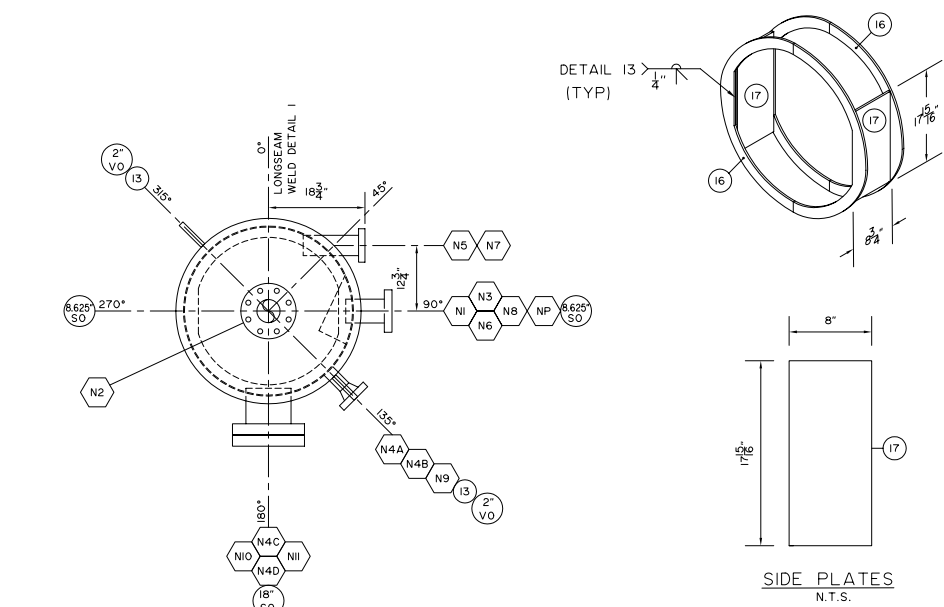
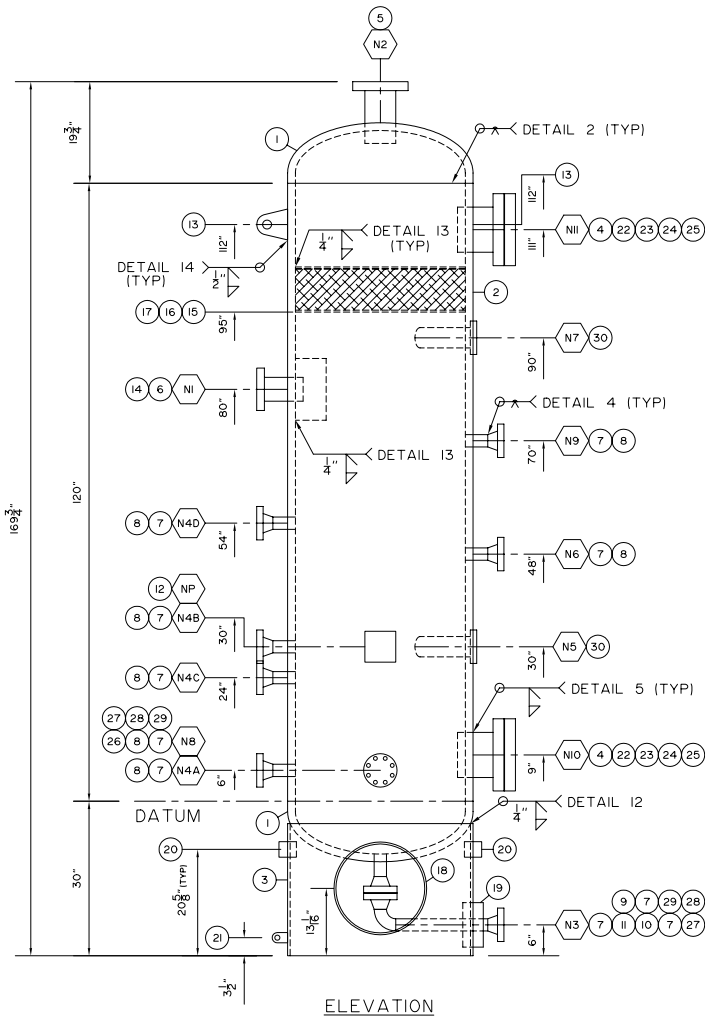
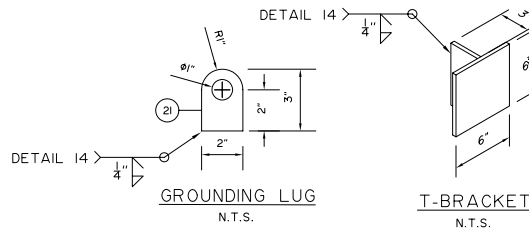


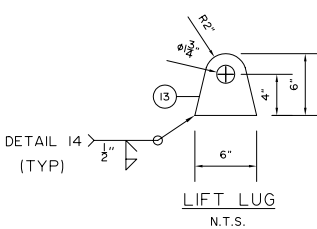


PLAN



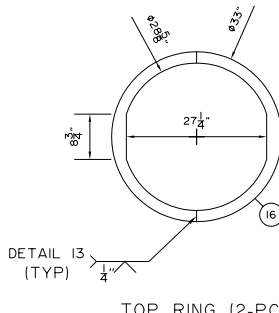
GROUNDING LUG
N.T.S.

T-BRACKET
N.T.S.

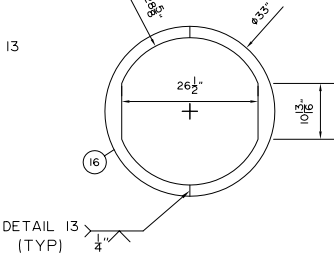


LIFT LUG
N.T.S.

INLET DIVERTER
N.T.S.

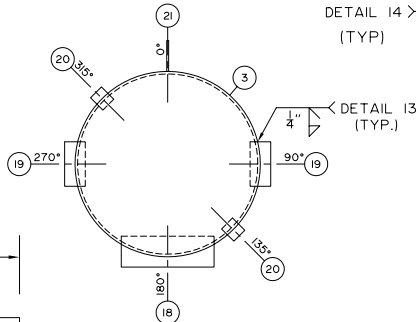


TOP RING (2-PC)



BOTTOM RING (2-PC)

VANE PACK SUPPORTS



SKIRT ORIENTATION

CERTIFIED BY: **BROMLEY** MECHANICAL SERVICES
Medicine Hat, Alberta
(800) 215-9806
(403) 526-3142

M.A.W.P. 1426 PSI AT 140 °F
M.A.W.P. -20 °F AT 1426 PSI
M.A.W.P. 7.5 PSI AT 140 °F

MFR'S SER. NO 231848 YR. BUILT -/-/12
VESSEL TYPE 36" X 10'-0" VERTICAL SEPARATOR
TAG 127-013 CHEVRON

M.A.W.P. 9832 KPA AT 60 °C
SHELL NOM. 1.500" MATERIAL SA516-70N
HEAD NOM. 1.500" MATERIAL SA516-70N
C.A. 0.125" CRN V9590.2

WEIGHT: DRY- 8,500 lbs
OPERATING- 11,400 lbs
HYDRO- 14,300 lbs

NAME PLATE DETAIL
N.T.S.

INSIDE & OUTSIDE OF NOZZLE BE ROUNDED PER UG-76(C)

WELD DETAIL 1		WELD DETAIL 2		WELD DETAIL 3		WELD DETAIL 4		WELD DETAIL 5		WELD DETAIL 6		WELD DETAIL 7		WELD DETAIL 8		WELD DETAIL 9		WELD DETAIL 10		WELD DETAIL 11		WELD DETAIL 12		WELD DETAIL 13		WELD DETAIL 14	
ROOT: BMS-LATH FBC: BMS-LATH (LONG SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)		ROOT: BMS-LATH FBC: BMS-LATH (CIRC SEAM)	
																											
WITHOUT BACKING		WITHOUT BACKING		3/16" TRANSITION		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING		WITHOUT BACKING	
R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")		R1/8" (1/8") a=60° (1/8") h=1/16" (1/16")	
NOZ	NO.	SIZE	RATING	TYPE OF SERVICE		NOZ		PROJECTION		REIF PAD		WELD		FILLET WELD		BILL OF MAT'L		ITEM No.		REMARKS							
N1	1	3"	600	INLET		4.62"		6" 1 5/16"		OD X THK		5		3/8 5/8		6.14											
N2	1	4"	600	OUTLET		6.00"		8" 3/4"				5		3/8 5/8		5											
N3	1	2"	600	WATER OUT/DRAIN		2.375"		6" 0				4.5		3/8		7,11,10,7,27,28,29,7,9											
N4A	1	2"	600	LG BRIDLE		2.375"		6" 0				4.5		3/8		7,8											
N4B	1	2"	600	LG BRIDLE		2.375"		6" 0				4.5		3/8		7,8											
N4C	1	2"	600	LG BRIDLE		2.375"		6" 0				4.5		3/8		7,8											
N4D	1	2"	600	LG BRIDLE		2.375"		6" 0				4.5		3/8		7,8											
N5	1	2"	600	CONDENSATE OUT		3.94"		6" 0				5		1/2		30				TANGENTIAL NOZZLE							
N6	1	2"	600	PIT		2.375"		6" 0				4.5		3/8		7,8											
N7	1	2"	600	PSV		3.94"		6" 0				5		1/2		30				TANGENTIAL NOZZLE							
N8	1	2"	600	SPARE		2.375"		6" 0				4.5		3/8		7,8,26,27,28,29											
N9	1	2"	600	TI		2.375"		6" 0				4.5		3/8		7,8											
N10	1	6"	600	INSPECTION		8.750"		6" 3/4"				5		3/8 5/8		4,22,23,24,25											
N11	1	6"	600	INSPECTION		8.750"		6" 3/4"				5		3/8 5/8		4,22,23,24,25											

BILL OF MATERIAL

ITEM	QTY.	DESCRIPTION
1	2	S.E. HEAD, 36"OD X 1.500" NOM. (1.4375" MIN), SA516-70N
2	1	SHELL, 36"OD X 1.500" X 10'-0" LONG, SA516-70N
3	1	SKIRT, 36"OD X 0.500" X 25 5/8" LONG, SA516-70N
4	2	RFLWN, 6" 600 ANSI X 9" OAL (1.38"WT), SA105N
5	1	RFLWN, 4" 600 ANSI X 12" OAL (1.00"WT), SA105N
6	1	RFLWN, 3" 600 ANSI X 9" OAL (0.8"WT), SA105N
7	10	RFLWN, 2" 600 ANSI SCH. 160, SA105N
8	7	PIPE, 2" SCH. 160 (0.344") X 4 7/16", SA106B
9	1	PIPE, 2" SCH. 160 (0.344") X 4 3/8", SA106B
10	1	WELD 90, 2" SCH. 160 LR, SA234WPB
11	1	PIPE, 2" SCH. 160 (0.344") X 17 7/8", SA106B
12	1	T-BRACKET - PLATE, 3/8" THK, SA516-70N C/W VESSEL NAME PLATE, SS (SEE DETAIL)
13	2	LIFT LUG - PLATE, 1" THK, SA516-70N (SEE DETAIL)
14	1	INLET DIVERTER, 3/8" THK, SA516-70N (SEE DETAIL)
15	1	VANE 33"OD X 8"TK, CIRCULAR, 316LSS (DOWNCOMER NOT REQ'D)
16	2	VANE SUPPORT RINGS - PLATE, 3/8"THK X 2"W, SA516-70N (SEE DETAIL)
17	2	VANE SUPPORT SIDES - PLATE, 3/8" THK, SA516-70N (SEE DETAIL)
18	1	PIPE, 18" SCH. STD. (0.375") X 6" LONG, SA106B
19	2	PIPE, 8" SCH. STD. (0.322") X 4" LONG, SA106B
20	2	FULL CPLG, 2" 3M, SA105N
21	1	GROUNDING LUG - PLATE, 3/8" THK, SA516-70N (SEE DETAIL)
22	2	RFB, 6" 600 ANSI, SA105N
23	2	316 SPIRALWND GSKT, 6" 600 ANSI, NASB
24	24	B7M STUD, 1" X 6 3/4", SA193-B7M
25	48	2HM HEX NUT, 1", SA194-2HM
26	1	RFB, 2" 600 ANSI, SA105N
27	2	316 SPIRALWND GSKT, 2" 600 ANSI, NASB
28	16	B7M STUD, 5/8" X 4 1/4", SA193-B7M
29	32	2HM HEX NUT, 5/8", SA194-2HM
30	2	RFBWN, 2" 600 ANSI X 12"L NS OD (1.00"WT), SA105N C/W IMPACT TEST

NOTES:

- SEE CHEVRON SPECIFICATIONS: PVM-SU-4750-E, PVM-CG66A-4750a AND APPENDIX B
- ALL MATERIALS MUST CONFORM TO CHEVRON SPECIFICATION PVM-CCLLA-4750a, APPENDIX B
- ALL PLATE SHALL BE ULTRASONICALLY EXAMINED TO ASME SA578 LEVEL A, ON A 100mm CONTINUOUS GRID
- MTR'S REQUIRED FOR ALL MATERIALS & FITTINGS
- ALL INTERNAL & EXTERNAL ATTACHMENTS TO BE CONTINUOUS, FULL PENETRATION WELDS; CHEVRON SPECS PVM-CCLLA-4750a 4.7(5), 6.10(5), AND APPENDIX B.2(3)
- ONLY LOW STRESS STAMPS TO BE USED ON WELD CAPS; CHEVRON SPEC PVM-CCLLA-4750a 6.10(18)
- MINIMUM WELD PREHEAT SHALL BE 120°C (248°F); CHEVRON SPEC PVM-CCLLA-4750a APPENDIX B.4 (2)
- ALL OPENINGS AND REINFORCING PADS SHALL BE LOCATED A MINIMUM OF 2" FROM VESSEL LONG SEAM & CIRC SEAMS
- ALL PAIRED INSTRUMENT CONNECTIONS SHALL BE "JIG SET"
- NAME PLATE TO BE CONTINUOUSLY WELDED TO BRACKET AFTER PWHT
- EXCEPT FOR NAME PLATE, WELDING ON VESSELS AFTER PWHT IS PROHIBITED, CHEVRON PVM-CCLLA-4750a, 7.2 (10)
- AFTER PWHT, VESSEL TO BE MARKED "HEAT TREATED - DO NOT WELD"
- SANDBLASTING & PAINTING - BY OTHERS

NON-DESTRUCTIVE EXAMINATIONS:

- RADIOGRAPHY: 100% OF ALL BUTT WELDS
- MPI: 100% ON LONG SEAM ROOT PASS PRIOR TO FILL & CAP
- 100% ON ROOT PASSES AND BACKGOUNG SURFACES OF ALL CAT. 'D' WELDS PER ASME APPENDIX 8 OR APPENDIX 6
- 100% ON ALL SURFACES OF COMPLETED CAT. D WELDS, PER ASME APPENDIX 6 BEFORE PWHT
- 100% ON LONG SEAM AFTER PWHT
- WFMP: 100% ON ALL INTERNAL ATTACHMENT WELDS, TO EXTEND MINIMUM OF 1" ON EACH SIDE OF WELD TOE
- UT: 100% OF ALL CAT. D NOZZLE TO SHELL OR HEAD WELDS PRIOR TO PWHT
- HARDNESS TESTING:
 - HARDNESS TESTING SHALL BE COMPLETED USING TELEBRINELLER, MICRODUR, OR EITZEN
 - AFTER PWHT TO MAX. HARDNESS BRINELL BHM 200
 - LONG SEAM & CIRC SEAMS: ONE SET PER 10 FEET OF WELDING;
 - MINIMUM ONE READING PER COURSE PER WELDER
 - NOZZLE NECK TO FLANGE WELDS; ONE SET PER EACH WELD

ASME 2010 ED. 2011 ADD. CODE SECT. VIII DIV. 1

BMS AQP (S) 1009	REGISTERED WELD PROCEDURE 505.2
FOR VESSEL TOLERANCES, SEE WELD HANDBOOK	
VESSEL TYPE: VERTICAL	
M.A.W.P.: 1426 PSIG (9832 kPa) AT +140°F (+60°C)	
M.A.E.W.P.: 7.5 PSIG (51.7 kPa) AT +140°F (+60°C)	
M.D.M.T.: -20°F (-29°C) AT 1426 PSIG (9832 kPa)	
IMPACT TESTING EXEMPT PER UCS66(b)	
P.W.H.T.: MINIMUM 1150°F FOR 90 MINUTES	
RADIOGRAPHY: RT-I	CIRC.: FULL LONG: FULL
JOINT EFFICIENCY: HEADS: 1.00	SHELL: 1.00
CORROSION ALLOWANCE: 1/8"	
HYDROSTATIC TEST: 1854 PSIG (12783 kPa) - CHART FOR 60 MINUTES	
VOLUME: 66.98ft ³ 1.2m ³	
WEIGHT (DRY): 8500 lb (3864kg)	

CLIENT:	 BROMLEY MECHANICAL SERVICES A DIVISION OF ARGO SALES LTD. 925 23 Street SW, Medicine Hat, Alberta, Canada T1A 8R1 Ph: (403) 526-3142 Fax: (403) 526-1061 Toll Free (800) 215-9806	
ULTRAFAB INDUSTRIES LTD.		
PROJECT:		
(I) - 36"OD X 10'-0" X 1426 PSI SOUR SEPARATOR CHEVRON CANADA		
TITLE: 36"OD X 10'-0" X 1426 PSI SEPARATOR		
CRN No.: V9590.2	Wo No.: 34497	SERIAL No.: 231848
DRAWN BY: S. WALL	REV. No.: 1	DATE: MM/DD/YY 03/28/13
DATE: MM/DD/YY 12/17/12	SCALE: 1/2"=1'-0"	CAD No.: 34497