

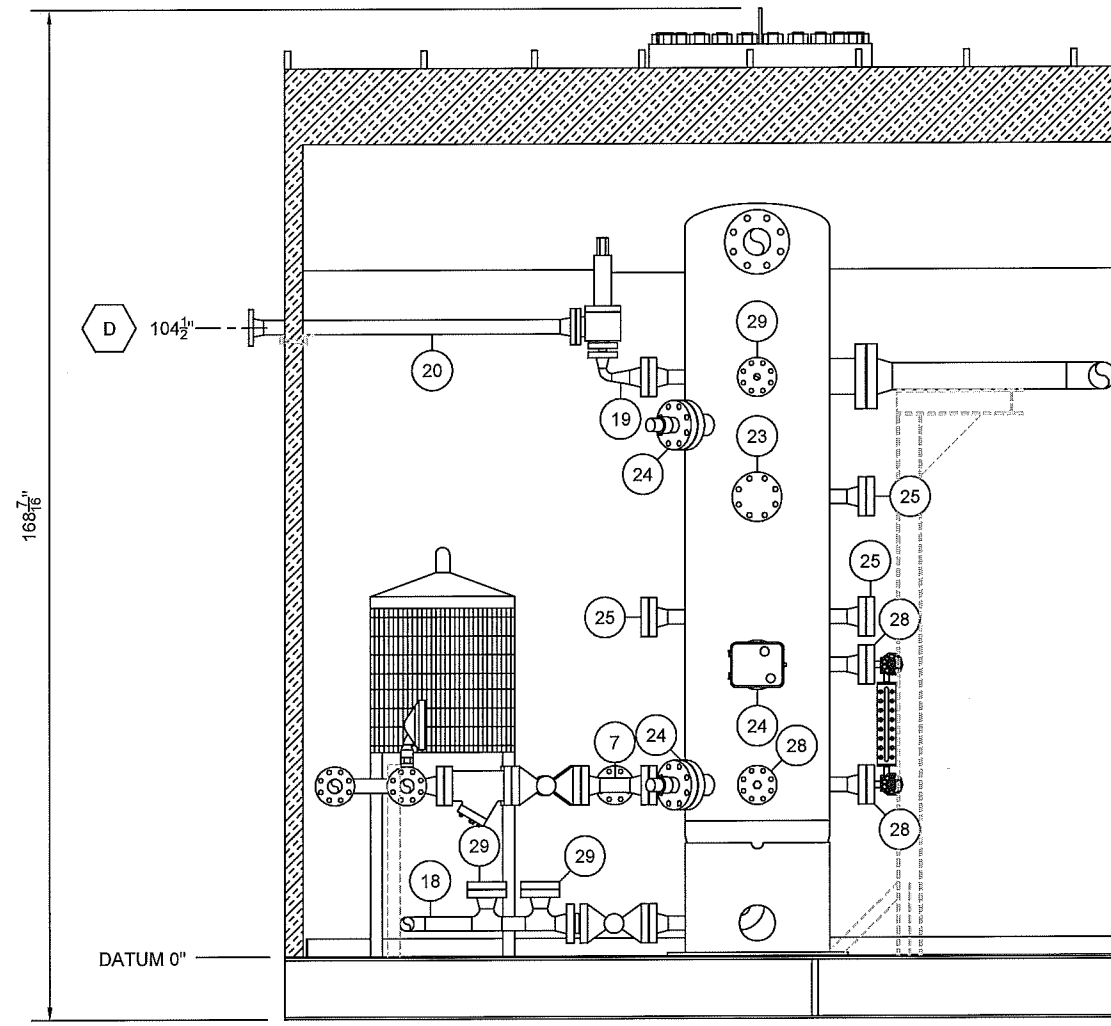
REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D
4	12/11/14	AS BUILT		DB	DB
3	10/14/14	ADDED PIPE SUPPORTS		DB	LW
2	10/01/14	ADDED TWO (2) 2" FLANGE SETS & BURNER TRAIN		LW	LW
1	09/15/14	REVISED AS PER INTERNAL PROJECT REVIEW		DB	LW
0	08/19/14	ISSUED FOR CONSTRUCTION		DB	LW

GlobalFlow

CUSTOMER: Encana Corporation
c/o Solaris MCI

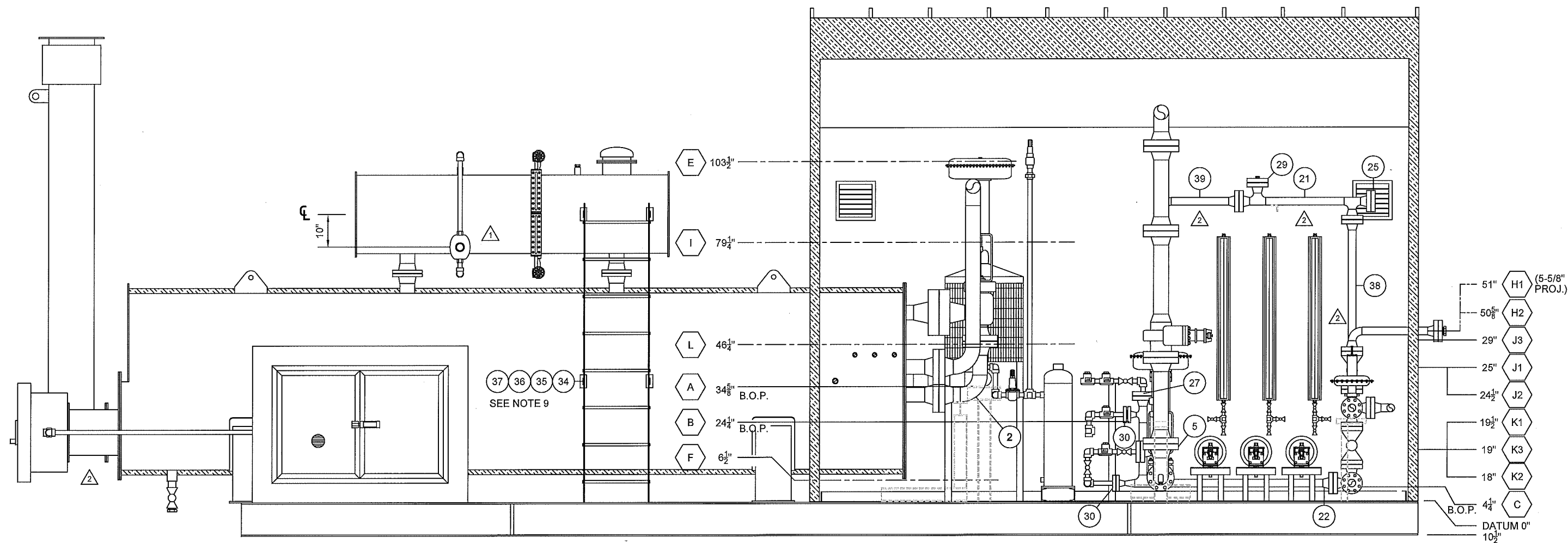
TITLE / PROJECT: 24"OD X 120" S/S X 1360 PSI
SOUR VERTICAL SEP. PKG. C/W
1.5M BTU/HR LINE HEATER

DRAWING NAME: LAYOUT - PLAN VIEW	QUANTITY: 1	PACKAGE SERIAL NO. (S): 14-086
JOB NO. (S): 14-086	DRAWN BY: D. BRYAN	DATE: 06/19/2014
REV. NO.: 4	PAGE NO.: 1 OF 4	SCALE: 3/8"=1'-0"
DRAWING NO.: 14-086-LAYOUT		



SECTION A-A

CUSTOMER:		TITLE / PROJECT:	
Encana Corporation c/o Solaris MCI		24"OD X 120" S/S X 1360 PSI SOUR VERTICAL SEP. PKG. C/W 1.5M BTU/HR LINE HEATER	
DRAWING NAME:	QUANTITY:	PACKAGE SERIAL NO. (S):	
LAYOUT - SECTION	1	14-086	
JOB NO. (S):	DRAWN BY:	DATE:	
14-086	D. BRYAN	06/19/2014	
REV. NO.:	PAGE NO.:	SCALE:	DRAWING NO.:
4	2 OF 4	3/8"=1'-0"	14-086-LAYOUT

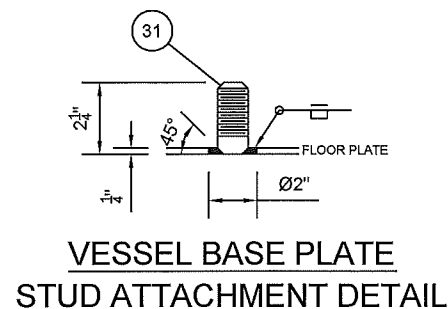


SECTION B-B

CUSTOMER: Encana Corporation c/o Solaris MCI	
TITLE / PROJECT: 24"OD X 120" S/S X 1360 PSI SOUR VERTICAL SEP. PKG. C/W 1.5M BTU/HR LINE HEATER	
DRAWING NAME: LAYOUT - SECTION	QUANTITY: 1
JOB NO. (S): 14-086	DATE: 06/19/2014
REV. NO.: 4	PAGE NO.: 3 OF 4
SCALE: 3/8"=1'-0"	DRAWING NO.: 14-086-LAYOUT

BILL OF MATERIALS

ITEM	DESCRIPTION	MATERIAL	QTY.	HEAT NUMBER
1	SPOOL 01	.	1	
2	SPOOL 02	.	1	
3	SPOOL 03	.	1	
4	SPOOL 04	.	1	
5	SPOOL 05	.	1	
6	SPOOL 06	.	1	
7	SPOOL 07 (SEE NOTE 10,11)	.	1	
8	SPOOL 08 (SEE NOTE 10,11)	.	1	
9	SPOOL 09 (SEE NOTE 10,11)	.	1	
10	SPOOL 10 (SEE NOTE 10,11)	.	1	
11	SPOOL 11 (SEE NOTE 10,11)	.	1	
12	SPOOL 12 (SEE NOTE 10,11)	.	1	
13	SPOOL 13 (SEE NOTE 10,11)	.	1	
14	SPOOL 14 (SEE NOTE 10,11)	.	1	
15	SPOOL 15 (SEE NOTE 10,11)	.	1	
16	SPOOL 16 (SEE NOTE 10,11)	.	1	
17	SPOOL 17 (SEE NOTE 10,11)	.	1	
18	SPOOL 18 (SEE NOTE 10,11)	.	1	
19	SPOOL 19	.	1	
20	SPOOL 20	.	1	
21	SPOOL 21 (SEE NOTE 10,11)	.	1	
22	SPOOL 22	.	1	
23	RFB, 3" 600 ANSI (SEE NOTE 10)	SA105N	1	
24	RFHB, 3" 600 ANSI W/ 2" NPT (SEE NOTE 10)	SA105N	3	
25	RFB, 2" 600 ANSI (SEE NOTE 10)	SA105N	4	
26	RFTD, 2" 600 ANSI (SEE NOTE 10)	SA350LF2 CL.1	2	
27	RFB, 2" 600 ANSI W/ 1" NPT (SEE NOTE 10, QTY. 2)	SA105N	3	
28	RFB, 2" 600 ANSI W/ 3/4" NPT (SEE NOTE 10)	SA105N	3	
29	RFB, 2" 600 ANSI W/ 1/2" NPT (SEE NOTE 10)	SA105N	4	
30	RFTD, 1" 600 ANSI (SEE NOTE 10)	SA105N	2	
31	BOLT, 1" x 4" (SEE DETAIL)	GR. 5	4	
32	WASHER, 1"	GR. 5	4	
33	NUT, 1"	GR. 5	4	
34	BOLT, 1/2" x 1"	GR. 5	4	
35	FLAT WASHER, 1/2"	GR. 5	8	
36	LOCK WASHER, 1/2"	GR. 5	4	
37	NUT, 1/2"	GR. 5	4	
38	SPOOL 23 (SEE NOTE 10,11)	.	1	
39	SPOOL 24 (SEE NOTE 10,11)	.	1	



GASKETS, STUDS, AND NUTS

DESCRIPTION	MATERIAL	QTY.
R38 RING GSKT 4" 2500 ANSI	316L SS	3
PSI LINEBACKER GSKT 4" 600 ANSI TYPE F G10 VITON SEAL	.	2
SPRLWND GSKT 4" 600 ANSI FLEXIBLE GRAPHITE	AISI TYPE 316L SS	5
SPRLWND GSKT 4" 150 ANSI FLEXIBLE GRAPHITE	AISI TYPE 316L SS	2
PSI LINEBACKER GSKT 3" 600 ANSI TYPE F G10 VITON SEAL	.	4
SPRLWND GSKT 3" 600 ANSI FLEXIBLE GRAPHITE	AISI TYPE 316L SS	2
PSI LINEBACKER GSKT 2" 600 ANSI TYPE F G10 VITON SEAL	.	47
SPRLWND GSKT 2" 150 ANSI FLEXIBLE GRAPHITE	AISI TYPE 316L SS	1
SPRLWND GSKT 1" 600 ANSI FLEXIBLE GRAPHITE	AISI TYPE 316L SS	4
STUD, 1-1/2" X 10-1/4"	SA-193 B7M	24
STUD, 7/8" X 5-3/4"	SA-193 B7M	56
STUD, 3/4" X 5"	SA-193 B7M	48
STUD, 5/8" X 5-1/4"	SA-193 B7M	16
STUD, 5/8" X 4-1/4"	SA-193 B7M	332
STUD, 5/8" X 3-3/4"	SA-193 B7M	4
STUD, 5/8" X 3-1/2"	SA-193 B7M	20
STUD, 5/8" X 3-1/4"	SA-193 B7M	4
NUT, 1-1/2"	SA-194-2HM	48
NUT, 7/8"	SA-194-2HM	112
NUT, 3/4"	SA-194-2HM	96
NUT, 5/8"	SA-194-2HM	752

GENERAL NOTES

- QUALITY CONTROL PROGRAM IS AQP-1464
- THREADED PIPING IS GF-1 REV. 1
- GENERAL DEVIATION TOLERANCE IS +/- 1/4"
- ALL OPENINGS SHALL BE COVERED FOR SHIPPING
- PACKAGE TO BE COMPLETELY DRAINED OF WATER BEFORE SHIPPING
- ALL PIPING PROJECTIONS TO BE 6" UNLESS OTHERWISE NOTED
- APPROXIMATE SHIPPING WEIGHT: TOTAL - 44,800 LBS
SKID & PIPE SUPPORTS - 7,500 LBS
LINE HEATER BATH - 7,000 LBS
VESSEL - 6,800 LBS
PIPING & INSTRUMENTS - 10,000 LBS
COIL BUNDLE - 6,500 LBS
FIRE-TUBE - 2,800 LBS
STACK - 1,000 LBS
BUILDING - 3,200 LBS
- APPROXIMATE SHIPPING DIMENSIONS: 12'-2" W X 35'-10" L X 14'-1" H
- 9/16" HOLES TO MOUNT LADDER TO ATTACHMENT TABS WILL BE SHOP FIT
- TO BE INTERNALLY COATED
- "HANDLE WITH CARE! INTERNALLY COATED" TO BE MARKED ON INTERNALLY COATED ITEMS ON AN AREA VISIBLE WITHOUT HANDLING

EXTERNAL PAINTING & PREP.

SURFACE PREP (EXT): SSPC SP6
 PRIMER (EXT): ONE (1) COAT EPOXY
 *4.0 - 6.0 MILS DFT
 TOP COAT (EXT): ONE (1) COAT HI-BUILD URETHANE
 *2.0 - 4.0 MILS DFT
 TOP COAT COLOR: WARM GREY
 INSULATION: .
 OTHER: .

INTERNAL COATING

SURFACE PREP: SSPC-SP10
 TOP COAT: TWO (2) COATS DEVCHEM 253
 *12.0 - 16.0 MILS DFT
 OTHER: SEE ENCANA SARP ECA-Y-2

PACKAGE CONNECTION SCHEDULE

A	4" RTJ, 2500 ANSI, EMULSION INLET
B	4" RF, 600 ANSI, V-112 GAS OUTLET
C	2" RF, 600 ANSI, V-112 DRAIN OUTLET
D	2" RF, 150 ANSI, V-112 PSV OUTLET
E	1-1/2" FNPT, 150 PSI, V-113 PSV OUTLET
F	1/2" TUBING, 150 PSI, V-113 DRAIN OUTLET
G	1" FNPT, 600 ANSI, FUEL GAS INLET
H1 / H2	2" RF, 600 ANSI C/W 2" FNPT (PLUGGED), V-112 PROVER OUTLET / INLET
I	3/8" TUBING, 150 PSI, INSTRUMENT GAS TO ESDV
J1 / J2	1/2" TUBING, 150 PSI, P-114 / P-115 METHANOL/CHEMICAL INLET
J3	1/2" TUBING, 150 PSI, P-116 CORROSION INHIBITOR INLET
K1 / K2	3/8" TUBING, 2500 ANSI, P-114 / P-115 METHANOL/CHEMICAL INLET
K3	1/2" TUBING, 600 ANSI, P-116 CORROSION INHIBITOR OUTLET
L	1/2" TUBING, 150 ANSI TUBING, FLARE GAS TO PILOT

ASME B31.3 2012. EDITION

RATING / FLUID SERVICE: 2500 ANSI, NORMAL, SOUR, STD TEMP, CLASS "FSA"					RATING / FLUID SERVICE: 2500 ANSI, NORMAL, SOUR, LOW TEMP, CLASS "FSB"				
M.A.W.P.: 4503 PSIG (31048 kPa) AT +200°F (+93°C) / -20°F (-29°C)					M.A.W.P.: 4503 PSIG (31048 kPa) AT +200°F (+93°C) / -50°F (-45°C)				
CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER					CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER				
TESTING PRESSURE: 6755 PSIG (46572 kPa), 60 MIN., (2) GAUGES & (1) CHART					TESTING PRESSURE: 6755 PSIG (46572 kPa), 60 MIN., (2) GAUGES & (1) CHART				
CONNECTION: SOCKET WELD CONNECTION TESTING: HYDRO					CONNECTION: SOCKET WELD CONNECTION TESTING: HYDRO				
LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.	LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.
1/2"	SCH. XXS	SA106B	9000 PSI	SA105N	1/2"	SCH. XXS	SA333GR6	9000 PSI	SA350LF2 CL.1
3/4"	SCH. XXS	SA106B	9000 PSI	SA105N	3/4"	SCH. XXS	SA333GR6	9000 PSI	SA350LF2 CL.1
1"	SCH. XXS	SA106B	9000 PSI	SA105N	1"	SCH. XXS	SA333GR6	9000 PSI	SA350LF2 CL.1
1-1/4"	N/A	N/A	N/A	N/A	1-1/4"	N/A	N/A	N/A	N/A
1-1/2"	N/A	N/A	N/A	N/A	1-1/2"	N/A	N/A	N/A	N/A
2"	N/A	N/A	N/A	N/A	2"	N/A	N/A	N/A	N/A

ASME B31.3 2012. EDITION

RATING / FLUID SERVICE: 600 ANSI, NORMAL, SWEET, STD TEMP, CLASS "CAA"					RATING / FLUID SERVICE: 600 ANSI, NORMAL, SWEET, LOW TEMP, CLASS "CAB"				
M.A.W.P.: 1360 PSIG (9377 kPa) AT +200°F (+93°C) / -20°F (-29°C)					M.A.W.P.: 1360 PSIG (9377 kPa) AT +200°F (+93°C) / -50°F (-45°C)				
CORROSION ALLOWANCE: 0.0625" (1.6mm) TESTING MEDIUM: WATER					CORROSION ALLOWANCE: 0.0625" (1.6mm) TESTING MEDIUM: WATER				
TESTING PRESSURE: 2040 PSIG (14065 kPa), 60 MIN., (2) GAUGES & (1) CHART					TESTING PRESSURE: 2040 PSIG (14065 kPa), 60 MIN., (2) GAUGES & (1) CHART				
CONNECTION: THREADED CONNECTION TESTING: HYDRO					CONNECTION: THREADED CONNECTION TESTING: HYDRO				
LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.	LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.
1/2"	SCH. 160	SA106B	3000 PSI	SA105N	1/2"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
3/4"	SCH. 160	SA106B	3000 PSI	SA105N	3/4"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1"	SCH. 160	SA106B	3000 PSI	SA105N	1"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/4"	SCH. 160	SA106B	3000 PSI	SA105N	1-1/4"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/2"	SCH. 160	SA106B	3000 PSI	SA105N	1-1/2"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
2"	N/A	N/A	N/A	N/A	2"	N/A	N/A	N/A	N/A

RATING / FLUID SERVICE: 150 ANSI, NORMAL, SOUR, STD TEMP, CLASS "ASA"					RATING / FLUID SERVICE: 150 ANSI, NORMAL, SWEET, LOW TEMP, CLASS "ASB"				
M.A.W.P.: 260 PSIG (1793 kPa) AT +200°F (+93°C) / -20°F (-29°C)					M.A.W.P.: 260 PSIG (1793 kPa) AT +200°F (+93°C) / -50°F (-45°C)				
CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER					CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER				
TESTING PRESSURE: 390 PSIG (2689 kPa), 60 MIN., (2) GAUGES & (1) CHART					TESTING PRESSURE: 390 PSIG (2689 kPa), 60 MIN., (2) GAUGES & (1) CHART				
CONNECTION: THREADED CONNECTION TESTING: HYDRO					CONNECTION: THREADED CONNECTION TESTING: HYDRO				
LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.	LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.
1/2"	N/A	N/A	N/A	N/A	1/2"	N/A	N/A	N/A	N/A
3/4"	SCH. 160	SA106B	3000 PSI	SA105N	3/4"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1"	SCH. 160	SA106B	3000 PSI	SA105N	1"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/4"	SCH. 160	SA106B	3000 PSI	SA105N	1-1/4"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/2"	SCH. 160	SA106B	3000 PSI	SA105N	1-1/2"	SCH. 160	SA333GR6	3000 PSI	SA350LF2 CL.1
2"	N/A	N/A	N/A	N/A	2"	N/A	N/A	N/A	N/A

RATING / FLUID SERVICE: 600 ANSI, NORMAL, SOUR, STD TEMP, CLASS "CSA"					RATING / FLUID SERVICE: 600 ANSI, NORMAL, SOUR, LOW TEMP, CLASS "CSB"				
M.A.W.P.: 1360 PSIG (9377 kPa) AT +200°F (+93°C) / -20°F (-29°C)					M.A.W.P.: 1360 PSIG (9377 kPa) AT +200°F (+93°C) / -50°F (-45°C)				
CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER					CORROSION ALLOWANCE: 0.125" (3.2mm) TESTING MEDIUM: WATER				
TESTING PRESSURE: 2040 PSIG (14065 kPa), 60 MIN., (2) GAUGES & (1) CHART					TESTING PRESSURE: 2040 PSIG (14065 kPa), 60 MIN., (2) GAUGES & (1) CHART				
CONNECTION: THREADED CONNECTION TESTING: HYDRO					CONNECTION: THREADED CONNECTION TESTING: HYDRO				
LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.	LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.
1/2"	SCH. XXS	SA106B	6000 PSI	SA105N	1/2"	SCH. XXS	SA333GR6	3000 PSI	SA350LF2 CL.1
3/4"	SCH. XXS	SA106B	6000 PSI	SA105N	3/4"	SCH. XXS	SA333GR6	3000 PSI	SA350LF2 CL.1
1"	SCH. XXS	SA106B	6000 PSI	SA105N	1"	SCH. XXS	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/4"	SCH. XXS	SA106B	6000 PSI	SA105N	1-1/4"	SCH. XXS	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/2"	SCH. XXS	SA106B	6000 PSI	SA105N	1-1/2"	SCH. XXS	SA333GR6	3000 PSI	SA350LF2 CL.1
2"	N/A	N/A	N/A	N/A	2"	N/A	N/A	N/A	N/A

RATING / FLUID SERVICE: 150 PSI, NORMAL, SWEET, STD TEMP, CLASS "AU"					RATING / FLUID SERVICE: 150 PSI, NORMAL, SWEET, LOW TEMP, CLASS "AUL"				
M.A.W.P.: 150 PSIG (1034 kPa) AT +100°F (+38°C) / -20°F (-29°C)					M.A.W.P.: 150 PSIG (1034 kPa) AT +100°F (+38°C) / -50°F (-45°C)				
CORROSION ALLOWANCE: 0.0625" (1.6mm) TESTING MEDIUM: AIR / NITROGEN					CORROSION ALLOWANCE: 0.0625" (1.6mm) TESTING MEDIUM: AIR / NITROGEN				
TESTING PRESSURE: 165 PSIG (1138 kPa), 15 MIN., (2) GAUGES					TESTING PRESSURE: 165 PSIG (1138 kPa), 15 MIN., (2) GAUGES				
CONNECTION: THREADED CONNECTION TESTING: PNEUMATIC					CONNECTION: THREADED CONNECTION TESTING: PNEUMATIC				
LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.	LINE SIZE	PIPE SCH.	PIPE MAT.	FITTING RATING	FITTING MAT.
1/2"	SCH. 80	SA106B	3000 PSI	SA105N	1/2"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1
3/4"	SCH. 80	SA106B	3000 PSI	SA105N	3/4"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1
1"	SCH. 80	SA106B	3000 PSI	SA105N	1"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/4"	SCH. 80	SA106B	3000 PSI	SA105N	1-1/4"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1
1-1/2"	SCH. 80	SA106B	3000 PSI	SA105N	1-1/2"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1
2"	SCH. 80	SA106B	3000 PSI	SA105N	2"	SCH. 80	SA333GR6	3000 PSI	SA350LF2 CL.1



CUSTOMER: **Encana Corporation c/o Solaris MCI** TITLE / PROJECT: **24" OD X 120" S/S X 1360 PSI SOUR VERTICAL SEP. PKG. C/W 1.5M BTU/HR LINE HEATER**

DRAWING NAME: **BOM & NOTES** QUANTITY: **1** PACKAGE SERIAL NO. (S): **14-086**

JOB NO. (S): **14-086** DRAWN BY: **D. BRYAN** DATE: **06/19/2014**

REV. NO.: **4** PAGE NO.: **4 OF 4** SCALE: **3/8"=1'-0"** DRAWING NO.: **14-086-LAYOUT**