

LINE HEATER BUILDING EDGE

DATE	04/01/11	CLIENT	ARC PETROLEUM INC. c/o XXL ENGINEERING LTD.
DESIGNED BY	M.E.W.	TITLE	DAWSON LSD: 16-13-79-15 W6M
DRAWN BY	TY	CHECKED BY	MECHANICAL FLOW DIAGRAM 2MM BTU/HR
APPROVED BY		JOB #	SOUR SERVICE LINEHEATER PACKAGE
SCALE	N.T.S.	REF. NO.	EV-11002
		DRAWING NO.	PNID
		SHEET NO.	EV-11002
		1 OF 2	EV-11002-F-001
		REV. NO.	1

1	ISSUED FOR P.ENG STAMP	MEW	17/03/11
0	ISSUED FOR CONSTRUCTION	TY	18/01/11
REV		BY	APPR
			d/m/y



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LH-100

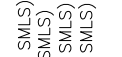
2MM BTU/HR LINEHEATER

SIZE: 66" O.D. x 20'-0" S/S
c/w 10 PASSES OF 4" 1500# SCH.160 RTJWN PREHEAT COIL
DESIGN PRESSURE: 3212 psig
DESIGN TEMPERATURE: 200F
MDMT: -20F
PWHT: 1150F ± 50F FOR 1 HOUR MINIMUM
CORROSION ALLOWANCE: 1/8"
RADIOGRAPHY: 100%
c/w 405gal EXPANSION TANK (32"O.D. x 120"lg)



GENERAL NOTES:

- 1. QUANTITIES IN B.O.M. ARE FOR (1) UNIT.
2. ALL PIPING TO BE IN ACCORDANCE WITH THE LATEST EDITION OF ASME B31.3 PRESSURE PIPING CODE.
3. VESSEL TO BE FABRICATED TO THE LATEST EDITION OF ASME SECTION VIII, DIVISION 1 PRESSURE VESSELS.
4. SPEC 'ES' SOCKETWELD PIPING: 3/4"-1 1/2" = SCH XXS
SPEC 'ES' WELDED PIPING: 2"-3" = SCH 160
4" = SCH XXSmin (CALC WT & MDMT)
6" = SCH XXSmin (CALC WT & MDMT)
SCRD/SW (ASTM A333 Gr.6 SMLS)
BW/RTJ (ASTM A333 Gr.6 SMLS)
4" = SCH 160min BW/RTJ (ASTM A333 Gr.6 SMLS)
6" = SCH XXSmin BW/RTJ (ASTM A333 Gr.6 SMLS)
5. ALL FORGED STEEL FITTINGS TO BE: SA-105N, 3000# (min) RATING.
FUEL GAS COIL TO BE: SA-105N, 3000# (min) RATING.
ALL WELDED FITTINGS TO BE: SA-234-WPB NORMALIZED
6. SPEC 'ESL' TUBING: 1/4"-3/4" = 0.035" (min) ASTM A269 TP316/316L SMLS, FULLY ANNEALED
1/2" = 0.049" (min) ASTM A269 TP316/316L SMLS, FULLY ANNEALED
7. ALL TUBING FITTINGS: ASTM A182 F316/316L SWAGELOK
SPEC 'A' THREADED PIPING: 1/2"-2" = SCH 60
SPEC 'A' WELDED PIPING: 2"-10" = SCH 40
12" = STD
8. ALL FORGED STEEL FITTINGS TO BE: SA-105N, 3000# (min) RATING (SPEC 'A').
9. PAINTING SPEC:
EXTERNAL SURFACE PREPARATION: SSPO-SP-6 (COMMERCIAL SAND BLAST) - (PIPING, HEATER SKID, BODY & STACK)
EXTERNAL PRIMER: ONE (1) SHOP COAT OF COVERDALE FAST DRY PRIMER 5 mils
VESSEL EXTERNAL FINISH PAINT: TWO (2) SHOP COATS OF COVERDALE GREY ENAMEL (HIGH HEAT STACK & L.H. BODY SKID FLOOR/STRUCTURAL STEEL)
PIPING EXTERNAL FINISH: TWO (2) SHOP COATS OF COVERDALE BLACK ENAMEL
INTERNAL SURFACE PREPARATION: NA
INTERNAL COATING OF VESSEL: NA
PROTECT ALL OPENINGS FOR SHIPMENT.
10. BOLTING TO BE SA-193-B7M STUDS w/ SA-194-2HM NUTS c/w 316SS FLEXITALLIC GASKET.
11. BUILDING SIZE: 5'-4" LG x 2'-0" WIDE.
BUILDING TYPE: FOAM PANEL, BOX STYLE/SIDE MOUNTED ENCLOSURE
ROOF TYPE: SHED
WALL HEIGHTS: 5'-6" EAVE
EXTERIOR: 22 GAUGE GALVALUME PRE-PAINTED SURF WHITE (QC 8316)
INTERIOR: 22 GAUGE GALVALUME PRE-PAINTED WHITE
DOORS & TRIM PRE-PAINTED ROYAL BLUE (QC 8790)
DOORS: ONE (1) 2'-6"x5'-4" DOUBLE DOOR WITH PANIC HARDWARE, CHECK CHAIN, WHITECOMB DOOR LATCH WEATHER STRIP, SPRING LOADED BARREL BOLT.
VENTILATION: ONE (1) 4" ROUND VENT.
13. PACKAGE IS HYDRO TESTED @ 1.5 TIMES MAMP FOR ONE (1) HOUR AT ROOM TEMPERATURE.
14. VESSEL SHELL COVERED WITH 1 1/2" MINERAL WOOL HOT INSULATION, 0.20 STUCCO EMBOSSED ALUMINUM COVERING WITH STEEL BANDING (HEADS NOT INCLUDED)
15. ALL INSTRUMENTS TO BE VENTED TO ATMOSPHERE.
16. ALL PIPE, VALVES AND FITTINGS IN SOUR PROCESS LINES, EXCEPT INSTRUMENT AIR, TO BE NACE/ISO, LATEST EDITION ACCEPTABLE.
17. ALL PIPING TO MEET ARC RESOURCES SPEC 'ES' AND 'A' PIPING SPECIFICATIONS.
18. RUN INSTRUMENT TUBING UNDER LINE HEATER INSULATION WHERE POSSIBLE.
19. ELECTRICAL INSTALLED BY 3RD PARTY CONTRACTOR.
20. 5-PIECE MITRE FIRE TUBE TO BE STRESS RELIEVED
21. ACL BURNER TO BE PRE-WIRED
22. ENGINEER STAMPED DRAWINGS ON FUEL TRAIN

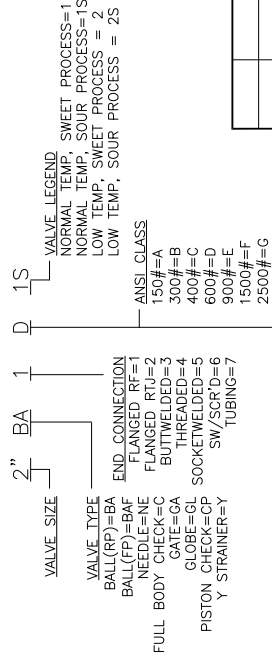


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VALVE LIST

Table with 3 columns: VALVE NUMBER, MANUFACTURER, DESCRIPTION. Includes entries for 1" NPT WOG 3000# REG. PORT BALL VALVE, 1/2" NPT WOG 3000# R.P. BALL VALVE, etc.

VALVE LEGEND



BL-100

FLAME ARRESTOR

2-PIECE BURNER HOUSING

MODEL: FAH32/18-20A2
TWO PIECE ALUMINUM CONSTRUCTION RATED FOR 2.0MM BTU/HR TO FIT A 20" FIRE TUBE
c/w (1) 1/2" ELECTRICAL CONNECTION (1) ACL-M200 MIXER (1) ACL-B20016 VENTURI BARREL (1) ACL-0N20018 HIGH EFFICIENCY BURNER NOZZLE



TH-100

ENARDO 330-AL THIEF HATCH (ZIRCO)

SIZE: 8" THIEF HATCH
PRESSURE: 16.0 OZ (16 OZ GALVANIZED WIRE PRESSURE SPRING)
VACUUM: 0.4 OZ
SPRING LOADED-SWEET SERVICE
BUNA PRESSURE AND VACUUM GASKETS
GALVANIZED STEEL PRESSURE AND VACUUM SPRINGS c/w BASE GASKET



BILL OF MATERIALS

Table with 4 columns: TAG, QTY, MAKE, DESCRIPTION. Lists various components like valves, gauges, and fittings with their quantities and descriptions.



VALVE TRAIN BOM (by OTHERS)

Table with 4 columns: TAG, QTY, DESCRIPTION. Lists valve train components like controllers, switches, and actuators.

Revision table and company information for Evolution Production Equipment Ltd. Includes revision history and contact details.

