

STREAM SUMMARY, CASES C3 TO C7 (STREAM 2 = STREAM 1 LESS PR-101/SDV-101 LOSSES; SEE PRO-CAL-001)

STREAM	1	3	4	5	6	7	8	10	11	12	13
C3 PRESSURE (PSIG)	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	950.0	950.0	1,000.0	1,000.0	150.0	15.0
TEMPERATURE (F)	60.0	60.0	60.0	60.0	60.0	57.0	57.0	60.0	105.0	54.8	45.3
FLOW (MMSCFD)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.001	0.001	0.001	0.001
MASS FLOW (LB/H)	20,373	20,373	20,372	20,372	20,372	20,372	20,372	1	1	1	1
C4 PRESSURE (PSIG)	1,100.0	1,097.3	1,096.5	1,094.7	1,093.6	1,001.6	1,000.0	1,097.3	1,097.3	150.0	15.0
TEMPERATURE (F)	120.0	119.9	119.8	119.8	119.7	115.5	115.4	119.9	119.9	67.6	58.6
FLOW (MMSCFD)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	0.001	0.001	0.001	0.001
MASS FLOW (LB/H)	244,466	244,466	244,465	244,465	244,465	244,465	244,465	1	1	1	1
C5 PRESSURE (PSIG)	900.0	897.2	896.4	894.5	890.9	751.8	750.0	897.2	897.2	150.0	15.0
TEMPERATURE (F)	60.0	59.8	59.8	59.7	59.6	50.8	50.7	59.8	105.0	61.1	51.8
FLOW (MMSCFD)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	0.001	0.001	0.001	0.001
MASS FLOW (LB/H)	244,468	244,468	244,465	244,465	244,465	244,465	244,465	3	3	3	3
C6 PRESSURE (PSIG)	1,150.0	1,148.0	1,147.5	1,146.1	1,145.3	751.6	750.0	1,148.0	1,148.0	150.0	15.0
TEMPERATURE (F)	45.0	44.9	44.8	44.8	44.7	18.2	18.1	44.9	105.0	45.9	36.0
FLOW (MMSCFD)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	0.001	0.001	0.001	0.001
MASS FLOW (LB/H)	244,466	244,466	244,465	244,465	244,465	244,465	244,465	1	1	1	1
C7 PRESSURE (PSIG)	1,100.0	1,097.7	1,097.1	1,095.6	1,092.7	851.6	850.0	1,097.7	1,097.7	150.0	15.0
TEMPERATURE (F)	60.0	59.9	59.8	59.7	67.8	52.1	51.9	59.9	105.0	42.5	31.5
FLOW (MMSCFD)	120.04	120.04	120.00	120.00	120.00	120.00	120.00	0.042	0.042	0.042	0.042
MASS FLOW (LB/H)	260,863	260,863	260,771	260,771	260,771	260,771	260,771	92	92	92	92

BASIS CASES (GEN-DB-001 SECTION 6)

C1: DESIGN MAX, WINTER, MAX PRESSURE CUT, 120 MMSCFD, DESIGN GAS, INLET 1,150 PSIG / 45 F, TRUNK 750 PSIG, HEATER ON
C2: NORMAL OPERATION, 90 MMSCFD, DESIGN GAS, INLET 1,050 PSIG / 70 F, TRUNK 950 PSIG, HEATER BYPASSED
C3: MINIMUM FLOW (TURNDOWN), 10 MMSCFD, DESIGN GAS, INLET 1,000 PSIG / 60 F, TRUNK 950 PSIG, HEATER BYPASSED
C4: SUMMER MAX TEMPERATURE, 120 MMSCFD, DESIGN GAS, INLET 1,100 PSIG / 120 F, TRUNK 1,000 PSIG, HEATER BYPASSED
C5: MIN METERING PRESSURE, MAX FLOW, 120 MMSCFD, DESIGN GAS, INLET 900 PSIG / 60 F, TRUNK 750 PSIG, HEATER ON
C6: HEATER-OUT WINTER UPSET, 120 MMSCFD, DESIGN GAS, INLET 1,150 PSIG / 45 F, TRUNK 750 PSIG, HEATER BYPASSED
C7: RICH GAS, DESIGN MAX, 120 MMSCFD, RICH GAS, INLET 1,100 PSIG / 60 F, TRUNK 850 PSIG, HEATER ON

LIQUID, VENT AND STANDBY STREAMS (ALL CASES)

14	G-101 FUEL (STANDBY)	0 NORMAL; 680 SCF/H AT 15 PSIG DURING UTILITY OUTAGE
20	V-101 LIQUIDS TO T-101	2 BBL/D AVERAGE (HOLD H-20); 30 GPM WHILE DUMPING; SG ABOUT 0.85; FLASHES ACROSS LCV-104 (ABOUT 750 SCF/BBL DUMPED, HOLD H-12)
21	PR-101 DRAIN TO T-101	BATCH AFTER PIG RECEIPT, DESIGN 5 BBL, GRAVITY FROM DEPRESSURED BARREL
22	T-101 TRUCK-OUT	BATCH BY VACUUM TRUCK, UP TO 400 GPM
30	VENT HEADER TO VS-101	INTERMITTENT: S1 BLOWDOWN PEAK 16,859 LB/H, MIN -64 F; PSV-101 FIRE 15,793 LB/H
31	T-101 VENT (PVRV-193/FA-193)	UP TO 30,863 SCFH AIR EQUIVALENT DURING A SLUG DUMP; EMERGENCY VENT EV-193

KEY DUTIES AND SETTINGS

H-101: C1 ABSORBED 3.96 MMBTU/H; C7 1.52; FIREBOX 6.0 MMBTU/H; EFFICIENCY 75 % HHV
FCV-131/132: CV REQUIRED 23 TO 228; RATED ABOUT 550; PREDICTED NOISE 85.6 DBA AT 1 M, ACOUSTIC INSULATION ON BODY AND 10 FT DOWNSTREAM
E-161: 4.0 KW DESIGN, 5 KW RATED; PCV-161 150 PSIG, PCV-162 15 PSIG
RELIEF: PSV-101 'E' 1,440 PSIG; PSV-157 'D' 1,440 PSIG; PSV-161 'D' 250 PSIG; TSV-136 1,440 PSIG
BLOWDOWN: RO-181 0.5625 IN, RO-182 0.5625 IN, RO-183 0.1875 IN; ABOUT 20 MIN TO 50 PSIG (S1, S2)
OPSS: PT-133A/B/C 2003 TRIP 1,225 PSIG CLOSES SDV-102 (FULL STROKE 4 S MAX); 192.201 LIMIT 1,290 PSIG (75 % SMYS OF ASSUMED TRUNK, HOLD H-04)

NOTES / REFERENCES
1. STREAM NUMBERS AS SHOWN ON PRO-DWG-001.
2. DATA FROM PRO-CAL-001 (GERG-2008), CLEAN FILTER.
3. FUEL DRAW = HEATER FIRED DUTY / HHV + PILOT; G-101 STANDBY.
REF: PRO-DWG-001, PRO-CAL-001

REVISIONS			
REV	DATE	DESCRIPTION	BY CHK APP
A	2026-09-29	ISSUED FOR REVIEW (IFR)	
PRELIMINARY - ISSUED FOR REVIEW - NOT FOR CONSTRUCTION			

ENGINEER OF RECORD SEAL

NOT SEALED
PRELIMINARY

PE NO. _____

PROJECT
120 MMSCFD RECEIPT INTO
COUNTY,
DISCIPLINE: PROCESS
SCALE: NTS

PROCESS FLOW DIAGRAM
STREAM SUMMARY CASES C3 TO C7
DRAWN: ____ CHECKED: ____ APPROVED: ____
DWG NO. PRO-DWG-002
SHEET 2 OF 2 REV A