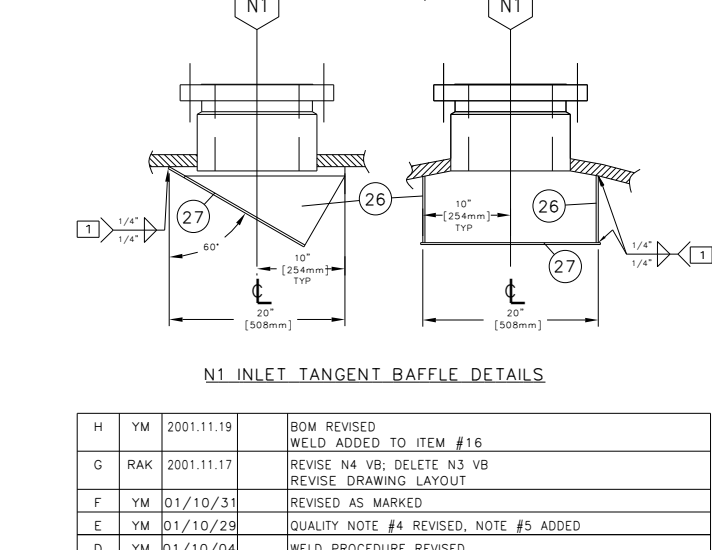
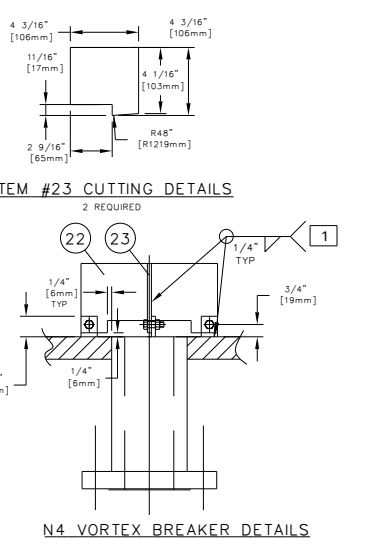
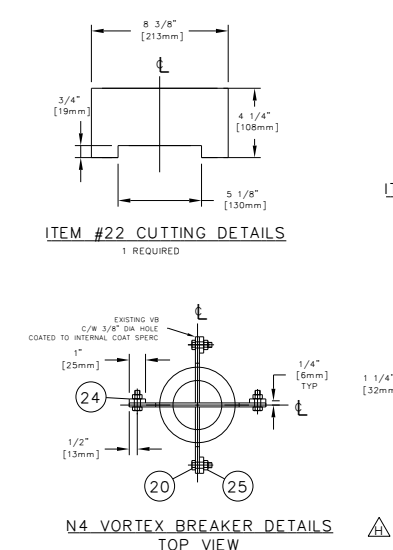
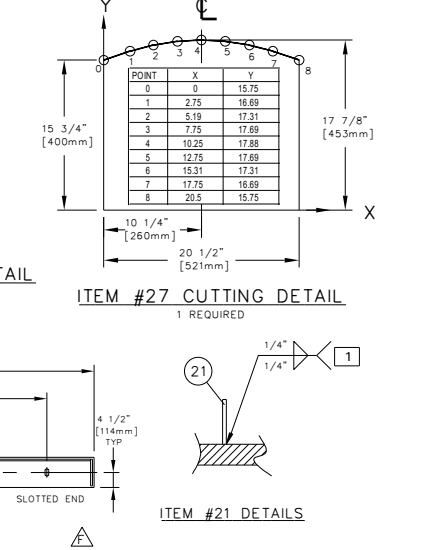
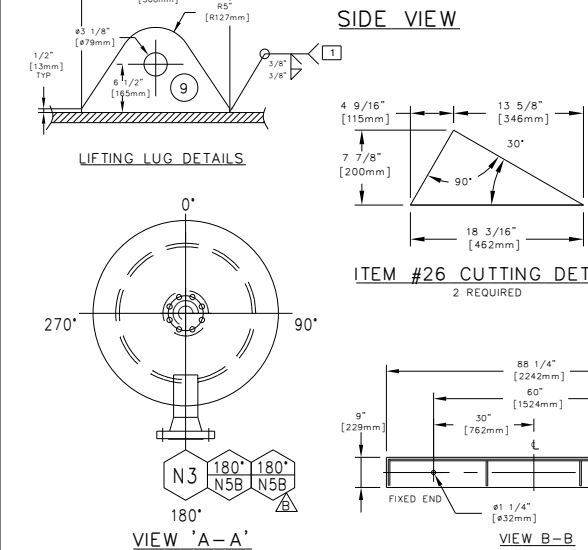
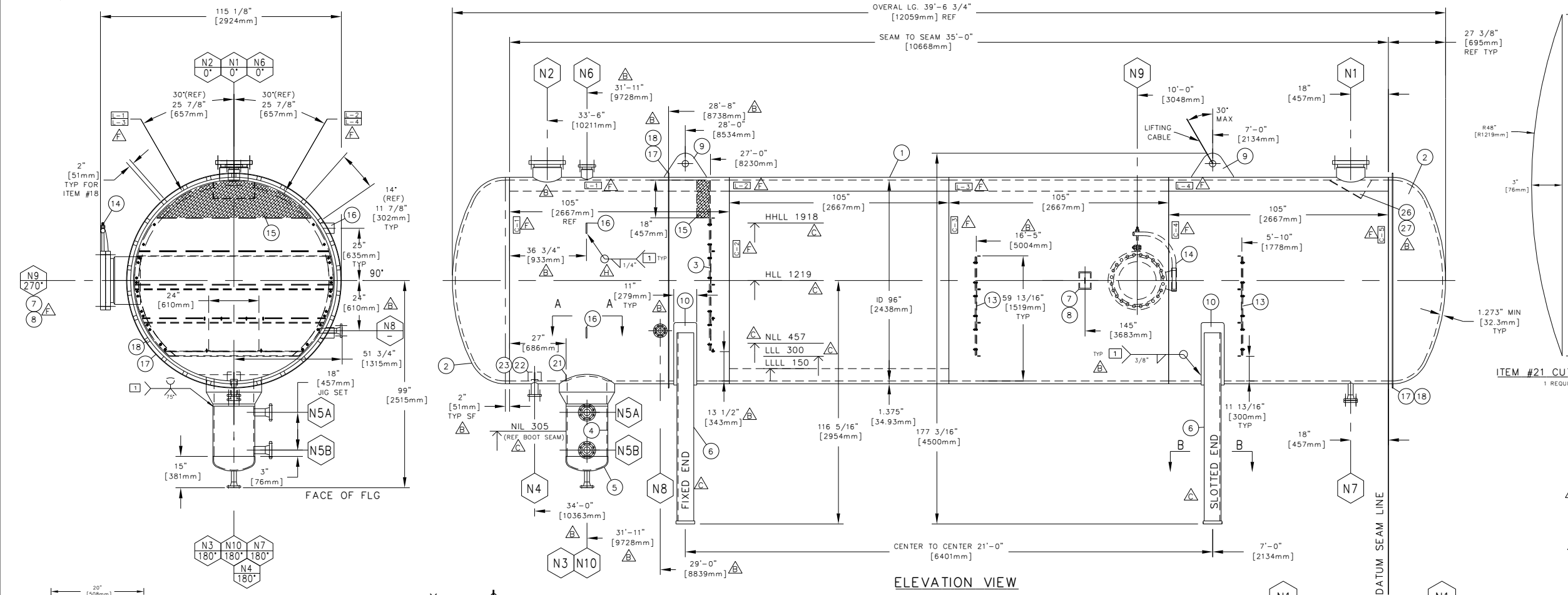




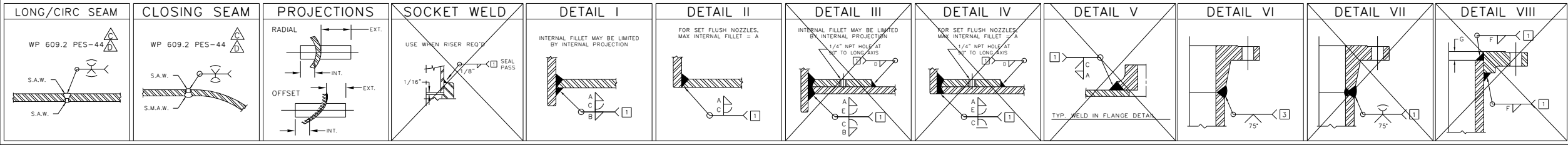
ITEM	LOCATION	PART NO	QTY	DESCRIPTION
1	SHOULDER	62807	892.5	F2 PL 1.375\"/>
2	HEADS	67130	2	EA HD 2:15E 96ID1.273MN 2SF SA516-70N IMP -50F
3	BAFFLE	67131	1	EA BAFFLES DETAILS ITEM #1 DWG 2001-0871D
4	BOOT SHELL	67132	24.0	LN PIPE 20\"/>
5	BOOT HEAD	67133	1	EA HD 2:15E 20\"/>
6	SADDLES	67126	2	EA SADDLES DETAILS DWG 2001-0869D
7	NAME PL	61103	1	EA PL DATA UNITS WET/IMP EXTENDED VERS DWG 9104-2A
8	NAME PL	61104	1	EA BOWT STD. DATA PL. EXTENDED VERS. DWG 9104-3A
9	LIFT LUG	62807	32	F2 PL 1.375\"/>
10	WEAR PAD	62855	17.4	F2 PL .500 SA516-70N 2 PCS 11\"/>
11				
12				
13	BAFFLE	67131	0	EA BAFFLES DETAILS ITEM #2 DWG 2001-0871D
14	N9 DAVIT	56312	1	EA DAVIT 18\"/>
15	DEMISTER	67134	1	EA MESH MIST ELIM 144 KG/M3 152mm THK 316-S3 REMOVABLE
16	BRIDLE CLIPS	62855	0.5	F2 PL .500 SA516-70N 2 PCS 5\"/>
17	INS SUPP	51463	53.8	FT BAR RND 1/4\"/>
18	INS SUPP	67146	1.7	F2 PL .250 SA 516-70N 52 PCS 1-3/4\"/>
19				
20	N4 VORTEX	67344	4	EA BOLT HEX 5/16\"/>
21	LIQ WIER	67146	0.9	F2 PL .250 SA 516-70N 1 PCS 3/4\"/>
22	N4 VORTEX	67146	0.2	F2 PL .250 SA 516-70N 1 PCS 4-1/4\"/>
23	N4 VORTEX	67146	0.2	F2 PL .250 SA 516-70N 2 PCS 4-3/16\"/>
24	N4 VORTEX	67146	0.04	F2 PL .250 SA 516-70N 4 PCS 1\"/>
25	N4 VORTEX	63925	1	EA NUT HEX 5/16\"/>
26	N2 BAFFLE	67146	2.0	F2 PL .250 SA 516-70N 2 PCS 7-7/8\"/>
27	N2 BAFFLE	67146	2.5	F2 PL .250 SA 516-70N 1 PCS 17-7/8\"/>
28	N4 VORTEX			
29	N1 & N2	67139	2	EA FLG 10 CL300 RFHB X 12\"/>
30	N3	56112	0.5	FT PIPE 2\"/>
31	N3, N7 & N8	56103	3	EA FLG 2 CL300 RFWN SCH160 SA350-LF2
32	N4	67166	1	EA FLG 3 CL300 RFLWN X 12\"/>
33	N5A & B	56114	1.0	FT PIPE 3\"/>
34	N5A & B	62547	2	EA FLG 3 CL300 RFWN XH BORE SA350-LF2
35	N6	67140	1	EA FLG 3 CL300 RFHB X 12\"/>
36	N7	56112	0.6	FT PIPE 2\"/>
37	N7	58776	1	EA FLG 5/8NC 2 CL300 RF SA 350-LF2
38	N7	64497	8	EA STUD 5/BLND X 3-1/2 LG SA193-B7M
39	N7	58668	16	EA NUT HEX 5/8\"/>
40	N7	67142	1	EA GASKET 2 CL300 SPRWND 304SS W/GRPH FILL
41	N8	56112	0.7	FT PIPE 2\"/>
42	N9	67141	1	EA FLG 18 CL300 RFHB X 18\"/>
43	N9	63029	1	EA FLG BLIND 18 CL300 RF SA350-LF2
44	N9	65516	24	EA STUD 1-1/4NC X 8LG SA193B7M
45	N9	60864	48	EA NUT HEX 1-1/4\"/>
46	N9	67143	1	EA GASKET 2 CL300 SPRWND 304SS W/GRPH FILL
47	N10	67144	1	EA FORGING WELD NECK 19\"/>
48				
49				
50				

QUALITY NOTES:
1. HOLIDAY TESTING IS REQ'D ON THE INTERNAL COATING.
2. ALL WELDS JOINING NON PRESSURE RETAINING COMPONENTS TO PRESSURE RETAINING COMPONENTS SHALL BE 100% MPI REPORT USING RING-NDE-001.
3. PRODUCTION IMPACT TESTING REQ'D AS PER UG-84.
4. VESSEL SHALL BE VICKERS MICRO HARDNESS TESTED AFTER PWHT. PERFORM BM-HAZ-BW-HAZ-BW ON INTERNAL/EXTERNAL SURFACES FOR ONE CIRC, ONE LONG AND ONE ON THE CAT 'C' AND 'D' OF ONE NOZZLE.
5. MAXIMUM ACCEPTABLE HARDNESS FOR P1 MATERIALS: HV 210
6. TEST SHALL BE PERFORMED BY COSB LEVEL II OR III TECHNICIAN
7. AFTER FINAL HYDROTEST, VESSEL TO BE COMPLETELY DRAINED AND DRIED PRIOR TO COVERING AND PROTECTING ALL OPENINGS. PLUG ALL WEEP HOLES IN REPAIRS WITH GREASE.
8. ALL COATED CORNERS AND EDGES TO BE BROKEN PRIOR TO COATING.
9. SERVICE STUDS, NUTS AND GASKET NOT TO BE USED FOR HYDROTEST.
10. TOLERANCE ON NOZZLE EXTERNAL & INTERNAL PROJECTION TO BE ±1/8\"/>

SHOP NOTES:
1. SHELL PLATES SHALL BE TRIMMED SQUARE TO WITHIN 1/32\"/>

NOZZLE SCHEDULE Note: All dimension are in English units

MARK	IDENTIFIER	SIZE	DESCRIPTION	ID	OD	ORIENT	NECK MAT'L	I	T	SIZE	TYPE	CLASS	FLG MAT'L	MATERIAL	PAD THICK.	PAD DIA	I	T	N	THICK	EXT. PROJ.	INT. PROJ.	DETAIL	A	B	C	D	E	REMARKS
N1	INLET	N/A	9.56 ID X 2.03 WALL	9.56	13.62	0	SA 350 LF2	N	N	10	HB	300	SA350LF2	N/A	0.0000	0.00	-	2.030	8.00	0.00	II	0.357	-	FULL	-	-	-	SET FLUSH	ITEM(S) #29
N10	BOOT FORGING	N/A	19 ID X 3.75 WALL	19.00	26.50	180	SA 350 LF2	N	N	10	N/A	N/A	N/A	N/A	0.0000	0.00	-	3.750	10.00	0.00	II	0.375	-	FULL	-	-	-	GR FLUSH	ITEM(S) #47
N2	GAS OUTLET	N/A	9.56 ID X 2.03 WALL	9.56	13.62	0	SA 350 LF2	N	N	10	HB	300	SA350LF2	N/A	0.0000	0.00	-	2.030	8.00	0.00	II	0.357	-	FULL	-	-	-	SET FLUSH	ITEM(S) #29
N3	WATER DRAIN	N/A	2 SCH 160	1.69	2.38	0	SA 333 6	N	N	2	WN	300	SA350LF2	N/A	0.0000	0.00	-	0.344	SHOWN	0.00	II , VI	0.375	-	FULL	-	-	-	GR FLUSH	ITEM(S) #30, 31
N4	CONDENSATE OUTLET	N/A	3 ID X 0.81 WALL	3.00	4.62	180	SA 350 LF2	N	N	3	LWN	300	SA350LF2	N/A	0.0000	0.00	-	0.810	8.00	0.00	II	0.375	-	FULL	-	-	-	GR FLUSH	ITEM(S) #32
N5A	BRIDLE (BOOT)	N/A	3 SCH 80 (XH)	2.90	3.50	0	SA 333 6	N	N	3	WN	300	SA350LF2	N/A	0.0000	0.00	-	0.300	8.00	0.50	I , VI	0.500	-	FULL	-	-	-	-	ITEM(S) #33, 34
N5B	BRIDLE (BOOT)	N/A	3 SCH 80 (XH)	2.90	3.50	0	SA 333 6	N	N	3	WN	300	SA350LF2	N/A	0.0000	0.00	-	0.300	8.00	0.50	I , VI	0.500	-	FULL	-	-	-	-	ITEM(S) #33, 34
N6	BRIDLE (SHELL)	N/A	2.9 ID X 1.24 WALL	2.90	5.38	0	SA 350 LF2	N	N	3	HB	300	SA350LF2	N/A	0.0000	0.00	-	1.240	6.00	0.00	II	0.375	-	FULL	-	-	-	SET FLUSH	ITEM(S) #35
N7	DRAIN C/W BLIND	N/A	2 SCH 160	1.69	2.38	180	SA 333 6	N	N	2	WN	300	SA350LF2	N/A	0.0000	0.00	-	0.344	8.00	0.00	II , VI	0.375	-	FULL	-	-	-	GR FLUSH	ITEM(S) #36-40
N8	LIQUID RETURN	N/A	2 SCH 160	1.69	2.38	-	SA 333 6	N	N	2	WN	300	SA350LF2	N/A	0.0000	0.00	-	0.344	SHOWN	0.00	II , VI	0.375	-	FULL	-	-	-	SET FLUSH	ITEM(S) #41
N9	MANWAY	N/A	18 ID X 2.375 WALL	18.00	22.75	270	SA 350 LF2	N	N	18	HB	300	SA350LF2	N/A	0.0000	0.00	-	2.375	12.00	2.00	I	0.375	0.375	FULL	-	-	-	-	ITEM(S) #42-46



H	YM	2001.11.19		BOM REVISED WELD ADDED TO ITEM #16
G	RAK	2001.11.17		REVISE N4 VB; DELETE N3 VB REVISE DRAWING LAYOUT
F	YM	01/10/31		REVISED AS MARKED
E	YM	01/10/29		QUALITY NOTE #4 REVISED, NOTE #5 ADDED
D	YM	01/10/04		WELD PROCEDURE REVISED
C	YM	01/09/20		REVISED AS MARKED
B	YM	01/09/17		REVISED AS MARKED
A	YM	01/09/05		ISSUED FOR CUSTOMER APPROVAL
O	YM	01/08/30		PRELIMINARY RELEASE FOR CUSTOMER SITE LAYOUT ONLY
NO	BY	DATE	CHKD	REVISIONS
WELD PROCEDURES				
UNSPECIFIED TOLERANCES				
THIS DRAWING OF A				
CONFIDENTIAL NATURE IS				
THE EXCLUSIVE PROPERTY OF				
RNG PRO-TECH INC.				
AND MAY NOT BE REPRODUCED,				
USED OR DISCLOSED WITHOUT				
WRITTEN PERMISSION OF THE				
OWNER.				

DESIGN DATA - ENGLISH (METRIC) UNITS

ASME SEC. VIII DIV 1, 1998 EDITION, 2000ADDENDA		SYMBOL UW12 (a)	
MAWP INT: 500psi(3448kPa) @ 100°F(38°C)		DIAMETER 96.00" ID(2438mm)	
MAP INT: 529psi(3647kPa) @ 70 °F(21°C)		LENGTH O/A 39' 6-3/4"(12059mm)	
DESIGN TEMP. - INT: 100°F(38°C)		CAPACITY: 1913ft ³ (54m ³)	
MDMT: -50°F @ 500psi (-46°C @ 3448kPa)		HEAD TYPE: 2:1 ELLIPSOIDAL	
XRAY SHELL LONG:FULL UW-11(A) CIRC:FULL UW-11(A)		HEAD MATERIAL: SA-516-70N IMP -50F	
XRAY HEAD LONG: SMLS CIRC:FULL UW-11(A)		HEAD THICKNESS: 1.273" MIN(32.3 mm)	
JOINT EFF. - HEAD: 1.00 SHELL: 1.00		HEAD CORROSION ALLOWANCE: 0.063 "(1.6 mm)	
STRESS RELIEVED: 90 MINUTES @ 1100 MIN		SHELL MATERIAL: SA-516-70N IMP -50F	
HYDRO TEST NEW & COLD: 688psi(4744kPa)		SHELL THICKNESS: 1.375" (34.93 mm)	
LIMITED BY HEADS		SHELL CORROSION ALLOWANCE: 0.063 "(1.6 mm)	
EST. SHIPPING WEIGHT: 67300lb(30600kg)		BOOT HEAD TYPE: 2:1 ELLIPSOIDAL	
EST. HYDRO TEST WEIGHT: 192600lb(87400kg)		BOOT HEAD MATERIAL: SA-516-70N IMP -50F	
SANDBLAST: EXTERNAL: SSPC-SP6 INTERNAL: SSPC-SP6 BOOT & 305 mm BOTTOM OF VESSEL		BOOT HEAD THICKNESS: 0.3077" MIN(7.82 mm)	
PRIMER: EXTERNAL: CLOVAPRIME 21 (2-2.5 MILS DFT, 1 COAT) INTERNAL: EC376 F-15 (15-20 MILS DFT, 2 COATS)		BOOT HEAD CORROSION ALLOWANCE: 0.063 "(1.6 mm)	
INSULATION: BY CUSTOMER		BOOT SHELL MATERIAL: SA-333-6	
CRN .		BOOT SHELL THICKNESS: 0.5 "(12.7 mm)	
		BOOT SHELL CORROSION ALLOWANCE: 0.063 "(1.6 mm)	
		STUDS: SA-193-B7M	
		NUTS: SA-194-2HM	
		MW GASKETS: 304SS SPIRAL WOUND, GRAPHITE FILLED	
		FLANGES: SA-350-LF2 PIPE: SA-333-6	
		SUPPORT MTL: SA-516-70N/SA-36/44W	
		REINFORCING MTL: SA-516-70N	
		REG DRAWING .	
		INLET SEPARATOR/SLUG CATCHER	
		TAG# V-200, HUSKY ENERGY INC	
		GALLOWAY LSD 12-05-54-20 W5M	
DR. YM	DATE 2001/08/30	PROJ. P.O. 31-0132	DRAWING No. 2001-0864D
CHKD. -	DATE	SCALE	P/N - 16400401
MAINT'D	DATE		

