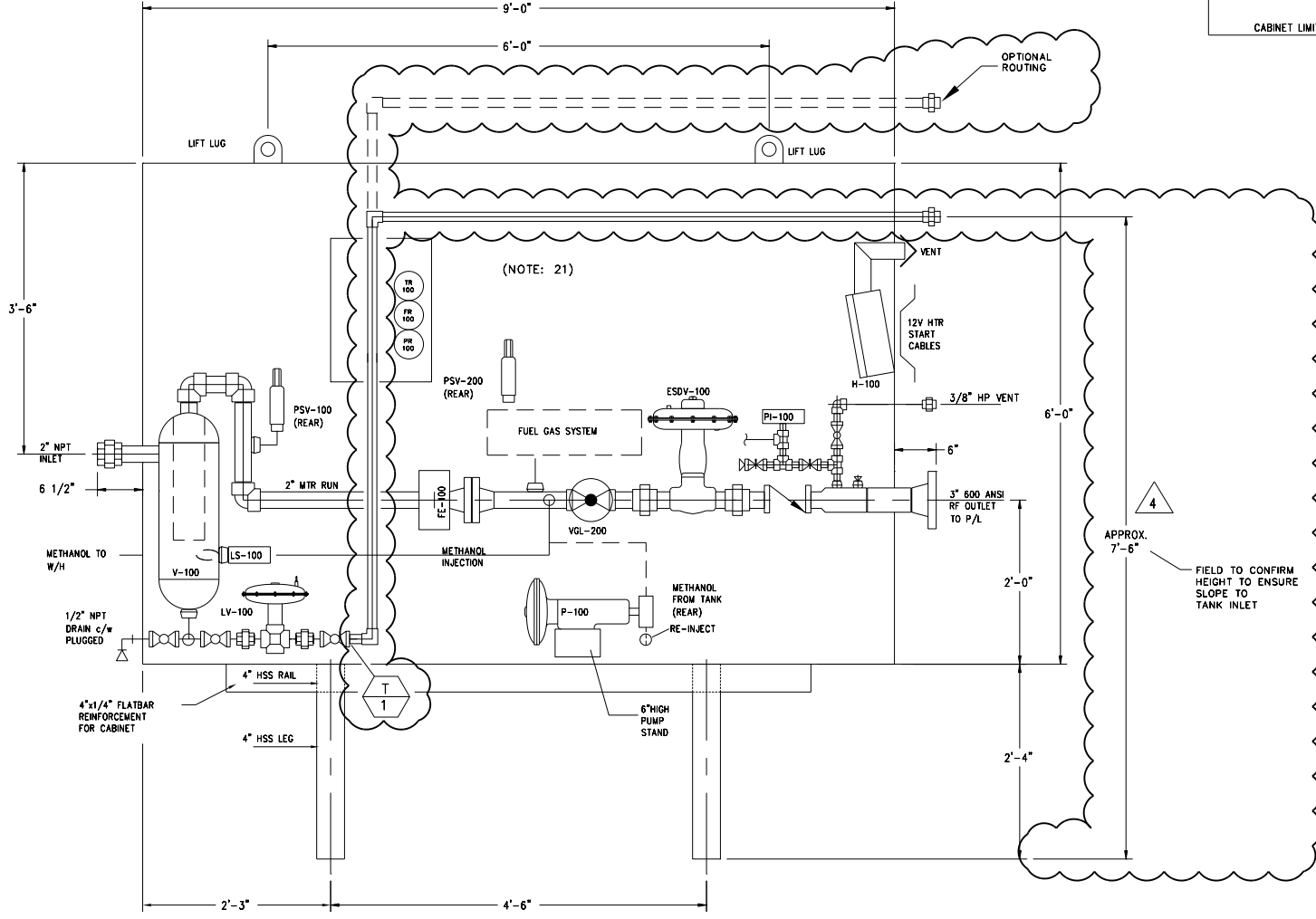


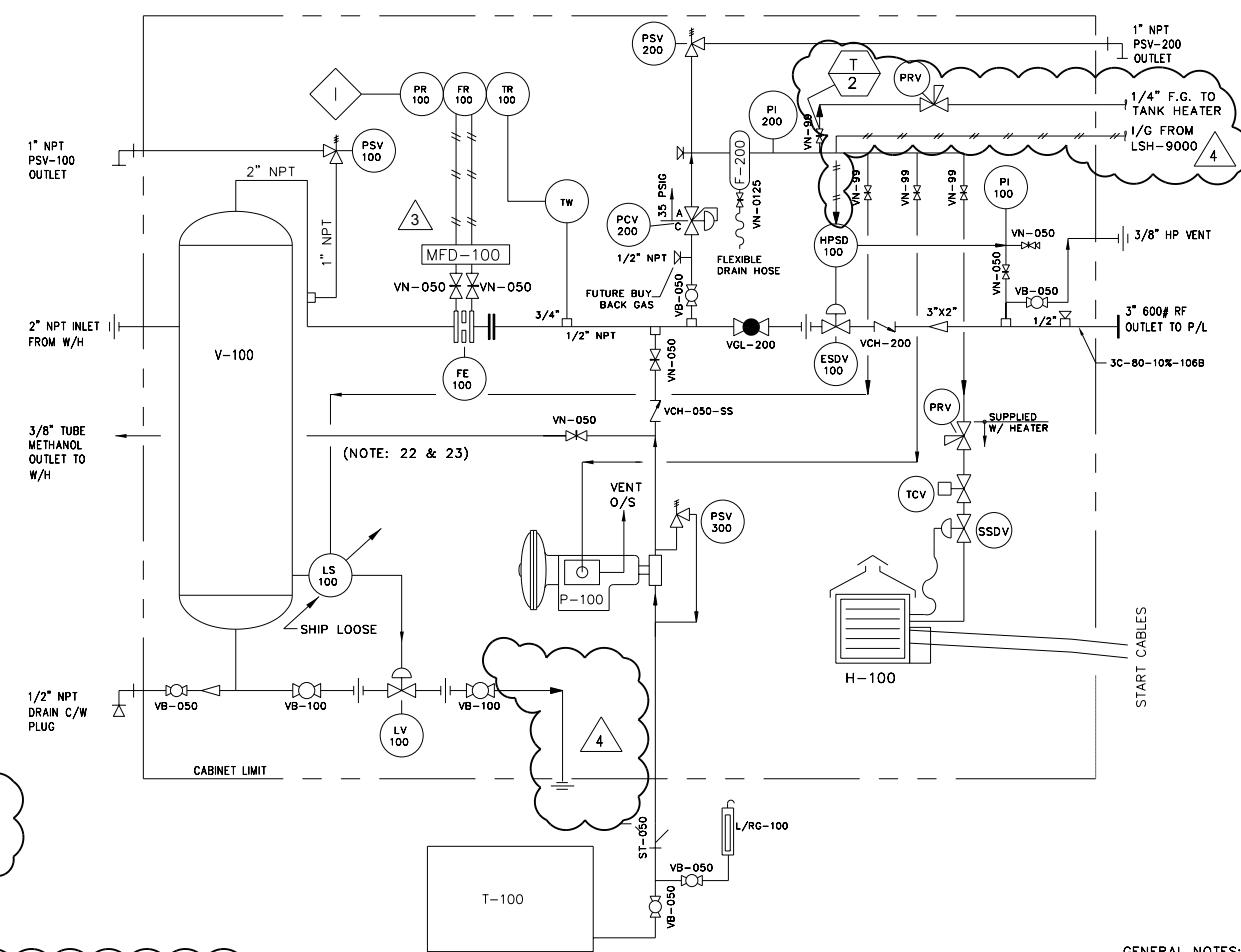
PLAN VIEW



ELEVATION VIEW

V-100
CYCLONE SEPARATOR
 SIZE: 8 5/8" O.D x 1'-8" 5/5" 2-PHASE
 D.P.: 1480 PSIG @ 100°F
 C.A.: 0.0625"

H-100
CATADYNE BUILDING HEATER
 6000 BTU/HR



FLOW DIAGRAM

TAG	QTY	MAKE	DESCRIPTION
ESDV-100	1	Kimray	2" NPT Model 2200 SMT-PO motor valve, 1" port, 35# signal
F-200	1	Bolston	Filter, 1/4" NPT Model C8002N-0A2-DX c/w 100-12-DX element
FE-100	1	Northstar (Camco)	JUNIOR Type Meter Run, NPS 2" Sch. 80, 600 ANSI, built to AGA 3C specs, beta 0.7, c/w seal ring & 1 orifice plate (TBA Bare), 10% radiography, 1/2", 1/2" and 3/4" 3000# FS connections, Straightening vanes
PR/FR/TR-TW	1	Barton	Reconditioned, Barton Model # 202R THREE Pan chart recorder, c/w 24 hour/7 day clock (0-1000 psig) static element, 0-100" W.C. & 0-150 deg F Temperature, c/w SS thermowell 5/4" NPT x 1.5" Long
HPSD-100	1	Amot	High pressure pilot model 4023E, set @ 4960 Kpa rising
H-100	1	Catadyne	Building Heater, 6000 BTU/hr catalytic c/w safety shut down valve, regulator, thermostat, vent hood and 12VDC starter
L/RG-100	1	Kenca	Level/Rote Gauge, Model P5700-52-48-CTM (No Test Valve)
LS-100	1	SOR	Level Controller, 2" NPT Model 1530B-G2A-C-J0-PS, 0-30 psig, Snap output, 1500 psig MWP.
LV-100	1	Kimray	Dump Valve, 1" NPT Model 1400-SMT-PO-1/8, 1/8" port, Fail Close Signal, Carbide Trim
MFD-100	1	Agco	Reconditioned 5-Valve CS Manifold, Model M6AVDC-4
P-100	1	Texsteam	Injection Pump, Model 5113 LP, 3/8" plunger, 1500 psig max discharge, 16.0 Gpd c/w Micro-Switch
PCV-200	1	Fisher	Regulator, 1/4" NPT Model 1301F, Brass Body, set at 35 psig, c/w tapped body
PI-100	1	Wiko	Pressure Indicator, 1/2" NPT x 4" dial liquid filled, dual scale (0-1500 psig)
PI-200	1	Wiko	Pressure Indicator, 1/4" NPT x 2.5" liquid filled, dual scale (0-100 psig) SS case, back mounted
PSV-100	1	Mercer	Threaded Relief Valve, 1" NPT x 1" NPT Model 9100-WCB, Set @ 1480 (Max 1500) psig, "D" ORIFICE
PSV-200	1	Mercer	Threaded Relief Valve, 1/2" NPT x 1" NPT Model 9100-WCB, Set @ 45 psig, "D" ORIFICE
PSV-300	1	Nupro	Methanol Relief Valve, 1/4" NPT, set @ 1440 psig, Model SS-4R3A5 EP O-ring, methanol service
ST-050	1	Mueller	Strainer, 1/2" NPT CI Body
T-100	1	Clemmer	Tank, 300 gallon, round c/w Fill & Vent connections
VB-050	5	WKM	Ball Valve, 1/2" NPT Regular Port, 2000 psig WOG
VB-100	2	WKM	Ball Valve, 1" NPT Regular Port, 2000 psig WOG
VCH-200	1	Novco	Check Valve, 2" NPT, 1500# WOG
VCH-050-SS	1	Nupro	Check Valve, 1/2" NPT, SS Body, SS-BCP2-1
VGL-200	1	DSI	Globe valve, 2" NPT, class 800
VN-0125	1	Zimco	Needle Valve, 1/8" NPT Brass, 200 psi Model 850-A22
VN-050	4	Agco	Needle Valve, 1/2" NPT, Model H7VIC-44Q MXF
VN-050	2	Century	Needle Valve, 1/2" NPT, Model CM2-2-M44T-B-A MXF
VN-99	4	Agco	Mini Valve, Model H5RDC-2 FXF

GENERAL NOTES:

- No of Units req'd: SEVENTEEN (17)
- Materials shown for one Unit only
- Welded piping to be: See Line Specs. on P&ID
- All Threaded piping to be: Up to & including 2" SA-106B Sch.80
- All Welded Fittings to be: See Line Specs. on P&ID
- All Forged Steel fittings to be: See Table below
- Unit to be designed / hydrotested as follows:

PIPING

SPEC.	SERVICE	DESIGN	NPT PIPING	F.S. FITTINGS	STRESS RELIEF	HYDROTEST @ ROOM TEMP.
A:	SWEET	100 PSIG @ 100° F	SEE LINE SPEC.	SA-105N, 3000#	SEE LINE SPEC.	150 PSIG
C:	SWEET	1480 PSIG @ 100° F	SEE LINE SPEC.	SA-105N, 3000#	SEE LINE SPEC.	2220 PSIG

* Use SA-350-LF2 for Low Temp F.S. Fittings & SA-333 for Low Temp. NPT Piping

VESSEL

TAG #	MAWP	HYDROTEST @ ROOM TEMP.	STRESS RELIEF
V-100	1480 PSIG @ 100° F	2220 PSIG	NO

- Unit to be commercially sandblasted to SSPC-SP-6 and shop-primed with: ONE (1) coat Lead Oxide
- Finish Paint: ONE (1) coat Industrial Enamel Taupe c/w flat black vessel & PCR Color Bands
- Interior Insulation: Doors, Walls, & Roof
Doors, Walls, & Roof: 1" thick spray-on urethane c/w fire-retardant coating
Floor: Removable 1" thick styrofoam (for floor drainage access)
- Radiography on Piping welding to be: See Line Specs on P&ID
- OPSCO standard pipe supports, as required.
- Unless specified otherwise, all projections beyond building wall to be: 6"
- Dimensions may change to reflect customer requests, layout changes, accessibility and non-conformity of OEM supplied components.
- Stress Relieving Details: See Line Specs on P&ID
- XP electrical hook-up of Catalytic Heaters: YES
- Other Electrical Work: NO
- All bleeding type of instruments with bleed ports (excluding most diaphragms, but including PCV-200 bonnet & Pump Diaphragm) to be vented to Cabinet edge
- Tubing Details:

SERVICE	SIZE	TUBE	WT	FITTINGS	FERRULES
UNDER 1600 PSIG	INSTR. 3/8" PROCESS 1/2"	SS	0.035" 0.049"	CPCS	ADVANCED BACK (CS/SS)

- Cabinet: Welded 14 gauge CS c/w doors, 1/4 turn handle Inlet/Outlet vents
- Do not Caulk around small tubing vents.
- Minimize tubing vent external projection but keep downward bend
- Attach Bench Test Certificate To All PSVs
- Total Package Weight: 1800 Lbs

ENCANA.

BURLINGTON G.P. 08-01
 08-01-049-14 W4M
 WELLSITE
 16-03-049-14 W4M
 1:12' 1020

EXCELSIOR ENGINEERING INC.
 V-100 INLET SEPARATOR
 GENERAL ARRANGEMENT & P&ID

BRUCE HOLDEN
 BH00760B

THIS DRAWING REPRESENTS PROPRIETARY INFORMATION AND SHOULD NOT BE DISTRIBUTED OR MODIFIED IN ANY MANNER THAT IS NOT IN THE BEST INTEREST OF ENCANA OR THE ORIGINAL AUTHOR.

ELECTRICAL: HOOKUP OF HEATER CABLES ONLY (CLASS 1 DIV.2)

DPH P.O. # 6198-D001

OPSCO STANDARD WELDED PIPELINE DESIGNATION SYSTEM
 OPTIONAL: LEAVE OUT UNLESS NEEDED

EXAMPLE: 6B - 40 - 10% - 106B - HT - OTHER NOT

LINE SIZE (NPS) A=150 D=900 B=300 E=1500 C=600
 ANS CLASS X-RAY MATERIAL SPEC. STRESS REL.

PIPE SCHEDULE

No.	DATE	REVISIONS	BY	APP	No.	DATE	REVISIONS	BY	APP	ENGINEERS RECORD	DATE
1	Oct 06, 2003	CUSTOMER COMMENTS INCORPORATED/ ISSUED FOR CONSTRUCTION	T.V.							DRAWN BY TOAN VAN CHECKED BY APPD. BY	Oct 02, 2003
2	Oct 17, 2003	CHANGES AS PER CUSTOMER COMMENTS/ RE-ISSUED FOR CONSTRUCTION	T.V.								
3	Oct 24, 2003	AS BUILT	T.V.							ISSUED TO SHOP	
4	Nov 18, 2004	MODIFIED FOR EXCELSIOR JOB#1020	TMD								



CLIENT	ENCANA CORPORATION C/O DPH ENGINEERING
PROJECT	METER UNIT TYPE "A" - MODIFIED # 1 (A-M1)
TITLE	FLOW & PIPING LAYOUT
Scale	1", 12"
JOB No.	JM-03-4005
DWG. No.	L-03-4005-2081
REV.	3