



AIR COOLED EXCHANGER SPECIFICATION SHEET

005953-DS-M001

CUSTOMER: McMoRan Oil and Gas LLC	JOB NUMBER: 005953	ITEM #: HAL-0701 & HAL-0702
PLANT NAME: Davy Jones 1 Satellite	DATE: 7/12/2010	REVISION: B
PLANT LOCATION: SMI 230A (Gulf of Mexico)	PREPARED BY: HDO, KB	CASE: IFQ
SERVICE: Produced Natural Gas	CHECKED BY: BJB	REQUIRED # 2 - 50% DUTY EACH
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1 MODEL: TYPE: Vertical Forced Draught	NO. OF BAYS: 2 per cooler
2 SURFACE PER UNIT-FINISHED TUBE (FT ²):	BARE TUBE (FT ²):
3 HEAT EXCHANGED (BTU/HR): 17,000,000 (per cooler)	MTD (EFF.) (°F):
4 TRANSFER RATE-FINISHED TUBE: BARE TUBE, SERVICE: (BTU/HR FT ² °F)	CLEAN (BTU/HR FT ² °F):

PERFORMANCE DATA - TUBE SIDE					
FLUID NAME: Natural Gas, Sour (50 PPM)				INLET	OUTLET
7 TOTAL FLUID ENTERING, LB/HR: 86,935		DENSITY (LIQ/VAP) (LB/FT ³):		3.80	47.85 / 5.75
8 INLET		OUTLET		SPECIFIC HEAT (LIQ/VAP) (BTU/LB/°F):	
9 TEMPERATURE (°F): 361.8		130.0		0.65	0.72 / 0.68
10 LIQUID FLOW (LB/HR): 0		9,329		COND. (LIQ/VAP) (BTU/HR/FT ² °F):	
11 VAP. FLOW (LB/HR) / MW: 86,935 19.69		77,607 18.83		0.04	
12 NONCOND (LB/HR) / MW:				POUR / FREEZE POINT (°F):	
13 STEAM (LB/HR):				BUBBLE POINT (°F):	
14 WATER (LB/HR):				LATENT HEAT (BTU/LB):	
15 VISCOSITY (LIQ/VAP) (CP): 0.0180		0.317 / 0.016		1650.00	1640.00
				PRESSURE DROP-ALLOW / CALC (PSI):	
				10.00	
				FOULING RESISTANCE INSIDE	
				0.002	

PERFORMANCE DATA - AIR SIDE	
17 AIR QUANTITY TOTAL (LB/HR):	ALTITUDE (FT): 83
18 AIR QUANTITY / FAN (ACFM):	TEMPERATURE IN (°F): 95
19 ACTUAL STATIC PRESS (IN H2O):	TEMPERATURE OUT (°F):
20 FACE VELOCITY (SFM):	MIN. DESIGN AMBIENT (°F): 32
21 RELATIVE HUMIDITY: 100%	FAN AIR TEMPERATURE (°F):

DESIGN - MATERIALS - CONSTRUCTION		
23 DESIGN PRESSURE (PSIG): 3000	TEST PRESSURE (PSIG): PER CODE	DESIGN TEMPERATURE (°F): 450 / -20 MDMT
24 TUBE BUNDLE:	HEADER TYPE: FABRICATED PLUG BOX	TUBE MATERIAL: SB-423-825
25 SIZE:	MATERIAL HEADER: SA-516-70 Normalized	TYPE: SEAMLESS
26 NO./BAY: NO ROWS:	MATERIAL NOZZLE: A106 Gr B / A105N	OD (IN): THK (IN):
27 PASS ARRANGEMENT (TOP TO BOTTOM):	NO. PASSES:	NO./BUNDLE:
28 ROWS/PASS:	PLUG MATERIAL: A105N	LENGTH (FT):
29 BAYS IN PARALLEL: IN SERIES:	GASKET MATERIAL:	PITCH (IN):
30 BUNDLES IN PARALLEL: IN SERIES:	CORROSION ALLOWANCE (IN): 0.125	FIN TYPE: EXTRUDED
31 BUNDLE FRAME	INLET NOZZLE (IN): (2) - 6"	MATERIAL: ALUMINUM
32 MISCELLANEOUS	OUTLET NOZZLE (IN): (2) - 6"	OD (IN): THK (IN):
33 STEAM COIL: NO	RATING & FACING: 1500-RTJ	NO./IN: SUPPORT:
34 HAIL SCREEN: NO	VENT: 1" Flanged 1500-RTJ	TUBE HOLE GROOVING:
35 RECIRCULATION: NO	DRAIN: 1" Flanged 1500-RTJ	CODE REQUIREMENTS (Note 7)
36 LOUVERS: NO	TI: NONE PI: NONE	CODE: BPVC VIII, DIV 1; API 661; NACE MR0175
37 FRAME FINISH: GALVANIZED	CHEM. CLEANING: NONE	STAMP: YES AND NATIONAL BOARD REG.
38 LETHAL SERVICE: NO	HEADER FINISH:	RADIOGRAPHY: PER CODE & MMR SPEC
39 INLET (BUG) SCREEN: NO		HEAT TREAT: PER CODE & MMR SPEC

MECHANICAL EQUIPMENT			
41 FAN MFG. & MODEL:		DRIVER TYPE: ELECTRIC MOTOR (Note 4)	SPEED REDUCER, TYPE: BELT ADJUSTMENT
42 NO./BAY: 2	RPM: (NOTE 3)	S.F.: 1.15	INSUL/T.R.:
43 DIA. (FT):	NO. BLADES:	NO./BAY: 2	FRAME (HP):
44 PITCH: MANUALLY ADJUSTABLE	ANGLE:	RPM:	DUTY:
45 MAT'L BLADE: ALUMINUM	HUB: ALUMINUM	ENCLOSURE: TEFC	VFD: None
46 HP/FAN DESIGN:	SPL dBA: 85	V/PC: 460/3/60	SPACE HTR: Yes
STRUCTURE (NOTE 6)		WALKWAYS	
48 WINDLOAD (MPH): 150, Exp C, K _{ZT} = 1.0	SEISMIC: Zone 2	INLET HEADER:	NO
49 LIVE LOAD (LB/FT ²):		OUTLET/RETURN:	NO
50 SNOWLOAD (LB/FT ²): NONE		DRIVE ACCESS:	NO

51 DIMENSIONS: L	W	H	WEIGHT/BAY (LB)	SHIPPING WEIGHT (LB)
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- 52 NOTES:
- 53 1. Vendor sizing to include an additional 10% on flow and duty.
 - 54 2. Vendor to provide unit dimensions and weights (lift, operating, hydro) in their quote.
 - 55 3. Maximum fan tip speed to be 60 m/s.
 - 56 4. Electrical Area Classification: Class I, Div 2, Groups C & D per NEC.
 - 57 5. Materials on process side shall be NACE MR0175 compliant for H2S (50 ppm)
 - 58 6. Structure Design to be in accordance with the UBC latest edition.
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