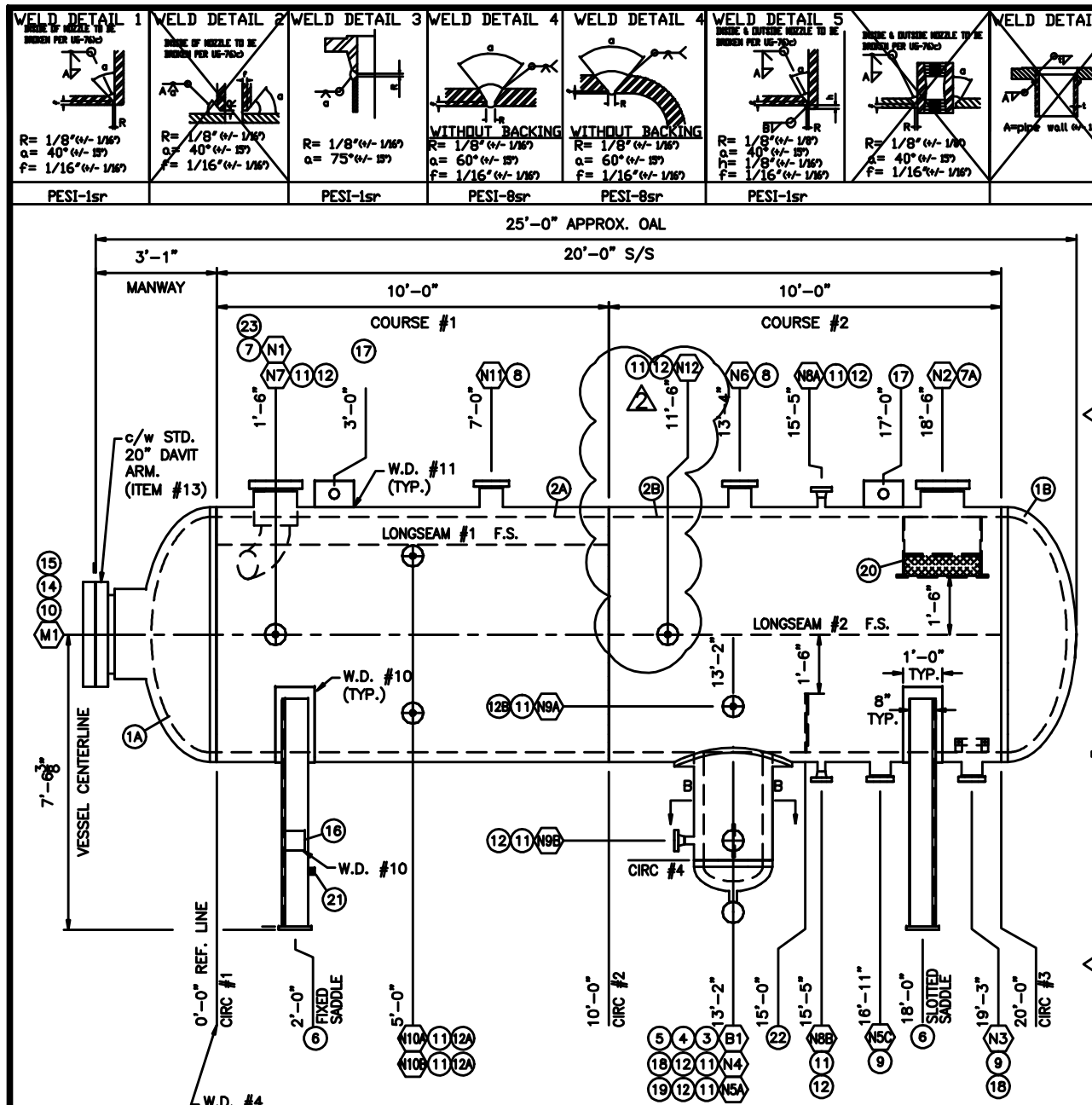

BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL^
1A/B	2	HEAD: 72" ID x 3"NOM (2.875"MIN.) THK, 2:1 S.E. c/w 2" S.F.	SA-516-70N
2A/B	2	SHELL: 3"THK. PLATE, ROLLED TO 78" OD x 10'-0" - (BBE) (20'-0" TOTAL)	SA-516-70N
3	1	BOOT HEAD: 24" OD x 3"NOM (2.5"MIN.) THK, 2:1 S.E. c/w 2" S.F. 1	SA-516-70N
4	1	BOOT SHELL: 3"THK. PLATE, ROLLED TO 24" OD x 3'-0" LONG - (POExBOE)	SA-516-70N
5	1	REPAD (BOOT): 1 3/8" THK. PLATE x 36" OD x 24 1/8"ID, ROLLED TO MATCH 78" OD SHELL (NOTE 9)	SA-516-70N
6	2	SADDLE: (SEE PAGE 2 OF 2, DETAILS)	-
7	1	FVC FLANGE: NPS 8"-CL600 RF 'V1' (7.62"ID x 2.82"WALL) x 14" LONG	SA-105N
7A	1	FVC FLANGE: NPS 8"-CL600 RF 'V1' (7.62"ID x 2.82"WALL) x 12" LONG	SA-105N
8	2	FVC FLANGE: NPS 4"-CL600 RF HB (3.83"ID x 1.62"WALL) x 12"LONG	SA-105N
9	2	FVC FLANGE: NPS 3"-CL600 RF 'V1' (2.90"ID x 1.74"WALL) x 10"LONG	SA-105N
10	1	FVC FLANGE: NPS 20"-CL600 RF 'V1' (20.00"ID x 3.88"WALL) x 20"LONG	SA-105N
11	10	FLANGE: NPS 2"-CL600 RF WN, c/w Sch.160 BORE	SA-105N
12	7	PIPE: NPS 2", SCH. 160 (0.344"WALL) x 7" - (BOExPOE)	SA-106-B
12A	2	PIPE: NPS 2", SCH. 160 (0.344"WALL) x 8 1/2" - (BOExPOE)	SA-106-B
12B	1	PIPE: NPS 2", SCH. 160 (0.344"WALL) x 10 1/2" - (BOExPOE)	SA-106-B
13	1	DAVIT ARM: (SEE DWG. '20INCH600DAVIT')	-
14	24	STUDS: 1 5/8"ø x 11 1/2" LONG c/w TWO(2) 1 5/8"ø NUTS EA.	SA-193-L7M /SA-194-2HM
15	1	BLIND FLANGE: NPS 20"-CL600 RF c/w 316 SST GASKET	SA-105N
16	1	NAMEPLATE BACKING: 3/16" THK x 6" x 6"	SA-36
17	2	LIFT LUG: (SEE PAGE 2 OF 2, DETAILS)	-
18	2	VORTEX BREAKER: (SEE PAGE 2 OF 2, DETAILS)	-
19	1	ELBOW: NPS 2", 90° LR, SCH. 160 (0.344"WALL) - (BBE)	SA-234-WPB
20	1	PES STD. MISTEX & CONTAINMENT - (SEE DWG. '24 MISTEX') - (NOTE 5)	-
21	1	GROUNDING LUG: 1/4" PLATE x 2" x 2"	SA-36
22	1	WEIR PLATE: (SEE PAGE 2 OF 2, DETAILS)	-
23	1	INLET DIVERTER: ELBOW: NPS 8", 90° LR, SCH. STD (0.325"WALL) - (PBE)	SA-234-WPB

GENERAL NOTES

1. THE FOLLOWING MATERIAL^ MAY BE UPGRADED: PIPE FROM SA-106-B TO SA-333-Gr.6.
   WELDED FITTING FROM SA-234-WPB TO SA-420-WPL6
   FLANGE/COUPLING FROM SA-105N TO SA-350-LF2 CL.1
   PLATE FROM SA-36 TO SA-516-70N
2. MAWP EQUALS DESIGN PRESSURE.
3. TOLERANCE SPECS AS PER DWG: DMV-2002TOL REV.0
4. ALL SA-516-70N MAT'L IS FINE GRAIN PRACTICE.
5. MISTEX DESIGN REF. DRAWING: '24 MISTEX'
6. CRN REFERENCE DRAWING: PES-72H-1440 REV.1 1
7. WPS: PESI-1sr, PESI-8sr
8. NOZZLES WITH BLIND FLANGES HAVE BEEN CONSIDERED UNDER UG-34, UCS-66(a)(3) & FIG.UCS-66 GENERAL NOTE E.
9. REPAD TO c/w 1/4"DIA. WEEP HOLE.

NOZZLE WELD SCHEDULE

MARK	SIZE (NPS)	SCH.	CLASS	TYPE	SERVICE	LOCATION	OSP	ISP (h)	WELD DETAIL	"A" FILLET	"B" FILLET	"C" FILLET	REPAD (ODxTHK)
B1	24"	3"THK	-	PLATE	BOOT	SHELL	AS SHWN	GF	8	3/8"	.	5/8"	36" x 1 3/8"
N1	8"	FVC	CL600	RF V1	GAS INLET	SHELL	8"	2"	5	3/8"	.	.	--
N2	8"	FVC	CL600	RF V1	GAS OUTLET	SHELL	8"	-	1	3/8"	.	.	--
N3	3"	FVC	CL600	RF V1	HC OUT	SHELL	6"	GF	1	3/8"	.	.	--
N4	2"	160	CL600	RF WN	WATER OUT	BOOT (SHELL)	6"	-	1 & 3	3/8"	.	.	--
N5A	2"	160	CL600	RF WN	DRAIN	BOOT (HEAD)	AS SHWN	GF	1 & 3	3/8"	.	.	--
N5C	3"	FVC	CL600	RF V1	DRAIN(S)	SHELL	6"	GF	1	3/8"	.	.	--
N6	4"	FVC	CL600	RF HB	SPARE	SHELL	8"	-	1	1/2"	.	.	--
N7	2"	160	CL600	RF WN	PI/PIT	SHELL	6"	-	1 & 3	3/8"	.	.	--
N8A/B	2"	160	CL600	RF WN	HC CAGE	SHELL	6"	-	1 & 3	3/8"	.	.	--
N9A	2"	160	CL600	RF WN	H2O CAGE	SHELL - TAN	AS SHWN	-	1 & 3	3/8"	.	.	--
N9B	2"	160	CL600	RF WN	H2O CAGE	BOOT (SHELL)	6"	-	1 & 3	3/8"	.	.	--
N10A/B	2"	160	CL600	RF WN	LSDH	SHELL - TAN	AS SHWN	-	1 & 3	3/8"	.	.	--
N11	4"	FVC	CL600	RF HB	PSV	SHELL	8"	-	1	1/2"	.	.	--
N12	2"	160	CL600	RF WN	LSDL	SHELL	6"	-	1 & 3	3/8"	.	.	--
M1	20"	FVC	CL600	RF V1	MANWAY	HEAD	AS SHWN	-	1	3/8"	.	.	--

STAMPS & APPROVALS

LAST SAVED ON: Tuesday, February 09, 2010 @ 9:43:32 AM by jay snell
PRINTED ON: Tuesday, February 09, 2010 @ 9:56:43 AM

DESIGN DATA

DESIGN & FABRICATE TO: ASME CODE SECTION VIII, DIV 1, 2007 EDITION, 2008 ADD.	
MAWP @ TEMPERATURE: 1440 PSIg @ 100°F	MIN. DESIGN METAL TEMPERATURE (MDMT): -20°F @ 1440 PSIg
IMPACT TESTS: HEADS/SHELLS IMPACT TESTED TO -20°F PER UG-84; NOZZLES FROM PIPE & WN FLANGE EXEMPT PER UG-20(f)(1-5) & UCS-66(b)(1)(b)/ FVC EXEMPT AS PER UCS-66(b)(1)(b)	
RADIOGRAPHY: LONG SEAM - FULL PER UW-11(a); CIRC SEAMS - FULL PER UW-11(a) OTHER: MPI	
POST WELD HEAT TREATMENT (PWHT): YES; 135 MIN @ 1150°F	PREHEAT: 200°F
CORROSION ALLOWANCE: 1/8"	MAX. CAPACITY: 632 cu.ft.
HYDROSTATIC TEST PRESSURE: 2160 PSIg	EMPTY WEIGHT: 77,000 lbs

CALC PKG REV. LEVEL	REV. CALCS REQ'D	NO.	DATE	REVISIONS	DWN	DD	PC	QC
1	NO	2	10-02-08	CHANGED LOCATION OF N12	JS	.	.	.
1	NO	1	10-01-14	REVISED BOOT HEAD MIN. THK.	JS	.	.	.
1	NO	0	09-12-21	ISSUED FOR CONSTRUCTION	DS	.	.	.
1	YES	A	09-12-08	ISSUED FOR APPROVAL	JS	.	.	.

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DATE	08/03/02
DESIGNED BY	PES
DRAWN BY	PP
CHECKED BY	.
APPROVED BY	.
SCALE	1/4"=1'-0"
CLIENT	CONOCOPHILLIPS
	=
	LSD: -
TITLE	HORIZONTAL SEPARATOR 72"ID x 20'-0" S/S MAWP 1440 PSIg @ 100°F c/w 1/8" C.A.
PROJECT NO.	0000324
FILENAME	V0000325
REFERENCE NO.	U4855.2
SHEET NO.	1 OF 2
DRAWING NO.	V-0000325
REV. NO.	2

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