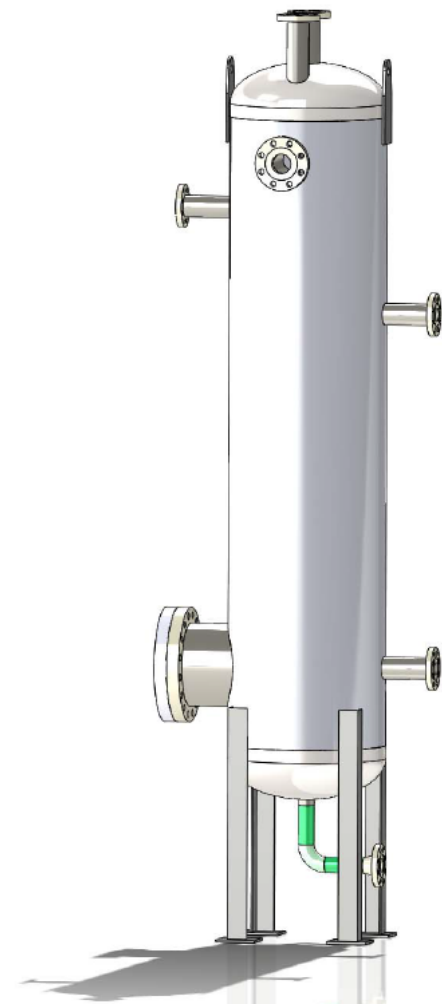



**BILL OF MATERIALS**

PCMK	STOCK CODE	QTY	SIZE	DESCRIPTION
1	213-116-001	2	24" OD	HEAD, 2:1 ELLIPTICAL, 0.4375" MIN, 1/2" MIN, SF", SA-516-70 (HOT FORMED)
2	102-116-001	1	24" OD	ROLLED CYLINDER, 1/2" THICK, x 8'-0" LG, SA-516-70
3	201-103-007	2 L.F.	2"	PIPE, 160 (0.344 WALL) SMLS, SA-106B (ASME B36.10M)
4	205-104-335	1	10"	FLANGE, R.F.L.W.N. 300#, 12" L.G., SA-105 (ASME B16.5)
5	204-104-134	1	3"	FLANGE, R.F.L.W.N. 300#, 9" L.G., SA-105 (ASME B16.5)
6	204-104-128	4	2"	FLANGE, R.F.L.W.N. 300#, 9" L.G., SA-105 (ASME B16.5)
7	205-104-334	2	2"	FLANGE, R.F.W.N., SCH 160 BORE, 300#, SA-105 (ASME B16.5)
8	205-104-336	1	10"	FLANGE, R.F.B.F., 300#, SA-105 (ASME B16.5)
9	205-104-042	1	2"	FLANGE, R.F.B.F., 300#, SA-105 (ASME B16.5)
10	205-103-088	1	2"	ELBOW, LRBW, 90 DEGREE, SCH. 160, SA-234 WPB (ASME B16.9)
11	205-102-008	1	2"	TEE, BW, SCH. 160, SA-234 WPB (ASME B16.9)
12	110-001-047	3	10"	GASKET, 304L SPIRAL WOUND, 300#, CS OUTER RING, GRAPHITE FILLED (ASME B16.20)
13	110-001-038	3	2"	GASKET, 304L SPIRAL WOUND, 300#, CS OUTER RING, GRAPHITE FILLED (ASME B16.20)
14	203-102-001	1	-	PLATE, 1/4" x 4" x 6 1/2" LG, SA-36 (NAMEPLATE BRACKET)
15	203-102-001	1	-	PLATE, 1/4" x 4 1/2" x 6" LG, SA-36 (NOZZLE A DIVERTER TOP PLATE)
16	203-102-001	1	-	PLATE, 1/4" x 6 1/2" SQUARE, SA-36 (NAMEPLATE FACE)
17	203-102-001	1	-	PLATE, 1/4" x 6" x 8" LG, SA-36 (NOZZLE A DIVERTER FACE PLATE)
18	203-103-001	4	-	PLATE, 3/8" x 6" SQUARE, SA-36 (BASEPLATES)
19	203-103-001	2	-	PLATE, 3/8" x 5" x 1'-0 7/8" LG, SA-36 (PADEYES)
20	203-106-001	2	-	PLATE, 3/4" x 1 13/16" x 3 7/8" LG, SA-36 (INNER HINGE BRACKETS)
21	203-106-001	2	-	PLATE, 3/4" x 1 13/16" x 4 1/2" LG, SA-36 (OUTER HINGE BRACKETS)
22	204-075-001	1	-	BAR, 3/4" x 1'-1 1/4" L.G., SA-36 (HINGE PIN)
23	204-050-001	1	-	BAR, 1/2" x 9 1/2" L.G., SA-36 (MANWAY HANDLE)
24	204-103-002	4	-	ANGLE, 3x3x1/4" x 2'-11 5/8" LG, SA-36
25	111-011-374	18	-	STUDS, 1" x 6 1/4" LG., SA-193B7 W/2 HH NUTS EA., SA-194GR2H, BLACK
26	111-002-048	10	-	STUDS, 5/8" x 3 1/2" LG., SA-193B7 W/2 HH NUTS EA., SA-194GR2H, BLACK
27	111-011-371	4	-	FLATWASHER, 3/4", CS
28	111-011-373	1	-	SPLIT COTTER PIN, 1/8" X 1 1/8" LG, CS, (ASME B18.8.1)
29	190-045-002	1	-	TAG, 5.5" X 5.5", ASME CODE NAMEPLATE
30	190-100-006	1	1 GAL	SHERWIN WILLIAMS, ZINC CLAD II (PART A B69VZ12 /PART B B69VZ15 /PART F B69D11) W/R7K111 THINNER
31	190-100-005	1	1 GAL	SHERWIN WILLIAMS, HEAT-FLEX HIGH TEMP 500I (B59-810 SERIES)
32	205-104-129	1	2"	FLANGE, R.F.L.W.N. 300#, 12" L.G., SA-105 (ASME B16.5)
33	203-104-001	2	-	PLATE, 1/2" x 4 3/4" x 5" LG, SA-36 (GROUNDING LUG)
34	111-011-372	1/40	-	NESLON STUDS, 1/8 x 3/8 x 1 1/2" LG, R6P
35	-	-	-	-
36	-	-	-	-
37	-	-	-	-
38	-	-	-	-
39	-	-	-	-
40	-	-	-	-



\*DO NOT DUPLICATE\*



Certified By: **SUMMIT ENERGY EQUIPMENT**  
41 PIONEER PKWY 903 951 1217  
SULPHUR SPRINGS, TX 75482

446 PSIG	600°F
M.A.W.P.	TEMP.
0.125"	14.7 PSIG
C.A. HEAD, SHELL	M.A.E.W.P.
300°F	TEMP.
0.500"	-20°F
Head W.T.	M.D.M.T.
446 PSIG	P.S.I.
0.500"	11397
Shell W.T.	SERIAL NO.
2016	YEAR BUILT
-	004-F-501
ASSET NO.	EQUIPMENT NO.


DESIGN DATA	
ASME SECTION VIII, DIV. 1 2015 EDITION	P.W.H.T.: <u>NO</u>
INTERNAL DESIGN PRESSURE: <u>390</u> PSI	RT - <u>3</u>
DESIGN TEMP.: <u>600</u> °F	N.D.E.: <u>=</u>
EXTERNAL DESIGN PRESSURE: <u>14.7</u> PSI @ 300°F	M.A.W.P.: <u>446</u> PSIG
HYDROTEST CONDITIONS: [ <u>580</u> PSIG] @ AMB.	WEIGHT EMPTY: [ <u>1,800</u> lb]
COR. ALLOW: [ <u>0.125</u> "]	NOZZLE NECKS: [ <u>0.125</u> "]
	WPS: DWG# 300-021-008-001-01

**PAINTING SPECIFICATIONS**

**EXTERIOR:**  
 SURFACE PREPARATION: SSPC SP-10 (NEAR WHITE BLAST CLEANING)  
 PRIME COAT: INORGANIC ZINC, SHERWIN WILLIAM ZINC CLAD II PLUS, 2-4 MILS  
 INTERMEDIATE COAT: NONE  
 FINISH COAT: SHERWIN WILLIAMS HEAT-FLEX HIGH TEMP 500 1-1.5 MILS (SHALE GRAY)

**INTERIOR:**  
 SURFACE PREPARATION: NONE  
 PRIME COAT: NONE  
 FINISH COAT: NONE

REV	DATE	REVISIONS	DWN	CHK	APP
-	-	-	-	-	-
1	03/09/16	ADDED NELSON STUDS TO BOM ITEM #34	TB	-	-
0	01/28/16	ISSUE FOR FABRICATION	TB	-	-
A	11/04/15	ISSUE FOR APPROVAL	TB	-	-



SUMMIT ENERGY EQUIPMENT  
41 HC PIONEER PKWY  
SULPHUR SPRINGS, TX 75482  
PH: 903-951-1217  
www.summitenergyequipment.com

KPE  
KP ENGINEERING

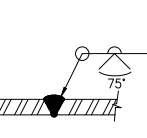
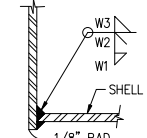
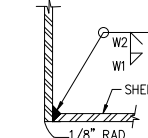
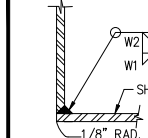
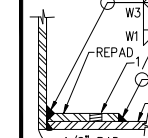
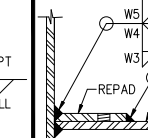
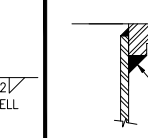
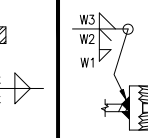
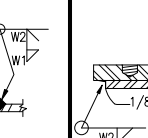
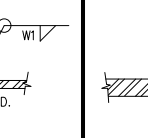
HOLLY FRONTIER J-1422 B  
PENEX FEED STEAM HEATER CONDENSATE POT  
TAG# 004-V-501

DESIGN AND BILL OF MATERIAL DRAWING

PROJECT NUMBER	QUALITY CONTROL APPROVED	SHEET	REV.	DRAWING NUMBER
11397	DATE _____ BY _____	1 of 1	1	100-021-008-001-01

V	U	R	L1&2	H	D	C	B	A	MARK	QTY	SERVICE	SIZE	RATING	TYPE	BORE	SCH	WALL	LG	O.D.	MAT'L	OD&THK	MAT'L	BOM #	O.S.	I.S.	TYPE	W1	W2	W3	W4	W5	REMARKS				
											VENT	2"	300#	RFLWN	2.00"	-	0.655"	11"	3 5/16"	SA-105	-	-	32	SEE ELEV	FLUSH	III	3/8	FP	-	-	-	-	-	-		
											UTILITY CONNECTION	2"	300#	RFLWN	2.00"	-	0.655"	8 11/16"	3 5/16"	SA-105	-	-	6, 9, 13, 26	8"	FLUSH	III	3/8	FP	-	-	-	-	-	-	W/BLIND	
											RELIEF	3"	300#	RFLWN	3.00"	-	0.810"	8 3/4"	4 5/8"	SA-105	-	-	5	8"	FLUSH	III	3/8	FP	-	-	-	-	-	-	-	-
											LEVEL BRIDLE	2"	300#	RFLWN	2.00"	-	0.655"	8 5/8"	3 5/16"	SA-105	-	-	6	8"	FLUSH	III	3/8	FP	-	-	-	-	-	-	-	-
											HANDHOLE	10"	300#	RFLWN	10.00"	-	1.310"	10 1/2"	12 5/8"	SA-105	-	-	4, 8, 12, 25	8"	FLUSH	III	3/8	FP	-	-	-	-	-	-	W/BLIND & HINGE ASSY (SEE DETAIL)	
											DRAIN	2"	300#	RFLWN	160	160	0.344"	SEE DETAIL	2 3/8"	SA-105	-	-	7	SEE ELEV	-	I	FP	-	-	-	-	-	-	-	-	
											VAPOR EQUALIZATION	2"	300#	RFLWN	2.00"	-	0.655"	6"	3 5/16"	SA-105	-	-	6	SEE ELEV	FLUSH	III	3/8	FP	-	-	-	-	-	-	-	
											LIQUID OUTLET	2"	300#	RFLWN	160	160	0.344"	SEE DETAIL	2 3/8"	SA-106B	-	-	3, 7, 10, 11	SEE ELEV	FLUSH	III	3/8	FP	-	-	-	-	-	-	-	
											INLET	2"	300#	RFLWN	2.00"	-	0.655"	8 5/8"	3 5/16"	SA-105	-	-	6	8"	FLUSH	III	3/8	FP	-	-	-	-	-	-	-	W/INLET DIVERTER (SEE DETAIL)

**NOZZLE SCHEDULE**

TYPE	WELD THICKNESS	PROJ.	REINFORCING PAD	NECK
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4
	W1	W2	W3	W4

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

PROPRIETARY AND CONFIDENTIAL

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