

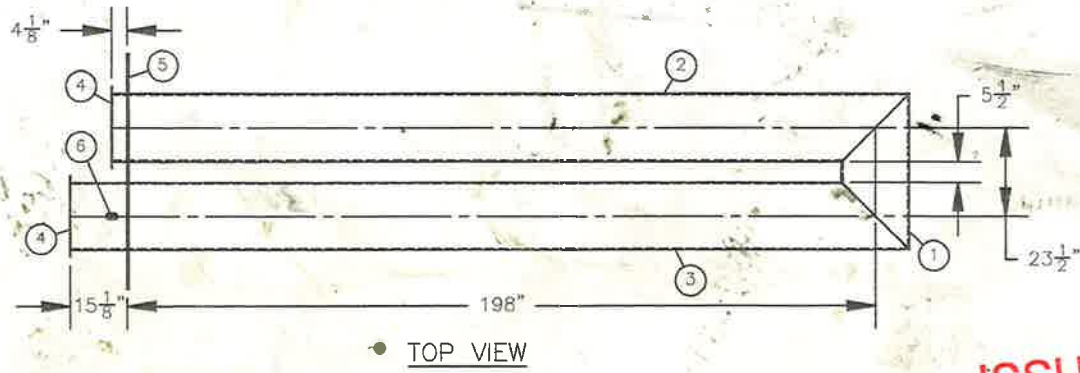
THE PROPERTY OF SILVERADO CERTIFIED ENERGY EQUIPMENT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS INTENDED

GENERAL NOTES:

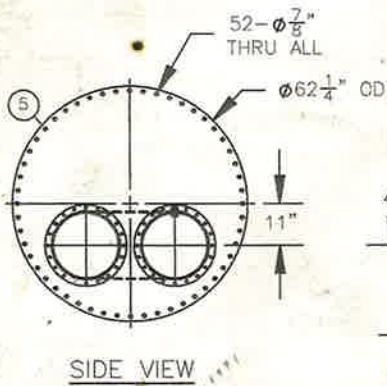
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
2. ALL WELDS TO BE 1/4" FILLET UNLESS OTHERWISE NOTED.
3. GRIND ALL SHARP EDGES.
4. FINAL INSPECTION REQUIRED.

BILL OF MATERIALS

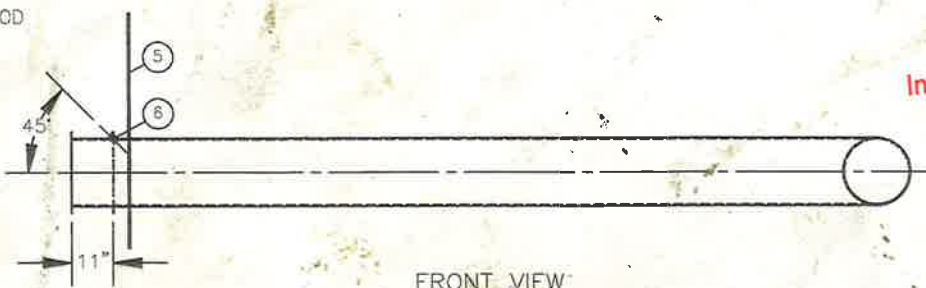
ITEM	QTY	DESCRIPTION	MATERIAL	PART NO	PURCHASE ORDER NO
1	1	18" STD SMLS PIPE X 41 1/2" LG	SA-106B	STPI18-STD	
2	1	18" STD SMLS PIPE X 211" LG	SA-106B	STPI18-STD	
3	1	18" STD SMLS PIPE X 222" LG	SA-106B	STPI18-STD	
4	2	1/8" X 21 1/2" OD PLATE	SA-36	10000270	
5	1	3/8" X 62 1/4" OD PLATE	SA-36	10000272	
6	1	1" NPT 3M FULL CPLG	SA-105N	CP1-3M	



TOP VIEW



SIDE VIEW



FRONT VIEW

ISSUED FOR CONSTRUCTION

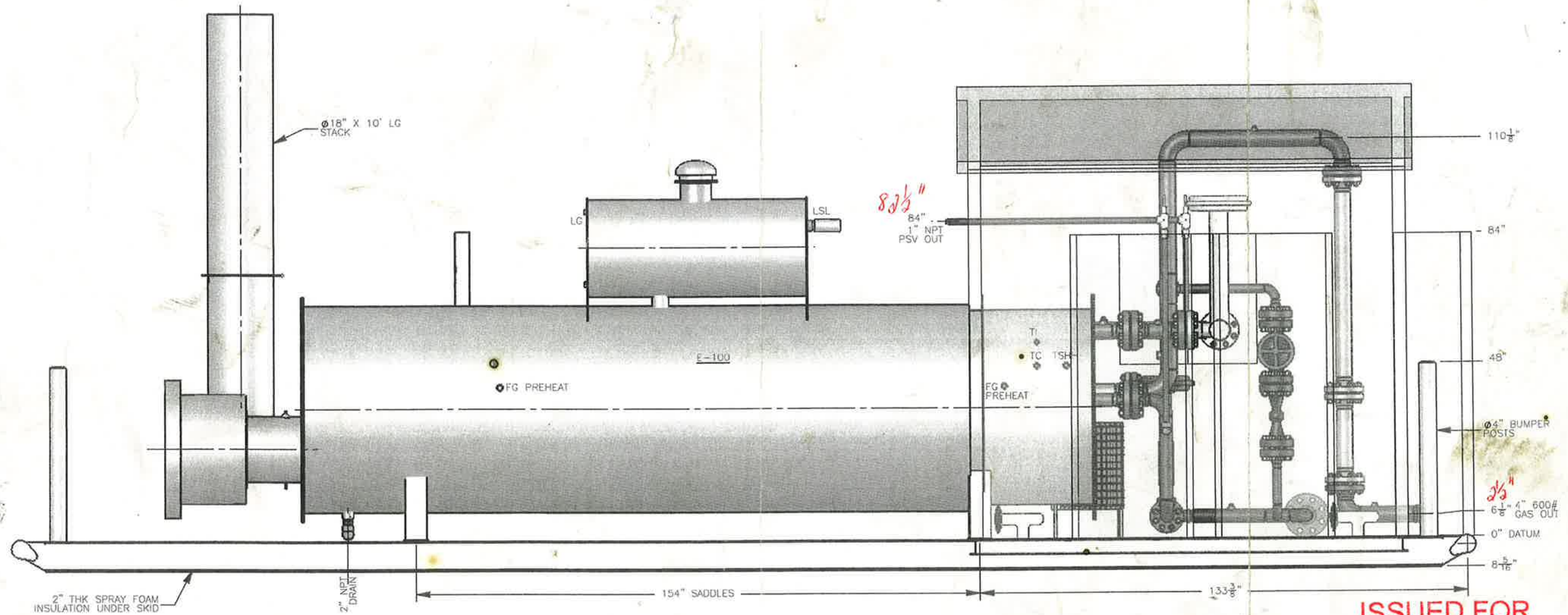
Init. *[Signature]* Date 8 Feb 07



18" OD FIRETUBE ASSEMBLY

DWG NO:	01.24:07	BY:	DJG	DATE:	01.19.07	Customer:	CANADIAN FOREST OIL	Work Order No:	1801
DWN BY:		CHK:	<i>[Signature]</i>	DATE:	02/12/07	DWG NO:	984E07-FT	REV:	0
ENG APP:		QC APP:	<i>[Signature]</i>	DATE:	02/12/07			SHT:	1/1

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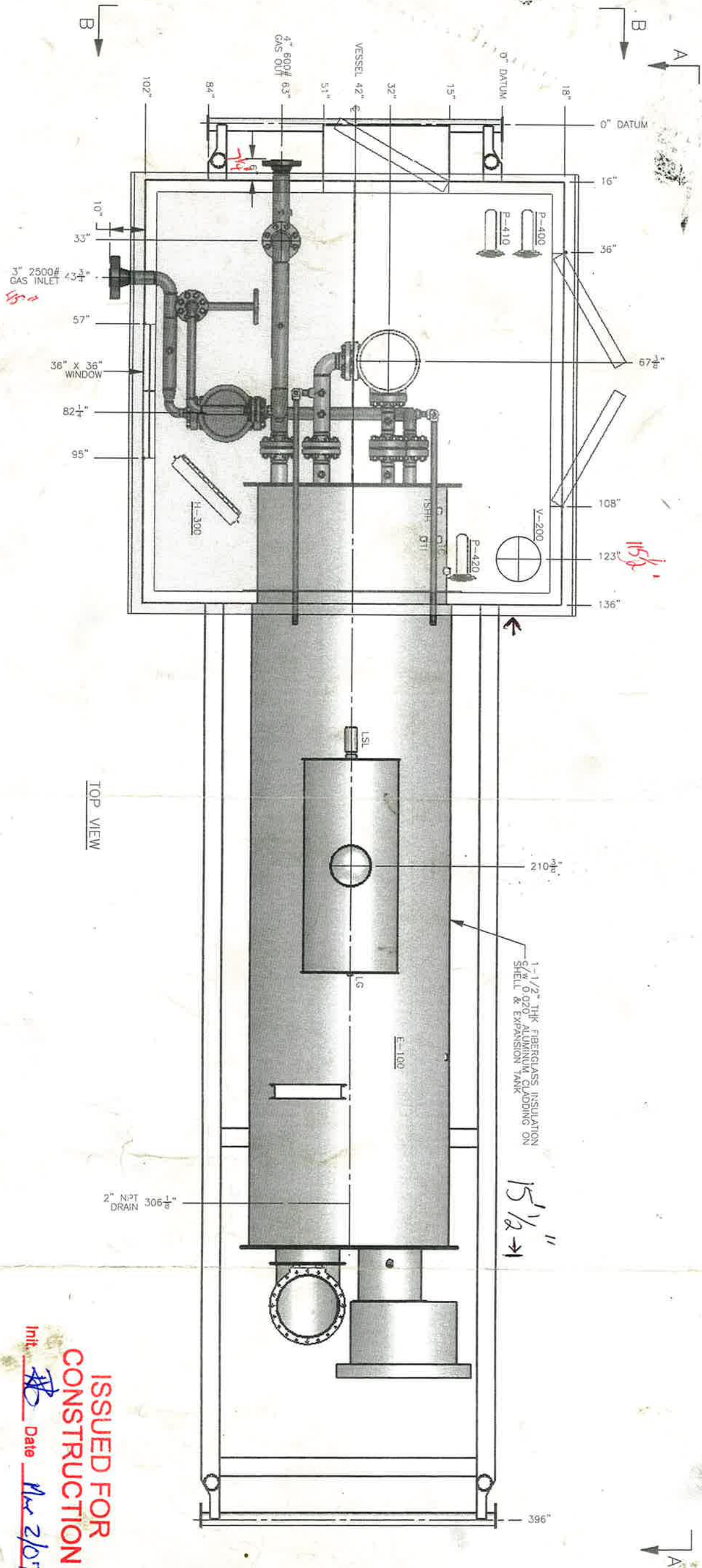


ELEVATION VIEW 'A-A'

ISSUED FOR CONSTRUCTION

Init. RB Date Mar 2/07

		54" OD X 18'-0" LG LINEHEATER GENERAL ARRANGEMENT	
		Customer: CANADIAN FOREST OIL	Work Order No: 1801
BY DWN	DATE 01.18.07	DWG NO: 984B07	REV 0
CHK CJG	DATE 02/02/07		SHT 2/3
ENG APP QC APP	DATE 05 2007		



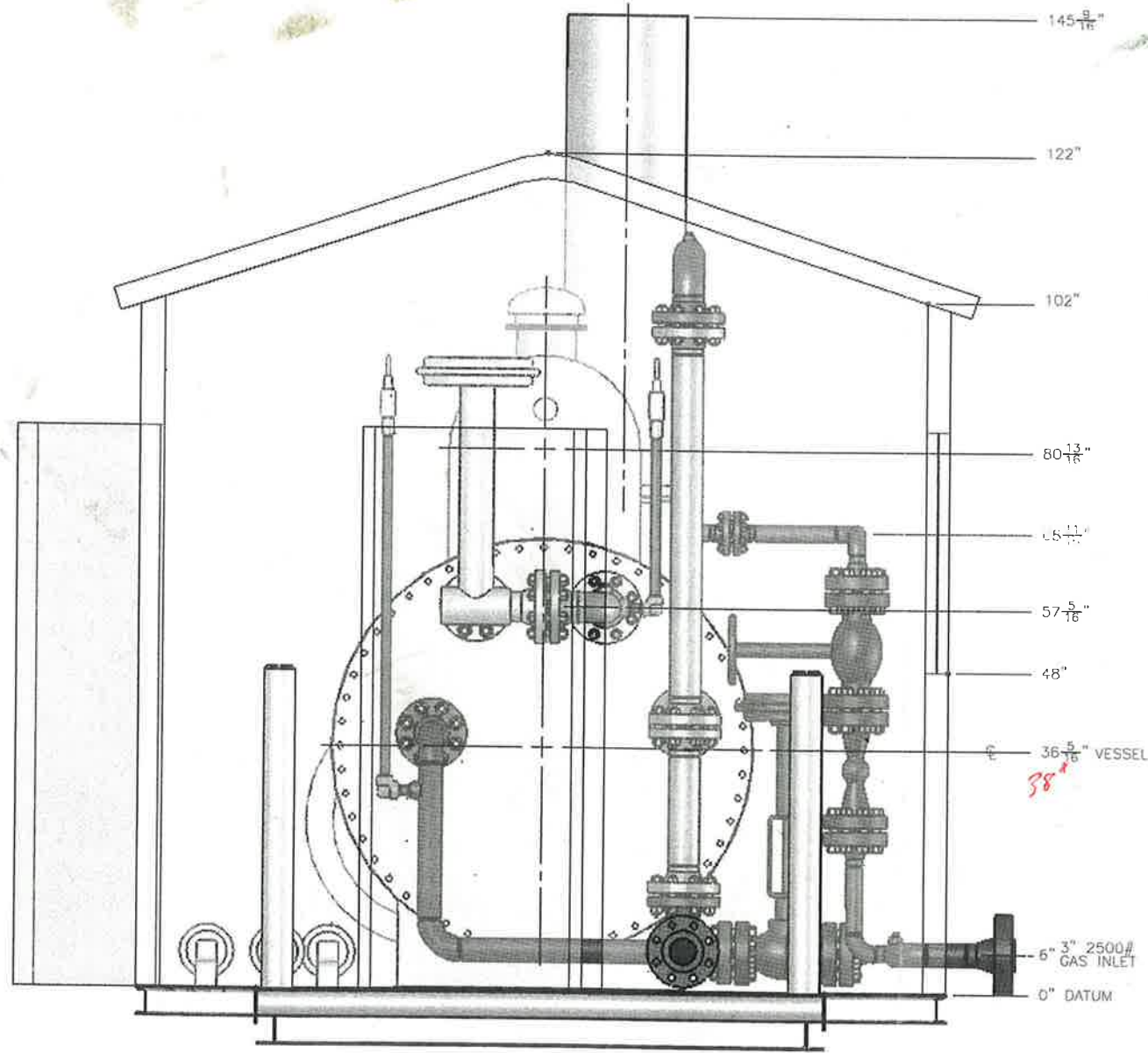
TOP VIEW

ISSUED FOR CONSTRUCTION
 Init. *[Signature]* Date *Mar 2/07*

REV	DESCRIPTION	DWG BY	DATE
0	ISSUED FOR CONSTRUCTION	DJC	01.24.07

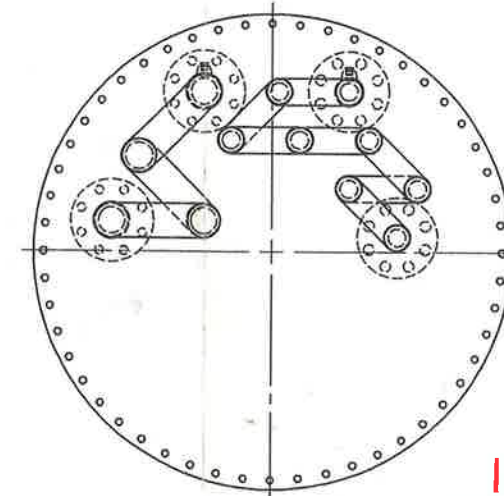
		54" OD X 18'-0" LG LINEHEATER GENERAL ARRANGEMENT	
BY	DATE	Customer:	Work Order No:
DWN	DJC 01.18.07	CANADIAN FOREST OIL	1501
CHK	02/02/07		REV
ENG APP			0
QC APP	05/05/07		SHT
			1/3

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ELEVATION VIEW 'B-B'

BILL OF MATERIALS				
ITEM	QTY	DESCRIPTION	MATERIAL	PART NO
1	1	1/8" X 11 3/4" OD BAU GASKET	-	-
2	2	1/8" X 21 1/2" OD BAU GASKET	-	-
3	2	1/8" X 62 1/4" OD X 53 1/2" ID BAU GASKET	-	-
4	8	5/8" X 4 1/4" STUDS	SA-193-B7	B7ST0.625X4.25
5	40	7/8" X 5 3/4" STUDS	SA-193-B7	B7ST0.875X5.75
6	24	1 1/8" X 6 3/4" STUDS	SA-193-B7	B7ST1.125X6.75
7	40	1" X 6 3/4" STUDS	SA-193-B7	B7ST1X6.75
8	5	2" 2500# R-26 GASKET	304SS	GAS-R26
9	3	3" 1500# R-35 GASKET	304SS	GAS-R35
10	1	2" 600# FLEX GASKET	304SS	GAS2-3/4/600304
11	5	4" 600# FLEX GASKET	304SS	GAS4-600304
12	1	8" JAYCO, 16oz PRESSURE, 4oz VACUUM THIEF HATCH	-	I-JTH8
13	16	5/8" NUT	SA-194-2H	NUT.625-2H
14	80	7/8" NUT	SA-194-2H	NUT.875-2H
15	80	1" NUT	SA-194-2H	NUT1-2H
16	48	1 1/8" NUT	SA-194-2H	NUT1.125-2H



COIL LAYOUT

ISSUED FOR CONSTRUCTION

Init. JB Date Mar 2/07

		54" OD X 18'-0" LG LINEHEATER GENERAL ARRANGEMENT	
		Customer: CANADIAN FOREST OIL	Work Order No: 1807
DWN	BY: DJG	DATE: 01.18.07	DWG NO: 984B07
CHK	[Signature]		REV: 0
ENG APP: [Signature]	DATE: FEB 05 2007		SHT: 3/3
QC APP: [Signature]			

COIL DESIGN DATA:

1000# RTJ SCH 100, INDIRECT PREHEAT COIL
 WMP: 3375 PSIG @ 200°F, 8-PASS
 S/N: S-2354 CRN: P4407.213, M
 4" 800# RF SCH 160, INDIRECT REHEAT COIL
 WMP: 1350 PSIG @ 200°F, 4-PASS
 S/N: S-2353 CRN: P4417.213, M

E-100 LINEHEATER

SIZE: 54" OD X 18'-0" LG
 RATING: 1.5 MMBTU/HR
 MFG: SILVERADO OILFIELD VENTURES LTD.
 LINEHEATER S/N: S-2355k

V-200 FUEL GAS SCRUBBER

SIZE: 12 3/4" OD X 3'-0" S/S
 WAMP: 720 PSIG @ 100°F
 MFG: SILVERADO OILFIELD VENTURES LTD.
 S/N: _____
 CRN: T0849.213

H-300

MODEL: CATADYNE
 SIZE: 24" X 24"
 MFG: CIS-CAN
 EXPLOSION PROOF
 VENTHOOD

P-400 INJECTION PUMP

MAX. DISCHARGE PRESS: 1500 PSI
 MAX. SUPPLY PRESS: 35 PSI
 MODEL #: 5100 SERIES
 MFG: CYS CONTROLS LTD.
 c/w 3/8" PLUNGER
 S/N: _____

P-410 INJECTION PUMP

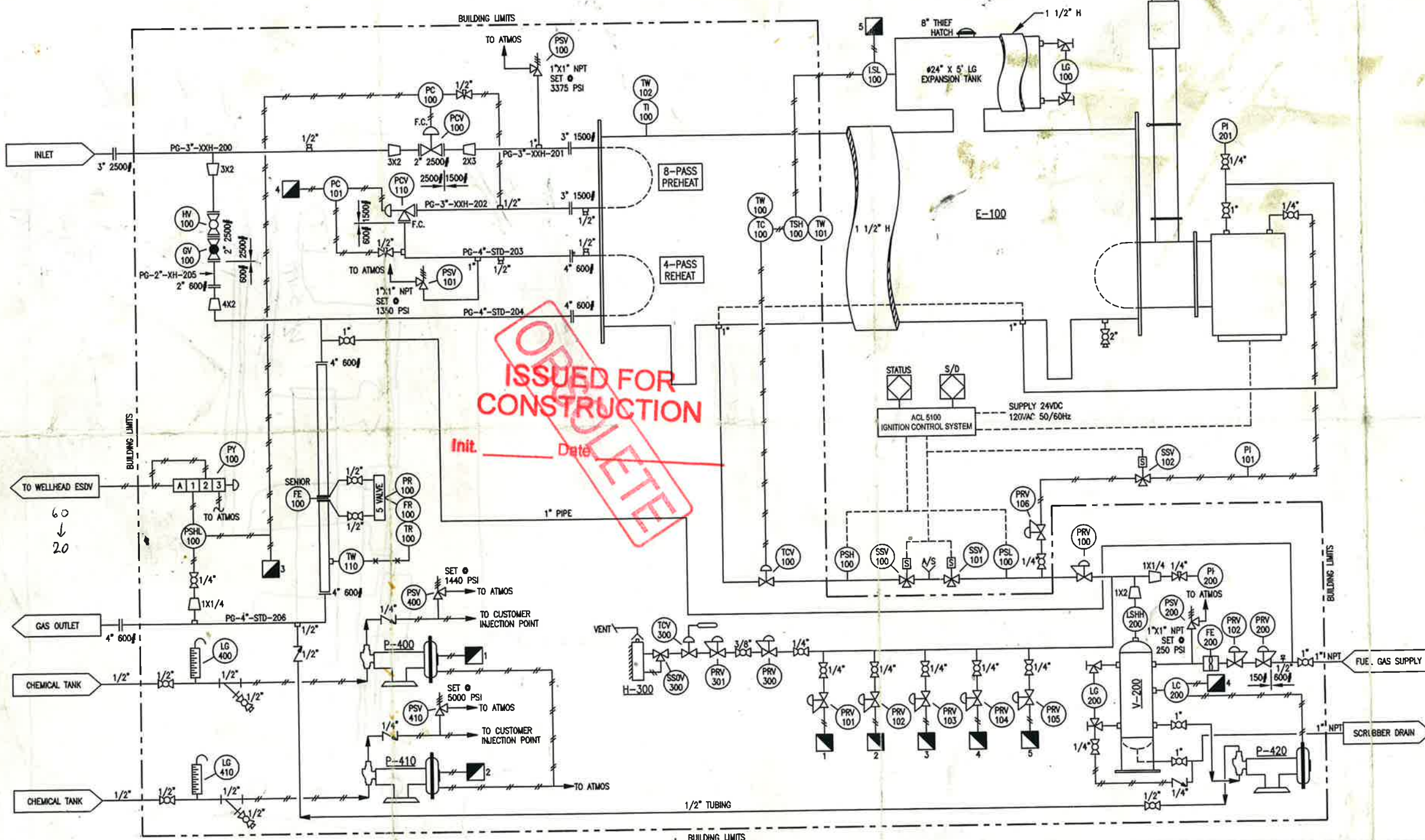
MAX. DISCHARGE PRESS: 5000 PSI
 MAX. SUPPLY PRESS: 35 PSI
 MODEL #: 5000 SERIES
 MFG: TEXTSTEAM
 c/w 1/2" PLUNGER
 S/N: _____

P-420 INJECTION PUMP

MAX. DISCHARGE PRESS: 1500 PSI
 MAX. SUPPLY PRESS: 35 PSI
 MODEL #: 5000 SERIES
 MFG: TEXTSTEAM
 c/w 1/2" PLUNGER
 S/N: _____

GENERAL NOTES:

1. COILS ARE NOT SHOWN FOR CLARITY
2. ALL INSTRUMENTS ARE SUITABLE FOR SWEET SERVICE.
3. FUEL GAS PIPING: 1" S/BO THD, SA-106B w/ 2000# FITTINGS.
4. INSTRUMENTATION: 3/8" 304S.S. WELDED TUBING w/ C.S. SWAGelok FITTINGS.
5. 1 1/2" THK FIBERGLASS INSULATION c/w ALUMINUM CLADDING CM HEATER AND EXPANSION TANK SHELLS.
6. BURNER SYSTEM ARE B149.3 COMPATIBLE.
7. 2" THK SPRAY FOAM INSULATION UNDER SKID.



BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	PO#
V-200	1	12-3/4" OD X 3' S/S, 720 PSIG FUEL GAS SCRUBBER c/w 1830 (SMP-200)	
H-300	1	CATADYNE HEATER, 24" X 24" c/w VENTHOOD, EXPLOSION PROOF, 12V WRE TO CLASS 1 DIV II	
P-400	1	CYS 5100 SERIES INJECTION PUMP c/w 3/8" PLUNGER	
P-410/420	2	TEXTSTEAM 5000 SERIES INJECTION PUMP c/w 1/2" PLUNGER	
FE-100	1	4" 600# RF SR METER RUN, SWEET, 2000 EDITION, 85" LG	
FE-200	1	ROOTS GAS METER 1500#	
FR/PR/TR-100	1	BARTON 3 PEN CHART RECORDER, 100" WC X 2500# STATIC X 150PF, BATTERY OPERATED CLOCK, 5 VALVE S.S. MANIFOLD	
LC-200	1	NORRSEAL EYS, 2" NPT, BACK MOUNT, SNAP ACTING, PVC DISPLACER	
LG-100/200	2	RED LINE SITE GLASS c/w (2) VALVES	
LG-400/410	2	DANIEL DRUM GAUGE, TRANSPARENT, 48" VISIBLE	
LSL-100	1	SOR ES-1530 ELECTRIC SHUTDOWN CONTROLLER, 2" NPT	
PC-100	1	FISHER 4150, REVERSE ACTING, 0-3000 PSI BOURDON TUBE	
PC-101	1	FISHER 4150, REVERSE ACTING, 0-1500 PSI BOURDON TUBE	
PI-101	1	0-30 PSI 1/4" NPT, 2 1/2" DIAL, 4" FACE, DUAL SCALE, BTM MOUNT, LG FILLED	
PI-200/201	2	0-300 PSI 1/4" NPT, 2 1/2" DIAL, 4" FACE, DUAL SCALE, BTM MOUNT, LG FILLED	
PCV-100	1	2" 2500# RTJ FISHER 'D' BODY c/w FISHER 867 SIZE 45 ACTUATOR	
PCV-110	1	WILLIS ANGLE CHOKE 3" 1500# RTJ INLET X 4" 600# RF, CERAMIC TRIM, STYLE C c/w FISHER 656-60 ACTUATOR, 6-30 PSI SIGNAL, F.C.	
PSH-100	1	HIGH PRESSURE SWITCH, SET AT 50 PSI	
PSL-100	1	LOW PRESSURE SWITCH, SET AT 3 PSI	
PSHL-100	1	FISHER 4680 PRESSURE PILOT, SET AT _____ PSI LOW/_____ PSI HIGH	
PRV-100/101	2	FISHER 627, 1" NPT, 35-80 PSI RANGE, 1500 PSI BODY, NACE	
PRV-102	1	FISHER 627, 1" NPT, 120-550 PSI RANGE, 1500 PSI BODY, NACE	
PRV-101-106	6	FISHER 67CFR, 1/4" NPT, 0-80 PSI RANGE, SWEET	
PRV-200	1	FISHER 630, 1" NPT, 550-1440 PSI RANGE, 1500 PSI BODY, NACE	
PRV-300	1	FISHER 912 LOW PRESSURE REGULATOR (c/w HEATER)	
PRV-301	1	MAXITROL APPLIANCE REGULATOR (c/w HEATER)	
PSV-100	1	TAYLOR B200, 1" NPT, 'E' ORIFICE, SET @ 3375 PSIG	
PSV-101	1	TAYLOR B200, 1" NPT, 'E' ORIFICE, SET @ 1350 PSIG	
PSV-200	1	TAYLOR B200, 1" NPT, 'E' ORIFICE, SET @ 250 PSIG	
PSV-400	1	NUPRO PUMP RELIEF VALVE, 1/4" NPT, SET @ 1440 PSIG	
PSV-410	1	NUPRO PUMP RELIEF VALVE, 1/4" NPT, SET @ 5000 PSIG	
PY-100	1	AMOT 4057-CP PRESSURE SWITCH, MANUAL LATCHING	
SOV-102	1	ASCO 3 WAY 24V SOLENOID VALVE, MODEL#: EFB3202200-24	
SSOV-300	1	100% SAFETY SHUT-OFF VALVE, 3/8" NPT c/w THERMOCOUPLE (c/w HEATER)	
SSV-100	1	CCS-6900-GZE HIGH PRESSURE SHUTOFF SOLENOID VALVE	
SSV-101	1	CCS-6900-GZE LOW PRESSURE SHUTOFF SOLENOID VALVE	
TC-100	1	KIMRAY HT-12, 3/4" NPT	
TCV-100	1	KIMRAY 112-SMT, 1" MNPT, AIR TO OPEN/F.C.	
TCV-300	1	TEMPERATURE CONTROL VALVE, 0 TO 4°C c/w CAPILLARY	
TI-100	1	0-250°F, 3" FACE, 3/4" NPT, 12" STEM, DUAL SCALE, BACK MOUNT	
TSH-100	1	KIMRAY T-12M, 3/4" NPT	
TW-100-102	3	3/4" NPT X 1/2" NPT X 12" LG THERMOWELL, 304SS	
TW-110	1	3/4" NPT X 1/2" NPT X 2" LG THERMOWELL, 304SS	
	1	ZIRCO ACL 5100 BURNER SYSTEM, 24V	
	1	ZIRCO 30/18-18A(2) BURNER, LEFT HAND OFFSET, NO BOLT PATTERN	
HV-100	1	2" 2500# RTJ BALL VALVE, S.S. TRIM	
GV-100	1	2" 2500# RTJ MANUAL GLOBE VALVE, S.S. TRIM	
	11	1/4" NPT 2000# BAR STOCK BALL VALVE, S.S. TRIM	
	2	3/8" NPT MANUAL SHUT-OFF BALL VALVE (c/w HEATER)	
	7	1/2" NPT 2000# BAR STOCK BALL VALVE, S.S. TRIM	
	5	1" NPT 2000# BAR STOCK BALL VALVE, S.S. TRIM	
	1	2" NPT 2000# BAR STOCK BALL VALVE, S.S. TRIM	
	3	1/4" NPT INLINE CHECK VALVE, S.S. TRIM	
	1	1/4" NPT 6000# MOF NEEDLE VALVE, S.S. TRIM	
	1	1/2" NPT INLINE CHECK VALVE, S.S. TRIM	
	2	1/2" NPT 6000# MOF NEEDLE VALVE, S.S. TRIM	
	2	1/2" NPT Y-STRAINERS	
	1	10' X 10' X 8'-6" HIGH GABLE SELF FRAMER BUILDING c/w 22 GAUGE GALVANIZED EXTERIOR, R-12 FIBERGLASS INSULATION IN WALLS & ROOF c/w 4 MIL VAPOR BARRIER, 24 GAUGE FLUTED ALUMINUM INTERIOR	
	3	(1) 3' X 7' SINGLE & (1) DOUBLE INSULATED DOOR c/w MCG WINDOW, PANIC HARDWARE, CHECK CHAIN, AND WEATHER STRIPPING	
	2	12" X 12" LOUVERED VENTS c/w SLIDE AND SCREEN	
	1	36" X 36" DOUBLE GLAZED SLIDING WINDOW c/w SCREEN	

XXX-XXX-XXX-XXX-XXX	LINE SCHEDULE
---	LINE SIZE
---	LINE CLASS
---	LINE NUMBER
---	LINE SERVICE

DESCRIPTION	DRAWING NO.	REV	DESCRIPTION	DATE	DWN	CHK	APP
		0	ISSUED FOR CONSTRUCTION	01.24.07	DJG		

BY: DWN DJG
 DATE: 12.20.06
 CHK: [Signature]
 APP: [Signature] FEB 05 2007
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SILVERADO
 Certified Energy Equipment
 P.O. Box 265
 Red Deer, Alberta T4N 5E8
 Ph: (403) 340-1900
 Fax: (403) 341-6162

54" OD X 18'-0" LG 1.5 MMBTU/HR LINEHEATER P & ID (SWEET)	
CUSTOMER	CANADIAN FOREST OILFIELD
Work Order No:	REV DWG NO
[Signature]	0 83007