

GENERAL NOTES

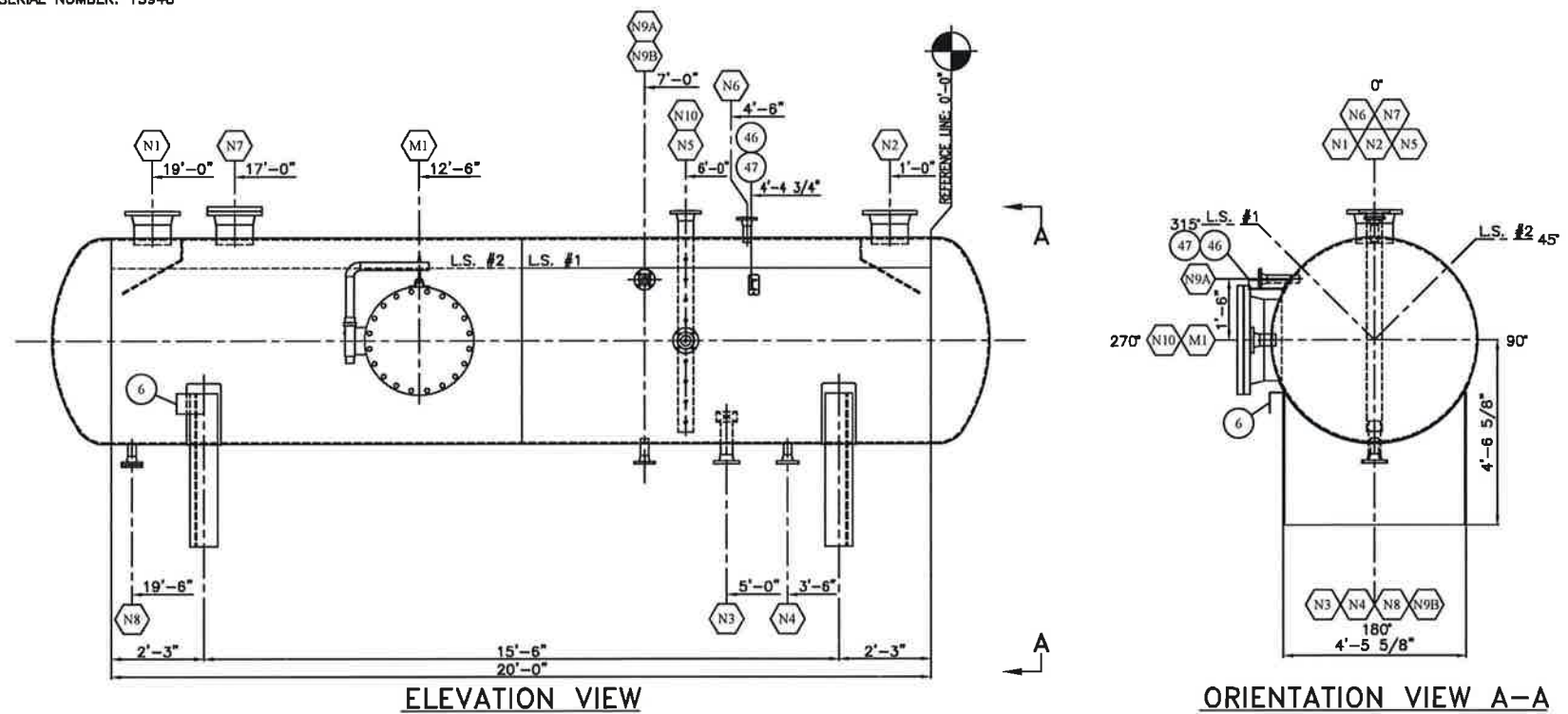
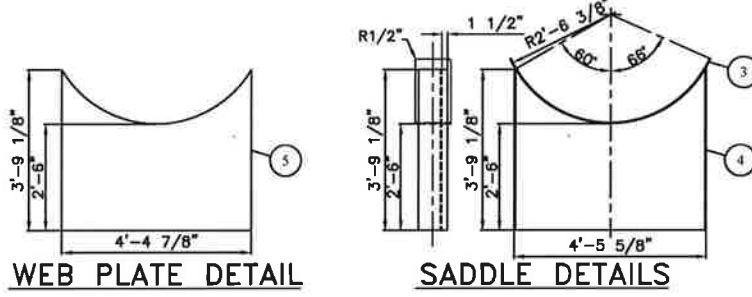
- QUALITY CONTROL PROGRAM NUMBER: AQP-1317(S)
- WELDING PROCEDURE REGISTRATION NUMBER: WP1970.2
- SELECT CHEMISTRY REQUIREMENTS: NIL
- ULTRASONIC TESTING: NIL
- HIC TESTED PLATE: NIL
- MPI: 100% WET FLOURESCENT TESTING OF THE FOLLOWING
-FILLET WELDS ON VESSEL ONLY
- HARDNESS TEST:
3 POINT TRAVERSE ON (1) LONG SEAM, (1) CIRC SEAM & (1) NOZZLE FILLET (HAZ/WELD/HAZ)
-HARDNESS VALUES SHALL NOT EXCEED 200BHN AFTER PWHT
- PIPE & FLANGE IMPACT TESTS EXEMPT AS PER UCS-66(g)
- PLATE IMPACT TESTS EXEMPT AS PER UCS-66
- HEAT AFFECTED ZONE EXEMPT AS PER UCS-67(d)(3)
- PRODUCTION WELD TO BE IMPACT TESTED AS PER UG-84(i) AT A TEMP NOT WARMER THAN -49°F AND TO EXCEED 15/10 FT-LBS
- NUTS & BOLTS IMPACT TEST EXEMPT PER FIG. UCS-66(e)
- PWHT: ACCORDING TO UCS-58
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
- INTERNAL SANDBLAST: SSPC-SP5 (WHITE)
- INTERNAL FINISH: DEVOE 253/253HS AS PER MANUFACTURER'S SPECIFICATIONS
- EXTERNAL SANDBLAST: SSPC-SP6 (COMMERCIAL)
- EXTERNAL FINISH:
ALL AREAS: ONE (1) COAT CLOVAGUARD 83150 EPOXY PRIMER (6-8mils)
NON INSULATED AREAS: TWO (2) COATS CLOVATHANE 83400 (TAN QC-8315)
- ALL BOLT HOLES TO STRADDLE CENTERLINE
- ALL REPADS/WEAR PADS TO HAVE 1/4" NPT WEEP HOLE
- ALL OUTSIDE PROJECTIONS MEASURED ALONG CENTERLINE OF NOZZLE
- ALL INSIDE PROJECTIONS MEASURED ALONG SHORTSIDE OF NOZZLE
- FABRICATION TOLERANCE AS PER BW&ML DWG#: TOL2002
- VESSEL TO BE REGISTERED IN ALBERTA & BRITISH COLUMBIA
- VESSEL TO BE SUPPLIED WITH U-STAMP
- VESSEL SERIAL NUMBER: 15948

NOZZLE SCHEDULE

MARK	QTY	DESCRIPTION	NPS	CLASS	TYPE	PROJECTION		WELD DETAIL	WELD				BILL OF MATERIALS ITEM NUMBER
						INSIDE	OUTSIDE		A	B	C	D	
N1	1	INLET/OUTLET	10	150	RFWN	1"	8"	1,2	1/4	-	-	-	12,13,14
N2	1	ONS OUTLET/INLET	10	150	RFWN	1"	8"	1,2	1/4	-	-	-	12,13,14
N3	1	TRUCK-OUT	3	150	RFWN	6"	6"	1,2	1/4	-	-	-	15,16,17,18
N4	1	DRAIN INLET	2	300	RFWN	FLUSH	6"	1,3	1/4	-	-	-	23,24,48,49,50,51
N5	1	21-LIT-9011	4	150	RFWN	1"	8"	1,2	1/4	-	-	-	23,24,25,26,27
N6	1	FUEL GAS INLET	2	150	RFWN	1"	6"	1,2	1/4	-	-	-	19,28,29
N7	1	SPARE	10	150	RFWN	1"	8"	1,2	1/4	-	-	-	13,14,30,31,32,33
N8	1	SPARE	2	150	RFWN	FLUSH	6"	1,3	1/4	-	-	-	19,20,21,22,23,24
N9A	1	21-LG-9011	2	150	RFWN	1"	9 1/2"	1,2	1/4	-	-	-	19,34,35
N9B	1	21-LG-9011	2	150	RFWN	1"	6"	1,2	1/4	-	-	-	19,28,35
N10	1	21-LSH-9001	3	150	RFWN	1"	6"	1,2	1/4	-	-	-	15,23,24,36,37,38
M1	1	MANWAY	24	150	RFWN	0"	8"	1,3	3/8	-	-	-	39,40,41,42,43,44,45

BILL OF MATERIALS

ITEM	QTY	REF.	PART No.	DESCRIPTION	MATERIAL	WEIGHT
1	2	SHELL	1-002421	3/8" THK x 120" W ROLL TO 60" ID (CIRC=15"-10 7/8")	SA-516-70N	4840#
2	2	HEAD	1-001388	3/8" THK (0.313" MIN) x 60" ID 2:1 S.E.	SA-516-70N	1016#
3	2	SADDLE	1-009465	10" x 1/4" THK x 70 3/4" LG, ROLL TO 60 3/4" ID	SA-516-70N	150#
4	4	SADDLE	1-001121	8" x 3/8" THK x 3'-9 1/8" LG	SA-36	105#
5	2	SADDLE	2-001273	3/8" THK x 45 1/8" W x 52 7/8" LG (SEE DETAIL)	SA-36	325#
6	1	NAMEPLATE	2-000219	6" x 8" NAMEPLATE BRACKET	SA-569	2#
7	1	NAMEPLATE	1-001701	6" x 8" ALUMINUM NAMEPLATE	ALUMINUM	1#
9	1	SKID	-	SKID ASSEMBLY (SEE DWG D1869-3 FOR DETAIL)	-	1550#
12	2	N1,N2	2-000276	3/8" THK x 10"-14" INLET DEFLECTOR	SA-516-70N	87#
13	3	N1,N2,N7	1-000995	10" x CLASS 150 RFWN FLG SCH STD	SA-360-LF2 CL1	156#
14	3	N1,N2,N7	1-003441	10" PIPE SCH STD x 5 7/8" LG (BOE,ROE)	SA-333-GR6	60#
15	2	N3,N10	1-000980	3" x CLASS 150 RFWN FLG SCH XH	SA-360-LF2 CL1	10#
16	1	N3	1-003423	3" PIPE SCH XH x 9 3/4" LG (BOE,ROE)	SA-333-GR6	10#
17	1	N3	1-004298	3" STAINLESS REMOVABLE VORTEX BREAKER ASSEMBLY w/ 2-001445 - PIPE MOUNT CLIP	SA-240-304L	12#
18	1	N3	-	TRUCK-OUT PIPING SPOOLS (SEE DWG D1869-5)	-	-
19	4	N6,N8,N9A/B	1-000976	2" x CLASS 150 RFWN FLG SCH 160	SA-360-LF2 CL1	6#
20	1	N8	1-000972	2" x CLASS 150 RF BLIND FLG	SA-360-LF2 CL1	10#
21	1	N8	1-001292	2" x CLASS 150 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
22	1	N8	1-003420	2" PIPE SCH 160 x 3 7/8" LG (BOE,COE)	SA-333-GR6	5#
23	28	N4,N5,N8,N10	1-002627	5/8" DIA x 3 1/2" LG STUD	SA-193-B7M	-
24	56	N4,N5,N8,N10	1-001868	5/8" DIA NUT	SA-194-2HM	-
25	1	N5	1-000985	4" x CLASS 150 RFWN FLG SCH XH	SA-360-LF2 CL1	15#
26	1	N5	1-001300	4" x CLASS 150 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
27	1	N5	1-003428	4" PIPE SCH XH x 5'-2 3/8" LG c/w HOLES (BOE,ROE)	SA-333-GR6	78#
28	2	N6,N9B	1-003420	2" PIPE SCH 160 x 4 7/8" LG (BOE,ROE)	SA-333-GR6	6#
29	1	N6	-	FUEL GAS PIPING SPOOLS (SEE DWG D1869-5)	-	-
30	1	N7	1-005282	10" x CLASS 150 RF BLIND FLG	SA-360-LF2 CL1	70#
31	1	N7	1-005283	10" x CLASS 150 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
32	12	N7	1-002653	7/8" DIA x 4 1/2" LG STUD	SA-193-B7M	-
33	24	N7	1-001874	7/8" DIA NUT	SA-194-2HM	-
34	1	N9A	1-003420	2" PIPE SCH 160 x 9 1/4" LG (BOE,ROE)	SA-333-GR6	3#
35	1	N9	-	LEVEL GAUGE PIPING SPOOLS (SEE DWG D1869-5)	-	-
36	1	N10	1-004892	3" x CLASS 150 RF HUB BLIND, TAPPED TO 2" NPT	SA-360-LF2 CL1	8#
37	1	N10	1-001297	3" x CLASS 150 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
38	1	N10	1-003423	3" PIPE SCH XH x 4 3/4" LG (BOE,ROE)	SA-333-GR6	5#
39	1	M1	1-001001	24" x CLASS 150 RFWN FLG SCH STD	SA-360-LF2 CL1	260#
40	1	M1	1-001002	24" x CLASS 150 RF BLIND FLG	SA-360-LF2 CL1	411#
41	1	M1	1-001306	24" x CLASS 150 RF "CG" FLEX GASKET	316SS	-
42	1	M1	1-004062	24" x CLASS 150 DAWT ARM ASSEMBLY	-	-
43	1	M1	1-003449	24" PIPE SCH STD x 4 7/8" LG (BOE,COE)	SA-333-GR6	38#
44	20	M1	1-002694	1 1/4" DIA x 6 3/4" LG STUD	SA-193-B7M	-
45	40	M1	1-001882	1 1/4" DIA NUT	SA-194-2HM	-
46	1	SUPPORT	1-000393	C306# x 1'-0" LG	SA-36	6#
47	1	SUPPORT	N/A	REPAD: 3/8" THK x 3" W x 6" LG (USE MANWAY CUT-OUT)	SA-516-70N	3#
48	1	N4	1-008903	2" x CLASS 300 RFWN FLG SCH 160	SA-360-LF2 CL1	8#
49	2	N4	1-010699	2" x CLASS 300 RF "CG" GRAPHOIL FLEX GASKET	316SS	-
50	1	N4	1-003420	2" PIPE SCH 160 x 3 5/8" LG (BOE,COE)	SA-333-GR6	5#
51	1	N4	1-006405	2" x CLASS 300 BLIND FLG	SA-360-LF2 CL1	8#



DESIGN SPECIFICATIONS

DESIGN & FABRICATE TO: 2010 ED. ASME BOILER & PRESSURE VESSEL CODE SEC VIII, DIV 1

DESIGN PRESSURE & TEMPERATURE: 50 PSI @ 200°F

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

IMPACT TESTS: SEE NOTES 8.9, 10.11 & 12

RADIOGRAPHY: 100% AS PER UW-11(a)

POST WELD HEAT TREATMENT: YES AS PER UCS-56

HYDROSTATIC TEST PRESSURE: 75 PSIG PREHEAT: 50°F

CORROSION ALLOWANCE: 1/8" MAWP: 50 PSI @ 200°F

HEAD THK. MIN.: 0.3130" VOLUME: 432 ft³, 12.2 m³

WEIGHT EMPTY: 8,450 lbs WEIGHT FULL: 33,900 lbs

MURPHY OIL COMPANY LTD

TUPPER CENTRAL FLARE KNOCKOUT PACKAGE - TAG: PK-9000
80" ID x 20'-0" S/S FLARE KNOCKOUT DRUM

DATE: 03/14/11 SALE ORDER: 002482

SHEET: 2 OF 5 JOB ORDER: D1869 SIZE: D

DRAWN BY: TJA PURCHASE ORDER: 54116050-S204 DRAWING NO.: D1869-2 REV: 1

LOCATION: VARIOUS CRN DWG: BWM-295-09 R1 PM: CRN NUMBER: V0608.21

WELD DETAIL NUMBER	REGISTERED WELDING PROCEDURE NUMBER	BACKWELD/GOUGE
ROOT	HOT PASS	FILL & CAP
1,2,3,5	BWM-16 (GMAW)	BWM-16 (SMAW)
4	BWM-16 (GMAW)	BWM-10 (SAW)
6	BWM-20 (GMAW)	BWM-20 (SMAW)

NO.	DESCRIPTION	REVISION	DATE	BY	APP'D
0	ISSUED FOR FABRICATION		07/26/11	KMP	
1	AS BUILT		11/29/11	KMP	

FILE PATH: M:\Maindata\CAD\Tonka\11800-D1869\11800-D1869-2