

V-101
INLET FILTER SEPARATOR, HORIZONTAL TWO-STAGE
COALESCING FILTER (1 MICRON, 16 ELEMENT POSITIONS) + VANE MIST EXTRACTOR
120 MMSCFD AT 900 PSIG; 42 IN ID x 15 FT S/S, 1.75 IN SHELL
LIQUID BARREL NPS 24 x 14 FT, TWO COMPARTMENTS
MAWP 1,440 PSIG @ -20 / 150 F, ASME VIII DIV. 1, CA 1/16 IN, PWHT, CVN -20 F
SHOP HYDROTEST 2,225 PSIG; ISOLATED FROM FIELD HYDROTEST

PSV-101
V-101 RELIEF VALVE, FIRE CASE
SET 1,440 PSIG, API 526 ORIFICE PER PROCESS
RELIEF CALC
INLET CL 600 / OUTLET CL 150 S1, DISCHARGE TO VS-101

LCV-104
V-101 SUMP DUMP VALVE
NPS 1, CL 600 GLOBE (PER PRO-DS-002)
ELECTRIC MODULATING, FAIL LAST (FL), ZT-104
POWERED FROM 120 VAC UPS

SDV-106
V-101 LIQUID OUTLET SHUTDOWN VALVE
NPS 2 CL 600 BALL, ELECTRO-HYDRAULIC
SPRING-RETURN, FAIL CLOSED
CLOSED BY SIS: I-01, I-04, I-05

- NOTES**
- V-101 BYPASS 1004 IS LOCKED CLOSED. BYPASS USE REQUIRES APPROVAL BECAUSE UNFILTERED GAS REACHES THE METERS (BASIS SECTION 12).
 - HV-103C AND HV-103D WITH THE BLEED BETWEEN FORM A DOUBLE BLOCK AND BLEED ACROSS THE BYPASS. BLEED VALVE PLUGGED, OPENED ONLY TO PROVE ISOLATION.
 - PDIT-103 ALARMS AT 10 PSI (ELEMENT CHANGE-OUT). CLEAN DP 2 PSI (BASIS SECTION 6).
 - SIS TRIPS: LSHH-105 (26 IN) CLOSES SDV-101 (I-03). LSSL-106 (3 IN, I-04) AND T-101 LSHH-192 (I-05) CLOSE SDV-106 AND FORCE LCV-104 CLOSED. SDV-106 ALSO CLOSES ON STATION ESD (I-01). RESET AT HS-106. SEE INS-LST-004.
 - RO-104 LIMITS GAS BLOW-BY THROUGH A FAILED-OPEN LCV-104 TO THE T-101 EMERGENCY VENT CAPACITY (EV-193). BORE PER PRO-CAL-007.
 - SPEC BREAK A6 / D1 IS AT THE LCV-104 STATION OUTLET: SDV-106, RO-104, LCV-104, HV-104A/B/C ARE CLASS 600. LINE 1060 IS NPS 2 A6 UPSTREAM AND NPS 4 D1 (285 PSIG) DOWNSTREAM. NO CLOSED VALVE ON D1 EXCEPT LO VALVES AT T-101.
 - PSV-101 SIZED FOR FIRE CASE PER API 521. INLET VALVE HV-101G IS CAR SEALED OPEN; INLET LOSS 3 % MAXIMUM PER API 520 PART II. OUTLET PIPING SPEC S1 STAINLESS.
 - LCV-104 AND ITS ACTUATOR ARE POWERED FROM THE 120 VAC UPS. PDI-103A SHARES THE PDIT-103 IMPULSE LINES THROUGH A 3-VALVE MANIFOLD. ZSO-103C ALARMS AND INHIBITS FIC-131 START IF HV-103C IS NOT CLOSED (I-15).
 - FUEL GAS IS TAKEN DOWNSTREAM OF V-101 AND UPSTREAM OF THE CUSTODY METERS, SO FUEL IS NOT METERED FOR DELIVERY (BASIS SECTION 8.2).
 - V-101 IS BLOWN DOWN THROUGH BDV-181 (DWG-101) WITH HV-103A AND HV-103B OPEN.
 - VENT AND DRAIN CONNECTIONS 3/4 IN, CLASS 6000 SW, VALVE AND PLUG, NORMALLY CLOSED. HPV / LPD FOR HYDROTEST.

