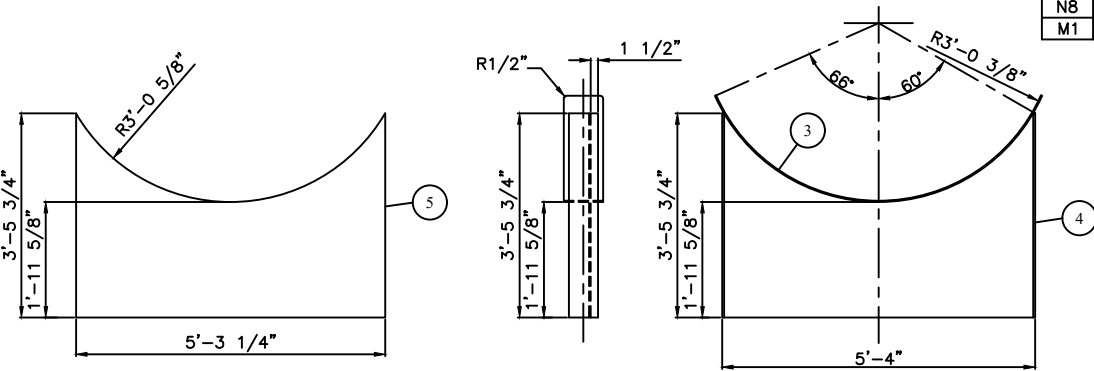
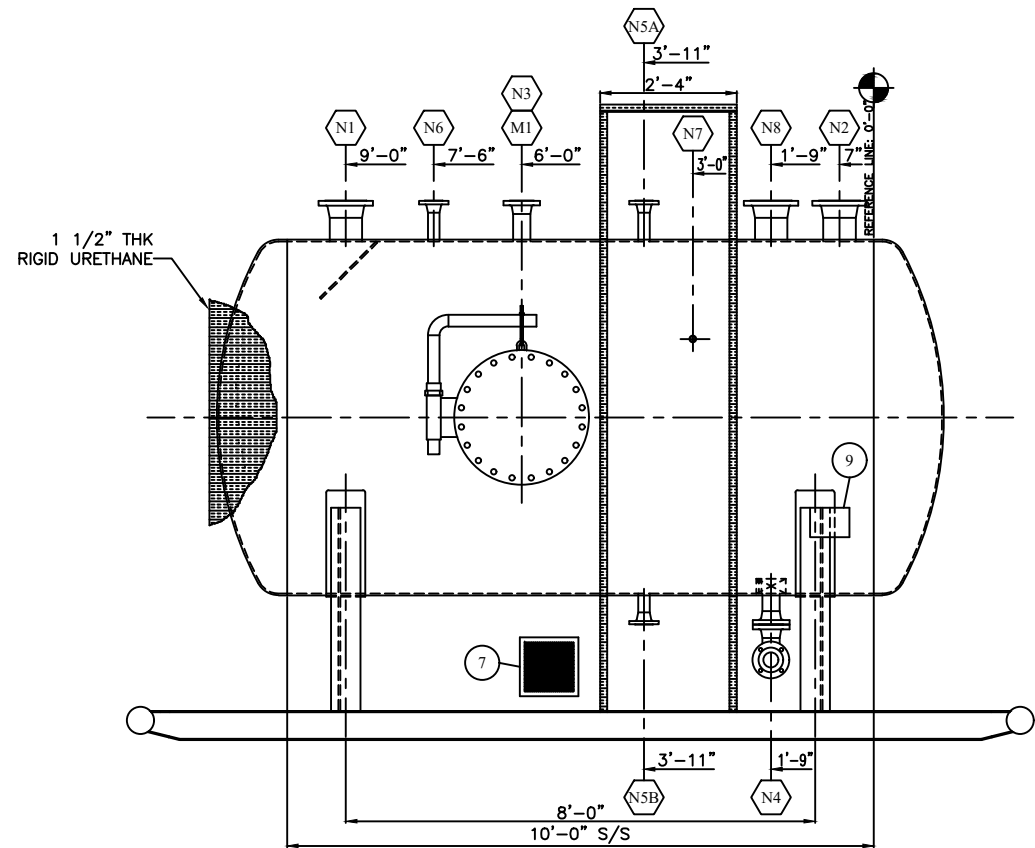


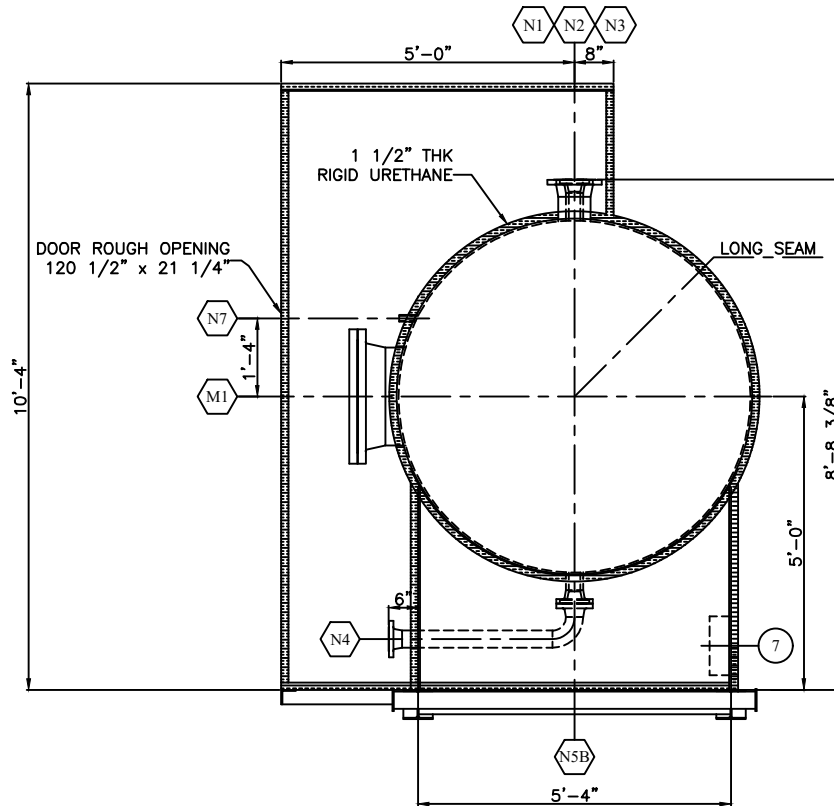


WEB PLATE DETAIL

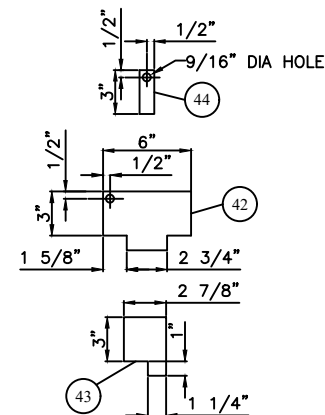
SADDLE DETAILS



ELEVATION VIEW



ORIENTATION VIEW A-A



VORTEX BREAKER

NOZZLE SCHEDULE

MARK	NO. REQ'D	DESCRIPTION	SIZE	ANSI	TYPE	PROJECTION		WELD DETAIL	WELD		REPAD	BILL OF MATERIALS	
						INSIDE	OUTSIDE		A	B		ITEM NUMBER	
N1	1	OFF GAS	6"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	10,11,12	
N2	1	OUTLET	6"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	10,11	
N3	1	WATER INLET	3"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	13,14	
N4	1	TRUCKOUT	3"	150#	RFWN	FLUSH	6"	1,2	5/16	-	-	13,15,16,17,18,19,20	
N5A	1	BRIDLE	2"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	21,22	
N5B	1	BRIDLE	2"	150#	RFWN	FLUSH	6"	1,2	3/8	-	-	21,23	
N6	1	BLANKET GAS	2"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	21,22	
N7	1	TI	3/4"	3000#	CPLG	FLUSH	-	2	3/8	-	-	24	
N8	1	PSV	6"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	10,11	
M1	1	MANWAY	20"	150#	RFWN	FLUSH	8"	1,2	3/8	-	-	27,28,29,30,31,32,33	

GENERAL NOTES

- QUALITY CONTROL PROGRAM NUMBER: AQP-1317
- WELDING PROCEDURE REGISTRATION NUMBER: WP1970.2
- SHELL AND HEAD MATERIAL: SA-516-70N
- FLANGE MATERIAL: SA-105-N
- PIPE MATERIAL: SA-106-B
- PLATE MATERIAL: SA-516-70N/SA-36
- BOLTING MATERIAL: SA-193-B7M/SA-194-2HM
- INTERNAL SANDBLAST: SSPC-SP5 (WHITE)
- INTERNALLY COAT: DEVCO 253 AS PER MANUFACTURER'S SPECIFICATION
- EXTERNAL SANDBLAST: SSPC-SP6 (COMMERCIAL)
- EXTERNAL COATING: ONE COAT OF PRIMER
- ONE COAT OF INDUSTRIAL ENAMEL
- ALL BOLT HOLES TO STRADDLE CENTERLINE
- ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
- ALL OUTSIDE PROJECTIONS ARE TO BE MEASURED ALONG THE CENTERLINE OF THE NOZZLE
- FABRICATION TOLERANCE AS PER BILTON WELDING DRAWING NUMBER TOL2002
- CRN DRAWING NUMBER: BWM-049-02 REV 4
- SERIAL NO.: 12894
- SHIPPING DIMENSIONS: 9'-0" W x 11'-0" H x 15'-6" LG

BILL OF MATERIALS

ITEM	REQ'D	PART	DESCRIPTION	MATERIAL	WEIGHT
1	1	SHELL	3/8" THK x 120" W ROLL TO 72" ID x 228 1/2" LG	SA-516-70N	2900#
2	2	HEAD	3/8" THK (0.3130" MIN) x 72" ID F&D (CR=66" & KR=5")	SA-516-70N	1195#
3	2	SADDLE	8" x 1/4" THK FLATBAR ROLL TO 72 3/4" ID x 84 3/8" LG	SA-36	80#
4	4	SADDLE	6" x 3/8" FLATBAR x 3'-5 3/4" LG	SA-36	40#
5	2	SADDLE	3/8" THK x 41 3/4" W x 63 1/4" LG (SEE DETAIL)	SA-36	140#
6	1	SKID	SKID (SEE DWG A648-2 FOR DETAIL)	-	750#
7	1	HEATER	12" x 12" CATADYNE HEATER ASS. 12 VOLT NATURAL GAS	-	-
8	1	HEATER	GALV. VENT FOR AIR OUTLET (MOUNT SIDE OF HEATER NEAR TOP)	-	-
9	1	NAMEPLATE	6" x 8" NAMEPLATE BRACKET(SEE 6x8 NAMEPLATE BRACKET)	SA-36	-
10	3	N1,N2,N8	6" x 150# RFWN FLG SCH XH	SA-105-N	-
11	3	N1,N2,N8	6" PIPE SCH XH x 5" LG (BOE,COE)	SA-106-B	-
12	1	N1	3/8" THK DEFLECTOR PLATE	SA-36	-
13	4	N3,N4	3" x 150# RFWN FLG SCH XH	SA-105-N	-
14	1	N3	3" PIPE SCH XH x 5 5/8" LG (BOE,COE)	SA-106-B	-
15	1	N4	3" x 150# RF FLEXITALLIC GASKET	304SS	-
16	1	N4	3" x 90" LR BW ELBOW SCH XH	SA-234-WPB	-
17	1	N4	3" PIPE SCH XH x 3 3/4" LG (BOE,COE)	SA-106-B	-
18	1	N4	3" PIPE SCH XH x 2'-6 3/4" LG (BBE)	SA-106-B	-
19	4	N4	5/8" DIA x 3 1/2" LG STUD	SA-193-B7M	-
20	8	N4	5/8" DIA NUT	SA-194-2HM	-
21	3	N5,N6	2" x 150# RFWN FLG SCH 160	SA-105-N	-
22	2	N5A,N6	2" PIPE SCH 160 x 5 7/8" LG (BOE,COE)	SA-106-B	-
23	1	N5B	2" PIPE SCH 160 x 3 7/8" LG (BOE,COE)	SA-106-B	-
24	1	N7	3/4" x 3000# x 4" LG CPLG	SA-105-N	-
27	1	M1	20" x 150# RFWN FLG SCH STD	SA-105-N	-
28	1	M1	20" x 150# RF BLIND FLG	SA-105-N	-
29	1	M1	20" x 150# RF FLEXITALLIC GASKET	304SS	-
30	1	M1	20" PIPE SCH STD x 4 1/8" LG (BOE,COE)	SA-106-B	-
31	1	M1	20" DAVIT ARM	-	-
32	20	M1	1 1/8" DIA x 6 1/4" LG STUD	SA-193-B7M	-
33	40	M1	1 1/8" DIA NUT	SA-194-2HM	-
34	2	INSUL	1 1/2" x 45" COV x 12'-6" LG SHT RIGID URETH, CORR&STUCCO EMBOSS ALUM ONE SIDE	-	-
35	5	INSUL	1 1/2" x 13'-6" LG SHT RIGID URETH, CORR&STUCCO EMBOSS ALUM ONE SIDE (CURFS)	-	-
36	3	INSUL	1 1/2" x 45" x 8'-5" LG SHT RIGID URETH, CORR&STUCCO EMBOSS ALUM BOTH SIDES	-	-
37	3	INSUL	1 1/2" x 45" x 10'-4" LG SHT RIGID URETH, CORR&STUCCO EMBOSS ALUM BOTH SIDES	-	-
38	60 FT	INSUL	SEA "L" FLASHING	-	-
39	8 FT	INSUL	SEA "Z" FLASHING	-	-
40	400	INSUL	SCREWS - #8 - 1/2" STAINLESS STEEL	-	-
41	3	INSUL	ALUMINUM SILICONE CAULK	-	-
42	1	VORTEX	4" x 1/8" SS FLATBAR x 6" LG	SS	-
43	2	VORTEX	4" x 1/8" SS FLATBAR x 2 7/8" LG (SEE DETAIL)	SS	-
44	1	VORTEX	1" x 1/8" SS FLATBAR x 3" LG	SS	-
45	1	VORTEX	1/2" DIA x 2" LG BOLT c/w NUT	SS	-

WELD DETAIL NUMBER	REGISTERED WELDING PROCEDURE NUMBER			BACKWELD/GOUGE
	ROOT	HOT PASS	FILL & CAP	
1,2,3,5	BWM-001	BWM-001	BWM-001	N/A
4	BWM-001	BWM-003	BWM-003	N/A
6	N/A	N/A	BWM-018	N/A

1	WELD NECK FLANGE	2	NOZZLE NECK	3	NOZZLE NECK	4	SEAM	5	ATTACHMENTS	6	STAINLESS ATTACHMENT

REV. NO.	DATE	REVISION	BY	APP'D
A	02/28/03	ISSUED FOR APPROVAL	DSG	
B	03/07/03	REVISED AS PER CLIENT REQUEST	DSG	
0	03/13/03	ISSUED FOR FABRICATION	DSG	
1	04/03/03	AS BUILT DRAWING	JMB	

BILTON
Welding & Manufacturing Ltd.

BOX 6106
3704 58 AVE.
INNISFAIR, AB
CANADA
403-227-7799
1-888-227-4923
FAX 227-7796

This drawing is property of BILTON WELDING & MANUFACTURING LTD., and is lent to the recipient for their confidential use only. In consideration of the loan of this drawing, the recipient promises and agrees that it shall not be used in any way detrimental to the interests of BILTON WELDING & MANUFACTURING LTD., that it shall be returned upon request, and that it shall not be reproduced, copied, lent, or otherwise disposed of, directly or indirectly, without the written consent of BILTON WELDING & MANUFACTURING LTD.

DESIGN SPECIFICATIONS

DESIGN & FABRICATE TO: 2001 ASME BOILER & PRESSURE VESSEL CODE SEC VIII, DIV 1, 2001 ADDENDA
DESIGN PRESSURE & TEMPERATURE: 50 PSI @ 100°F
MINIMUM DESIGN METAL TEMP: -20°F @ 50 PSI
IMPACT TESTS: EXEMPT AS PER UG-20(f)
RADIOGRAPHY: RT-1 AS PER REQUEST (J.E.=0.7)
POST WELD HEAT TREATMENT: NONE AS PER UCS-56
HYDROSTATIC TEST PRESSURE: 75 PSIG PREHEAT: 50°F
CORROSION ALLOWANCE: 1/8" MAWP: 50 PSI @ 100°F
HEAD THK. MIN: 0.3130" VOLUME: 336 CuFt. 9.5 Cum
WEIGHT EMPTY: 5,600 LBS WEIGHT FULL: 26,500 LBS

CONOCOPHILLIPS CANADA

60 BBL SINGLE WALL ABOVE GROUND INCINERATOR TANK 72" ID x 10'-0" S/S, 50 PSI DESIGN, 50 PSI MAWP (REGISTERED) TAG: V-0701			
DATE: 02/28/03		SHEET: 1 OF 3	
SCALE: N.T.S.		JOB NO.:	SIZE
DRAWN BY: DSG		A648	D
PURCHASE ORDER: JH1-4932		DRAWING NO.:	REV.
LOCATION: 12-29-36-06 W5M		A648-1	1
APP'D BY:	CRN: R0268.2		