HOLDS:

1. (DELETED)
2. SLUG CONTROL SYSTEM TO BE FINALIZED BASED ON FLOW ASSURANCE STUDY; INITIAL SOFT STOP POSITION.
3-10. DELETED.
11. THERMOWELL SIZE.
12. MAX OPERATING PRESSURE TO INITIATE THE DEPRESSURIZATION.

A90-T1-L-0001

12" SCRAPER RECEIVER

TYPE	: INSTRUMENTED SCRAPER
BARREL SIZE	: 16.0 " X 4215.0 mm LONG
DESIGN PRESSURE	: 20684.3 kPag (3000 PSIG) / FV
DESIGN TEMP	: 93.3 °C (200 °F)
DESIGN CODE	: ASME B31.8
RATING	: ASME CLASS 1500 RJ
TRIM	: 15SV0P

NOTES CONT'D:

16. LOCATED DECK FLOOR LEVEL.
17. GLOBE TYPE VALVE.
18. VALVE SHALL BE PAINTED WITH TOP COAT ORANGE-RAL-2000.
19. MOV IS PROVIDED WITH MECHANICAL INTERLOCK TO ENSURE NO OTHER DEPRESSURIZING MOV ON THIS TPOS OPEN WHILE THIS MOV IS OPEN.
20. RISER SHALL BE CS+FBE INTERNAL COATING PLUS 1.6 MM C.A.
21. SCRAPER PASSAGE INDICATOR TO BE NON INTRUSIVE TYPE.
22. DELETED.
23. VALVE SHALL BE API 6D DIB-2 TYPE. DPE SEAT SHALL BE ON THE TRAP SIDE LOCATION AND SPE SEAT ON THE PIPELINE SIDE.
24. ANCHOR SECURELY. TWO PHASE FLOW WITH POSSIBLITY OF SLUG AND VERY HIGH VELOCITY.
25. SLUG CONTROL VALVE TO BE EQUIPPED WITH SOFT LIMIT STOP TO AVOID FULL CLOSURE OF THE VALVE. SOFT LIMIT CAN BE CHANGED ANYTIME DURING PRODUCTION LIFE AS REQUIRED.
26. ON ACTIVATION OF A SINGLE HH/LL PRESSURE ALARM ON AN INLET PIPELINE, THE ESD LOGIC WILL ISOLATE THE INCOMING PIPELINE BY CLOSING THE INLET ZV.ON ACTIVATION OF XooY HH/LL PRESSURE ALARM THE ESD LOGIC (LEVEL 1) WILL:
    a) CLOSE ALL INCOMING PIPELINES ZVs.
    b) CLOSE THE 42" OUTLET PIPELINE ZV.
    c) TRIP THE CIU PUMPS.
    d) TRIP THE SLOP PUMPS.
27. PROVISION FOR FUTURE MECHANICAL SCRAPER PASSAGE INDICATOR. PROVIDE BLIND FLANGE.
28. FAIL SAFE POSITION IS FS (FAIL STEADY) FOR BOTH POWER FAILURE CASE/SIGNAL FAILURE CASE.
29. DEPRESSURIZATION SHALL BE CARRIED OUT ONLY WHEN THE OPERATING PRESSURE OF THE PRODUCTION HEADER IS NOT HIGHER THAN 600 PSIG (HOLD 12) TO AVOID THE DEPRESSURIZATION GAS TO EXCEED THE FLARE DESIGN CAPACITY.

NOTES:

1. FOR ALL GENERAL SYMBOLS & LEGEND REFER TO DWG. RA-042840 SHT 001.
2. ALL EQUIPMENT, INSTRUMENT TAG NUMBERS AND LINE NUMBERS ARE PRECEDED BY PLANT NO. A90 AND PLATFORM PREFIX NO.T1.
3. FUSIBLE PLUG SYSTEM FROM ESD/HPU PANEL CP-0018 INSTALLED PER API RP-14C.
4. SUBSEA LINE SHALL BE SCRAPABLE AND CS+INTERNAL FBE COATED WITHOUT CORROSION ALLOWANCE.
5. SCRAPER TRAP CLOSURE IS QUICK OPENING TYPE WITH SAFETY INTERLOCK.
6. LOCATE SCRAPER PASSAGE INDICATOR AT LEAST ONE INSTRUMENTED SCRAPER DISTANCE FROM BARRED TEE. SCRAPER PASSAGE INDICATOR SHALL HAVE A LOCAL DISPLAY THAT SHALL BE EXTENDED IN CASE THE SCRAPER PASSAGE INDICATOR IS NOT VISIBLE.
7. PRESSURE INDICATOR IS VISIBLE FROM TRAP DOOR.
8. PARTIAL STROKE TEST IS REQUIRED.
9. FLANGES MATERIALS ATTACHED ON B31.8 DESIGN SYS. ARE ASTM A707 L3 CL3, MATING FLANGE IS DESIGNED TO MATCH BRANCH PIPING SPECIFICATION.
10. THE DISTANCE BETWEEN THE CENTER LINE OF THE BRANCH AND THE NEAR END OF THE TRAP ISOLATION SHALL BE KEPT TO A MINIMUM AND IF MORE THAN THREE PIPE DIAMETERS LINE SHALL BE SLOPED BACK TO THE BRANCH.
11. FOR H ISOLATION SPOOL DETAILS REFER TO DRAWING NO. XX-XXXXXX SHT 001. THIS SPOOL WILL BE INSTALLED IN CLOSE POSITION IN NORMAL OPERATION AND REVERSE TO OPEN POSITION DURING SCRAPER OPERATION.
12. MINIMUM DESIGN METAL TEMP = - 20°F.
13. CORROSION TRANSMITTER COMMUNICATES TO A NEW CMS SERVER AT ZULF CPF.
14. RISER, VALVES AND ALL FITTINGS ARE SUITABLE FOR PASSING SCRAPER TOOL.
15. REFER TO TYPICAL SAMPLING SYSTEM P&ID DRAWING ON RA-042841 SH.29.

LEGEND

PIPING MATERIAL SPECIFICATION SAES-L-105

- PROCESS LINE
- INSTRUMENT AIR LINE
- INSTRUMENT ELECTRICAL LINE
- REDUCER
- SPECTACLE PLATE-OPEN
- SPECTACLE PLATE-CLOSED
- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- PLUG VALVE
- BALL VALVE
- DOUBLE DISC GATE VALVE
- ANGLE VALVE
- PRESS. RELIEF VALVE
- VACUUM RELIEF VALVE
- MOTOR OPERATED VALVE
- PISTON OPERATED VALVE
- CONTROL VALVE
- BALL TYPE CONTROL VALVE WITH POSITIONER
- SOLENOID VALVE
- VALVE NORMALLY CLOSED
- DATA LINK
- HYDRAULIC LINE
- PILOT OPERATED VALVE(V6)
- BALL VALVE SPRING RETURN(V7)

INSTRUMENT DEFINITION & SYMBOLS SAES-J-003

AC/AFC	-AIR TO CLOSE/ AIR FAILURE OPEN
AC/AFS	-AIR TO CLOSE/AIR FAILURE STEADY
AO/AFC	-AIR TO OPEN/ AIR FAILURE CLOSE
AO/AFS	-AIR TO OPEN/AIR FAILURE STEADY
AOV	-AIR OPERATED VALVE
AT	-ANALYZER TRANSMITTER
DT	-DENSITY TRANSMITTER
ESD	-EMER. SHUTDOWN SYSTEM
FC	- FLOW CONTROLLER
FV	- FLOW CONTROL VALVE
FCV	-FLOW CONTROL VALVE (SELF ACTUATED)
FE	-FLOW ELEMENT
FG	-FLOW SIGHT GLASS
FHV	-FLOW MANUAL CONT. VALVE
FHTD	-FLOW MANUAL TRANSDUCER
FIC	-FLOW INDICATOR CONTROLLER
FM	-FLOW METER
RO	-RESTRICTION ORIFICE
FQI	-FLOW TOTALIZER INDICATOR
FR	-FLOW RECORDER
FT	-FLOW TRANSMITTER
FY	-FLOW RELAY
HIC	-HAND INDICATOR CONTROLLER
HS	-HAND SWITCH
LA	-LEVEL ALARM
LV	-LEVEL CONTROL VALVE
LCV	-LEVEL CONTROL VALVE (SELF ACTUATED)
LG	-LEVEL GAUGE GLASS
LIC	-LEVEL INDICATOR CONTROLLER
LI	-LEVEL INDICATOR
LR	-LEVEL RECORDER
LS	-LEVEL SWITCH
LT	-LEVEL TRANSMITTER
LTD	-LEVEL TRANSDUCER
ML	-MOTOR STATUS LIGHT
MOV	-MOTOR OPERATED VALVE
NA	-ANNUNCIATOR
PB	-PUSHBUTTON
PC	-PRESSURE CONTROLLER
PV	-PRESS. CONTROL VALVE
PCV	-PRESS. CONTROL VALVE (SELF ACTUATED)
PDC	-PRESS. DIFF. CONTROLLER
PDI	-PRESS. DIFF. INDICATOR
PDIC	-PRESSURE DIFFERENTIAL INDICATOR CONTROLLER
PDIS	-PRESSURE DIFFERENTIAL INDICATOR SWITCH
PDT	-PRESS. DIFF. TRANSMITTER
PDTD	-PRESS. DIFF. TRANSDUCER
PG	-PRESSURE GAGE
PI	-PRESSURE INDICATOR
PIC	-PRESS. INDICATOR CONTROLLER
PR	-PRESSURE RECORDER
PS	-PRESSURE SWITCH
PT	-PRESSURE TRANSMITTER
PX	-PRESSURE POINT
PY	-PRESS. COMPUTATION MOD.
PZV	-PRESSURE RELIEF VALVE
RTD	-RESIST. TEMP. DETECTOR
SI	-SPEED INDICATOR
SS	-SPEED SWITCH
TC	-TEMP. CONTROLLER
TV	-TEMP. CONTROL VALVE
TCV	-TEMP. CONTROL VALVE (SELF-ACTUATED)
TE	-TEMP. ELEMENT
TG	-THERMOMETER
THS	-TEMP. HAND SWITCH
TI	-TEMP. INDICATOR
TR	-TEMP. RECORDER
TS	-TEMP. SWITCH
TT	-TEMP. TRANSMITTER
TTD	-TEMP. TRANSDUCER
TW	-THERMOWELL

- TSO -TIGHT SHUT OFF
- S.C. - SAMPLE CONN.
- DRAIN TO PRESSURE SEWER
- OWS -OILY WATER SEWER
- D -DRAIN
- V -VENT

- VE -VIBRATION ELEMENT
- VS -VIBRATION SWITCH
- VT -VIBRATION TRANSMITTER
- XL -PILOT LIGHT (NOT FOR MOTOR)
- XS -LIMIT SWITCH
- ZV -SAFETY SHUTDOWN VALVE

RTU: F-FLOW, P-PRESS, L-LEVEL, T-TEMP, X-MISC., A-ALARM

- LOCAL PANEL MOUNTED INSTR.
- BOARD MOUNTED INSTRUMENT
- XL: STATUS LIGHTS R=RED, G=GREEN PILOT LIGHT (DO NOT USE FOR MOTOR STATUS)
- MOTOR STATUS PILOT LIGHT
- ML
- LOCAL MOUNTED INSTRUMENT
- MOUNTED BEHIND LOCAL PANEL
- RACK MOUNTED (OR BACK OF PANEL)
- ELECTRICAL SUPPLY REQUIRED
- INSTRUMENT AIR SUPPLY REQUIRED
- H / HIGH / LOW / L
- TWO PEN RECORDER
- FF FOUNDATION FIELDBUS INSTRUMENT

DISTRIBUTED CONTROL/SHARED DISPLAY SYMBOLS

- (DCS) DISTRIBUTED CONTROL SYSTEM, OPERATOR ACCESSIBLE IN CONTROL ROOM
- (DCS) DISTRIBUTED CONTROL SYSTEM, OPERATOR INACCESSIBLE IN CONTROL ROOM
- (DCS) DISTRIBUTED CONTROL SYSTEM, OPERATOR INACCESSIBLE IN FIELD

DISTRIBUTED CONTROL INTERCONNECTING LOGIC CONTROLLER WITH BINARY OR SEQUENTIAL FUNCTIONS

- (PLC) PROGRAMMABLE LOGIC CONTROLLER, NORMALLY INACCESSIBLE OR BEHIND THE PANEL DEVICE OR FUNCTIONS
- (PLC) PROGRAMMABLE LOGIC CONTROLLER FUNCTION, CAN BE NORMALLY DISPLAYED ON CRT
- LOCAL DCS OR AUXILIARY DCS LOCATION NORMALLY ACCESSIBLE TO OPERATOR
- (PLC) PROGRAMMABLE LOGIC CONTROLLER I/O POINT NORMALLY INACCESSIBLE BY OPERATOR