

GENERAL NOTES

1. QUALITY CONTROL PROGRAM NUMBER: AQP-1317(S)
2. WELDING PROCEDURE REGISTRATION NUMBER: WP1970.2
3. SHELL AND HEAD MATERIAL: SA-516-70N
4. FLANGE MATERIAL: SA-105-N
5. PIPE MATERIAL: SA-106-B
6. PLATE MATERIAL: SA-516-70N/SA-36
7. BOLTING MATERIAL: SA-193-B7/SA-194-2H
- INTERNAL SANDBLAST: SSPC-SP10 (NEAR WHITE)
- INTERNALLY COAT: DEVOE 253 AS PER MANUFACTURER'S SPECIFICATION
3-5mils ON FLANGE FACES
10. EXTERNAL SANDBLAST: SSPC-SP3 (POWER TOOL)
11. EXTERNAL COATING: ONE COAT OF CARBOLINE 890 (MOUNTAIN LEDGE WHITE #1898)
12. INSULATION: 1 1/2" THK ALUMINUM CLAD RIGID URETHANE
13. ALL BOLT HOLES TO STRADDLE CENTERLINE
14. ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
15. ALL OUTSIDE PROJECTIONS ARE TO BE MEASURED ALONG THE CENTERLINE OF THE NOZZLE
16. FABRICATION TOLERANCE AS PER BILTON WELDING DRAWING NUMBER TOL2002
17. IMPACT TEST EXEMPTIONS:
PLATE: EXEMPT AS PER UCS-66
NOZZLES: EXEMPT AS PER UCS-66(b)
18. PRODUCTION IMPACT TESTS OF HAZ EXEMPT PER UCS-67(d)(3)
PRODUCTION IMPACT TEST OF FILLER METAL REQUIRED AS PER UG-84(i)
TO EXCEED 15-12 FT-LBS @ TEMP. NOT WARMER THAN -49°F
19. ANODE TO BE ATTACHED WITH DOUBLE NUTS
-STAINLESS TAB TO BE IN BETWEEN NUTS
20. SERIAL NUMBER: 13728
21. VESSEL TO BE REGISTERED IN ALBERTA
22. VESSEL TO BE SUPPLIED WITH U-STAMP
23. SHIPPING DIMENSIONS: 9'-0" W x 11'-0" H x 24'-6" LG

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	INLET	10"	150	RFWN	1"	12"	1,3	1/4	-	-	9,10,11	
N2	1	OUTLET	10"	150	RFWN	1"	8"	1,3	1/4	-	-	9,12	
N3	1	LG/LSH/LSHH	4"	150	RFWN	SHOWN	8"	1,3	1/4	-	-	13,14,15,16,17,31,32,55	
N4	1	LIT	4"	150	RFWN	SHOWN	8"	1,3	1/4	-	-	13,14	
N5	1	SPARE	4"	150	RFWN	1"	8"	1,3	1/4	-	-	13,19	
N6	1	PI	2"	150	RFWN	1"	8"	1,3	1/4	-	-	20,21	
N7	1	TRUCKOUT	3"	150	RFWN	FLUSH	6"	1,4	1/4	-	-	22,23,24,25,26,27,28,29,30,31,32	
C1	1	SUCKOUT	1 1/2"	3000	TOL	-	-	-	1/4	-	-	33,34,35,36,37,38	
M1	1	MANWAY	20"	150	RFSO	1"	8"	2,3	1/4	-	-	39,40,41,42,43,44,45	

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	1100#
3	2	SADDLE	8" x 1 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'-6 1/8" LG	SA-36	40#
5	2	SADDLE	3/8" THK x 42 1/8" W x 63 1/4" LG (SEE DETAIL)	SA-36	140#
6	1	NAMEPLATE	6" x 8" NAMEPLATE BRACKET	SA-36	3#
7	1	HEATER	12" x 12" CATADYNE HEATER, 12 VOLT NATURAL GAS	-	-
8	1	SKID	SKID (SEE DWG B392-2 FOR DETAIL)	-	1200#
9	2	N1,N2	10" x 150# RFWN FLG SCH STD	SA-105-N	-
10	1	N1	10" PIPE SCH STD x 11 1/2" LG (BBE)	SA-106-B	-
11	1	N1	10" x 45' LR BW ELBOW SCH STD	SA-234-WPB	-
12	1	N2	10" PIPE SCH STD x 5 3/4" LG (BOE,ROE)	SA-106-B	-
13	3	N3,N4,N5	4" x 150# RFWN FLG SCH XH	SA-105-N	-
14	2	N3,N4	4" PIPE SCH XH x 6'-2 3/8" LG c/w HOLES (BOE,ROE)	SA-106-B	-
15	1	N3	4" x 150# RF BLIND FLG TAPPED TO 1"	SA-105-N	-
16	1	N3	4" x 150# RF FLEX GASKET	304SS	-
17	1	N3	TGS-5020 LIQUID LEVEL GAUGE (SOUR)	-	-
19	1	N5	4" PIPE SCH XH x 6 1/2" LG (BOE,ROE)	SA-106-B	-
20	1	N6	2" x 150# RFWN FLG SCH 160	SA-105-N	-
21	1	N6	2" PIPE SCH 160 x 6 7/8" LG (BOE,ROE)	SA-106-B	-
22	3	N7	3" x 150# RFWN FLG SCH XH	SA-105-N	-
23	1	N7	3" x 150# RFTO FLG	SA-105-N	8#
24	1	N7	3" x 150# RF RP BALL VALVE	SA-105-N	-
25	3	N7	3" x 150# RF FLEX GASKET	304SS	-
26	1	N7	3" x 90' LR BW ELBOW SCH XH	SA-234-WPB	-
27	1	N7	3" PIPE SCH XH x 3 3/4" LG (BOE,COE)	SA-106-B	-
28	1	N7	3" PIPE SCH XH x 6" LG (BBE)	SA-106-B	-
29	1	N7	3" x 4" LG NIPPLE SCH XH	SA-106-B	5#
30	1	N7	3" MALE/FEMALE CAMLOCK c/w CAP	-	-
31	20	N3,N7	5/8" DIA x 3 1/2" LG STUD	SA-193-B7	-
32	40	N3,N7	5/8" DIA NUT	SA-194-2H	-
33	1	C1	1/2" x 3000# TOL	SA-105-N	1#
34	2	C1	1/2" x CLOSE NIPPLE	SA-106-B	1#
35	1	C1	1/2" x 2000# 90' THRD ELBOW	SA-105-N	1#
36	1	C1	1/2" PIPE SCH XH x 7 1/2" LG (TOE,COE)	SA-106-B	1#
37	1	C1	1/2" x 2000# S.E. NACE BARSTOCK BALL VALVE	SA-105-N	-
38	1	C1	12 GAUGE 36" x 24" x 3" LIP CONTAINMENT TRAY	-	48#
39	1	M1	20" x 150# RFSO FLG	SA-105-N	-
40	1	M1	20" x 150# RF BLIND FLG	SA-105-N	-
41	1	M1	20" x 150# RF FLEX GASKET	304SS	-
42	1	M1	20" PIPE SCH STD x 10 1/4" LG (COE,ROE)	SA-106-B	-
43	1	M1	20" DAVIT ARM	-	-
44	20	M1	1 1/8" DIA x 6 1/4" LG STUD	SA-193-B7	-
45	40	M1	1 1/8" DIA NUT	SA-194-2H	-
46	5	INSULATION	1 1/2" x 45" x 13'-6" LG RIGID URETH. CORR & STUCCO EMBOSS ALUM ONE SIDE (CURFS)	-	-
47	3	INSULATION	1 1/2" x 45" x 8'-6" LG RIGID URETH. CORR & STUCCO EMBOSS ALUM BOTH SIDES	-	-
48	2	INSULATION	1 1/2" x 45" x 12'-6" LG RIGID URETH. CORR & STUCCO EMBOSS ALUM ONE SIDE	-	-
49	60 FT	INSULATION	SEA "L" FLASHING	-	-
50	400	INSULATION	SCREWS - #8 - 1/2" STAINLESS STEEL	-	-
51	1	ANODE	3" x 22" x 3/8" INTERNAL ANODE (SEE NOTE 19)	-	-
52	1	ANODE	3" x 1/4" x 3" LG TAB c/w HOLE	SA-240-TP316	-
53	2	N3	PROXIMITY SWITCHES (ELECTRIC)	-	-

WEB PLATE DETAIL

SADDLE DETAILS

ELEVATION VIEW

ORIENTATION VIEW A-A

DESIGN SPECIFICATIONS

DESIGN & FABRICATE TO: 2004 EDITION ASME BOILER & PRESSURE VESSEL CODE SEC VIII, DIV 1

DESIGN PRESSURE & TEMPERATURE: 50 PSI @ 302°F

MINIMUM DESIGN METAL TEMP: -49°F @ 50 PSI

IMPACT TESTS: SEE NOTES 17 & 18

RADIOGRAPHY: NONE AS PER UW-11(c)

POST WELD HEAT TREATMENT: NONE AS PER UCS-56

HYDROSTATIC TEST PRESSURE: 75 PSIG PREHEAT: 50°F

CORROSION ALLOWANCE: 1/8" MAWP: 50 PSI @ 302°F

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

WEIGHT EMPTY: 6,800 LBS WEIGHT FULL: 45,100 LBS

PETRO CANADA

60 BBL SINGLE WALL FLARE KNOCKOUT DRUM
72" ID x 10'-0" S/S x 50 PSI MAWP

DATE: 03/21/05 SHEET: 1 OF 2

SCALE: N.T.S. JOB NO.: B392

DRAWN BY: DSG DRAWING NO.: B392-1

PURCHASE ORDER: 5128-RL-001

LOCATION: MINEHEAD 03-06-49-18 WSM

CRN DWG: BWM-111-04 R4

CRN NUMBER: R8180.2

APP'D: 1

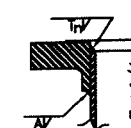
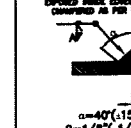
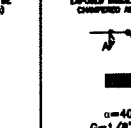
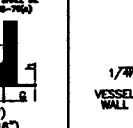
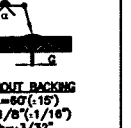
BILTON

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WELD DETAIL NUMBER	REGISTERED WELDING PROCEDURE NUMBER	ROOT	HOT PASS	FILL & CAP	BACKWELD/GOUGE
1,2,3,4,5	BWM-015 (GMAW)	BWM-015 (SMAW)	BWM-015 (SMAW)	N/A	
6	BWM-015 (GMAW)	BWM-008 (SAW)	BWM-008 (SAW)	N/A	
7	N/A	N/A	BWM-018 (SMAW)	N/A	

WELD NECK FLANGE	SLIP ON FLANGE	NOZZLE NECK	NOZZLE NECK	ATTACHMENTS	SEAM	STAINLESS ATTACHMENTS
						
$\alpha=75^{\circ}(.15)$ $\phi=1/8^{\circ}(.1/16)$	$T_n+1/4$	$\alpha=40^{\circ}(.15)$ $\phi=1/8^{\circ}(.1/16)$ $\phi=1/16^{\circ}(.1/16)$	$\alpha=40^{\circ}(.15)$ $\phi=1/8^{\circ}(.1/16)$ $\phi=1/16^{\circ}(.1/16)$	$1/8$	WITHOUT BACKING $\alpha=60^{\circ}(.15)$ $\phi=1/8^{\circ}(.1/16)$ $\phi=1/32^{\circ}$	$1/8$

REV. NO.	DATE	REVISION	BY	APP'D
A	03/22/05	ISSUED FOR APPROVAL	DSG	
0	03/28/05	ISSUED FOR FABRICATION	DSG	
1	03/29/05	ADDED (2) PROXIMITY SWITCHES	DSG	

