methylhexane	0.01*	0.187912	0.0136163	0.282373	1.15868E-06	1.28699*	1.81517	6. 3678E-07
3-Methylhexane	0.009*	0.1 8735	0.01073 1	0.227113	1.07229E-06	1.06199*	1.51892	6 28712E-07
2,2, -Trimethylpentane	0*	0	0	0	0	0*	0	0
nC7	0.016*	0.258962	0.019172	0. 17 72	5.88232E-07	2. 3098*	3.55035	82128E-07
Methylcyclohexane	0.016*	0.320199	0.0225 77	0. 91591	2.5 5 9E-05	2.67797*	3.8 900	1 5 112E-05
Toluene	0.003*	0.0686 92	0.00 76373	0.105039	0.000271352	0.58799 *	0.8 132	0.000232035
nC8	0.00 *	0.0663099	0.005 1233	0.13100	1.26933E-08	1.99298*	3.05570	3 80927E-08
Ethylbenzene	0*	0.0138106	0.00105 52	0.025560	1.6 266E-05	0.3 7997*	0.520 35	22589E-05
meta-Xylene	0.002*	0.0303980	0.00232915	0.0569232	2.52529E-05	0.829992*	1.27	7. 3580E-05
o-Xylene	0*	0.0172017	0.00132370	0.032610	2.2367 E-05	0.523995*	0.790831	8 23652E-05
nC9	0.001*	0.0150822	0.0013 823	0.0363377	.7711 E-10	1. 3699*	2.2 792	5 95206E-09
nC10	0*	0.003 0790	0.000352396	0.00982969	3.79576E-12	1.01199*	1.59116	1 79165E-10
Dodecanes	0*	0.00112878	0.0001 3958	0.00 36619	9.19188E-12	2.30798*	3.6 905	2.13333E-09
Other Decanes	0.002*	0.0150750	0.001 9770	0.0 00978	.2 559E-09	3.05597*	.82053	8 52868E-08
Other Heptanes	0.011*	0.118676	0.008663 7	0.180226	6.85395E-07	0.870991*	1.30203	. 1513E-07
Other Hexanes	0*	0	0	0	0	0*	0	0
Other Nonanes	0.005*	0.0 28 07	0.00373 35	0.09 765	7.8 221E-08	2.83197*	. 3 0	70303E-07
Other Octanes	0.017*	0.226980	0.0179951	0. 17822	7.63987E-07	5.05595*	7.73620	1. 8981E-06
Pentadecanes	0*	1.82861E-05	3.56 95E-06	0.000126529	5.69301E-17	1.36599*	2.1623	5. 0 82E-13
Tetradecanes	0.001*	7.2 19E-05	1.228 5E-05	0.000 12521	2.12 18E-15	1.60 98*	2.55 0	5 89156E-12
Tridecanes	0*	0.00031197	.5 982E-05	0.001 5920	.26656E-13	2.07298*	3.28018	3. 1568E-10
Undecanes	0*	0.00 8 0 7	0.0005 3167	0.0155038	3.17715E-10	3.09097*	.8762	2.13190E-08
Water	0*	2.79 00	0.168967	6.07580	97.8206	0*	0.195652	99.9967
Docosanes	0*	.2 6 6E-10	3. 1390E-10	1 3 588E-08	0	0.375996*	0.595233	0
E cosanes	0*	9.99870E-09	.67567E-09	1 99085E-07	0	0. 98995*	0.789950	0
Heneicosanes	0*	2. 2536E-09	1.3752 E-09	5 96296E-08	0	0. 50995*	0.713963	0
Hentriacontanes Plus	0*	2.00936E-13	1. 5625E-12	2 76036E-11	0	3.83 96*	6.07106	0
Heptacosanes	0*	.65315E-13	1.03715E-12	3 72013E-11	0	0.166998*	0.26 372	0
Heptadecanes	0*	9. 1663E-07	2.56707E-07	9 85 6 E-06	7.32508E-23	0.89 991*	1. 168	7 9 351E-18
Hexacosanes	0*	1. 8101E-12	2.52989E-12	9 87696E-11	0	0.159998*	0.253291	0
Hexadecanes	0*	.03730E-06	9. 3976E-07	3. 5086E-05	1.0 715E-20	1.09399*	1.7318	3 30361E-16
Nonacosanes	0*	2.60352E-1	1.01997E-13	2 85258E-12	0	0.0819992*	0.129811	0
Nonadecanes	0*	. 2553E-08	1.71576E-08	7.12516E-07	0	0.59199 *	0.937175	0
Octacosanes	0*	8.86795E-1	2.61018E-13	8 38153E-12	0	0.0989990*	0.15672	0
Octadecanes	0*	2.018 2E-07	6.78391E-08	2 66979E-06	0	0.787992*	1.2 7 5	0
Pentacosanes	0*	3.9685 E-12	6.96517E-12	2 272 9E-10	0	0.158998*	0.251708	0
Tetracosanes	0*	2.07538E-11	2.77 6E-11	9 8683 E-10	0	0.2 5998*	0.389 3	0
Triacontanes	0*	9.15229E-15	.8 950E-1	1.13689E-12	0	0.07 9993*	0.118730	0
Tricosanes	0*	8.23956E-11	8. 81 7E-11	3 21065E-09	0	0.270997*	0. 29011	0
Mass Fraction	%	%	%	%	%	%	%	%
N2	0.582181*	0.0 0961	0 5791 3	0.0 13225	0.000963106	0.009 591*	6. 753E-05	1.167 6E-06
CO2	0.28 273*	0.151 99	0 275686	0.139931	0. 26173	0.010 279*	0.0013636	0.000217251
C1	56. 637*	10.0095	55.8251	9.33 87	0.82 087	1.09 5*	0.0328571	0.000678027
C2	21.51 1*	15.9850	21.3603	1 .6658	1. 8931	2.308 2*	0.207179	0.001 0206
C3	12.3281*	2 .7276	12.3852	22. 320	0.3 2602	.213 7*	0.890 05	0.00135119
iC	2.16281*	7.92 1	2.16876	7.29825	0.0178682	1.6102 *	0.630226	0.000210360
nC	3.7978 *	17.3735	3.96388	16.2327	0.0538951	.19723*	1.83170	0.000879598
Propane, 2,2-Dimethyl-	0.0270165*	0.158577	0.030830	0.15160	9.0338 E-05	0.0 93136*	0.02 5359	2 3229 E-06
iC5	0.89 920*	6.12338	0 991002	6.23306	0.00388958	2. 0650*	1.58258	0.00017559
nC5	0.793609*	5.99801	0 900797	6.3 6 1	0.00106025	2.78918*	1.99313	6 95873E-05
2-2-Dimethylbu ane	0.01613 *	0.1291	0.0176596	0.1 67 7	8.68173E-06	0.0863877*	0.07383 1	9 71601E-07
Cyclopentane	0.0295 3*	0.0665519	0.00916525	0.0720 86	0.000172601	0*	0.0291309	1. 2253E-05
2-3-Dimethylbu ane	0.0121008*	0.239628	0.0318228	0.283913	.75199E-05	0.225393*	0.177 56	6. 0855E-06
2-Methylpentane	0.189579*	1.65801	0 219712	2.000	0.000182380	1. 8273*	1.3 689	2 86062E-05
3-Methylpentane	0.10 87 *	0.93786	0.123163	1.13608	0.000291312	0.890579*	0.819628	62158E-05
nC6	0.2339 9*	2.06171	0 270 02	2.67593	5.9 6E-05	2. 3613*	2.3 259	1. 0102E-05
Methylcyclopentane	0.035 532*	0.538173	0.06823 1	0.66 2	0.000258985	0.6258 9*	0.558237	5 29392E-05
Benzene	0.0073123 *	0.069 780	0.00882 17	0.0850358	0.002136 5	0.0711857*	0.0661038	0.0005 970
Cyclohexane	0.039392 *	0.517151	0.0660292	0.663130	0.000 53711	0.711750*	0.671936	0.000122295
2-Methylhexane	0.0 6901 *	0. 72277	0.063 838	0.698312	6.37968E-06	1.17525*	1.23189	3 57999E-06
3-Methylhexane	0.0 22113*	0.373815	0.0500 58	0.561653	5.90 03E-06	0.969788*	1.03083	3. 9675E-06
2,2, -Trimethylpentane	0*	0	0	0	0	0*	0	0
nC7	0.0750 22*	0.6508 6	0.0893881	1.032 1	3.23880E-06	2.21992*	2. 09 8	2 681 9E-06
Methylcyclohexane	0.0735325*	0.788561	0.103010	1.19125	0.000137335	2.39627*	2.55962	8 39891E-05
Toluene	0.0129381*	0.158650	0.020 228	0.238859	0.00137383	0. 93735*	0.525026	0.00118667
nC8	0.0213867*	0.189985	0.028766	0.369325	7.96722E-08	2.07 71*	2.36 08	2. 1520E-07
Ethylbenzene	0*	0.0367756	0.00520911	0.0669729	9.58268E-05	0.336695*	0.37 218	0.0002 9021
meta-Xylene	0.00993850*	0.0809 53	0.0115055	0.1 91 9	0.0001 7317	0.803037*	0.916383	0.000 3817
o-Xylene	0*	0.0 58057	0.00653880	0.085 52	0.000130 8	0.506978*	0.5686 7	0.000 85358
nC9	0.00600322*	0.0 85182	0.0080 576	0.115022	3.362 5E-09	1.67961*	1.95269	23720E-08
nC10	0*	0.0121619	0.00233296	0.03 5175	2.96761E-11	1.31222*	1.53335	1. 1 9 E-09
Dodecanes	0*	0.00 822 1	0.0011 092	0.01835 6	8.60309E-11	3.5826 *	.20967	2 01691E-08
Other Decanes	0.0133203*	0.0538020	0.00991580	0.1 081	3.319 9E-08	3.96282*	.6 565	6 73587E-07
Other Heptanes	0.0515957*	0.298289	0.0 03953	0. 5738	3.77 08E-06	0.795 36*	0.883707	2. 5579E-06
Other Hexanes	0*	0	0	0	0	0*	0	0
Other Nonanes	0.0300032*	0.137756	0.0222757	0.299839	5.52 0E-07	3.30870*	3.85816	3 3 659E-06
Other Octanes	0.09089 7*	0.650329	0.0956 51	1.1779	.795 0E-06	5.26336*	5.98529	9. 602E-06
Pentadecanes	0*	9.7 231E-05	3.52335E-05	0.000663307	6.6 71E-16	2.6 25*	3.11083	6 37225E-12
Tetradecanes	0.00928601*	0.000360 75	0.000113398	0.0020198	2.3156 E-1	2.90182*	3. 3230	6. 8765E-11
Tridecanes	0*	0.001 269	0.000390312	0.00663980	.322 3E-12	3. 8310*	.0960	3. 95 7E-09
Undecanes	0*	0.0189775	0.003950 6	0.0598103	2.72887E-09	. 0313*	5.16237	1 8 965E-07
Water	0*	1.26250	0.1 1635	2.701	96.83 5	0*	0.0238727	99.9917
Docosanes	0*	3.30822E-09	.93378E-09	1 03171E-07	0	1.06 30*	1.25218	0
E cosanes	0*	7.08 80E-08	6.1 596E-08	1 38806E-06	0	1.28 68*	1.511 6	0
Heneicosanes	0*	1.80 22E-08	1.89781E-08	36 7 E-07	0	1.21899*	1. 3 17	0
Hentriacontanes Plus	0*	2.20168E-12	2.96002E-11	2 97611E-10	0	15.2677*	17.9628	0
Heptacosanes	0*	. 367E-12	1.83737E-11	3. 9573E-10	0	0.579 57*	0.6817	0
Heptadecanes	0*	5.68036E-06	2.87263E-06	5 8 933E-05	9.68025E-22	1.96162*	2.30787	1 06039E-16
Hexacosanes	0*	1.36222E-11	.31670E-11	8 93917E-10	0	0.53 711*	0.629099	0
Hexadecanes	0*	2.29303E-05	9.9 583E-06	0.000192855	1.30293E-19	2.25760*	2.65606	.15221E-15
Nonacosanes	0*	2.66823E-13	1.93916E-12	2 8766 E-11	0	0.3053 3*	0.3592 3	0
Nonadecanes	0*	2.980 0E-07	2.1 352E-07	72161E-06	0	1. 858*	1.70 28	0
Octacosanes	0*	8.78077E-13	.79 8E-12	8.16617E-11	0	0.356168*	0. 190 0	0
Octadecanes	0*	1.288 E-06	8.03332E-07	1 67693E-05	0	1.8276 *	2.15025	0
Pentacosanes	0*	3.51076E-11	1.1 305E-10	1 97815E-09	0	0.511068*	0.601283	0
Tetracosanes	0*	1.76311E-10	.372 1E-10	8 2 916E-09	0	0.759323*	0.893360	0
Triacontanes	0*	9.70623E-1	9.5 069E-13	1.18638E-11	0	0.288997*	0.3 0011	0
Tricosanes	0*	6.70839E-10	1.28099E-09	2 57213E-08	0	0.801667*	0.9 3179	0

Process Streams	Stock Tank Oil	To VDU	Water	Water Flash	Water/ Brine	Wellstream	1	2	3	8	10
Composition Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total** From Block:	Stock ank	MIX 100		Produced Water ank	Heater reater	M X 101	Choke	VSSL 100	MIX 104	VSSL 100	VLVE 100
o Block:			MIX 101	MIX 100	Produced Water ank	Choke	VSSL 100	MIX 104	VLVE 100	MIX 104	Heater reater
Mole Fraction	%	%	%	%	%	%	%	%	%	%	%
N2	0.000160513	0.0627579	0*	0.0610969	1.32170E-06	0.31 276	0.31 276	0.000107282	0.00616932	0.0230 39	0.00616932
CO2	0.00297695	0.1372 8	0*	0.17 37	9.05653E-05	0.0988303	0.0988303	0.00118385	0.01 0103	0.0 971 8	0.01 0103
C1	0.1599 5	2 .8760	0*	30.1923	0.0010 355	53.3220	53.3220	0.03 68 5	2. 62 2	9.220 0	2. 62 2
C2	0.68 167	21.19 8	0*	22.2895	0.0010 832	11.3869	11.3869	0.00922119	2.1930	8.27205	2.1930
C3	2. 323	22.3573	0*	20.8007	0.0007 6 11	5.01982	5.01982	0.0023193	2.61120	9.873 2	2.61120
iC	1. 9292	5. 3561	0*	3.50802	9.79832E-05	0.79853	0.79853	0.000193 89	0.790 63	2.99030	0.790 63
nC	. 826	11.9173	0*	11.2 81	0.0003777 8	1.60725	1.60725	0.000 65307	1.9 259	7.3 880	1.9 259
Propane, 2,2-Dimethyl-	0.0 96918	0.0876260	0*	0.0503367	1.05039E-06	0.0115570	0.0115570	1.285 7E-06	0.0171800	0.06 9995	0.0171800
iC5	3.31121	3.38368	0*	2.5 957	6.76696E-05	0. 76050	0. 76050	5.866 5E-05	0.90 538	3. 2230	0.90 538
nC5	.2067	3.31 1	0*	2.55996	.12962E-05	0.501165	0.501165	2.175 7E-05	1.05282	3.983 5	1.05282
2-2-Dimethylbu ane	0.130267	0.0597 62	0*	0.0298073	.816 0E-07	0.0115275	0.0115275	3.31 5E-07	0.028 0 9	0.107 73	0.028 0 9
Cyclopentane	0.0629692	0.0378332	0*	0.0377 1	.00692E-06	0.00631099	0.00631099	3.2 280E-06	0.01 6092	0.0552670	0.01 6092
2-3-Dimethylbu ane	0.312 91	0.110861	0*	0.0751777	2.0 223E-06	0.02 8619	0.02 8619	1.51868E-06	0.06 963	0.2 5795	0.06 963
2-Methylpentane	2.37096	0.767067	0*	0.6388 2	1.19 97E-05	0.182670	0.182670	5.63007E-06	0. 856 5	1.83750	0. 856 5
3-Methylpentane	1. 3883	0. 33903	0*	0. 63897	1.39966E-05	0.10815	0.10815	6.97708E-06	0.291629	1.103 1	0.291629
nC6	.11556	0.953826	0*	0.632333	8.837 3E-06	0.286650	0.286650	3.338 3E-06	0.806033	3.0 97	0.806033
Methylcyclopentane	0.999233	0.25 951	0*	0.292556	1. 0663E-05	0.0710173	0.0710173	7.50830E-06	0.19799	0.7 9121	0.19799
Benzene	0.127781	0.035 622	0*	0.0368775	0.000127130	0.0093321	0.0093321	9. 698E-05	0.025690	0.0969 08	0.025690
Cyclohexane	1.1989	0.2 993	0*	0.288567	2.88759E-05	0.0805998	0.0805998	1.6 16 E-05	0.231615	0.87630	0.231615
2-Methylhexane	1.82959	0.187906	0*	0.099 82	1.57322E-06	0.109067	0.109067	8. 3591E-07	0.335221	1.26836	0.335221
3-Methylhexane	1.53038	0.1 8731	0*	0.0811805	1.3872 E-06	0.09052 3	0.09052 3	7.91 1 E-07	0.279572	1.05780	0.279572
2,2, -Trimethylpentane	0	0	0*	0	0	0	0	0	0	0	0
nC7	3.56030	0.25895	0*	0.1 0818	1.79790E-06	0.203990	0.203990	6.27639E-07	0.6 1882	2. 2866	0.6 1882
Methylcyclohexane	3.86053	0.32020	0*	0.399997	1.91 86E-05	0.223577	0.223577	8.670 E-06	0.699877	2.6 807	0.699877
Toluene	0.8 3176	0.0686506	0*	0.0901072	0.000232875	0.0 87303	0.0 87303	0.0001259 2	0.152901	0.578173	0.152901
nC8	3.0179	0.0663071	0*	0.0263920	2.8 695E-07	0.1608	0.1608	6.83917E-08	0.529109	2.00196	0.529109
Ethylbenzene	0.51 500	0.0138109	0*	0.0183236	.2 297E-05	0.0275953	0.0275953	2.17365E-05	0.090 788	0.3 2280	0.090 788
meta-Xylene	1.258 9	0.030399	0*	0.0502706	7. 8270E-05	0.0672189	0.0672189	3.12706E-05	0.220963	0.835960	0.220963
o-Xylene	0.780272	0.0172022	0*	0.02 0 15	8.25891E-05	0.0 15516	0.0 15516	.02989E-05	0.13686	0.51773	0.13686
nC9	2.2037	0.015081	0*	0.0039797	.31380E-08	0.11 651	0.11 651	1. 9875E-08	0.383100	1. 952	0.383100
nC10	1.55 61	0.003 0769	0*	0.000 11617	.0252 E-09	0.0802 85	0.0802 85	1.02960E-09	0.2695 7	1.01987	0.2695 7
Dodecanes	3.55827	0.00112875	0*	0.0007 8067	9.12313E-09	0.183017	0.183017	2.28318E-09	0.616301	2.33187	0.616301
Other Decanes	.71320	0.01507 9	0*	0.0136529	2.12856E-07	0.2 373	0.2 373	6.53676E-08	0.817667	3.09377	0.817667
Other Heptanes	1.30830	0.118673	0*	0.079 882	1.18 23E-06	0.0767811	0.0767811	.63116E-07	0.238173	0.901162	0.238173
Other Hexanes	0	0	0*	0	0	0	0	0	0	0	0
Other Nonanes	.3622	0.0 28 09	0*	0.0 52777	8.93366E-07	0.228075	0.228075	3.02609E-07	0.759608	2.87 09	0.759608
Other Octanes	7.65808	0.226978	0*	0.19 838	3.31033E-06	0. 128 6	0. 128 6	1.19399E-06	1.3 837	5.10177	1.3 837
Pentadecanes	2.107 6	1.82850E-05	0*	2.18801E-06	2.098 9E-11	0.108320	0.108320	3. 1325E-12	0.36 95	1.38086	0.36 95
Tetradecanes	2. 8970	7.2 378E-05	0*	1.320 8E-05	1.29275E-10	0.127973	0.127973	2.39366E-11	0. 31151	1.63133	0. 31151
Tridecanes	3.19751	0.00031196	0*	0.000173205	1.95996E-09	0.16 383	0.16 383	. 626E-10	0.5537 8	2.09519	0.5537 8
Undecanes	.75876	0.00 8 0 3	0*	0.00 22290	6.07768E-08	0.2 5107	0.2 5107	1.71307E-08	0.82 55	3.11983	0.82 55
Water	2.1993	2.79 00	100*	2.7967	99.9958	21.9 81	21.9 81	99.951	73.5 96	0.0560280	73.5 96
Docosanes	0.580109	.2 617E-10	0*	0	0	0.0298156	0.0298156	0	0.100 58	0.380099	0.100 58
E cosanes	0.769878	9.99801E-09	0*	0	0	0.0395692	0.0395692	0	0.133321	0.50 0	0.133321
Heneicosanes	0.695822	2. 2519E-09	0*	0	0	0.0357629	0.0357629	0	0.120 96	0. 55917	0.120 96
Hentriacontanes Plus	5.91680	2.00922E-13	0*	0	0	0.30 10	0.30 10	0	1.02 62	3.87681	1.02 62
Heptacosanes	0.257655	.65283E-13	0*	0	0	0.0132 26	0.0132 26	0	0.0 618	0.168821	0.0 618
Heptadecanes	1.3808	9. 1598E-07	0*	2.63 36E-09	2. 6229E-1	0.0709708	0.0709708	3. 1009E-16	0.239122	0.90 755	0.239122
Hexacosanes	0.2 6855	1. 8091E-12	0*	0	0	0.0126875	0.0126875	0	0.0 27 82	0.1617	0.0 27 82
Hexadecanes	1.68785	.03702E-06	0*	3.16753E-08	2.96299E-13	0.0867508	0.0867508	3.07000E-1	0.292288	1.10592	0.292288
Nonacosanes	0.126513	2.60333E-1	0*	0	0	0.00650235	0.00650235	0	0.021908	0.0828939	0.021908
Nonadecanes	0.913363	. 2522E-08	0*	0	0	0.0 69 38	0.0 69 38	0	0.158168	0.598 5	0.158168
Octacosanes	0.1527 1	8.86733E-1	0*	0	0	0.007850 0	0.007850 0	0	0.026 50	0.100079	0.026 50
Octadecanes	1.21576	2.01828E-07	0*	0	0	0.062 860	0.062 860	0	0.210535	0.796590	0.210535
Pentacosanes	0.2 5312	3.96826E-12	0*	0	0	0.0126082	0.0126082	0	0.0 2 810	0.160733	0.0 2 810
Tetracosanes	0.379539	2.0752 E-11	0*	0	0	0.0195070	0.0195070	0	0.0657253	0.2 8682	0.0657253
Triacontanes	0.115713	9.15165E-15	0*	0	0	0.0059 727	0.0059 727	0	0.0200382	0.0758176	0.0200382
Tricosanes	0. 18110	8.23899E-11	0*	0	0	0.021 895	0.021 895	0	0.072 0 7	0.27395	0.072 0 7
Mass Fraction	%	%	%	%	%	%	%	%	%	%	%
N2	3.09 8 E-05	0.0 0963	0*	0.0 61763	2.05509E-06	0.31856	0.31856	0.00016680	0.00 0958	0.005895 9	0.00 0958
CO2	0.00090173	0.151503	0*	0.207119	0.000221228	0.157382	0.157382	0.00289172	0.01 6128	0.0199816	0.01 6128
C1	0.0176605	10.0097	0*	13.0678	0.000929217	30.9525	30.9525	0.0308830	0.936210	1.35088	0.936210
C2	0.1 1593	15.9852	0*	18.0823	0.0017 963	12.3892	12.3892	0.0153893	1.56281	2.27159	1.56281
C3	0.7 1515	2 .7276	0*	2 .7 61	0.00182686	8.009 5	8.009 5	0.00567639	2.72883	3.97613	2.72883
iC	0.597227	7.92 25	0*	5.50095	0.000316101	1.679 0	1.679 0	0.00062 181	1.0888	1.58728	1.0888
nC	1.79323	17.3735	0*	17.6383	0.0012186	3.38022	3.38022	0.00150105	2.67587	3.90082	2.67587
Propane, 2,2-Dimethyl-	0.02 6760	0.158573	0*	0.097982	.206 2E-06	0.0301713	0.0301713	5.1 758E-06	0.0293760	0.0 28289	0.0293760
iC5	1.6 28	6.12330	0*	.96283	0.000270991	1.2 280	1.2 280	0.00023 918	1.5 667	2.25 99	1.5 667
nC5	2.08899	5.99795	0*	.98306	0.000165376	1.30836	1.30836	8.71153E-05	1.80021	2.62 73	1.80021
2-2-Dimethylbu ane	0.07726 1	0.1291 0	0*	0.0693012	2.30377E-06	0.0359 50	0.0359 50	1.58528E-06	0.0580119	0.08 5827	0.0580119
Cyclopentane	0.0303956	0.0665522	0*	0.071 177	1.55979E-05	0.016015	0.016015	1.26228E-05	0.02 2822	0.0353985	0.02 2822
2-3-Dimethylbu ane	0.1853 5	0.239623	0*	0.17 786	9.76835E-06	0.0775239	0.0775239	7.26378E-06	0.132676	0.193 3	0.132676
2-Methylpentane	1. 0627	1.65800	0*	1. 8529	5.71576E-05	0.569599	0.569599	2.69283E-05	0.9918 1	1. 613	0.9918 1
3-Methylpentane	0.853 01	0.937873	0*	1.07855	6.69 80E-05	0.3372 6	0.3372 6	3.33710E-05	0.595600	0.868391	0.595600
nC6	2. 103	2.06167	0*	1. 7016	.22709E-05	0.893827	0.893827	1.59675E-05	1.6 618	2. 0018	1.6 618
Methylcyclopentane	0.578803	0.538181	0*	0.66 273	6.57076E-05	0.216265	0.216265	3.50717E-05	0.39 908	0.57577	0.39 908
Benzene	0.0686979	0.069 785	0*	0.0777165	0.000551187	0.0263765	0.0263765	0.000 09565	0.0 75586	0.06915 5	0.0 75586
Cyclohexane	0.69 8	0.517160	0*	0.655215	0.00013 888	0.2 5 6	0.2 5 6	7.66819E-05	0. 61965	0.673527	0. 61965
2-Methylhexane	1.26180	0. 7226	0*	0.2689 1	8.7 980E-06	0.395 8	0.395 8	.69159E-06	0.796063	1.16069	0.796063
3-Methylhexane	1.055 5	0.373805	0*	0.219 63	7.715 5E-06	0.328216	0.328216	. 01 1E-06	0.663912	0.968006	0.663912
2,2, -Trimethylpentane	0	0	0*	0	0	0	0	0	0	0	0
nC7	2. 55 1	0.650829	0*	0.380687	9.999 2E-06	0.739613	0.739613	3. 9058E-06	1.52 30	2.222 9	1.52 30
Methylcyclohexane	2.60890	0.788578	0*	1.05960	0.00010 356	0.79 319	0.79 319	.72501E-05	1.62859	2.37 52	1.62859
Toluene	0.53 712	0.158655	0*	0.223993	0.00119096	0.162 6	0.162 6	0.0006 057	0.333880	0. 8651	0.333880
nC8	2.37272	0.189978	0*	0.0813356	1.8050 E-06	0.66 809	0.66 809	.33601E-07	1. 3239	2.088 7	1. 3239
Ethylbenzene	0.3759 7	0.0367767	0*	0.052 8 0	0.000250026	0.106007	0.106007	0.000128080	0.227650	0.33186	0.227650
meta-Xylene	0.91958	0.0809 9	0*	0.1 3989	0.000 0933	0.258221	0.258221	0.00018 260	0.555957	0.810521	0.555957
o-Xylene	0.5701 9	0.0 58072	0*	0.0688616	0.000 86672	0.159620	0.159620	0.000237 58	0.3 359	0.501979	0.3 359
nC9	1.9 53	0.0 85159	0*	0.0137709	3.07091E-07	0.532072	0.532072	1.06688E-07	1.16 7	1.6978	1.16 7
nC10	1.522 1	0.0121612	0*	0.00158007	3.17888E-08	0. 131 7	0. 131 7	8.13073E-09	0.908917	1.32523	0.908917
Dodecanes	.171 9	0.00 82232	0*	0.003 3769	8.62517E-08	1.12798	1.12798	2.158 5E-08	2. 8785	3.62738	2. 8785
Other Decanes	.61585	0.0538019	0*	0.052 123	1.68110E-06	1.25 90	1.25 90	5.16237E-07	2.7573	.02031	2.7573
Other Heptanes	0.902359	0.29828	0*	0.21 906	6.58690E-06	0.278 09	0.278 09	2.57581E-06	0.5656 5	0.82 729	0.5656 5
Other Hexanes	0	0	0*	0	0	0	0	0	0	0	0
Other Nonanes	3.8 910	0.137757	0*	0.156605	6.35697E-06	1.05800	1.05800	2.15319E-06	2.30790	3.36501	2.30790
Other Octanes	6.02089	0.650326	0*	0.600 67	2.09887E-05	1.706 2	1.706 2	7.56993E-06	3.65031	5.32228	3.65031
Pentadecanes	3.08103	9.7 176E-05	0*	1.25389E-05	2. 7 09E-10	0.832531	0.832531	.02398E-11	1.83719	2.67869	1.83719
Tetradecanes	3.39959	0.000360 56	0*	7.06780E-05	1. 2353E-09	0.918663	0.918663	2.63569E-10	2.02717	2.95568	2.02717
Tridecanes	.05755	0.001 266	0*	0.000861557	2.00572E-08	1.0966	1.0966	.5 985E-09	2. 1960	3.52786	2. 1960
Undecanes	5.11966	0.0189775	0*	0.0178087	5.27300E-07	1.38631	1.38631	1. 8619E-07	3.05 5	. 536	3.05 5
Water	0.272705	1.26251	100*	1.3593	99.9898	1 .3072	1 .3072	99.9 07	31. 023	0.00921815	31. 023
Docosanes	1.2 01	3.30800E-09	0*	0	0	0.335092	0.335092	0	0.739 81	1.07819	0.739 81
E cosanes	1. 9693	7.08 3 E-08	0*	0	0	0. 0 77	0. 0 77	0	0.892600	1.301	0.892600
Heneicosanes	1. 2038	1.80 10E-08	0*	0	0	0.38379	0.38379	0	0.8 6956	1.23 89	0.8 6956
Hentriacontanes Plus	17.7902	2.2015 E-12	0*	0	0	.80698	.80698	0	10.6081	15. 669	10.6081
Heptacosanes	0.675192	. 338E-12	0*	0	0	0.182 0	0.182 0	0	0. 02608	0.587018	0. 02608
Heptadecanes	2.28570	5.68000E-06	0*	1.70932E-08	3.28691E-13	0.617608	0.617608	.55190E-15	1.36293	1.98721	1.36293
Hexacosanes	0.623053	1.36213E-11	0*	0	0	0.168352	0.168352	0	0.371519	0.5 1688	0.371519
Hexadecanes	2.63056	2.29288E-05	0*	1.93512E-07	3.72 06E-12	0.710797	0.710797	3.85837E-13	1.56857	2.2870	1.56857
Nonacosanes	0.355791	2.66806E-13	0*	0	0	0.0961363	0.0961363	0	0.212153	0.309327	0.212153
Nonadecanes	1.68791	2.98021E-07	0*	0	0	0. 56080	0. 56080	0	1.006 8	1. 67 8	1.006 8
Octacosanes	0. 15013	8.78020E-13	0*	0	0	0.112138	0.112138	0	0.2 7 67	0.360816	0.2 7 67
Octadecanes	2.12959	1.28836E-06	0*	0	0	0.575 25	0.575 25	0	1.26985	1.851 8	1.26985
Pentacosanes	0.59550	3.5105 E-11	0*	0	0	0.160908	0.160908	0	0.355092	0.517737	0.355092
Tetracosanes	0.88 775	1.76299E-10	0*	0	0	0.239070	0.239070	0	0.527580	0.769231	0.527580
Triacontanes	0.3367 3	9.70561E-1	0*	0	0	0.0909896	0.0909896	0	0.200796	0.292768	0.200796
Tricosanes	0.93 115	6.70795E-10	0*	0	0	0.252 02	0.252 02	0	0.557001	0.812127	0.557001

Process Streams		Gas	HC Flash	HP Gas	HT Gas	LoadingPW	Oil	Oil 2	Produced Water	Stock Tank Oil	To VDU	Water	Water Flash	Water/ Brine	Wellstream	1	2	3	8	10
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: **Total**	From Block:		Stock ank	VSSL 100	Heater reater			Heater reater	Produced Water ank	Stock ank	MIX 100		Produced Water ank	Heater reater	M X 101	Choke	VSSL 100	MIX 104	VSSL 100	VLVE 100
	o Block:	MIX 101	MIX 100		Stock ank		MIX 101	Stock ank				MIX 101	MIX 100	Produced Water ank	Choke	VSSL 100	MIX 104	VLVE 100	MIX 104	Heater reater
Property	**Units**																			
emperature	°F	70*	7 .61 1*	78*	128*	83.105	70*	128	7 .61 1	7 .61 1	7 .6187	70*	7 .61 1*	128	69.7690	69.7025	78	78.0000	78	67.9157
Pressure	psia	30 .696*	15.1959*	302.696*	3 .6959*	0.573851	30 .696*	3 .6959	15.1959	15.1959	15.1959	30 .696*	15.1959*	3 .6959	30 .696	303.696*	302.696	302.696	302.696	36.6959*
Mole Fraction Vapor	%	99.9898	100	100	100	100	0	0	0	0	99.9995	0	100	0	69.8196	69.8292	0	0	0	6.586 0
Mole Fraction Light Liquid	%	0.0102038	0	0	0	0	100	100	100	97.85 3	0.000 51108	100	0	100	8.31388	8.30 33	100	26. 295	100	19.9283
Mole Fraction Heavy Liqu d	%	0	0	0	0	0	0	0	0	2.1 573	0	0	0	0	21.8665	21.866	0	73.5705	0	73. 853
Molecular We ght	lb/lbmol	21.36	39.8689	21. 918	0.5181	18.1987	109.729	1 7.6 6	18.0162	1 5.291	39.8687	18 0153	37.0651	18.016	27.636	27.636	18.0172	2.19 9	109. 97	2.19 9
Mass Density	lb/ft^3	1.2 9 2	0.1071 8	1.22502	0.228628	0.00179391	3.1 1	3.3995	62.2358	.9132	0.1071 7	62 2976	0.099 300	61.5 99	2.26 11	2.25630	62.183	7.505	2.870	3.93 38
Molar F ow	lbmol/h	98. 191	.07588	98.6972	.25918	0.000353138	11.1297	7.030 2	30.3666	7.21371	.07617	30 80 9	0.0002837 3	30.3669	1 0.35	1 0.35	30.6 69	1 6565	11.0096	1 6565
Mass Flow	lb/h	2102.66	162.501	2121.18	172.57	0.006 2666	1221.25	1038.02	5 7.091	10 8.09	162.512	55 .960	0.0105170	5 7.101	3878.87	3878.87	552.172	1757.69	1205.52	1757.69
Vapor Volumetr c Flow	ft^3/h	1682.92	1516.61	1731.55	75 .822	3.58250	28.3063	23.9177	8.79061	23.3359	1516.72	8.90820	0.105773	8.8887	1713.20	1719.13	8.87972	36 9998	28.1201	6.752
iqu d Volumetric Flow	gpm	209.818	189.08	215.882	9 .1077	0. 66 9	3.52909	2.98195	1.09597	2.909 1	189.098	1.11063	0.0111873	1.10821	213.59	21 .333	1.10708	.61296	3.50588	55.6990
Std Vapor Volumetr c Flow	MMSCFD	0.896363*	0.0371216	0.898896	0.0387909	3.21625E-06	0.101365	0.06 0303	0.276568	0.0656997	0.03712 2	0.280559	2.58 22E-06	0.276570	1.27829	1.27829	0.279120	0.379391	0.100271	0.379391
Std Liquid Volumetr c Flow	sgpm	12.139	0.6711 9	12.1878	0.693803	1.35026E-05	3.5 275*	2.8161	1.09375	2.83879	0.67119	1.109 0*	. 9786E-05	1.09379	16.7915	16.7915	1.10503	.6037	3. 9871	.6037
Compressibl ity		0.916603	0.986152	0.920361	0.97 991	0.999 0	0.136331	0.0187163	0.000767211	0.00857350	0.9861 8	0.0155013	0.987963	0.00161035	0.65 593	0.65 78	0.0151999	0.0 65955	0.133990	0.0695097
Speci ic Grav ty			1.37657	0 7 2056	1.39899	0.628355	0.691759	0.69585	0.997868	0.720123		0.998859	1.27976	0.986872			0.997029	0.761686	0.687370	
API Grav ty							71.5699	63.375	10.0018	63.2658		9.96309		10.0008			10.0 3	52. 372	71.6511	
Surface Tens on	lbf/ft						0.00127087	0.0013975	0.00 997 87	0.00162262?		0.00503226		0.00 60 11			0.00 968 57	0.0021 26 7	0.00125031	
Net Ideal Gas Heating Value	Btu/ft^3	1166.69	2066.07	1171.37	206 .08	27.1387	5527.17	7387.26	0.0736276	7250.88	2066.06	0	1925.3	0.0916170	1256. 0	0.557187	1 57.87	551 .51	1 57.87	
Net Liqu d Heating Value	Btu/lb	20657.0	19516.7	2061 6	19170.7	- 63.573	18970.1	188 0.6	-1058.13	18790.1	19516.7	-1059.76	19567.	-1057.7	17018.8	17018.8	-10 7.	12679.	18966.8	12679.
Gross Ideal Gas Heating Value	Btu/ft^3	1285.39	22 9.31	1290. 2	22 7.39	78.998	5936.	7917.59	50.3876	7772. 2	22 9.30	50.31	2098.31	50. 067	1383.13	1383.13	50.8989	1602.79	5922.72	1602.79
Gross Liquid Heating Value	Btu/lb	22765.8	21261.3	22717.1	20887.9	617.8 9	20385.7	20203.7	1.65671	20152.	21261.3	0	21338.8	2.06687	18759.2	18759.2	12.8775	13982.9	20381.7	13982.9
Mass Flow		lb/h	b h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	b h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
N2		12.2 13*	0.0716567	12.28 7	0.0713118	6.18956E-08	0.115358*	0.00066926	6 3870 E-06	0.00032 366	0.0716615	0*	.85636E-06	1.12 3 E-05	12.3567	12.3567	0.0009210	0.0719923	0.0710712	0.0719923
CO2		5.97730*	0.2 6187	5.8 780	0.2 1 8	2.73887E-05	0.127350*	0.01 15 8	0.00118856	0.009 5097	0.2 6209	0*	2.17827E-05	0.0012103	6.10 65	6.10 65	0.0159673	0.2568 9	0.2 0881	0.2568 9
C1		1187.2 *	16.2655	118 .15	16.1095	5.29613E-05	13.3660*	0.3 1062	0.003709 2	0.185098	16.2669	0*	0.00137 3	0.00508376	1200.61	1200.61	0.170527	16. 557	16 2852	16. 557
C2		52.369*	25.9758	53.091	25.3093	9.57127E-05	28.1915*	2.15055	0.00767053	1. 8 02	25.9777	0*	0.00190172	0.0095722	80.560	80.560	0.08 975	27. 69	27 38	27. 69
C3		259.219*	0.1826	262.712	38.7118	2.20179E-05	51. 570*	9.2 255	0.00739225	7.7717	0.1852	0*	0.00260255	0.00999 79	310.676	310.676	0.0313 3	7.96 3	7 9330	7.96 3
C		5. 766*	12.8772	6.0033	12.59 9	1.1 833E-06	19.6651*	6.5 18	0.00115086	6.259 6	12.8778	0*	0.000578535	0.00172939	65.1 17	65.1 17	0.003 655	19.138	19.1350	19.138
C		79.8558*	28.2321	8 0810	28.013	3. 6366E-06	51.2586*	19.0133	0.00 81220	18.79 7	28.2339	0*	0.00185502	0.00666722	131.11	131.11	0.00828835	7.033	7 0251	7.033
Propane, 2,2-Dimethyl-		0.568065*	0.257689	0.653968	0.261629	5.80575E-09	0.6022 1*	0.25 686	1 27066E-05	0.258626	0.257700	0*	1.030 8E-05	2.3013 E-05	1.17031	1.17031	2.8 235E-05	0.516338	0.516310	0.516338
C5		18.8172*	9.95056	21.0210	10.7566	2. 9970E-07	29.389 *	16. 275	0.000960657	17.2336	9.95108	0*	0.0005219 0	0.001 8260	8.2065	8.2065	0.00129715	27.1856	27.18 3	27.1856
C5		16.6869*	9.7 683	19.1075	10.9523	6.81389E-08	3 .0628*	20.6890	0.000380705	21.89	9.7 736	0*	0.00052 068	0.00090 77	50.7 97	50.7 97	0.000 81026	31.6 22	31 6 17	31.6 22
-2-Dimethylbu ane		0.339252*	0.209860	0 37 592	0.2532 7	5.579 5E-10	1.05501*	0.766 10	5 3155 E-06	0.809796	0.209867	0*	7.288 0E-06	1.26039E-05	1.39 26	1.39 26	8.753 8E-06	1.01967	1.01966	1.01967
Cyclopentane		0.621217*	0.1081 8	0.19 12	0.12 337	1.10925E-08	0*	0.302383	7 78251E-05	0.318573	0.108155	0*	7.51099E-06	8.53361E-05	0.621217	0.621217	6.9699 E-05	0. 26806	0. 26736	0. 26806
-3-Dimethylbu ane		0.25 39*	0.389397	0 675019	0. 89960	3.05395E-09	2.75261*	1.8 202	3 50606E-05	1.9 258	0.389 16	0*	1.83822E-05	5.3 28E-05	3.00705	3.00705	.01085E-05	2.33203	2.33199	2.33203
-Methylpentane		3.98621*	2.69 28	.66050	3. 522	1.17210E-08	18.1078*	13.9810	0.000156502	1 .7389	2.69	0*	0.000156208	0.000312710	22.09 0	22.09 0	0.0001 8690	17. 335	17. 33	17. 335
3-Methylpentane		2.2051 *	1.52 0	2.61251	1.96058	1.87216E-08	10.8762*	8.50786	0.0002528 3	8.9 0	1.52 15	0*	0.000113 31	0.000366273	13.0813	13.0813	0.00018 265	10. 688	10. 686	10. 688
C6		.91915*	3.35030	5.73572	.61796	3.82031E-09	29.7513*	2 .3165	7 66 87E-05	25.58 2	3.350 6	0*	0.00015 616	0.000231265	3 .670	3 .670	8.81683E-05	28.93 7	28 93 6	28.93 7
Methylcyclopentane		0.7 5 61*	0.87 536	1. 737	1.1 631	1.66 1E-08	7.6 317*	5.79 59	0.000289625	6.06637	0.87 606	0*	6.98615E-05	0.000359 87	8.38863	8.38863	0.000193656	6.9 126	6.9 107	6.9 126
Benzene		0.15375 *	0.112902	0.187176	0.1 67 9	1.37302E-07	0.869355*	0.686167	0.00300738	0.720015	0.112911	0*	8.173 3E-06	0.00301555	1.02311	1.02311	0.00226150	0.835932	0.833671	0.835932
Cyclohexane		0.828290*	0.8 0376	1. 0060	1.1 39	2.91585E-08	8.69223*	6.97 80	0.000669063	7.27881	0.8 0 5	0*	6.89088E-05	0.000737972	9.52052	9.52052	0.000 23 16	8.11992	8.11950	8.11992
-Methylhexane		0.986178*	0.767 55	1.3 661	1.20510	.10001E-10	1 .3527*	12.7872	1 95858E-05	13.22 8	0.767 83	0*	2.828 5E-05	.78703E-05	15.3389	15.3389	2.59057E-05	13.9923	13 9923	13.9923
3-Methylhexane		0.887560*	0.607 53	1.06156	0.969266	3.79 32E-10	11.8 35*	10.7002	1 9130 E-05	11.0620	0.607 76	0*	2.30809E-05	.22113E-05	12.7311	12.7311	2. 303 E-05	11.6695	11 6695	11.6695
,2, -Trimethylpentane		0*	0	0	0	0	0*	0	0	0	0	0*	0	0	0	0	0	0	0	0
C7		1.57788*	1.05763	1.89608	1.78168	2.081 7E-10	27.1107*	25.0108	1. 6702E-05	25.73 9	1.05767	0*	.00368E-05	5. 7069E-05	28.6886	28.6886	1.927 0E-05	26.7925	26 7925	26.7925
Methylcyclohexane		1.5 61 *	1.281 2	2.18503	2.05579	8.8260 E-09	29.26 5*	26.5692	0.000 59 97	27.3 36	1.28153	0*	0.000111 38	0.000570935	30.8106	30.8106	0.000260902	28.6256	28 6253	28.6256
oluene		0.2720 5*	0.257809	0. 3320	0. 12209	8.82913E-08	6.0297 *	5. 985	0.006 9218	5.60 25	0.257832	0*	2.35573E-05	0.0065157	6.30178	6.30178	0.00355630	5.86858	5.86502	5.86858
C8		0. 9691*	0.308727	0 610188	0.637358	5.12026E-12	25.337 *	2 .5395	1 32133E-06	2 .8682	0.308735	0*	8.55 06E-06	9.87539E-06	25.7871	25.7871	2.39 22E-06	25.1769	25.1769	25.1769
thylbenzene		0*	0.0597608	0.110 95	0.115578	6.158 7E-09	.11188*	3.88	0.00136237	3.9 026	0.0597663	0*	5.5197 E-06	0.00136789	.11188	.11188	0.00070722	.00139	.00068	.00139
meta-Xylene		0.208973*	0.131537	0 2 053	0.257393	9. 675 E-09	9.80708*	9.51220	0.00239721	9.63805	0.131552	0*	1.51 33E-05	0.002 1235	10.0161	10.0161	0.001017 3	9.77200	9.77098	9.77200
o-Xylene		0*	0.07 3 7	0.138700	0.1 7 56	8.3857 E-09	6.191 6*	5.9026	0.00265535	5.97566	0.07 19	0*	7.2 217E-06	0.00266259	6.191 6	6.191 6	0.00131118	6.05276	6.051 5	6.05276
C9		0.126227*	0.0788 26	0.170665	0.198 99	2.16093E-13	20.5122*	20.2692	2 31813E-07	20.3889	0.0788 0	0*	1. 829E-06	1.68010E-06	20.638	20.638	5.89100E-07	20. 677	20. 677	20. 677
C10		0*	0.0197632	0.0 9 863	0.0595682	1.90718E-15	16.025 *	15.916	7 7 102E-09	15.9562	0.019763	0*	1.66176E-07	1.73917E-07	16.025	16.025	. 8956E-08	15.9759	15 9759	15.9759
Dodecanes		0*	0.007836 7	0.02 2010	0.0316752	5.52892E-15	3.7529*	3.6971	1.103 3E-07	3.7209	0.00783683	0*	3.615 1E-07	.7188 E-07	3.7529	3.7529	1.1918 E-07	3.7287	3 7287	3.7287
Other Decanes		0.280081*	0.087 288	0 210332	0.2 3008	2.13332E-12	8.3958*	8.2226	3 68513E-06	8.3782	0.087 3 3	0*	5.51219E-06	9.19732E-06	8.6759	8.6759	2.85052E-06	8. 656	8. 656	8. 656
Other Heptanes		1.08 88*	0. 8 72	0 856856	0.769226	2. 25 7E-10	9.71 26*	9.17302	1 3 35 E-05	9. 5752	0. 8 7 6	0*	2.26016E-05	3.60370E-05	10.7991	10.7991	1. 2229E-05	9.9 228	9.9 227	9.9 228
Other Hexanes		0*	0	0	0	0	0*	0	0	0	0	0*	0	0	0	0	0	0	0	0
Other Nonanes		0.630866*	0.223855	0. 72507	0.517	3.55035E-11	0. 075*	0.0 83	1 83089E-05	0.3 19	0.223871	0*	1.6 702E-05	3. 7791E-05	1.0383	1.0383	1.18893E-05	0.5658	0 5658	0.5658
Other Octanes		1.91121*	1.05679	2.02880	2.03281	3.08185E-10	6 .2788*	62.1283	5.16783E-05	63.10 3	1.05685	0*	6.31510E-05	0.00011 829	66.1900	66.1900	.17990E-05	6 .1612	6 .1611	6 .1612
Pentadecanes		0*	0.00015831	0.0007 7366	0.0011 69	.27033E-20	32.2928*	32.2909	3. 8620E-11	32.2919	0.000158315	0*	1.31871E-09	1.35358E-09	32.2928	32.2928	2.22193E-10	32.2921	32 2921	32.2921
etradecanes		0.19525 *	0.000585776	0.002 0537	0.003 8571	1. 8818E-18	35. 385*	35.6278	3 5 933E-10	35.6307	0.000585783	0*	7. 3320E-09	7.78813E-09	35.6337	35.6337	1. 5535E-09	35.6313	35 6313	35.6313
ridecanes		0*	0.0023 39	0.00827923	0.011 586	2.77788E-16	2.5373*	2.5176	1 9123 E-08	2.5267	0.0023 8	0*	9.06099E-08	1.09733E-07	2.5373	2.5373	2.51230E-08	2.5290	2 5290	2.5290
Undecanes		0*	0.0308387	0.083796	0.103217	1.75376E-13	53.7732*	53.5862	1 01193E-06	53.6586	0.0308 06	0*	1.8729 E-06	2.88 86E-06	53.7732	53.7732	8.20630E-07	53.689	53 689	53.689
Water		0*	2.05158	3.00 32	.66197	0.00622323	0*	0.2 7802	5 7.0 5	2.85819	2.05173	55 .960*	0.0001 2961	5 7.0 5	55 .960	55 .960	551.8	551.955	0.111127	551.955
Docosanes		0*	5.37589E-09	1.0 65 E-07	1 780 7E-07	0	12.9978*	12.9978	0	12.9978	5.37589E-09	0*	0	0	12.9978	12.9978	0	12.9978	12 9978	12.9978
cosanes		0*	1.15129E-07	1.30367E-08	2 395 2E-06	0	15.6891*	15.6891	0	15.6891	1.15129E-07	0*	0	0	15.6891	15.6891	0	15.6891	15 6891	15.6891
Heneicosanes		0*	2.93187E-08	.02561E-07	7 532 0E-07	0	1 .8869*	1 .8869	0	1 .8869	2.93187E-08	0*	0	0	1 .8869	1 .8869	0	1 .8869	1 8869	1 .8869
Hentriacontanes Plus		0*	3.57776E-12	6.2787 E-10	5.13598E-10	0	186. 57*	186. 57	0	186. 57	3.57776E-12	0*	0	0	186. 57	186. 57	0	186. 57	186. 57	186. 57
Heptacosanes		0*	7.22100E-12	3.89739E-10	6 03271E-10	0	7.0761*	7.07661	0	7.07661	7.22100E-12	0*	0	0	7.07661	7.07661	0	7.07661	7.07661	7.07661
Heptadecanes		0*	9.23065E-06	6.09337E-05	0.0001009	6.22117E-26	23.9562*	23.9561	5 80129E-16	23.9562	9.23065E-06	0*	1.79769E-12	1.79827E-12	23.9562	23.9562	2.513 3E-1	23.9562	23 9562	23.9562
Hexacosanes		0*	2.21362E-11	9.15650E-10	1 5 267E-09	0	6.53015*	6.53015	0	6.53015	2.21362E-11	0*	0	0	6.53015	6.53015	0	6.53015	6.53015	6.53015
Hexadecanes		0*	3.72620E-05	0.000210969	0.000332817	8.373 9E-2	27.5709*	27.5703	2 2716 E-1	27.5706	3.72620E-05	0*	2.03517E-11	2.037 E-11	27.5709	27.5709	2.130 8E-12	27.5707	27 5707	27.5707
Nonacosanes		0*	.33591E-13	.11332E-11	96 3 E-11	0	3.72900*	3.72900	0	3.72900	.33591E-13	0*	0	0	3.72900	3.72900	0	3.72900	3.72900	3.72900
Nonadecanes		0*	.8 319E-07	.5 680E-06	8.1 826E-06	0	17.6908*	17.6907	0	17.6907	.8 319E-07	0*	0	0	17.6908	17.6908	0	17.6907	17 6907	17.6907
Octacosanes		0*	1. 2688E-12	1.01700E-10	1. 0927E-10	0	.3 970*	.3 970	0	.3 970	1. 2688E-12	0*	0	0	.3 970	.3 970	0	.3 970	.3 970	.3 970
Octadecanes		0*	2.0937 E-06	1.70 01E-05	2 8939 E-05	0	22.3200*	22.3200	0	22.3200	2.0937 E-06	0*	0	0	22.3200	22.3200	0	22.3200	22 3200	22.3200
Pentacosanes		0*	5.70503E-11	2. 2 61E-09	3. 1376E-09	0	6.2 1 1*	6.2 1 1	0	6.2 1 1	5.70503E-11	0*	0	0	6.2 1 1	6.2 1 1	0	6.2 1 1	6.2 1 1	6.2 1 1
etracosanes		0*	2.86507E-10	9.27 68E-09	1. 2359E-08	0	9.27322*	9.27322	0	9.27322	2.86507E-10	0*	0	0	9.27322	9.27322	0	9.27322	9.27322	9.27322
riacontanes		0*	1.57727E-13	2.02375E-11	2 0 739E-11	0	3.52937*	3.52937	0	3.52937	1.57727E-13	0*	0	0	3.52937	3.52937	0	3.52937	3.52937	3.52937
ricosanes		0*	1.09012E-09	2.71722E-08	.3882E-08	0	9.79035*	9.79035	0	9.79035	1.09012E-09	0*	0	0	9.79035	9.79035	0	9.79035	9.79035	9.79035

User Value Sets Report

Client Name:	Gulfport	**Job:**	
Location:	Vozar		
Flowsheet:	Production Facility		

Tank-1

User Value [BlockReady]

Parameter	1*	Upper Bour	
Lower Bound		Enforce Bo	FALSE

User Value [ShellLength]

Parameter	20* ft	Upper Bour	ft
Lower Bound	ft	Enforce Bo	FALSE

User Value [ShellDiam]

Parameter	12* ft	Upper Bour	ft
Lower Bound	ft	Enforce Bo	FALSE

User Value [BreatherVP]

Parameter	0.0300000* psig	Upper Bour	psig
Lower Bound	psig	Enforce Bo	FALSE

User Value [BreatherVacP]

Parameter	-0.0300000* psig	Upper Bour	psig
Lower Bound	psig	Enforce Bo	FALSE

User Value [DomeRadius]

Parameter	ft	Upper Bour	ft
Lower Bound	ft	Enforce Bo	FALSE

User Value [OpPress]

Parameter	0* psig	Upper Bour	psig
Lower Bound	psig	Enforce Bo	FALSE

User Value [AvgPercentLiq]

Parameter	50* %	Upper Bour	%
Lower Bound	%	Enforce Bo	FALSE

User Value [MaxPercentLiq]

Parameter	90* %	Upper Bour	%
Lower Bound	%	Enforce Bo	FALSE

User Value [MinPercentLiq]

Parameter	10* %	Upper Bour	%
Lower Bound	%	Enforce Bo	FALSE

User Value [AnnNetTP]

Parameter	37.5870* bbl/day	Upper Bour	bbl/day
Lower Bound	bbl/day	Enforce Bo	FALSE

User Value [OREff]

Parameter	0* %	Upper Bour	%
Lower Bound	%	Enforce Bo	FALSE

User Value [MaxAvgT]

Parameter	81.9* °F	Upper Bour	°F
Lower Bound	°F	Enforce Bo	FALSE

User Value [MinAvgT]					
Parameter	63.5*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [BulkLiqT]					
Parameter	74.6142*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [AvgP]					
Parameter	14.1*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [Therml]					
Parameter	1823*	Btu/ft^2/day	Upper Bour		Btu/ft^2/day
Lower Bound		Btu/ft^2/day	Enforce Bo	FALSE	

User Value [AvgWindSpeed]					
Parameter	6.5*	mi/h	Upper Bour		mi/h
Lower Bound		mi/h	Enforce Bo	FALSE	

User Value [MaxHourlyLoadingRate]					
Parameter		bbl/hr	Upper Bour		bbl/hr
Lower Bound		bbl/hr	Enforce Bo	FALSE	

User Value [SumLiqLevelInc]					
Parameter		ft/yr	Upper Bour		ft/yr
Lower Bound		ft/yr	Enforce Bo	FALSE	

User Value [FlashingT]					
Parameter	83.1054*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [EntrainedOilFrac]					
Parameter	1*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [TurnoverRate]					
Parameter	10.6407*		Upper Bour		
Lower Bound			Enforce Bo	FALSE	

User Value [LLossSatFactor]					
Parameter	0.5*		Upper Bour		
Lower Bound			Enforce Bo	FALSE	

User Value [AtmPressure]					
Parameter	14.1*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [TVP]					
Parameter	0.462027*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [MaxVP]					
Parameter	0.571958*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [MinVP]					
Parameter	0.371215*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [AvgLiqSurfaceT]				
Parameter	76.4805*	°F	Upper Bour	°F
Lower Bound		°F	Enforce Bo	FALSE

User Value [MaxLiqSurfaceT]				
Parameter	83.1054*	°F	Upper Bour	°F
Lower Bound		°F	Enforce Bo	FALSE

User Value [TotalLosses]				
Parameter	0.00268578*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [WorkingLosses]				
Parameter	0.000326447*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [StandingLosses]				
Parameter	0.000344999*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [RimSealLosses]				
Parameter	0*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [WithdrawalLoss]				
Parameter	0*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [LoadingLosses]				
Parameter	0.000655405*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [MaxHourlyLoadingLoss]				
Parameter	0*	b/hr	Upper Bour	lb/hr
Lower Bound		b/hr	Enforce Bo	FALSE

User Value [PStar]				
Parameter			Upper Bour	
Lower Bound			Enforce Bo	FALSE

User Value [AllCTotalLosses]				
Parameter	0.115351*	ton/yr	Upper Bour	ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE

User Value [AllCLoadingLosses]				
Parameter	0.0281488*	ton/yr	Upper Bour	ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE

User Value [AllCMaxHLoadingLoss]				
Parameter		b/hr	Upper Bour	lb/hr
Lower Bound		b/hr	Enforce Bo	FALSE

User Value [AllCFlashingLosses]				
Parameter	0.0661453*	ton/yr	Upper Bour	ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE

User Value [DeckFittingLosses]				
Parameter	0*	b/d	Upper Bour	lb/d
Lower Bound		b/d	Enforce Bo	FALSE

User Value [DeckSeamLosses]					
Parameter	0*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [FlashingLosses]					
Parameter	0.239488*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [TotalResidual]					
Parameter	2396.12*	ton/yr	Upper Bour		ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE	

User Value [GasMoleWeight]					
Parameter	0.0181987*	kg/mol	Upper Bour		kg/mol
Lower Bound		kg/mol	Enforce Bo	FALSE	

User Value [VapReportableFrac]					
Parameter	0.424926*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [LiqReportableFrac]					
Parameter	0.00546205*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [FlashReportableFrac]					
Parameter	66.0765*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

Notes:
This User Value Set was programmatically generated. GUID={1F095D0F-75DE-4924-A3F5-B1B3C8F042AD}

Tank-2

User Value [BlockReady]					
Parameter	1*		Upper Bour		
Lower Bound			Enforce Bo	FALSE	

User Value [ShellLength]					
Parameter	20*	ft	Upper Bour		ft
Lower Bound		ft	Enforce Bo	FALSE	

User Value [ShellDiam]					
Parameter	12*	ft	Upper Bour		ft
Lower Bound		ft	Enforce Bo	FALSE	

User Value [BreatherVP]					
Parameter	0.0300000*	psig	Upper Bour		psig
Lower Bound		psig	Enforce Bo	FALSE	

User Value [BreatherVacP]					
Parameter	-0.0300000*	psig	Upper Bour		psig
Lower Bound		psig	Enforce Bo	FALSE	

User Value [DomeRadius]					
Parameter		ft	Upper Bour		ft
Lower Bound		ft	Enforce Bo	FALSE	

User Value [OpPress]					
Parameter	0*	psig	Upper Bour		psig
Lower Bound		psig	Enforce Bo	FALSE	

User Value [AvgPercentLiq]					
Parameter	50*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [MaxPercentLiq]					
Parameter	90*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [MinPercentLiq]					
Parameter	10*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [AnnNetTP]					
Parameter	98.3185*	bbl/day	Upper Bour		bbl/day
Lower Bound		bbl/day	Enforce Bo	FALSE	

User Value [OREff]					
Parameter	0*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [MaxAvgT]					
Parameter	81.9*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [MinAvgT]					
Parameter	63.5*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [BulkLiqT]					
Parameter	74.6142*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [AvgP]					
Parameter	14.1*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [Therml]					
Parameter	1823*	Btu/ft^2/day	Upper Bour		Btu/ft^2/day
Lower Bound		Btu/ft^2/day	Enforce Bo	FALSE	

User Value [AvgWindSpeed]					
Parameter	6.5*	mi/h	Upper Bour		mi/h
Lower Bound		mi/h	Enforce Bo	FALSE	

User Value [MaxHourlyLoadingRate]					
Parameter		bbl/hr	Upper Bour		bbl/hr
Lower Bound		bbl/hr	Enforce Bo	FALSE	

User Value [SumLiqLevelInc]					
Parameter		ft/yr	Upper Bour		ft/yr
Lower Bound		ft/yr	Enforce Bo	FALSE	

User Value [FlashingT]					
Parameter	83.1054*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [EntrainedOilFrac]					
Parameter	1*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

User Value [TurnoverRate]					
Parameter	18.5557*		Upper Bour		
Lower Bound			Enforce Bo	FALSE	

User Value [LLossSatFactor]					
Parameter	0.5*		Upper Bour		
Lower Bound			Enforce Bo	FALSE	

User Value [AtmPressure]					
Parameter	14.1*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [TVP]					
Parameter	11.2578*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [MaxVP]					
Parameter	12.3319*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [MinVP]					
Parameter	10.2615*	psia	Upper Bour		psia
Lower Bound		psia	Enforce Bo	FALSE	

User Value [AvgLiqSurfaceT]					
Parameter	76.4805*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [MaxLiqSurfaceT]					
Parameter	83.1054*	°F	Upper Bour		°F
Lower Bound		°F	Enforce Bo	FALSE	

User Value [TotalLosses]					
Parameter	89.0661*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [WorkingLosses]					
Parameter	6.33894*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [StandingLosses]					
Parameter	8.50542*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [RimSealLosses]					
Parameter	0*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [WithdrawalLoss]					
Parameter	0*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [LoadingLosses]					
Parameter	19.0900*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	

User Value [MaxHourlyLoadingLoss]					
Parameter	0*	b/hr	Upper Bour		lb/hr
Lower Bound		b/hr	Enforce Bo	FALSE	

User Value [PStar]					
Parameter			Upper Bour		
Lower Bound			Enforce Bo	FALSE	
User Value [AllCTotalLosses]					
Parameter	20.9241*	ton/yr	Upper Bour		ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE	
User Value [AllCLoadingLosses]					
Parameter	4.48477*	ton/yr	Upper Bour		ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE	
User Value [AllCMaxHLoadingLoss]					
Parameter	0*	b/hr	Upper Bour		lb/hr
Lower Bound		b/hr	Enforce Bo	FALSE	
User Value [AllCFlashingLosses]					
Parameter	25.3204*	ton/yr	Upper Bour		ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE	
User Value [DeckFittingLosses]					
Parameter	0*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	
User Value [DeckSeamLosses]					
Parameter	0*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	
User Value [FlashingLosses]					
Parameter	109.626*	b/d	Upper Bour		lb/d
Lower Bound		b/d	Enforce Bo	FALSE	
User Value [TotalResidual]					
Parameter	4500.26*	ton/yr	Upper Bour		ton/yr
Lower Bound		ton/yr	Enforce Bo	FALSE	
User Value [GasMoleWeight]					
Parameter	0.0455827*	kg/mol	Upper Bour		kg/mol
Lower Bound		kg/mol	Enforce Bo	FALSE	
User Value [VapReportableFrac]					
Parameter	77.6834*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	
User Value [LiqReportableFrac]					
Parameter	99.8507*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	
User Value [FlashReportableFrac]					
Parameter	79.0143*	%	Upper Bour		%
Lower Bound		%	Enforce Bo	FALSE	

Notes:
This User Value Set was programmatically generated. GUID={74AD067A-697B-4323-9D60-2EC46F299732}