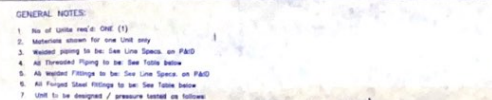


INLET SEPARATOR
SIZE: 48" ID x 12'-0" S/S 3-PHASE
O.P. 740 PSIG Incl. HYDROSTATIC PRESSURE @ 100°F
MAWP: 735 PSIG @ 100°F
C.A. 0.0625"

RUFFNECK BUILDING HEATER
MODEL XL-416-480/3/60-20 C/W THERMOSTAT

EXHAUST FAN
XP 120V, 1 PHASE, 12 AIR CH/H

HC TRANSFER PUMP
MODEL UNION DX-5, 1 HP 480/3/60,TEFC



FITTING AS PER B31-3						
SPEC.	SERVICE	DESIGN	NPT FITTING	F.S. FITTINGS	STRESS RELIEF	PROCEDURE TEST OR NOTA TEST
A	SWEET	250 PSIG @ 100° F	SEE LINE SPEC.	SA-100A, 3000#	SEE LINE SPEC.	478 PSIG (HYDROTEST)
B	SWEET	740 PSIG @ 100° F	SEE LINE SPEC.	SA-100A, 3000#	SEE LINE SPEC.	1110 PSIG (HYDROTEST)
C	SWEET	1400 PSIG @ 100° F	SEE LINE SPEC.	SA-100A, 3000#	SEE LINE SPEC.	2238 PSIG (HYDROTEST)
SC-101	SWEET	740 PSIG @ 100° F	SEE LINE SPEC.	SA-100A, 3000#	NO	1110 PSIG (HYDROTEST)
SC-102	SWEET	740 PSIG @ 100° F	SEE LINE SPEC.	SA-100A, 3000#	NO	1110 PSIG (HYDROTEST)

* Use SA-350-F1/2 for Low Temp F.S. Fittings & SA-333 for Low Temp NPS Piping

VESSEL AS PER API 650 DIV. 1			
TA: #	NAME	HYDROTEST @ ROOM TEMP	STRESS RELIEF
1041105	735 PSIG @ 100° F	1110 PSIG	NO

6. All blending type of instruments with bleed ports (INCLUDING despagner & regulator assemblies) to be installed to shut-down.

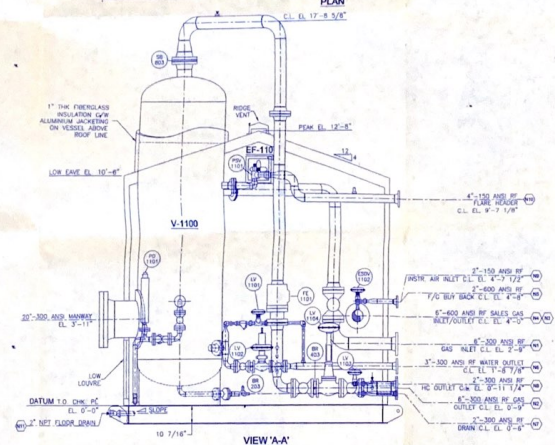
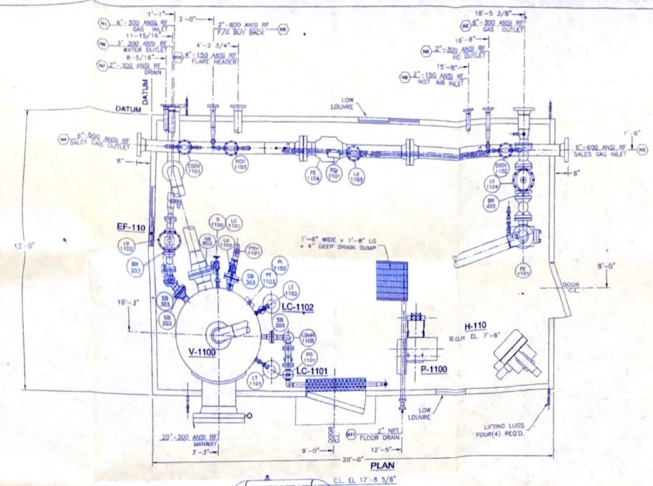
7. Telling details

SERVICE	SIZE	FLARE	WT	FITTINGS	TERMINALS
UNDER 800 PSIG	3/4" - 1 1/2"	NS	0.003"	CPVC	TRADITIONAL BUCK (55/50) 1/2"
UNDER 1800 PSIG	2"	SS	0.003"	CPVC	Adhesive BACK (55/50) 1/2"

Дресс

CLIENT	ENCANA CORPORATION c/o DPH ENGINEERING		
PROJECT	48" ID x 12'-0" S/S VERTICAL SEPARATOR PKG. (Q-110) CHOICE GAS PLANT LSD: 04-08-041-09 WAM		
TITLE	FLOW DIAGRAM		
DATE	409 Rev	JM-04-4248	SMC Rev F-04-4248-1171

IN



- GENERAL NOTES
1. No. of units will be ONE (1).
 2. Unit to be furnished complete to DPC-SP-6 and shop-grown with ONE (1) end Zinc Chromate.
 3. Finish Paint One (1) coat Industrial Enamel - House (one top coat).
 4. Uninsulated Piping, 2" Dia. and below, shall be insulated from underside of floor within building limits.
 5. Radiography in piping welding to be See Line Space on P&ID.
 6. OPGO standard pipe supports as required.
 7. Unless specified otherwise, all proportions beyond building will be 6".
 8. Dimensions may change to reflect customer requests. Report changes, accessibility and non-availability of OEM supplied components.
 9. Stress Analysis Details See Line Space on P&ID.
 10. All structural design of Catalytic Reactor HD.
 11. Other Electric Specs. HD.

SKID NOTES: REFER DRAWING# S-04-4246-1398
BUILDING NOTES: REFER DRAWING# B-04-4246-2075

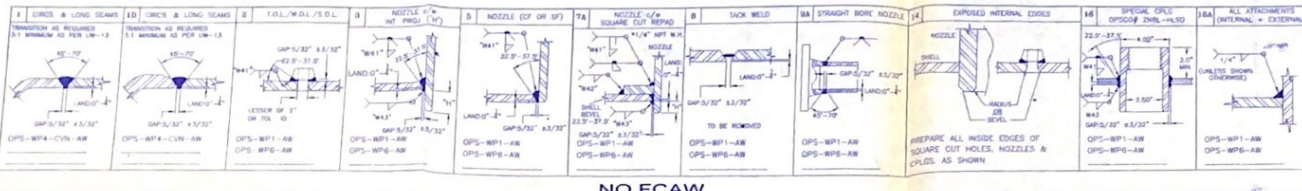
OPSCO STANDARD WELDED PIPELINE DESIGNATION SYSTEM
EXAMPLE: 10 - 40 - 108 - 1" - OTHER NOT
LINE SIZE (DIPS) - 10 - 40 - 108 - 1" - OTHER NOT
WELD TYPE - 108 - 1" - OTHER NOT
MATERIAL SPEC. - 108 - 1" - OTHER NOT
PIPE SCHEDULE - 108 - 1" - OTHER NOT

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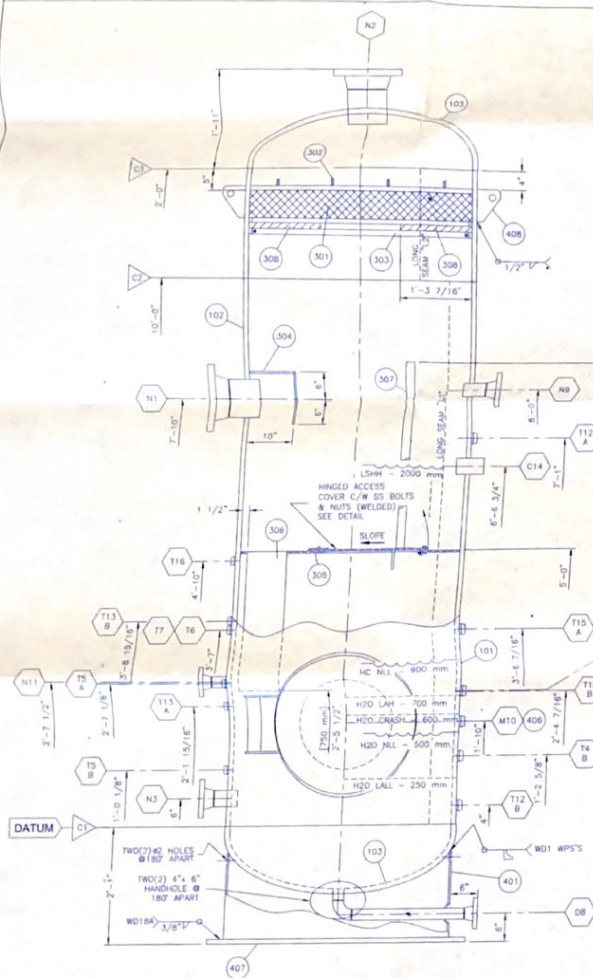
NO.	DATE	REVISIONS	BY	APP.	DATE	REVISIONS	BY	APP.	ENGINEER'S RECORD	DATE
1	10/1/2004	ISSUED FOR APPROVAL	10						DRAWN BY: TIAN VAN	Nov. 20, 2004
2	10/1/2004	REVISED AS PER COMMENTS	10						CHECKED BY:	
3	10/1/2004	ISSUED FOR CONSTRUCTION	10						APPROVED BY:	
4	10/1/2004	AS BUILT	10						ISSUED TO:	
									SHOP:	

Opcon

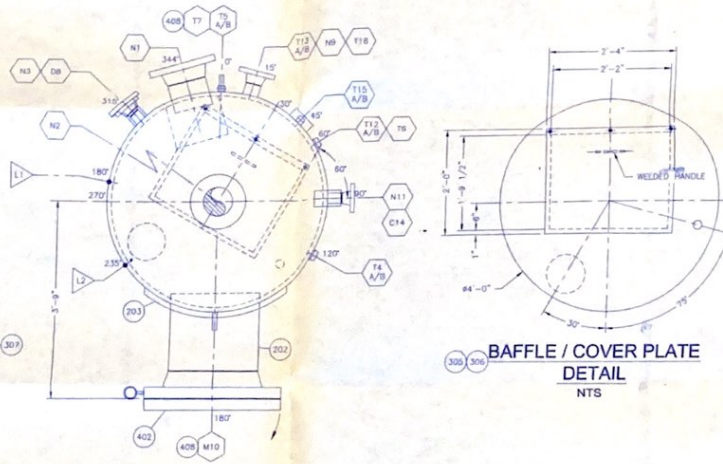
CLIENT	ENCANA CORPORATION
PROJECT	4246-1398, OFFICE VERIFICATION P&ID (B-110)
FILE	4246-1398, OFFICE VERIFICATION P&ID (B-110)
P.O. #	7080-0003
DATE	10-04-4246
REV.	1-04-4246-2211



NO FCAW

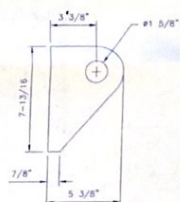


ELEVATION

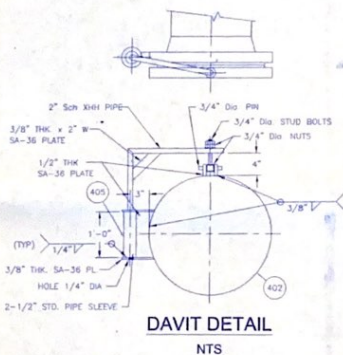


BAFFLE / COVER PLATE
DETAIL
NTS

ORIENTATION



LUG DETAIL
NTS



DAVIT DETAIL
NTS

BILL OF MATERIAL									
ITEM	QTY	SIZE	TYPE	RATING	SPC	MAT'L SPEC	DESCRIPTION		
100 VESSEL									
101	1	48\"/>							

300 INTERNAL ASSEMBLIES									
301	1	48" I.D.							
302	AS REQ'D	5/8" (16) PLATE			SA-516-70N			WEIGHT 8" DIA. (SA-516-70N) 316L SS 250 (2) (4 REQ'D)	
303	AS REQ'D	5/8" (16) PLATE			SA-516-70N			REMOVABLE WEIGHTER ASSEMBLY	
304	AS REQ'D	5/8" (16) PLATE			SA-516-70N			RAIL CRACKER	
305	AS REQ'D	3/8" (8) PLATE			SA-516-70N			SCREW PLATE C/LW ACCESS COVER PLATE	
306	AS REQ'D	8" PIPE		STD	SA-105B			BOPFCE PLATE	
307	AS REQ'D	1 1/2" PIPE		SH	SA-105B			STAND PIPE	
308	AS REQ'D	5/8" (16) PLATE			SA-36			WEIGHT RESTRICTOR PLATES	

400. EXTERNAL ASSEMBLIES									
401	1	48" O.D.	ROLLED PL		1/2"	SA-516-70N	SKIRT		
402	1	20"		300#		SA-350H-LF3	BLIND FLANGE		
				300#		316 SS	RF GASKET		
403	1	SAIT	8 1/2" x 10"			SA-100-670N	STEEL (24 MM) & NUTS (AS NEEDED)		
404	1	1/8" NPS				SA-194-70N	COUPLER DRUMS (MPS)		
405	1	1/8" NPS					WELDING BRACKET		
406	1	6" x 4"				SA-516-70N	BRIDGE W/ 2 SIDE BRACE (2X20NPS)		
407	1	64" O.D.	PIPING		1"	SA-516-70N	4400		
408	2		PLATE			SA-516-70N	LIFTING LUG (SEE DETAIL)		

NOTE:

- FOR NOZZLE N2 & M10 USE OPS-WP1-CVN-AW, OPS-WP4-CVN-AW WELD PROCEDURE.
- FCAW NOT PERMITTED
- REPAIRS TO BE AIR SOAP TESTED @ 50 psi

NOZZLE SCHEDULE									
MARK	SIZE	WELD TYPE	SERVICE	W.D.	WALL	W.D.	W.D.	PROJECTION	ITEM
N1	8"	3000	WPM	WAS INLET	3.8A14	1"	1/8"	1/4"	304.300

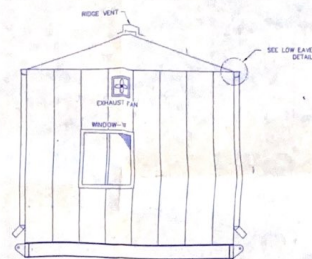
DESIGN DATA									
BY	DATE	REVISIONS	BY	DATE	REVISIONS	BY	DATE	REVISIONS	BY
1	10/1/80	PRELIMINARY	B.A.	10/1/80	1	10/1/80	1	10/1/80	1

DWG. RELEASE
FABRICATION COPY NO. ____ OF ____
DATE
SIGNED

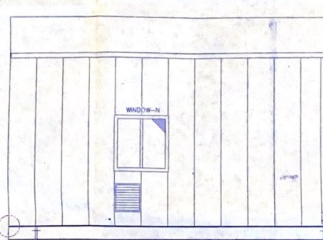
P.O. # 7060-D003

No.	DATE	REVISIONS	BY	DATE	REVISIONS	BY	DATE	REVISIONS	BY
1	10/1/80	PRELIMINARY	B.A.	10/1/80	1	10/1/80	1	10/1/80	1

CLIENT: ENCAN CORPORATION
PROJECT: 48" I.D. x 12'-0" VERTICAL SEPARATOR
TITLE: 48" I.D. x 12'-0" VERTICAL SEPARATOR
SHEET: 04-04-4240



WEST ELEVATION

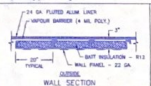


NORTH ELEVATION

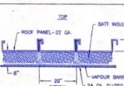
1. DESIGN LOADS : OSL = 2.0 Kpa
WIND (1/30) = 0.5 Kpa
2. BUILDING DESIGN MEETS CAN S-5126-MBA STANDARDS.
3. ERECTION IS TO BE PERFORMED CONSISTENT WITH TECHNIQUES USED FOR SELF-FRAMING BUILDINGS.
4. WORKMANSHIP TO BE DONE IN ACCORDANCE WITH STANDARD PRACTICE AND ALL APPLICABLE CODES.

13'-0" wide x 24' long
 ROOF TYPE : GABLE
 EXTERIOR : 22 g Aluminum stl
 INTERIOR : 22 g Platinium (White)
 INSULATION : Batt 12" type 1 fiberglass for walls (R20) for roof
 INSULATION BARRIER : 4" Polyurethane
 WINDOWS : Two (2) 36" x 36" double glazed c/p w/ heat sensor
 SINGLE DOOR : Two (2) 36" x 74" Insulated steel Insulated steel m/c w/ p
 c/p w/ sensor
 DOOR CHAIN & LOCKER :
 DOOR CLOSURE : Yes
 DOOR MOUNT : Yes (Double Glazed)
 ALUM THRESHOLD : Yes
 CANNOPY : Yes (On all shown)
 AIR INTAKE (LOUVER) : Two (2) 512" 18" x 18" stamped louvers c/p
 Sliders, 6" screen & aluminum dampers
 ROOFGUFT : 6' x 16'-0" x 16'-0" 12" deep
 LAVALTHERING : Batt w/ sensor
 BUILDING FAS : 12' x 12' x 12' 1200PSI, 1200PSI, One each on both sides
 600 CFS @ 6.25' c/s

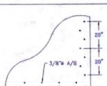
LAWE TIE TO TOP CHANNEL: 3/8" BOLTS - 2 EACH
 ROOF PANELS TO TOP CHANNEL: #14 SCREW - 3 PER PANEL
 ROOF PANEL TO PANEL: #14 SCREW - 4 PER PANEL
 ROOF PANEL TO END WALL: #14 SCREW - 4 PER PANEL
 END WALL PANEL TO PANEL: #8 SCREW - 4 PER PANEL
 SIDE WALL PANEL TO PANEL: #8 SCREW - 4 PER PANEL
 WALL PANEL TO TOP/BOT CHANNEL: #8 SCREW - 2 PER PANEL



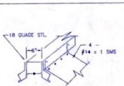
SECTION PATTERNS
= 1/2 SECTION IN RIBS EVERY 18"



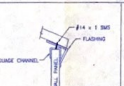
ROOF SECTION



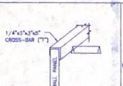
ANCHOR BOLT PLAN



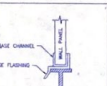
PEAK DETAIL WITH RIDGE VENT



LOW EAVE DETAIL



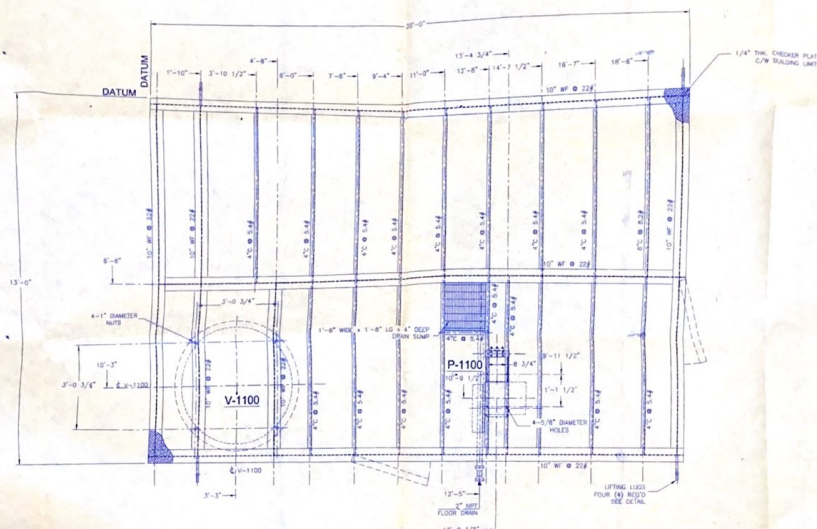
CROSS BAR DETAIL



BASE DETAIL

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N



- FABRICATION NOTES**
1. 1/4" FILLET WELDS UNLESS OTHERWISE NOTED
 2. FINISH PAINTING AS PER LAYOUT DRAWING NOTES
 3. FULL PENETRATION WELDS ON MAIN MEMBERS
 4. UNDERCOAT INSULATION AS PER LAYOUT DRAWING NOTES
 5. LIFTING LUG TO BE WELDED WITH E-7018-1
 6. WELDERS ARE TO BE CERTIFIED TO CSA W47.1 DIVISION 1 OR 2.1
 7. SURFACE TO BE PREPARED USING SHOP-PPH
 8. PRIMER AS PER LAYOUT DRAWING NOTES
 9. PERIMETER 3" SHOP UP (ENTER WELD DETAIL #5)
 10. GORE BARS (1) PER GORE (ENTER WELD DETAIL #4)
 11. THE FOLLOWING WELD PROCEDURES TO BE USED:
 QPS-WP13-HR & QPS-WP14-HR, REQ. 3

SKID & SUPPORTS WEIGHT	= 1,500 LBS
BUILDING WEIGHT	= 4,500 LBS
PIPING & VALVES WEIGHT	= 4,500 LBS
V-1100 VESSEL WEIGHT (EMPTY)	= 11,000 LBS
P-1100 PUMP WEIGHT (EMPTY)	= 500 LBS
TOTAL SHIPPING WEIGHT	= 28,000 LBS

WELD DETAIL #1

WELD DETAIL #2

WELD DETAIL #3

WELD DETAIL #4

WELD DETAIL #5

WELD DETAIL #6

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NO.	DATE	REVISIONS	BY	APP.	DATE
1	12/15/2004	ISSUED FOR CUSTOMER REVIEW	S.T.		
2	12/15/2004	ISSUED FOR P.E. REVIEW	S.T.		
3	12/15/2004	ISSUED FOR CONSTRUCTION	S.T.		
4	12/15/2004	ADDED GORE BARS DETAIL/CONNECTED	S.T.		
5	12/15/2004	WELD PROCEDURES (NOTE # 11) /	E.T.		

ENGINEERS RECORD

DESIGNED BY	SAULSON STAN	DATE	NOV. 04. 2004
CHECKED BY			
APPROVED BY			
DESIGNED TO	SHOP		

ENCANA CORPORATION

675 OPEN ENGINEERING

PROJECT NO. 13 - 12" x 6" S/S JUNCTION PIPING (V-1100)

DATE: 12/15/2004

TITLE: SKID LAYOUT

P.O. # 7000-0003

FOR NO. 04-4248

REV. NO. 5-04-4248-1308

