

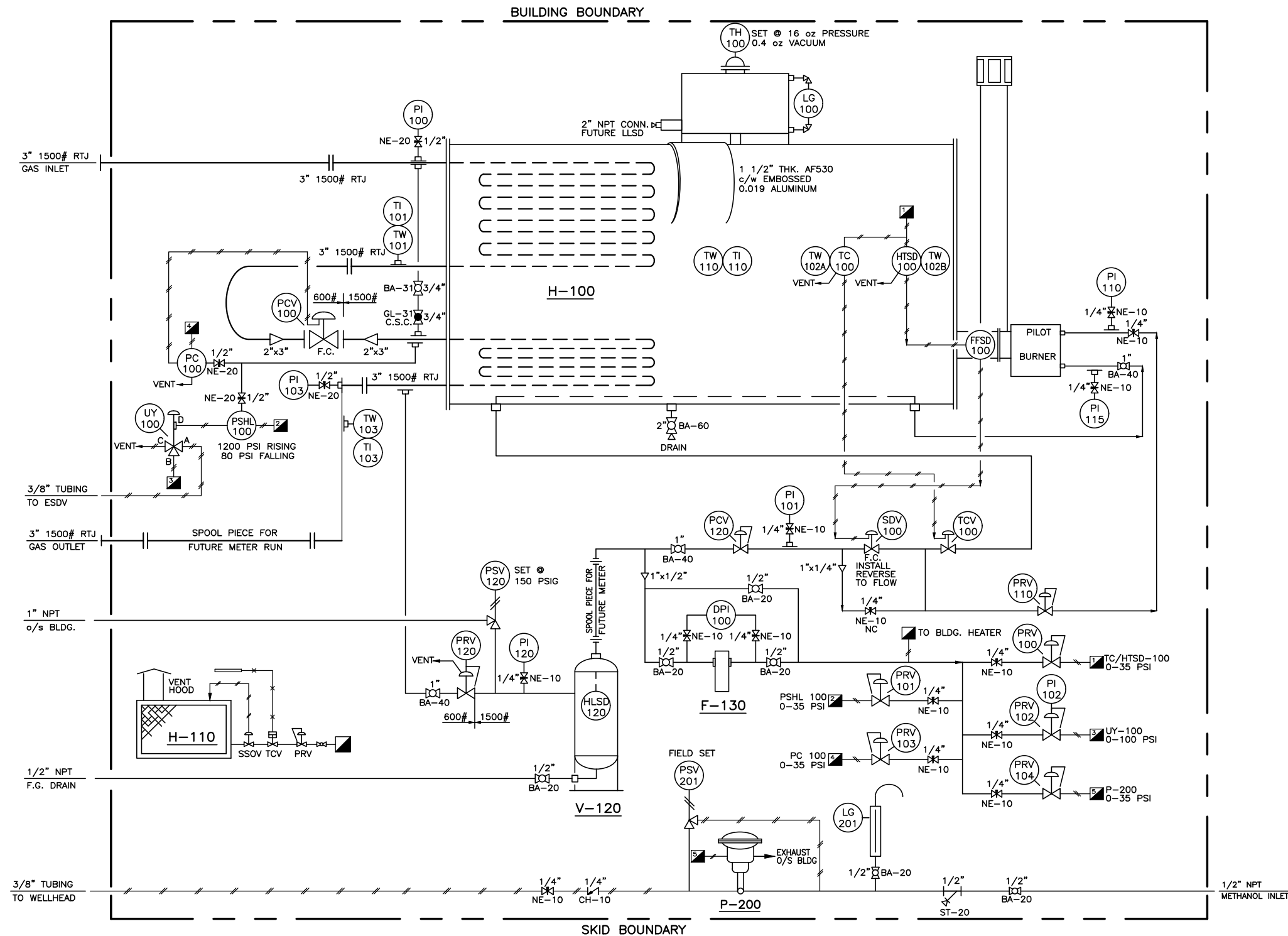
H-110
BUILDING HEATER
 24,000 BTU/HR CATADYNE HEATER
 c/w REGULATOR, THERMOSTAT, S.S.O.V.,
 PROTECTION GRILL, 12 VDC START-UP,
 VENT HOOD AND 30' CABLE (NAT. GAS)

V-120
FUEL GAS SCRUBBER
 8 5/8" OD x 36" S/S x
 285 PSIG x -20/150 °F x 0.125" C.A.

F-130
FILTER
 HEADLINE 370-A HOUSING
 c/w 25-178-70C ELEMENT

H-100
INLET LINE HEATER
 48" OD x 20'-0" LG (1.50 MM BTU/HR) c/w
 3" 1500# RTJ (10 PASSES) 3" SCH 160 PREHEAT COIL
 3375 PSI MAWP @ 200 °F
 3" 1500# RTJ (6 PASSES) 3" SCH 160 REHEAT COIL
 3375 PSI MAWP @ 200 °F

P-200
METHANOL PUMP
 CVS MODEL CVS-51-38-MVH PACKING
 c/w 3/8" PLUNGER & MICRO VALVE,
 6000 PSIG MAX DISCHARGE



TAG #s	QTY	DESCRIPTION
DPI 100	1	0-60 psi, 3" face, dual scale, L.F., 1/4" FNPT S.M., Wika 700.01
FFSD 100	1	Kimray HT-12-PG pneumatic pilot guard, 5-30 psi supply, direct acting, steel body, tapped vent
HLSD 120	1	Loures and Gauges LG12 2" NPT internal high level shutdown valve
HTSD 100	1	Kimray T-12 DA pneumatic temperature controller, 5-30 psi supply, indirect acting, cast iron body, tapped vent
LG 100	1	Essex 84A 1/2" gauge valves c/w Redline glass
LG 201	1	Loures and Gauges SG48BC calibrated rate/level gauge
PC 100	1	Fisher 4150 K pressure controller, direct acting, 0-1500 psi range, 316 SS bourdon tube, 6-30 psi output
PCV 100	1	2" 1500# RTJ Fisher 667-D body control valve, Nace, 3/4" trim, c/w size 46 actuator, 17-30 psi bench set, Fail Closed
PCV 120	1	1" NPT Fisher 627 regulator, D.I. body, 5-20 psi range, 1/4" Aluminum trim
PI 100	1	0-5000 psi, 4" face, dual scale, S.S., L.F., 1/2" L.M., Nuova Fima 18/3A-425
PI 103	1	0-1500 psi, 4" face, dual scale, S.S., L.F., 1/2" L.M., Nuova Fima 18/3A-421
PI 101/15	2	0-30 psi, 2 1/2" face, dual scale, Dry, 1/4" L.M., Nuova Fima MI-63-10
PI 102	1	0-200 psi, 2 1/2" face, dual scale, Dry, 1/4" L.M., Nuova Fima MI-63-14
PI 110	1	0-15 psi, 2 1/2" face, dual scale, Dry, 1/4" L.M., Nuova Fima MI-63-09
PI 120	1	0-200 psi, 2 1/2" face, dual scale, D.F., 1/4" L.M., Nuova Fima MI-63-14
PRV 100/101/103	3	1/4" NPT Fisher 67CFR regulator, 0-35 psi range
PRV 102	1	1/4" NPT Fisher 67CFR regulator, 0-125 psi range
PRV 104/110	2	1/4" NPT Fisher 67CFR regulator, 0-35 psi range
PRV 120	1	1" NPT Fisher 627 regulator, steel body, 70-150 psi range, 1/8" S.S. trim, nylon disk
PSHL 100	1	Fisher 4660 Hi-Lo pressure Pilot, 45-1455 psi range, 316 SS bourdon tube, set @ 1200 psig rising, 80 psig falling
PSV 120	1	1" x 1" NPT Wellmark W9501 RS relief valve set @ 150 psig, Nace primary zone
PSV 200	1	1/4" MNPT x 1/4" Swagelok Nupro SS-4R3A1-F relief valve c/w 177-R3A-K1-F spring, 3000-4000 psi range
SDV 100	1	1" NPT Kimray 112-SMT-DAB motor valve, P.O., cast iron body, 125 psi MAWP
TC 100	1	Kimray T-12 DA pneumatic temperature controller, 5-30 psi supply, indirect acting, cast iron body, tapped vent
TCV 100	1	1" NPT Kimray 112-SMT-DAB motor valve, P.O., cast iron body, 125 psi MAWP
TH 100	1	Jayco Thief Hatch model JT-8, std. 16oz press. 0.4 oz. Vacuum c/w gasket sweet
TI 110	1	0 to 250° F, dual scale, 1/2" NPT C.B.M., bimetallic, 3" dial, 4" stem, Gaugeteck GT3
TI 101/103	2	0 to 250° F, dual scale, 1/2" NPT C.B.M., bimetallic, 3" dial, 2 1/2" stem, Gaugeteck GT3
TW 110	1	1/2" x 3/4" x 4" lg 316 SS thermowell
TW 101/103	2	1/2" x 3/4" x 2 1/2" lg 316 SS thermowell
TW 102 A/B	2	Kimray SS12 steel separable socket, 1" MNPT x 1/2" FNPT x 12" lg
UY 100	1	1/4" NPT Fisher 167A switching valve c/w 18-30 psi spring range
BA 60	1	2" NPT ball valve, Dynaquip DY-VME3-A9 65, 2000# WOG
BA 40	3	1" NPT ball valve, Fortune 413-TN, 2000# WOG, Nace
BA 31	1	3/4" NPT ball valve, Nutron T3-R07S40-B, 4000# WOG
BA 20	6	1/2" NPT ball valve, Dynaquip DY-VME3-A9 04, 2000# WOG
CH 10	1	1/4" NPT piston check valve, Nupro SS-CH54-1, 6000 psi MAWP
GL 31	1	3/4" NPT globe valve, Navco GL-R20R15A8, Class 1500#, Std
NE 20	4	1/2" NPT needle valve, Century CM2-3-F44T-B-V
NE 10	14	1/4" NPT needle valve, Century CM2-3-F22T-B-V
ST 20	1	1/2" NPT Y-strainer, Alberta Strainer, YS-800, Nace
H 110	1	24,000 BTU/HR Catadyne heater, c/w regulator, thermostat, SSOV, protection grill, 12 VDC start, and 30' of cables (natural gas)
F 130	1	Headline 370-A filter housing, 1/2" NPT connection c/w 25-178-70C filter element
P 200	1	CVS 51-38-MVH chemical injection pump, 3/8" plunger and micro valve, hard packing, 6000 psig, max discharge.

NOTES:
 - ALL INSTR. TUBING TO BE 3/8" DIA. 304 SS c/w CADMIUM PLATED CARBON STEEL SWAGelok TUBE FITTINGS.
 - ALL PROCESS TUBING TO BE 3/8" DIA. 304 SS c/w 316 SS SWAGelok TUBE FITTINGS.

(2) REQ'D
 TIME CARD
 C-2200-PP

DWG. NO.	REFERENCE DRAWINGS	REV	DESCRIPTION	DATE	BY
		Δ	ADDED SPOOL PIECE FOR FUTURE METER RUN ON GAS OUTLET & FUTURE METER FOR F.G. OUTLET	04/07/04	J.J.
		Δ	REVISED AS PER BULT	05/21/04	J.J.



CUSTOMER: ENCANA RESOURCES		LOCATION: STOCK
c/o TUNDRA ENGINEERING LTD.		
MECHANICAL FLOW DIAGRAM		
1.5 MM BTU/HR LINE HEATER SKID PACKAGE (SWEET)		
DATE: 03/15/04	DRN BY: J.J.	SCALE: NTS
CHKD BY:	APPRD BY:	DWG NO: C-2200-B
REV: 2		