

### Air-Cooled Heat Exchanger Specification Sheet

1	Client: EOG													
2	Location: Wyoming													
3	Service of Unit: Cooling Water													
4	Item No.: 190608													
5	Date: 2/3/2022													
6	Size & Type	50	/	15	ft	Type	Forced	Number of Bays	1					
7	Surf/Unit-Finned Tube	69,662 ft <sup>2</sup>			Bare area/bundle	3,238	ft <sup>2</sup>	Ratio (Total	21.51					
8	Heat exchanged	12798925 BTU/h			MTD, Eff	41.76 °F								
9	Transfer rate	5.22	Bare, Service		94.64	Clean	148.72 BTU/(h-ft <sup>2</sup> -F)							
10	<b>PERFORMANCE DATA - TUBE SIDE</b>													
11	Fluid Circulated	Water				In/Out								
12	Total Fluid Entering	lb/h	160,000			Density, Liq	lb/ft <sup>3</sup>	60.372	/	61.891				
13		BPD	10,000			Density, Vap	lb/ft <sup>3</sup>	/						
14	Temperature	°F	190	/	110	Specific Heat, Liq	BTU/(lb-F)	1.0033	/	0.9976				
15	Liquid	lb/h	160000	/	160000	Specific Heat, Vap	BTU/(lb-F)	/						
16	Vapor	lb/h	0	/	0	Therm. Cond, Liq	BTU/(ft-h-F)	0.389	/	0.367				
17	Noncondensable	lb/h	0	/	0	Therm. Cond, Vap	BTU/(ft-h-F)	/						
18	Steam	lb/h	/			Freeze Point	°F							
19	Water	lb/h	/			Bubble / Dew point	°F							
20	Molecular wt, Vap	/			Latent heat	BTU/lb								
21	Molecular wt, NC	/			Inlet pressure (abs)	psi	124.7							
22	Viscosity, Liq	cp	0.3228	/	0.6146	Pres Drop, Allow/Calc	psi	10	/	4.01				
23	Viscosity, Vap	cp	/			Fouling resistance	ft <sup>2</sup> -h-F/BTU	0.001						
24	<b>PERFORMANCE DATA - AIR SIDE</b>													
25	Air Quantity, Total	2,225,000	lb/h			Altitude	5,121 ft							
26	Air Quantity/Fan	313,679	ft <sup>3</sup> /min			Temperature In	90 °F							
27	Static Pressure	0.96	inH2O			Temperature Out	114 °F							
28	Face Velocity	15.31	ft/s	Bundle velocity	3,258	lb/h/ft <sup>2</sup>	Design Ambient	90 °F						
29	<b>DESIGN-MATERIALS-CONSTRUCTION</b>													
30	Design/Vac./Test Pres	260	/ /			psi	Design temperature	200 °F						
31	<b>TUBE BUNDLE</b>		<b>Header</b>			<b>Tube</b>								
32	Size	50	ft			Type	Box	Material	Carbon Steel					
33	Number/bay	1			Material	Carbon Steel			Specifications					
34	Tube Rows	4			Passes	4			OD	1	Min Thk.	0.075	in	
35	Arrangement	/			Plug Mat.	/			No./Bun	266	Lng	48	ft	
36	Bundles	1	par			Gasket Mat.	/			Pitch	2.625 / 2.273	30	deg	
37	Bays	1	par			Corr. Allow.	in			<b>Fin</b>				
38	Bundle frame	/			Inlet Nozzle	2	6	in	Type	L-finned				
39	<b>MISCELLANEOUS</b>		/			Outlet nozzle	2	6	in	Material	Aluminum 1060			
40	Struct. Mount.	/			Special Nozzles	/			OD	2.25	Tks	0.016	in	
41	Surf.Preap	/			Rating	150 ANSI			No.	10	#/in	DesTemp	°F	
42	Louvers	/			TI	PI			Code	ASME Code Sec VIII Div 1				
43	Vibration Switches	/			Chem Cleaning	/			Stamp	Yes	Specs			
44	<b>MECHANICAL EQUIPMENT</b>													
45	Fan,Mfr., Model	/			Driver, Type	V-belt			Speed Reducer, Type					
46	No./Bay	2	RPM	147.5	Mfr.	/			Mfr.&Model					
47	Dia.	14	ft	Blade(s)	9	No./Bay	/			No./Bay				
48	Pitch	Angle			RPM	/			Rating					
49	Blade(s)	Hub	4.083	Enclosure	/			Ratio						
50	hp/Fan	50	hp	MinAmb	/			V/Phase/Hz						
51	Control Action on Air Failure-	/							Louvers					
52	Degree Control of Outlet Process Temperature													
53	Recirculation	/			Steam Coil	No			/					
54	Plot Area	ft <sup>2</sup>	Drawing No.	Wt.Bundle	32,347	Wt. Unit	32,347 lb							
55	Notes:													
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