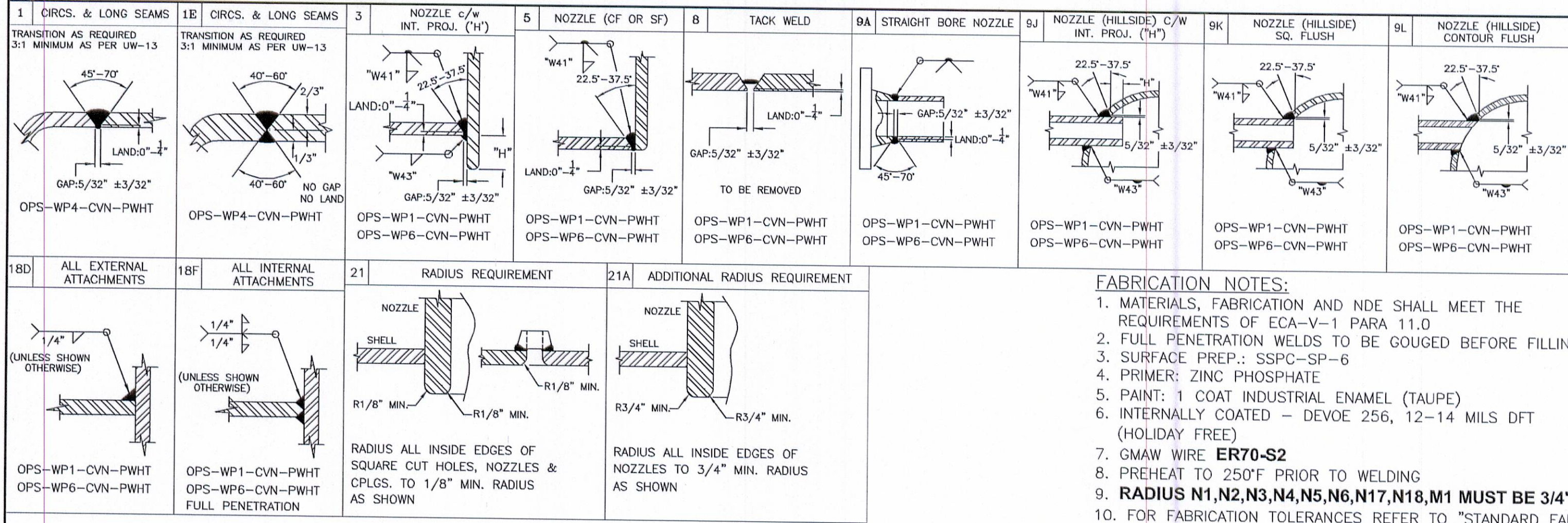




- FABRICATION NOTES:**
1. MATERIALS, FABRICATION AND NDE SHALL MEET THE REQUIREMENTS OF ECA-V-1 PARA 11.0
 2. FULL PENETRATION WELDS TO BE GOUGED BEFORE FILLING.
 3. SURFACE PREP.: SSPC-SP-6
 4. PRIMER: ZINC PHOSPHATE
 5. PAINT: 1 COAT INDUSTRIAL ENAMEL (TAUPE)
 6. INTERNALLY COATED - DEVOE 256, 12-14 MILS DFT (HOLIDAY FREE)
 7. GMAW WIRE **ER70-S2**
 8. PREHEAT TO 250°F PRIOR TO WELDING
 9. **RADIUS N1,N2,N3,N4,N5,N6,N17,N18,M1 MUST BE 3/4"**
 10. FOR FABRICATION TOLERANCES REFER TO "STANDARD FABRICATION TOLERANCES FOR UNFIRED PRESSURE VESSELS. (REV.0)"
 11. RETURN DWG. TO QC AFTER FABRICATION

- INSPECTION NOTES:**
1. CIT PHASED ARRAY UT ON LONG AND CIRC SEAMS. CODE CASE 2235-9, 100% X-RAY ON ALL BUTT WELDED NOZZLES.
 2. UT ON CATEGORY D WELDS BEFORE AND AFTER PWHT
 3. HARDNESS TEST PER ECA-V-1 (7.0)
 4. CHART RECORDER FOR HYDROTEST REQUIRED
 5. ALL PRESSURE RETAINING FILLET WELDS REQUIRE MPI BEFORE PWHT AND AFTER HYDROTEST. (WMPi)

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
 2. ALL BOLT HOLES TO STRADDLE NATURAL VESSEL CENTER LINES UNLESS OTHERWISE NOTED.
 3. CORNER RADIUS 1/8" MINIMUM FOR NOZZLES AND 1/8" MINIMUM FOR MANWAYS.
 4. **STENCIL VESSEL WITH 'POST WELD HEAT TREATED - DO NOT WELD'.**

400. EXTERNAL ASSEMBLIES

401	2	1/2" THK				SA-516-70N	SADDLE WEAR PLATE C/W 1/4" NPT WEEP HOLE, 16" WIDE x 121" LONG
402	4	1/2" THK				SA-36	SADDLE SIDE PLATE 12" WIDE x 5'-6 3/4" LONG
403	2	1/2" THK				SA-36	SADDLE WEIR PLATE 5'-5 7/8" WIDE x 2'-6 15/16" LONG
404	8	1/2" THK				SA-36	SADDLE STIFFENING RIBS 5 3/4" WIDE x 4'-0 1/16" LONG
405	8	1/2" THK				SA-36	SADDLE STIFFENING RIBS 5 3/4" WIDE x 3'-5 1/4" LONG
406	2	1" THK				SA-36	SADDLE BASE PLATE 12" WIDE x 7'-9" LONG
407	1	1/8" NPS					DOCAP GREASE NIPPLE
408	1	24"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE
409	1	24"		CL600		316 SS	RF GASKET
410	1 SET	1 7/8" x 13" LG. STUDS				SA-193-B7M SA-194-2HM	STUDS (24 Nos.) & NUTS (48 Nos.)
411	1	6"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE
412	1	6"		CL600		316 SS	RF GASKET
413	1 SET	1" x 6 3/4" LG. STUDS				SA-193-B7M SA-194-2HM	STUDS (12 Nos.) & NUTS (24 Nos.)
414	3	3"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE
415	3	3"		CL600		316 SS	RF GASKET
416	3 SETS	3/4" x 5" LG. STUDS				SA-193-B7M SA-194-2HM	STUDS (8 Nos.) & NUTS (16 Nos.)
417	4	2"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE
418	4	2"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE C/W 1" SCH.160 SW
419	2	2"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE C/W 3/4" D&T
420	1	2"	RF	CL600		SA-350-LF2 CL.1	BLIND FLANGE C/W 1/2" D&T
421	15	2"		CL600		316 SS	RF GASKET
422	15 SET	5/8" x 4 1/4" LG. STUDS				SA-193-B7M SA-194-2HM	STUDS (8 Nos.) & NUTS (16 Nos.)
423	2	16" x 10"	PLATE		2"	SA-516-70N	LIFTING LUG
424	1	8"	PIPE		40	SA-333-GR6	REINFORCING PIPE, 2" LONG
425	1	6" x 4"				SA-36	NAMEPLATE BRACKET

BILL OF MATERIAL

ITEM	QTY.	SIZE	TYPE	RATING	SCH./W.T.	MAT'L SPEC	DESCRIPTION
100. VESSEL							
101	1	96" I.D.	ROLLED PLATE		4"	SA-516-70N	96" I.D. x 10' LG
102	2	96" I.D.	ROLLED PLATE		4"	SA-516-70N	96" I.D. x 8' LG
103	2	96" I.D.	FORMED PLATE		4"	SA-516-70N	96" I.D. x 4" NOM THK, 2:1 S.E. HEAD (3.875" FORMED MIN.)
200. CONNECTIONS							
201	1	24"	RFV3	CL600	4.81"	SA-350-LF2 CL.1	ANSI FLANGE, 20" LONG (NUT RELIEF)
202	2	20"	RFV3	CL600	5.375"	SA-350-LF2 CL.1	ANSI FLANGE, 20" LONG (NUT RELIEF)
203	3	6"	RFHB	CL600	2.06"	SA-350-LF2 CL.1	ANSI FLANGE, 15" LONG (NUT RELIEF)
204	1	4"	RFHB	CL600	1.615"	SA-350-LF2 CL.1	ANSI FLANGE, 15" LONG (NUT RELIEF)
205	3	3"	RFV1	CL600	1.74"	SA-350-LF2 CL.1	ANSI FLANGE, 11" LONG (NUT RELIEF)
206	14	2"	RFWN	CL600	160	SA-350-LF2 CL.1	ANSI FLANGE
207	AS REQ'D	2"	PIPE		160	SA-333-GR. 6	SEAMLESS PIPE
300. INTERNAL ASSEMBLIES							
301	1	95.38" WIDE x 16" THICK			16" THK.	316L SS	JONELL 110-62V7 MESH/VANE ASSEMBLY, 7 SECTIONS
302	AS REQ'D	2"	FLATBAR		3/8"	SA-36	REMOVABLE DEMISTER STIFFENER
303	4	3" x 2"	PLATE		3/8"	SA-516-70N	DEMISTER STIFFENER CLIP
304	2	3'-4 3/4" x 3'	PLATE		3/8"	SA-516-70N	DEMISTER SUPPORT SIDE PLATE
305	1	18 1/2" x 3'	PLATE		3/8"	SA-516-70N	REMOVABLE DEMISTER SUPPORT SIDE PLATE
306	1	8'-0" x 3'	PLATE		3/8"	SA-516-70N	DEMISTER SUPPORT SIDE PLATE
307	1	8'-0" x 7/8"	PLATE		3/8"	SA-516-70N	DEMISTER SUPPORT BOTTOM PLATE c/w SLIP-ON FLANGE
308	1	7'-11 7/8" x 3'-9 1/2"	PLATE		3/8"	SA-516-70N	1.5" WIDE DEMISTER BACK SUPPORT RING
309	1	8'-0" O.D. (3'-9 1/2" HIGH)	PLATE		3/8"	SA-516-70N	DEMISTER SEMI CIRCLE PLATE
310	1	7'-11 7/8" x 3'	PLATE		3/8"	SA-516-70N	DEMISTER RECTANGULAR PLATE
311	2	2"	RFSO	CL150		SA-350-LF2 CL.1	SLIP-ON FLANGE
312	AS REQ'D	2"	PIPE		STD.	SA-333-GR6	SEAMLESS PIPE
313	AS REQ'D	3/8" THK	PLATE			SA-36	INLET DIVERTER (REMOVABLE)
314	4	2" x 2" THK	PLATE			SA-516-70N	INLET DIVERTER CLIPS
315	AS REQ'D	3/8" THK	PLATE			SA-36	VORTEX BREAKER
316	4	2" x 2 1/2" x 3/8" THK	PLATE			SA-516-70N	VORTEX BREAKER CLIPS
317	1	3/8" THK	PLATE			SA-516-70N	FIXED WEIR PLATE (SEE DETAIL)
318	1	3/8" THK	PLATE			SA-36	REMOVABLE WEIR PLATE (SHIP LOOSE)
319	1	3/8" THK	PLATE			SA-36	REMOVABLE WEIR PLATE (SEE DETAIL)
320	2	3/4" Ø	BAR			SA-36	3/4" Ø MANWAY GRAB RING
321	4	1 1/2" OD.	PLATE		3/8"	SA-516-70N	MANWAY GRAB PAD (SEE DETAIL)
322	8	1/2" THK	PLATE			SA-36	5"x5"x1/2" THK. PLATE (SEE DETAIL)
323	1	3/8" THK	PLATE			SA-36	3" x 2" PIPE SUPPORT PLATE
324	1	3/8" THK	PLATE			SA-516-70N	3" x 3" PIPE SUPPORT PLATE

NOZZLE SCHEDULE

MARK	SIZE	RATING	NECK O.D.	TYPE	SERVICE	W.D.	W41	W42	W43	H (MIN.)	EXT. PROJ.	ITEM
N1	20"	CL600	30.75"	RFV3	GAS INLET	5,21A	3/8"	-	BW	CF	13"	202
N2	20"	CL600	30.75"	RFV3	GAS OUTLET	5,21A	3/8"	-	BW	CF	13"	202
N3	6"	CL600	9.88"	RFHB	WATER OUT	5,21A	7/8"	-	BW	CF	10"	203
N4	6"	CL600	9.88"	RFHB	SPARE WATER OUT	5,21A	7/8"	-	BW	CF	10"	203,411,412, 413
N5	6"	CL600	9.88"	RFHB	PSV - 1212	5,21A	3/4"	-	BW	CF	10"	203
N6	4"	CL600	7.06"	RFHB	PSV - 1211	5,21A	3/4"	-	BW	CF	10"	204
N7A	2"	CL600	2.375"	RFWN	LG/LIT (UP) - 1214	5,9A,21	3/8"	-	BW	CF	6"	206,207,
N7B	2"	CL600	2.375"	RFWN	LG/LIT (BOTTOM) - 1214	3,9A,21	3/8"	-	BW	3"	6"	206,207
N8A	2"	CL600	2.375"	RFWN	LSLL - 1211	9A,9L,21	3/8"	-	BW	CF	AS	206,207,418, 421,422
N8B	2"	CL600	2.375"	RFWN	LSLL - 1211	3,9A,21	3/8"	-	BW	3"	6"	206,207,418, 421,422
N9	3"	CL600	6.38"	RFV1	DRAIN SPARE	5,21A	3/8"	-	BW	CF	6"	205,414,415, 416
N10A	2"	CL600	2.375"	RFWN	FUTURE LG (UP)	5,9A,21	3/8"	-	BW	CF	6"	206,207,417, 421,422
N10B	2"	CL600	2.375"	RFWN	FUTURE LG (BOTTOM)	3,9A,21	3/8"	-	BW	3"	6"	206,207,417, 421,422
N11	2"	CL600	2.375"	RFWN	FUTURE DESAND	9A,9J,21	3/8"	-	BW	AS	AS	206,207,417, 421,422
N12	2"	CL600	2.375"	RFWN	FUTURE DESAND	9A,9J,21	3/8"	-	BW	AS	AS	206,207,417, 421,422
N13	2"	CL600	2.375"	RFWN	PI/PIT - 1214	5,9A,21	3/8"	-	BW	CF	6"	206,207,419, 421,422
N14	2"	CL600	2.375"	RFWN	TIT - 1211	5,9A,21	3/8"	-	BW	CF	6"	206,207,420, 421,422
N15	2"	CL600	2.375"	RFWN	PIT - 1214	5,9A,21	3/8"	-	BW	CF	6"	206,207,419, 421,422
N16A/B	2"	CL600	2.375"	RFWN	LSHH - 1211	9A,9L,21	3/8"	-	BW	CF	AS	206,207,418, 421,422
N17	3"	CL600	6.38"	RFV1	DRAIN SPARE	5,21A	3/8"	-	BW	CF	6"	205,414,415, 416
N18	3"	CL600	6.38"	RFV1	DRAIN SPARE	5,21A	3/8"	-	BW	CF	6"	205,414,415, 416
M1	24"	CL600	33.62"	RFV3	MANWAY	5,21A	3/8"	-	BW	CF	ARD	201,408,409, 410

DESIGN DATA			
DESIGN & CONSTRUCTION	Vessel to be designed and constructed in accordance with ASME Boiler and Pressure Vessel Code Section VIII Div. I Code Year: 2007 Addenda: 2008a		
MDMT	-50°F (-45°C). PRODUCTION IMPACT TESTING REQUIRED AS PER UCS-66(a) AND UCS-67(a). MATERIAL TESTING REQ'D ON ITEMS 101, 102, 103, AND 423. ALL LOW TEMP MATERIAL EXEMPT PER UCS-66(3)(g)		
MAWP	1340 PSIG	9239 Kpa	SERIAL No. 02-0497-01
DESIGN TEMPERATURE	110° F	230° C	CRN
HYDROTEST PRESS.	2010 PSIG	13858 Kpa	TA2 No. V-121
CORR. ALLOWANCE	0.125 Inch	3.2 mm	YEAR BUILT 2009
VOLUME	1458 Cu.Ft.	41.3 Cu.M.	INSPECTION By A.B.S.A.
RADIOGRAPHY *	OT PHASED ARRAY (CODE CASE 2235-9)		APPROX. SHIPPING WT. 150,500 Lbs
CRN DRAWING No.	V-02-0497-01-001 R1		FINAL JOINT EFF. 100%
STRESS RELIEVE	YES @ 1150°F for 240 mins.	MAWEP @ Deg.F	N/A

ENSIGN
Opsco Manufacturing

CLIENT **ENCANA CORPORATION**
C/O SOLARIS MANAGEMENT CONSULTANTS INC.
PROJECT 96" I.D. X 26'-0" S/S INLET 2-PHASE SEPARATOR PACKAGE (M-120)
ETSHO COMPRESSOR STATION
LSD: c-67-K / 94-0-8
TITLE 96" I.D. X 26'-0" S/S INLET 2-PHASE SEPARATOR