

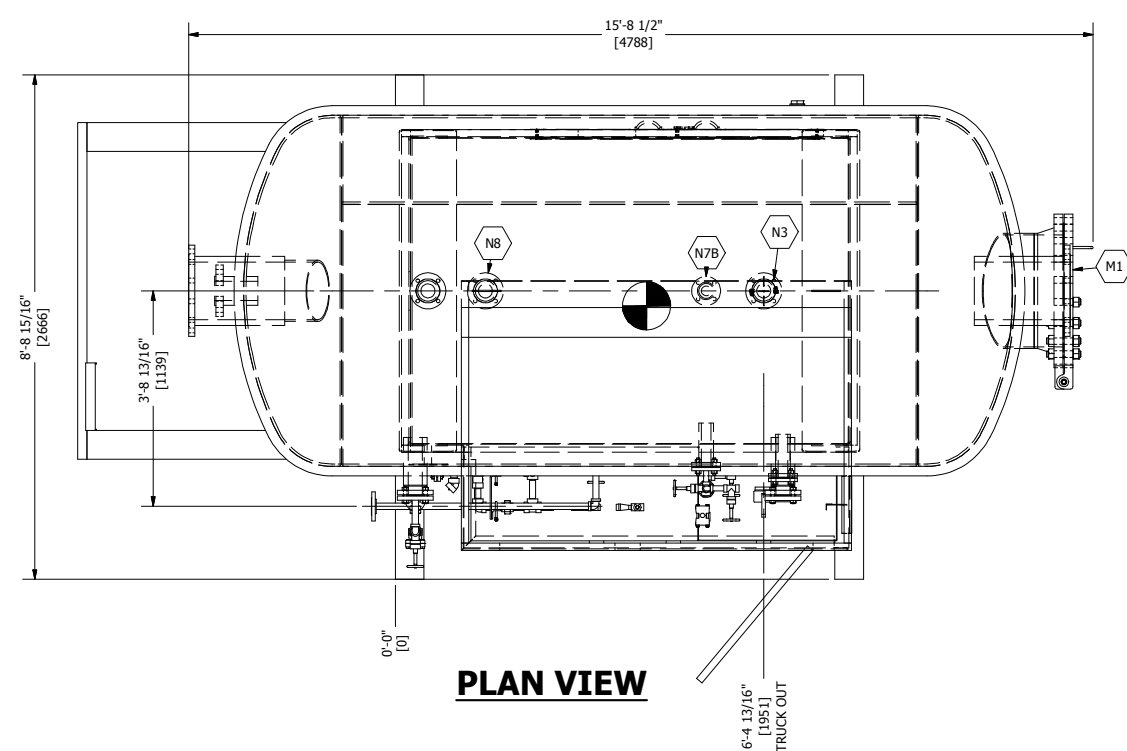
Please change the heater to 480 V, Single phase for Area 16-21. M.Y. 2019-10-25

GENERAL NOTES:
 1. ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
 2. FULL BOLT-UP FOR SHIPPING WILL BE USED - READY FOR SERVICE
 3. APPROXIMATE SHIPPING WEIGHT: 11,100 LBS
 4. APPROXIMATE SHIPPING DIMENSIONS: 8'-9" W x 9'-1" H x 15'-9" LG
 5. RING GASKETS SHALL BE COATED WITH RUST PREVENTIVE GREASE BEFORE INSTALLATION
 6. FLANGES TO BE PROTECTED AGAINST CORROSION & DAMAGE BY APPLYING STIFF GREASE, AND BY BOLTING ON A WOODEN OR STEEL COVER WITH MIN. OF 4 BOLTS
 - A PLASTIC SHEET SHALL BE INSERTED BETWEEN WOODEN COVER AND GREASED FLANGE SURFACE

BILL OF MATERIALS

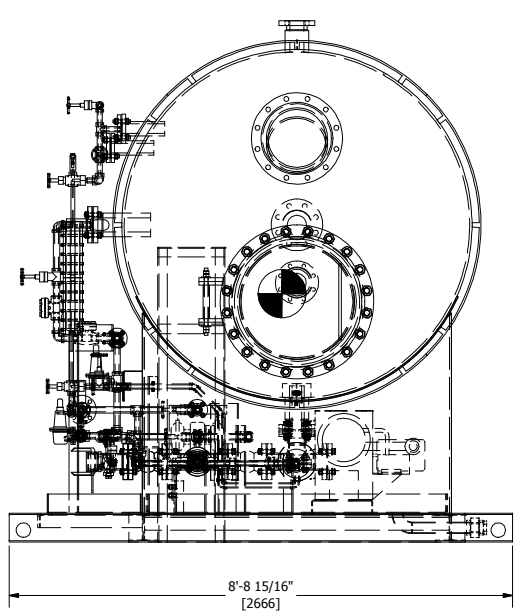
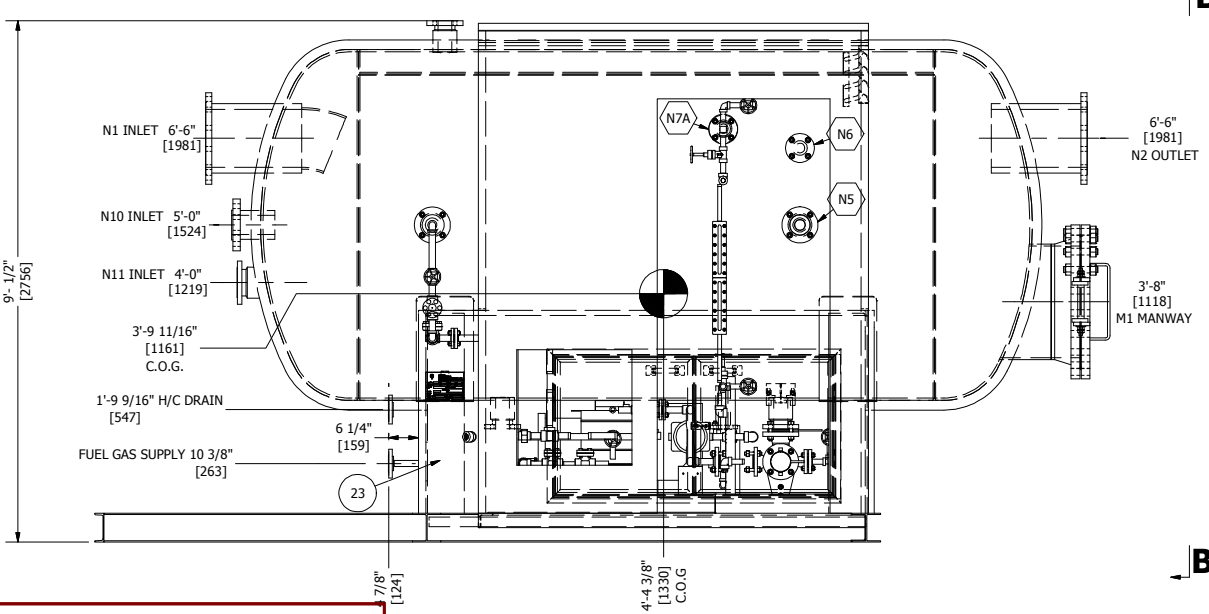
ITEM	QTY	REF.	PART No.	DESCRIPTION	LENGTH	MATERIAL	WEIGHT (lbs)
1	1	-	-	BUTT WELD SPOOLING (SEE DRAWING -702 FOR DETAILS)			101.42
2	1	-	-	SOCKET WELD ASSEMBLY (SEE DRAWING -701 FOR DETAILS)			149.62
3	1	-	-	VESSEL ASSEMBLY (SEE DRAWING -201 FOR DETAILS)			8109.25
4	1	HEATER	-	RUFFNECK 3KW ELECTRIC HEATER FX5-600-360-030-WT			205.00
5	1	PUMP	-	SANDPIPER G1F METALLIC MODEL STAINLESS STEEL, G1FB1ST0NSX00		316SS	114.49
6	1	-	-	SKID ASSEMBLY (SEE DRAWING -501 FOR DETAILS)			1541.02
7	1	-	-	ENCLOSURE ASSEMBLY (SEE DRAWING -601 FOR DETAILS)			556.89
8	1	LG PIPING	1-000257	3/4" U-BOLT c/w NUTS		MILD STEEL	0.26
9	6	PUMP/FG PIPING	1-000258	1" U-BOLT c/w NUTS		MILD STEEL	1.75
10	4	TRUCKOUT/FG PIPING	1-000759	3/4 x CL3000 90° THRD ELBOW		SA-350-LF2	4.09
11	5	FG PIPING	1-000760	1" x CL3000 90° THRD ELBOW		SA-350-LF2	8.57
12	1	N6	1-000972	2 x CLASS 150 RF BLIND FLG		SA-350-LF2 CL.1	5.38
13	2	N8/TRUCKOUT PIPING	1-000978	3" x CLASS 150 RF BLIND FLG		SA-350-LF2 CL.1	21.89
14	2	PUMP/FG PIPING	1-001448	2" x CLASS 150 RF HUB BLIND FLG TAPPED TO 1" NPT		SA-350-LF2 CL.1	12.07
15	1	NAMEPLATE	1-001701	6" x 8" NAMEPLATE		ALUMINUM	0.17
16	2	PIPING	1-001847	3/4" NIPPLE SCH 160 x 3" LG		SA-333-GR6	0.97
17	1	FG PIPING	1-003010	1/2 x CL3000 THRD TEE		SA-350-LF2 CL.1	0.96
18	2	PIPING	1-003011	1" x CL3000 THRD TEE		SA-350-LF2 CL.1	4.82
19	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	4"	SA-333-GR6	0.94
20	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	3"	SA-333-GR6	0.70
21	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	7 15/16"	SA-333-GR6	1.88
22	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	1'-6 1/8"	SA-333-GR6	4.30
23	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	1'-8 1/16"	SA-333-GR6	4.76
24	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	2'-1 15/16"	SA-333-GR6	6.16
25	1	PIPING	1-003415	1" PIPE SCH 160 (TBE)	4 13/16"	SA-333-GR6	1.14
26	1	PIPING	1-003490	3/4" x CL3000 THRD UNION		SA-350-LF2 CL.1	1.44
27	2	PIPING	1-003491	1" x CL3000 THRD UNION		SA-350-LF2 CL.1	4.10
28	1	LG PIPING	1-003801	1/2" NPT HEX HEAD PLUG		SA-350-LF2 CL.1	0.15
29	1	TRUCKOUT PIPING	1-003854	3" x CLASS 150 RFTO FLG		SA-350-LF2 CL.1	9.60
30	2	HEATER	1-004138	1/2" DIA x 1 1/2" LG STRUCTURAL HEX BOLT, c/w NUT AND WASHER		SA-325	0.45
31	1	TRUCKOUT PIPING	1-004300	3" x CLASS 150 SPEC BLIND FLG		SA-516-70N	2.53
32	1	N5	1-004892	3" x CLASS 150 RF HUB BLIND FLG TAPPED TO 2" NPT		SA-350-LF2 CL.1	11.33
33	2	TRUCKOUT/FG PIPING	1-004894	3/4 NPT HEX HEAD PLUG		SA-350-LF2 CL.1	0.51
34	1	DRAIN	1-005285	2" NPT HEX HEAD PLUG		SA-350-LF2 CL.1	2.16
35	1	DRAIN	1-007264	2" x CL3000 THRD UNION		SA-350-LF2 CL.1	6.79
36	1	PIPING	1-008376	1" x 3/4 CONC SWAGE SCH 160 (TLE x TSE)		SA-420-WPL6	0.70
37	1	M1	1-008401	24" x CLASS 150 RF "CGI" GRAPHITE FILLED GASKET		316SS	6.70
38	5	2" CONNECTIONS	1-008402	2 x CLASS 150 RF CGI GRAPHITE FILLED GASKET		316SS	2.08
39	1	2" CONNECTION	1-021435	2" x CLASS 150 FLEXPLO ZG 316L/PTFE GASKET		316SS	0.35
40	2	1" CONNECTIONS	1-017771	1" x CLASS 150 RF "CGI" GRAPHITE FILLED GASKET		316SS	0.33
41	10	3" CONNECTIONS	1-008408	3 x CLASS 150 RF CGI GRAPHITE FILLED GASKET		316SS	5.31
42	2	PIPING	1-008420	3/4" PIPE SCH 160 (TBE)	11 7/16"	SA-333-GR6	3.70
43	1	FG PIPING	1-010161	1" x 1/2" CONC SWAGE SCH 160 (TLE x TSE)		SA-420-WPL6	0.62
44	1	1 1/2" CONNECTION	1-025864	1 1/2" x CLASS 150 FLEXPLO ZG 316L/PTFE GASKET		316SS	0.24
45	1	PUMP/FG PIPING	1-010672	1" NIPPLE SCH 160 x 4" LG		SA-333-GR6	0.94
46	5	FG PIPING	1-010673	1" NIPPLE SCH 160 x 3" LG		SA-333-GR6	3.52
47	1	FG PIPING	1-012350	1" x 3/4" x CL3000 THRD REDUCING TEE		SA-350-LF2 CL.1	2.43
48	1	FG PIPING	1-012926	1" x CLASS 150 RFTO FLG		SA-350-LF2 CL.1	1.97
49	1	TRUCKOUT PIPING	1-014599	3" CAMLOCK DUST CAP		316/L	1.04
50	1	TRUCKOUT PIPING	1-014600	3" MALE CAMLOCK x FNPT		316/L	0.67
51	1	LG PIPING	1-015228	1/2" PIPE SCH XXH (TBE)	8"	SA-333-GR6	1.14
52	1	LG PIPING	1-015228	1/2" PIPE SCH XXH (TBE)	10 11/16"	SA-333-GR6	1.53
53	1	LG PIPING	1-015682	1/2" x CL6000 90° THRD ELBOW		SA-350-LF2 CL.1	1.38
54	2	PIPING	1-015767	1" NIPPLE SCH 160 x 6" LG		SA-333-GR6	2.83
55	1	LG PIPING	1-019381	1/2" NIPPLE SCH XXH x 3" LG		SA-333-GR6	0.43
56	2	TRUCKOUT PIPING	1-019384	3/4" NIPPLE SCH XXH x 3" LG	3"	SA-333-GR6	1.22
57	120	2" /3" CONNECTIONS	1-022566	5/8" DIA HEX NUT ZINC PLT		SA-194-2HM	15.61
58	52	2" /3" CONNECTIONS	1-022567	5/8" DIA x 3 1/2" LG STUD ZINC PLT		SA-193-B7M	16.21
59	4	TRUCKOUT PIPING	1-022568	5/8" DIA x 4" LG STUD ZINC PLT		SA-193-B7M	1.42
60	40	M1	1-022569	1 1/4" DIA HEX NUT ZINC PLT		SA-194-2HM	35.12
61	20	M1	1-022570	1 1/4" DIA x 7" LG STUD ZINC PLT		SA-193-B7M	49.86
62	24	1" / 1 1/2" CONNECTIONS	1-024438	1/2" DIA HEX NUT ZINC PLT		SA-194-2HM	1.72
63	4	TRUCKOUT/PIPE SUPPORT	1-024439	5/8" DIA x 4 1/4" LG STUD ZINC PLT		SA-193-B7M	1.51
64	8	1" CONNECTIONS	1-024440	1/2" DIA x 2 1/2" LG STUD ZINC PLT		SA-193-B7M	1.14
65	4	1 1/2" CONNECTIONS	1-025741	1/2" DIA x 2 3/4" LG STUD ZINC PLT		SA-193-B7M	0.63
66	1	TRUCKOUT/PIPE SUPPORT	2-012070	3" x CLASS 150 FLANGE GRABBER (3/8" THK)		SA-36	2.73
67	1	PUMP	2-013629	PUMP GUARD 1/8 THK x 13" W x 16" LG		SA-36	8.97
68	5	TRUCKOUT	1-025588	3" CL150 KAMPROFILE SIGMA 500 PTFE GASKET			
69	2	EXHAUST OUTLET	1-001777	1" NIPPLE SCH XH/80 x 3" LG		SA-106-B	1.07
70	1	EXHAUST OUTLET	1-003485	1" x CL3000 SW UNION		SA-105-N	2.01
71	3	EXHAUST OUTLET	1-000744	1" x CL3000 90° THRD ELBOW		SA-105-N	5.14
72	1	EXHAUST OUTLET	1-001792	1" NIPPLE SCH XH/80 x 8" LG		SA-106-B	1.44
73	1	EXHAUST OUTLET	1-003347	1" PIPE SCH XH/80 (TBE)	4'-8"	SA-106-B	10.16
74	1	EXHAUST OUTLET	1-000741	1" x CL3000 45° THRD ELBOW		SA-105-N	1.57
75	1	EXHAUST OUTLET	1-003347	1" PIPE SCH XH/80 (TBE)	2'-4"	SA-106-B	5.08
76	1	EXHAUST OUTLET	1-001427	ROUND BAR 1/4" x 1.500 in"	1 1/2"	SA-36	0.02

NOTE: MATERIALS ARE NACE MR0175/ISO 15156 AS PER CHEVRON SELECT CHEMISTRY AND AML REQ'D 11159.00



STEEL PIPING FORGED PRODUCTS SELECT CHEM
 MUST MEET CHEVRON AML KDA-0300-PUR-LST-CBU-0000-00001 AML REV3
 SELECT CHEM: As per KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 MUST MEET NACE MR0175/ISO 15156
 CE = 0.43 MAX
 C = 0.23
 Mn = 1.35
 V max = See Table 2 of KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 Nb max = See Table 2 of KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 Cr+Mo+Ni+Cu+V = 0.600 MAX
 P = 0.025
 S = 0.025

STEEL PIPING SEAMLESS PRODUCTS SELECT CHEM
 MUST MEET CHEVRON AML KDA-0300-PUR-LST-CBU-0000-00001 AML REV3
 SELECT CHEM: As per KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 MUST MEET NACE MR0175/ISO 15156
 CE = 0.43 MAX
 C = 0.23
 Mn = 1.35
 V max = See Table 2 of KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 Nb max = See Table 2 of KDA-0800-PIP-SPC-CBU-0000-00086 RA.2
 Cr+Mo+Ni+Cu+V = 0.600 MAX
 P = 0.025
 S = 0.010



STANTEC DOCUMENT PROCESSING STAMP

A - PROCEED I/O - DATA ACCEPTED FOR INFORMATION ONLY
 B - PROCEED, CHANGE AS NOTED AND RESUBMIT BY: 2019-11-01 C - DO NOT PROCEED, CHANGE AS NOTED AND RESUBMIT BY:
 SIGN: M.Y. DATE SIGNED: 2019-10-25
 VDDR CODE(S): DM01, DG02, GD11
 AUTHORIZATION TO PROCEED DOES NOT WAIVE SUPPLIER'S RESPONSIBILITY OR LIABILITY UNDER THE CONTRACT/PURCHASE ORDER FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS

ELEVATION VIEW

VIEW B-B

FLEXPLO GASKETS REQUIRED FOR TRUCKOUT SPOOLING

REV	DATE	DESCRIPTION	BY	ENG	PM	APP
A	2019/10/15	ISSUED FOR APPROVAL	RMM	JAM	DG	



BOX 6106
 5815 37 Street
 INNISFAIL, AB
 CANADA
 403-227-7799
 1-888-227-4923
 FAX 227-7796

CHEVRON CANADA LTD.

72" ID x 10' S/S 60 BBL FKOD - TAG: FKOD-4400
 FINAL ASSEMBLY

QUOTE NUMBER: 107948	SALE ORDER: 005675
PURCHASE ORDER: 11862693	JOB ORDER:
LOCATION: 16-21-059-19 WSM (SOFC-W115)	D5249
DATE: 2019/10/09	SIZE: D
SHEET: 1 OF 8	DRAWING NO.:
CRN DWG: N/A	D5249-101
CRN NUMBER: N/A	REV: A