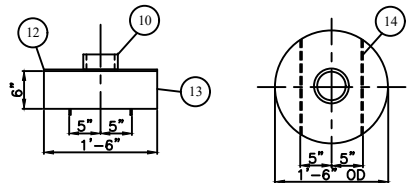
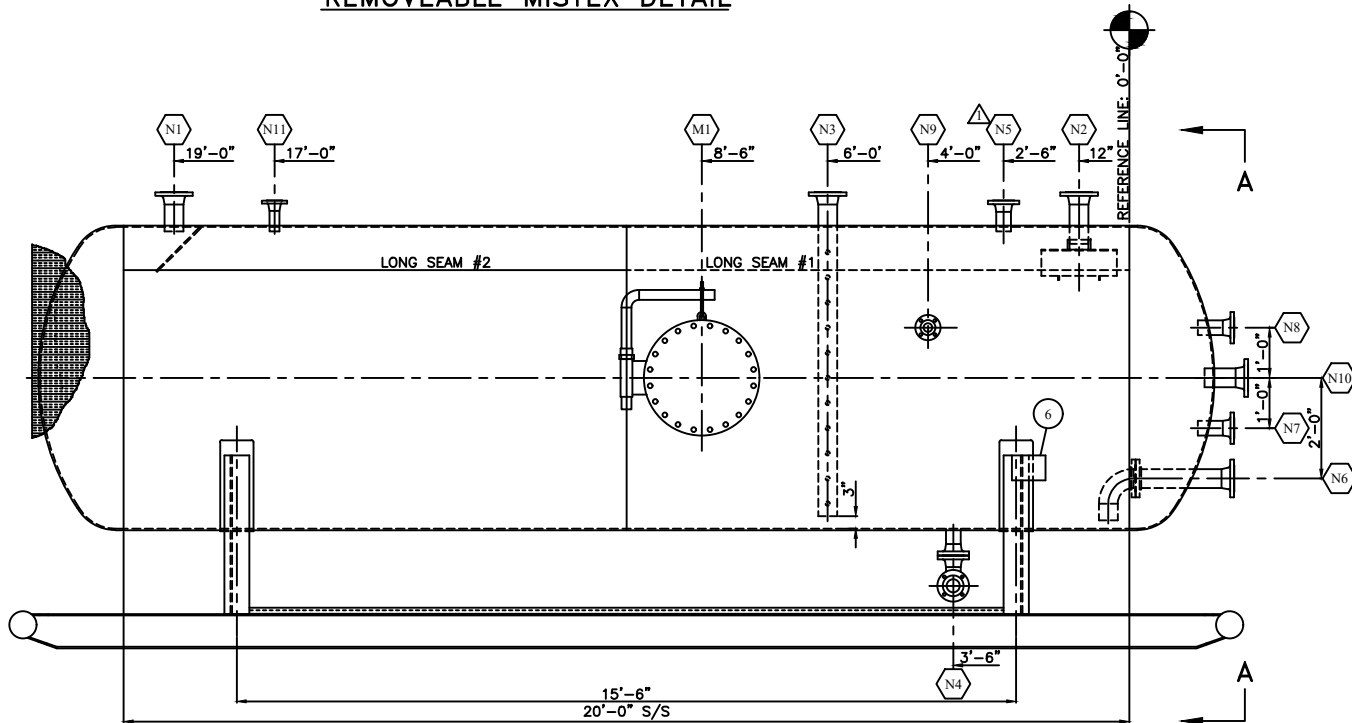


## GENERAL NOTES

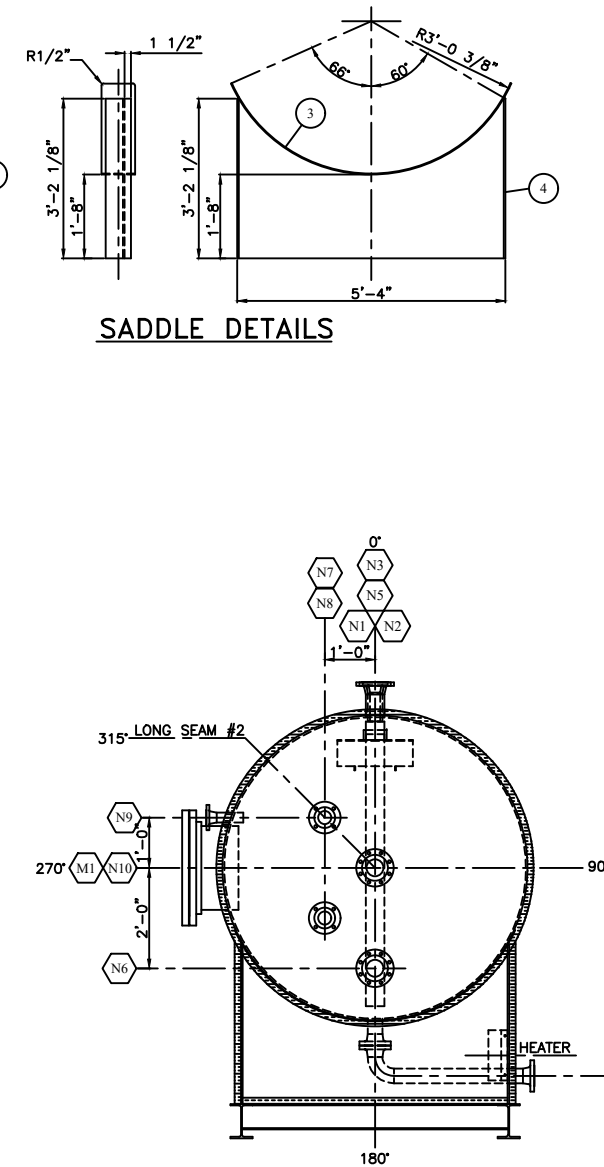
1. QUALITY CONTROL PROGRAM NUMBER: AQP-1317(S)
2. WELDING PROCEDURE REGISTRATION NUMBER: WP1970.2
3. HEAD & SHELL MATERIAL: SA-516-70N
4. FLANGE MATERIAL: SA-105-N U.N.O.
5. PIPE MATERIAL: SA-106-B
6. PLATE MATERIAL: SA-36
7. BOLTING MATERIAL: SA-193-B7M/SA-194-2HM
8. EXTERNAL SANDBLAST: SSPC-SP6 (COMMERCIAL)
9. EXTERNAL COATING (ALL SURFACES): ONE COAT PRIMER (NON INSULATED AREAS) ONE COAT INDUSTRIAL ENAMEL (WHITE)
10. INTERNAL SANDBLAST: SSPC-SP5 (WHITE)
11. INTERNAL COATING: DEVOE 253 AS PER MANUFACTURER'S SPECS
12. INSULATION: 1 1/2" THK ALUMINUM CLAD RIGID URETHANE
13. OPENING N4 (TRUCKOUT) SHALL BE FLUSH WITH INSIDE OF VESSEL
14. ALL BOLT HOLES TO STRADDLE CENTERLINE
15. ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
16. ALL OUTSIDE PROJECTIONS ARE TO BE MEASURED ALONG THE CENTERLINE OF THE NOZZLE
17. ALL INSIDE PROJECTIONS ARE TO BE MEASURED ON THE SHORT SIDE OF THE NOZZLE
18. PWHT:  
HEAT FROM AMBIENT TO 800°F AT A MODERATE RATE  
HEAT FROM 800°F TO 1150°F AT 400°F/Hr MAX  
SOAK AT 1150°F FOR 60 MIN  
COOL TO 800°F AT 500°F/Hr MAX  
FROM 800°F AIR COOL IN FURNACE
19. FABRICATION TOLERANCES AS PER BILTON DRAWING NUMBER TOL2002
20. VESSEL IS REGISTERED IN ALBERTA
21. SERIAL NUMBER: 12892
22. CRN DRAWING NUMBER: BWM-060-03
23. SHIPPING DIMENSIONS: 7'-0" W x 9'-6" H x 24'-6" LG



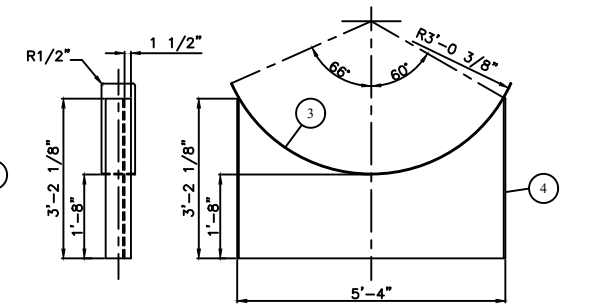
REMOVEABLE MISTEX DETAIL



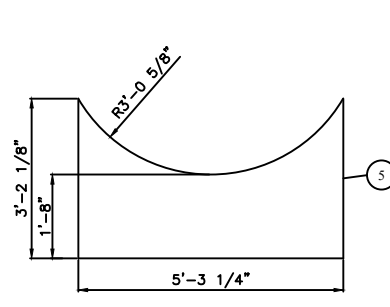
ELEVATION VIEW



ORIENTATION VIEW A-A



SADDLE DETAILS



WEB PLATE DETAIL

NOZZLE SCHEDULE												
PIPE	PROJECTION		WELD DETAIL	WELD		REPAD		BILL OF MATERIALS ITEM NUMBER				
	INSIDE	OUTSIDE		A	B	C	D					
RFWN	1"	8"	1,4	3/8	—	—	—	7,8,9				
RFWN	1"	8"	1,4	3/8	—	—	—	7,8,10,11,12,13,14,				
RFWN	SHOWN	8"	1,4	3/8	—	—	—	7,16,17,18,19,20,21,				
RFWN	FLUSH	6"	1,5	3/8	—	—	—	21,22,23,24,25,26,				
RFWN	1"	6"	1,4	3/8	—	—	—	21,22,23,24,30,36,				
RFWN	2"	10"	1,4	3/8	—	—	—	7,17,21,22,37,38,39,				
RFWN	2"	6"	1,4	3/8	—	—	—	21,22,42,43,44				
RFWN	2"	6"	1,4	3/8	—	—	—	23,43				
RFWN	2"	6"	1,4	3/8	—	—	—	28,45				
RFWN	2"	8"	1,4	3/8	—	—	—	7,46				
RFWN	1"	6"	1,4	3/8	—	—	—	28,29				
RFSO	2"	8"	2,6	3/8	—	1/4	—	47,48,49,50,51,52,53,				

BILL OF MATERIALS						
S	ITEM	REQ'D	PART	DESCRIPTION	MATERIAL	WEIGHT
	1	2	SHELL	3/8" THK x 120" W ROLL TO 72" ID x 228 1/2" LG	SA-516-70N	5800#
	2	2	HEAD	3/8" THK (0.3130" MIN) x 72" ID 2:1 S.E.	SA-516-70N	1195#
15	3	2	SADDLE	8" x 1/4" THK FLATBAR ROLL TO 72 3/4" ID x 84 3/8" LG	SA-36	80#
,22	4	4	SADDLE	6" x 3/8" FLATBAR x 3'-2 1/8" LG	SA-36	40#
,27	5	2	SADDLE	3/8" THK x 38 1/8" W x 63 1/4" LG (SEE DETAIL)	SA-36	140#
5	6	1	NAMEPLATE	6" x 8" NAMEPLATE BRACKET(SEE 6x8 NAMEPLATE BRACKET)	SA-36	3#
10,41	7	5	N1,2,3,6,10	4" x 150# RFWN FLG SCH 160	SA-105-N	75#
	8	3	N1,N2,N3	4" PIPE SCH 160 x 6 1/2" LG (BOE,ROE)	SA-106-B	24#
	9	1	N1	3/8" THK DEFLECTOR PLATE	SA-36	10#
	10	1	N2	4" x 150# HALF CPLG	304SS	2#
	11	1	N2	4" x 6" LG SCH STD NIPPLE (CUT IN HALF)	304SS	2#
	12	1	N2	18" OD x 4 1/2" ID x 1/4" THK	304SS	5#
3,54	13	1	N2	18" PIPE SCH 10 x 6" LG	304SS	2#
	14	1	N2	1" x 1/4" FLATBAR x 1'-11" LG	304SS	5#
	15	1	N2	18" OD x 4" THK MISTEX PAD c/w SS GRID	304SS	6#
	16	1	N3	4" x 150# RF BLIND FLG TAPPED TO 1"	SA-105-N	17#
	17	3	N3,N6	4" x 150# RF FLEX GASKET	304SS	-
	18	1	N3	4" PIPE SCH XH x 5'-7 7/8" LG (BOE,ROE) c/w HOLES	SA-106-B	93#
	19	1	N3	TGS LIQUID LEVEL GAUGE (SOUR)	-	-
	20	1	N3	PROXIMITY LEVEL SWITCH (ELECTRIC)	-	-
	21	44	N3,4,5,6,7	5/8" DIA x 3 1/2" LG STUD	SA-193-B7M	-
	22	88	N3,4,5,6,7	5/8" DIA NUT	SA-194-2HM	-
△	23	6	N4,5,7,8	3" x 150# RFWN FLG SCH XXH	SA-105-N	50#
△	24	3	N4,N5,N7	3" x 150# RF FLEX GASKET	304SS	-
	25	1	N4	3" x 90" LR BW ELBOW SCH XXH	SA-234-WPB	7#
	26	1	N4	3" PIPE SCH XXH x 3 3/4" LG (BOE,COE)	SA-106-B	3#
	27	1	N4	3" PIPE SCH XXH x 2'-6 3/4" LG (BBE)	SA-106-B	26#
	28	2	N9,N11	2" x 150# RFWN FLG SCH 160	SA-105-N	32#
	29	1	N11	2" PIPE SCH 160 x 6 7/8" LG	SA-106-B	-
△	30	1	N5	3" PIPE SCH XXH x 6 3/4" LG	SA-106-B	-
△	36	1	N5	3" 150# RF PSV MERCER 9162K11V82N1, SET @ 100 PSI	-	-
	37	2	N6	4" x 150# RFSO FLG	SA-105-N	-
	38	1	N6	4" x 90" LR BW ELBOW SCH XH	SA-234-WPB	12#
	39	1	N6	4" PIPE SCH 160 x 1'-8 1/8" LG	SA-106-B	-
	40	1	N6	4" PIPE SCH XH x 4" LG	SA-106-B	-
	41	1	N6	4" 150 ANSI FISHER 1051-V200 CONTROL VALVE NACE	-	-
	42	1	N7	3" x 150# HUB BLIND FLG TAPPED TO 2"	SA-105-N	-
	43	2	N7,N8	3" PIPE SCH XXH x 6" LG	SA-106-B	-
	44	1	N7	FISHER L2 LEVEL CONTROLLER (SOUR)	-	-
	45	1	N9	2" PIPE SCH 160 x 6 3/8" LG	SA-106-B	-
	46	1	N10	4" PIPE SCH 160 x 8" LG	SA-106-B	-
	47	1	M1	20" x 150# RFSO FLG	SA-105-N	165#
	48	1	M1	20" x 150# RF BLIND FLG	SA-105-N	285#
	49	1	M1	20" x 150# RF FLEXITALLIC GASKET	304SS	-
	50	1	M1	20" PIPE SCH STD x 11 3/8" LG (COE,ROE)	SA-106-B	75#
	51	1	M1	REPAD: 26" OD x 3/8" THK ROLLED TO 72 3/4" ID	SA-516-70N	65#
	52	1	M1	20" DAVIT ARM	-	-
	53	20	M1	1 1/8" DIA x 6 1/4" LG STUD	SA-193-B7M	-
	54	40	M1	1 1/8" DIA NUT	SA-194-2HM	-
	55	1	HEATER	12" x 24" CATADYNE HEATER (SEE CATADYNE HEATER DWG)	-	-
	56	1	HEATER	GALV VENT AIR OUTLET MOUNT SIDE OF HEATER NEAR TOP	-	-
	57	1	SKID	SKID (SEE DWG A646-2 FOR DETAIL)	-	1200#
	58	5	INSUL	1 1/2" x 15'-8" LG SHT RIGID URETH, CORR & STUCCO EMBOSS ALUM ONE SIDE (CURFS)	-	-
	59	4	INSUL	1 1/2" x 8'-0" LG SHT RIGID URETH, CORR & STUCCO EMBOSS ALUM ONE SIDE (CURFS)	-	-
	60	2	INSUL	1 1/2" x 45' COV x 12'-6" LG SHT RIGID URETH, CORR & STUCCO EMBOSS ONE SIDE	-	-
	61	3	INSUL	1 1/2" x 45' COV x 16'-0" LG SHT RIGID URETH, CORR & STUCCO EMBOSS ALUM BOTH SIDES	-	-
	62	60 FT	INSUL	SEA "L" FLASHING	-	-
	63	8 FT	INSUL	SEA "Z" FLASHING	-	-
	64	600	INSUL	SCREWS - #8 - 1/2" STAINLESS STEEL	-	-
	65	3	INSUL	ALUMINUM SILICONE CAULK	-	-

## DESIGN SPECIFICATIONS

DESIGN & FABRICATE TO: 2001 ASME BOILER & PRESSURE VESSEL  
CODE SEC VIII, DIV 1, 2002 ADDENDA

DESIGN PRESSURE & TEMPERATURE: 100 PSI @ 212°F

MINIMUM DESIGN METAL TEMP: -20°F @ 100 PSI

IMPACT TESTS: NONE AS PER UG-20(f)(1-5)

RADIOGRAPHY: RT-1 AS PER CLIENT REQUEST

POST WELD HEAT TREATMENT: YES AS PER CLIENT REQUEST

HYDROSTATIC TEST PRESSURE: 130 PSIG PREHEAT: 50°F

CORROSION ALLOWANCE: 1/8" MAWP: 100 PSI @ 212°F

HEAD THK. MIN: 0.3130" VOLUME: 614 CuFt. 17.4 Cum.

WEIGHT EMPTY: 7,750 LBS WEIGHT FULL: 47,200 LBS

## O'ROURKE ENGINEERING LTD

72" ID x 20'-0" S/S SINGLE WALL ABOVE GROUND  
FLARE KNOCKOUT DRUM

DATE: 02/10/03 SHEET: 1 OF 2

SCALE: N.T.S. JOB NO.: A646




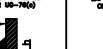

DRAWN BY: DSG SIZE: D

PURCHASE ORDER: 3102-6448

LOCATION: 03-31-54-22 W5M DRAWING NO.: A646-1

APP'D BY: JAM CRN: TBA REV.: 2

WELD DETAIL NUMBER		REGISTERED WELDING PROCEDURE		NUMBER	BACKWELD/GOUGE
ROOT		HOT PASS		FILL & CAP	
1,2,3,4,5,6,8		BWM-016		BWM-016	N/A
7		BWM-006		BWM-006	N/A

1	WELD NECK FLANGE	2	SLIP ON FLANGE	3	COUPLING	4	NOZZLE NECK	5	NOZZLE NECK
									

REV. NO.	DATE	REVISION	BY	APP'D
A	02/10/03	ISSUED FOR APPROVAL	DSG	
B	02/20/03	REVISED AS PER CLIENT REQUEST	DSG	
C	02/20/03	REVISED AS PER CLIENT REQUEST	DSG	
D	02/25/03	ISSUED FOR FABRICATION	DSG	JAM
1	03/04/03	CHANGED CONNECTION N5 TO 3"	DSG	
2	04/02/03	AS BUILT DRAWING	JMB	

**BILTON**  
Welding & Manufacturing Ltd.

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INNISFAIR, AB  
CANADA  
403-227-7799  
1-888-227-4923  
FAX 227-7796

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