

TANK NOZZLE SCHEDULE									
MARK	SIZE	SCH	CLASS	TYPE	SERVICE	ELEVATION	ORIENTATION	WELD	PROJ.
N1	8"	40	150	RFSO	VENT/GOOSENECK	ROOF	CENTER	1,6	8"
N2	2"	80	150	RFSO	LEVEL GAUGE	ROOF	255 DEG	1,6	6"
N3	3"	40	150	RFSO	INLET	52 15/16"	180 DEG +14 9/16"	-	-
N4	3"	40	150	RFSO	OUTLET	52 15/16"	180 DEG -5 1/8"	-	-
N5	3"	40	150	RFSO	HLSD	52 15/16"	180 DEG -24 3/4"	-	-
N6	3"	40	150	RFSO	CLEAN OUT	ROOF	215 DEG	1,6	6"
N7	3"	40	150	RFSO	CLEAN OUT	ROOF	145 DEG	1,6	6"
C1	1"	NPT	3000	LONG CPLG	ANNULUS VENT	ROOF	215 DEG	3	MAX
C2	3"	NPT	3000	CPLG	DUOVAULT OVERFLOW	228"	180 DEG	3	1/2"
C3	1/2"	NPT	3000	CPLG	LEAK DETECTION	3"	180 DEG - 22"	3	1"
C4	2"	NPT	3000	CPLG	ANNULUS DRAIN	4"	180 DEG + 8"	3	1"
M1	24" x 36"	-	-	MFG	MANWAY	ROOF	232 DEG	1	-

WELDING NOTES

- A. FABRICATE AND INSPECT TO CSA W47.1 AND W59.
B. ALL WELDS TO BE 1/4" CONTINUOUS FILLET UNLESS OTHERWISE NOTED.
C. ALL COUPLINGS TO HAVE 1/4" MIN. INTERNAL PROJECTION UNLESS OTHERWISE NOTED.
D. STAMP SERIAL NUMBER ON UPPER RIGHT CORNER OF NAMEPLATE BRACKET.
E. ELEVATIONS FOR NOZZLES DATUM FROM FLOOR TOP OF PLATE.
F. ALL BOLT HOLES TO STRADDLE COMMON CENTERLINE.
G. WELD PROCESS TO BE MCAW UNLESS OTHERWISE NOTED.
WPDS-FC1-15 AND WPDS FC1-10.
H. FLOOR PLATE CORNER PIECES ARE TO BE USED AS FLOOR SPACERS BETWEEN PRIMARY AND SECONDARY FLOORS. SHOP TO STITCH IN PLACE AS REQUIRED. MATERIAL SA-36 PLATE.
J. FLOOR JOINTS TO BE DOUBLE WELDED BUTT JOINTS.
K. VERIFY TANK SHELL HEIGHTS PRIOR TO INSERTION OF PRIMARY INTO SECONDARY SHELL.
L. LIFT LUGS TO BE CUT ON ONE END AT BEND.
M. WELD SUPPORT TABS AFTER TANK PLACEMENT ON SKID.
N. MPI INSPECTION ON LIFT LUG WELDMENT.
O.N3, N4 & N5 ORIENTATION BY ENVIROVAULT.
P. VAULT TO BE LOCATED ON INSIDE OF PRIMARY TANK SHELL CENTERED ON 180° MARK. SHOP TO REMOVE ROOF SECTION AS REQ.

NOTES

1. PAINT: (1) SPOT PRIME GREY PRIMER
2. SURFACE PREPARATION: SSPC-SP6-63 (COMMERCIAL BLAST)
3. INSULATION: 1.5" SPRAY FOAM W/ BLACK ELASTOMER COATING
4. PNEUMATIC LEAK TEST TO 24 OZ./SQ.IN.
5. INTERNAL COATING: NONE
6. SHIP LOOSE ITEMS *

NAME PLATE INFORMATION:

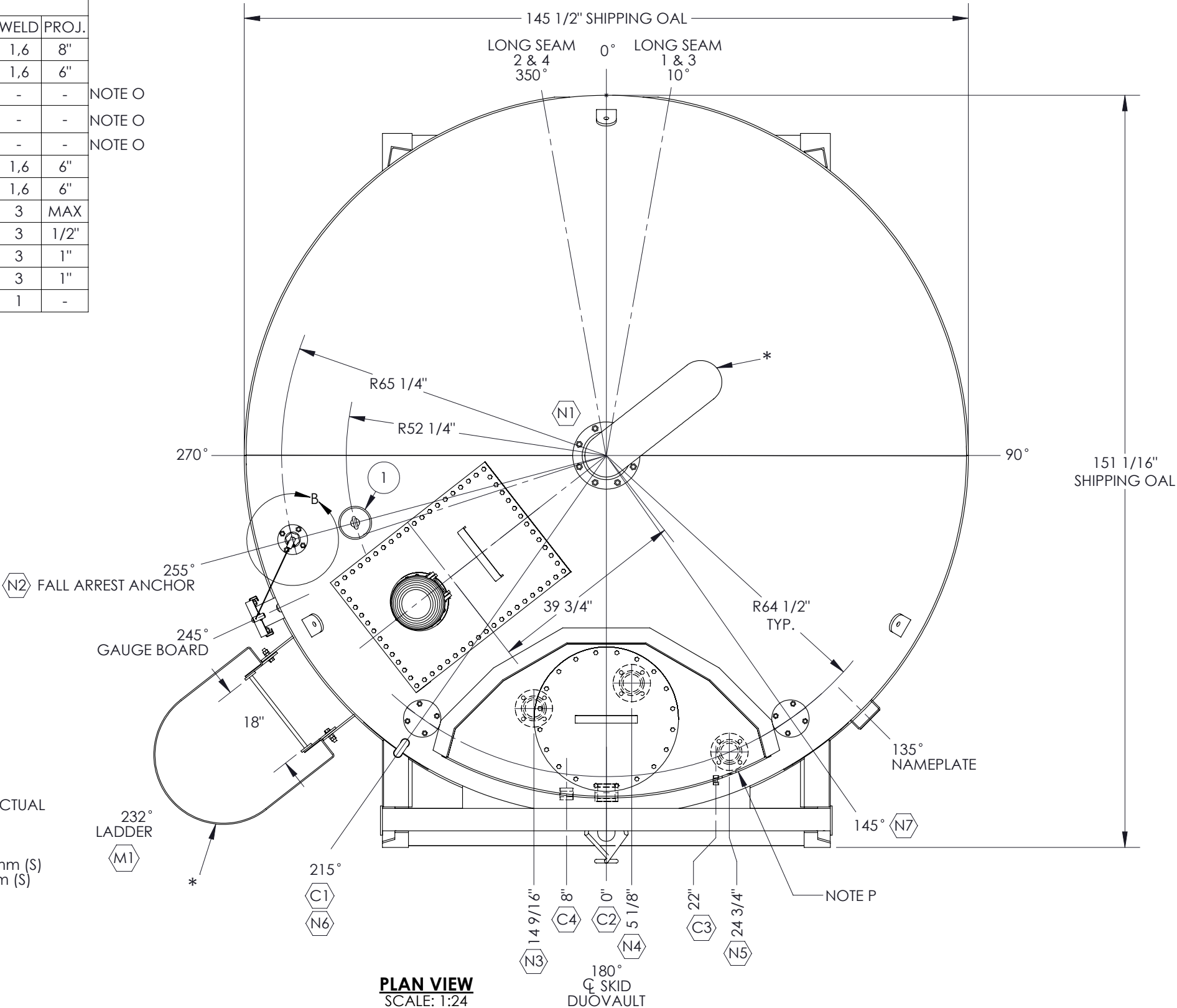
TANK SIZE: 400 BBL/63.6 cu.m. NOM. 365 BBL/58 cu.m. ACTUAL
DOUBLE WALL FLAT BOTTOM TANK
HEIGHT: 20'-0"/6096 mm
DIAMETER: 12'-0"/3658 mm
SHELL MAT'L: A36 3/16"/4.76 mm (P) & 3/16"/4.76 mm (S)
FLOOR MAT'L: A36 1/4"/6.35 mm (P) & 3/16"/4.76 mm (S)
ROOF MAT'L: A36 3/16"/4.76 mm
SERIAL NO.:
DATE BUILT: YEAR 2014
DESIGN: ATMOSPHERIC

PRIMARY WEIGHT: 6,545 LBS/2,968.8 kg
SECONDARY WEIGHT: 7,500 LBS/3,401.9 kg
SHIPPING WEIGHT: 19,936 LBS/9,042.8 kg
MANUFACTURER: ENVIROVAULT

VAULT S/N:

SHIPPING DATA	
OVERALL HEIGHT	12' - 7 1/16"
OVERALL LENGTH	23' - 3/4"
OVERALL WIDTH	12' - 1 1/2"
APPROX. WEIGHT	19,936 LBS

		1	APR. 28/14	CT			ADDED MC IN THE DESCRIPTION FOR ITEM # 39 IN BOM
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REFERENCE DRAWINGS		DRAWING REVISIONS					



PLAN VIEW

SCALE: 1:24

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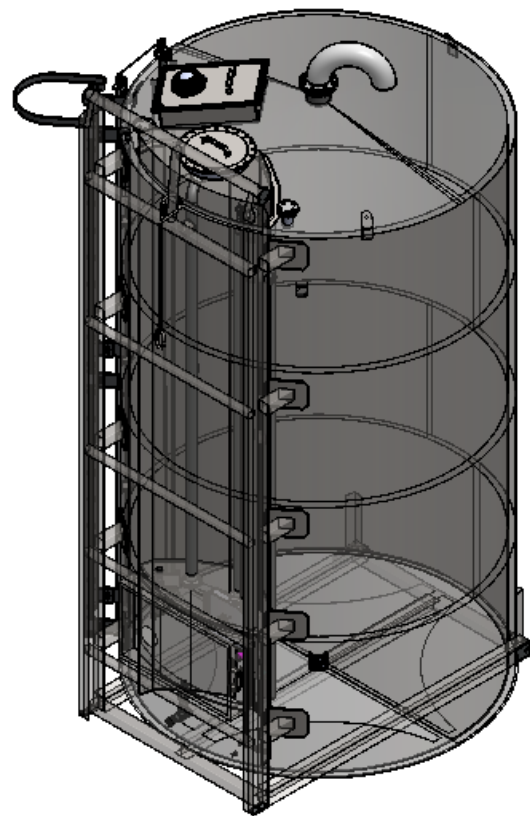


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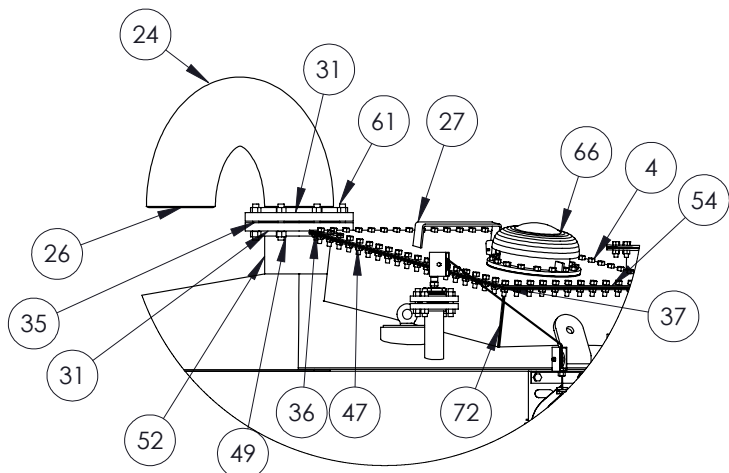
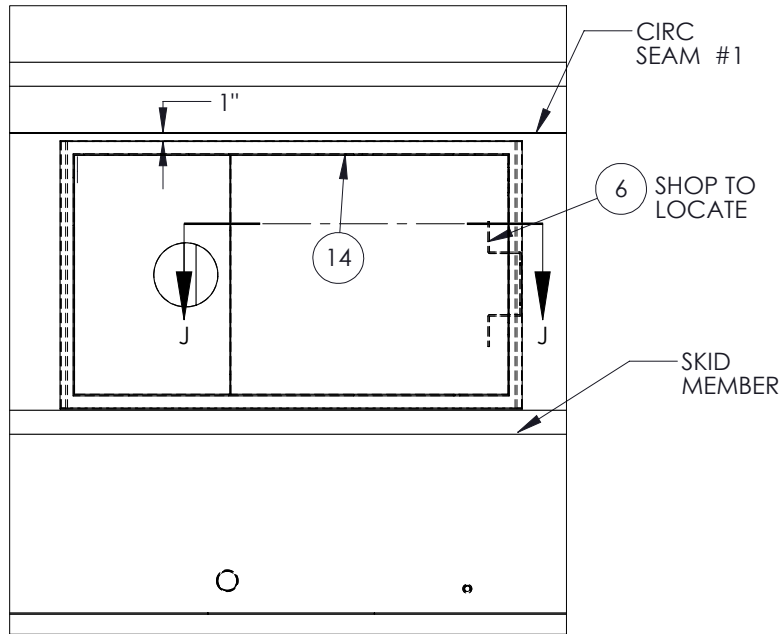
ENVIROVAULT CANADA LTD
400 BBL DUOVAULT TANK-IN-TANK

TANK ASSEMBLY

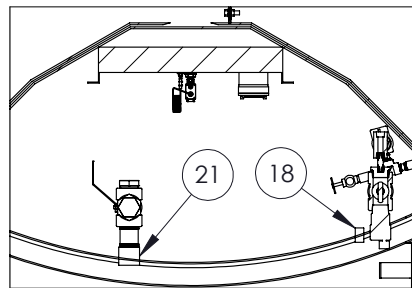
DWN: CT	CHK:	APP:
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SCALE: 1:24	DWG: 08979-001-T-001	REV: 1
SHEET: 1 OF 4		



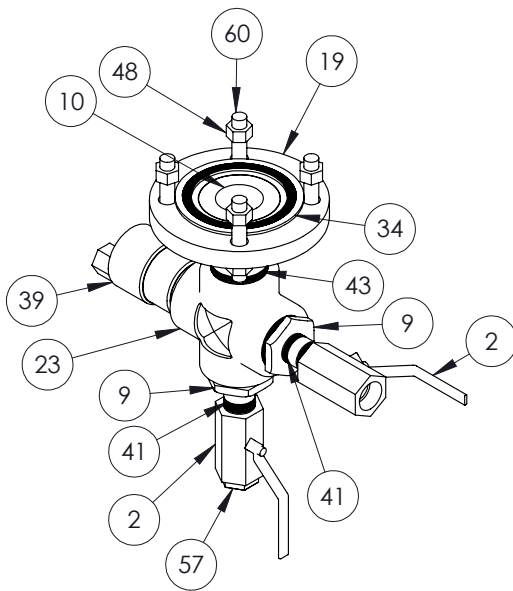
ISOMETRIC VIEW
SCALE: 1:48



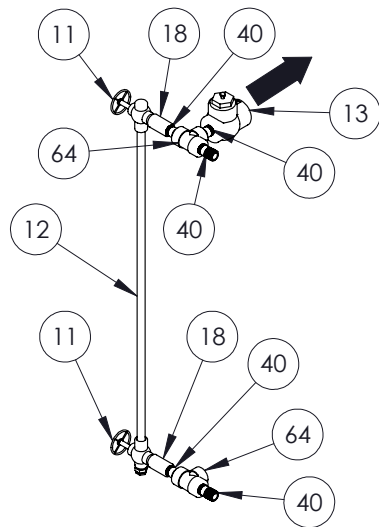
DETAIL A
SCALE 1 : 24



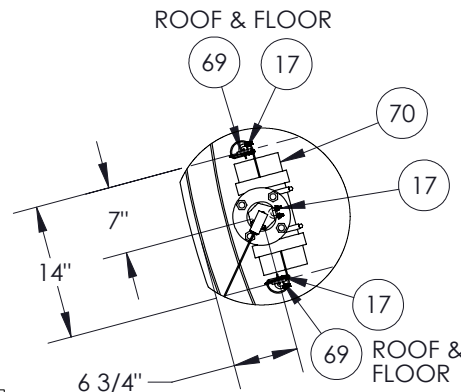
SECTION J-J
SCALE 1 : 24



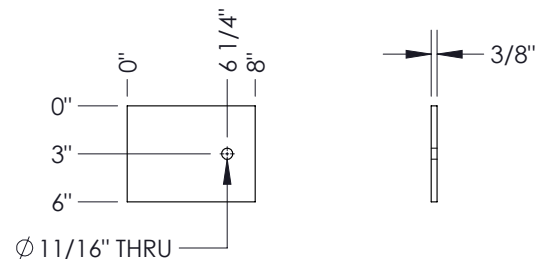
ISOMETRIC HLSD VIEW
SCALE: 1:8



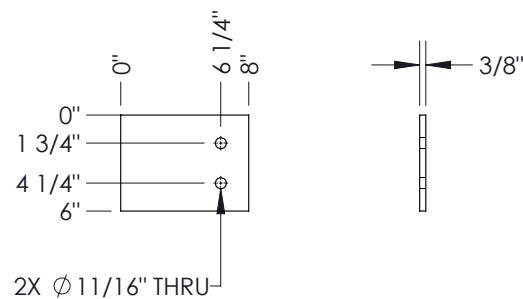
ISOMETRIC LEAK DETECTION VIEW
SCALE: 1:15



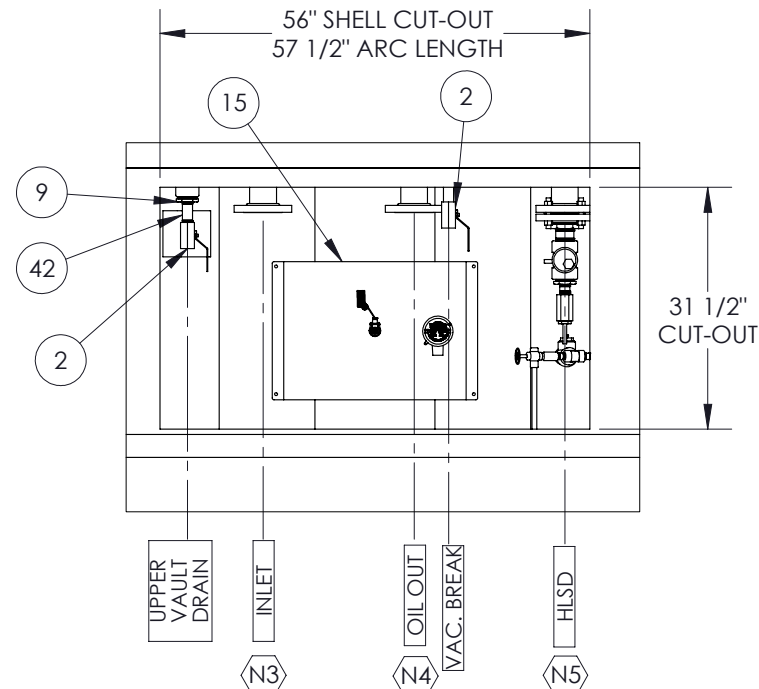
DETAIL 'B'
SCALE: 1:24



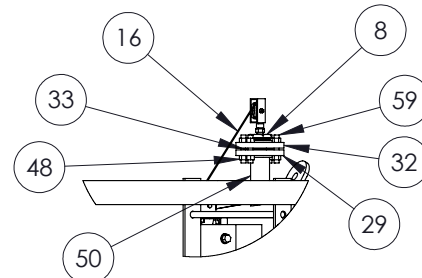
DETAIL ITEM # 56
SCALE: 1:12



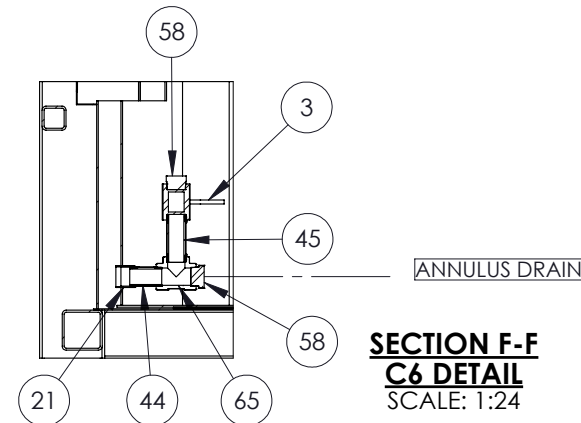
DETAIL ITEM # 55
SCALE: 1:12



DETAIL 'E'
WITHOUT ENVIROVAULT DOOR
SCALE: 1:24



DETAIL 'C'
SCALE: 1:24



SECTION F-F
C6 DETAIL
SCALE: 1:24

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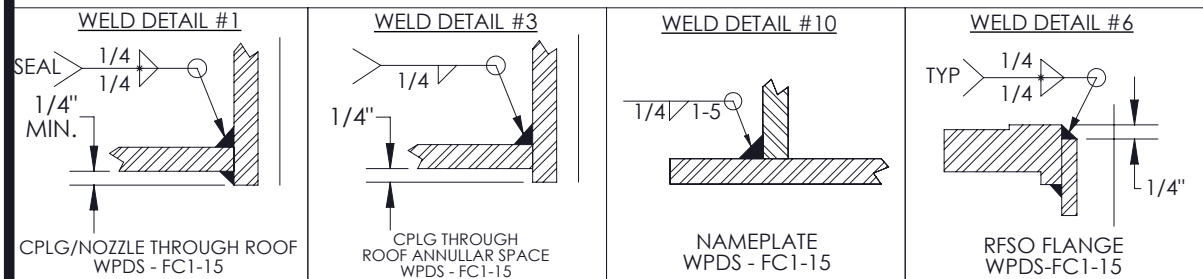
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ENVIROVAULT CANADA LTD
400 BBL DUOVAULT TANK-IN-TANK

TANK ASSEMBLY

DWN: CT	CHK:	APP:
DATE: APR. 15/14	DATE:	DATE:
SCALE: 1:48	DWG: 08979-001-T-001	REV: 1
SHEET: 3 OF 4		

BILL OF MATERIAL							
ITEM	PART #	DRAWING #	DESCRIPTION	MATERIAL	SIZE	QTY	MTR #
1	TK-FALLARREST	NWPL-00092	STANDARD TANK FALL ARREST TIE OFF LUG			1	
2	BA-NEO-BF 100GT		NEO 2500 BALL VALVE 1" 2000 PSI WOG, Lockable Handle	A105		4	
3	BARSTOCK22M		BALL VALVE BARSTOCK 2" 2000 WOG NACE A105N	CS		1	
4	BOL.51.5BAA		BOLT 1/2" x 1 1/2" LG HEX HEAD PLATED	GRADE 2		80	
5	BOL.51.5BAA		BOLT - 1/2" DIA. x 1 1/2" LG	GRADE 2		20	
6	BRACKET-CABLE-1		BRACKET FOR HEATER CABLE	SA-36		1	
7	BRACKET-NAME-1B		TANK/VESSEL NAME PLATE BRACKET 6"x6"x1/4"	SA-516-70N		1	
8	BUS2(.5)A		Bushing 2" x 1/2" THRD	SA105N		1	
9	BUS2(1)A		Bushing 2" x 1" THRD	SA105N		3	
10	BUS3(2)A		BUSHING 3" x 2"	SA105N		1	
11	BUY		CONBRACO SITE GLASS VALVE w/ BALL CHECK, 1/2"-300 PSI. SET OF 2	CS		1	
12	BUY		SITE GLASS RED LINE 5/8" OD	-	30 3/8"	1	
13	BUY		VALVE SWING CHECK WHEATLEY 1/2" NPT 2160 PSI P/N 9D-820-503360-131P	CS		1	
14	C/W VAULT		ENVIROVAULT DOOR EVD-02-12'OD	MS		1	
15	C/W VAULT		HEATER CATADYNE 18" x 24", 15,000 BTU, N/G, WIRED CL.1,DIV.1 SUPPLIED BY ENVIROVAULT	-		1	
16	CABLE.125		CABLE AVIATION 1/8"	SS	780"	1	
17	CL-18-SS		CABLE CLAMP 1/8" U-BOLT SS	SS		6	
18	COFTH.5WA		COUPLING FULL 1/2" 3M THRD	SA-105N		3	
19	FLA3AYEE		FLANGE 3" 150 ANSI RF THRD	SA-105N		1	
20	COFTH1WA		COUPLING FULL 1" 3M THRD	SA-105N		1	
21	COFTH2WA		Coupling 2" 3M THRD	SA-105N		1	
22	COFTH3WA		Coupling 3" 3M THRD	SA-105N		1	
23	CROTH2WA		CROSS 2" 3M THRD	SA-105		1	
24	ELBBW180L840B		Return 180 Deg 8" S/40 BW	SA234WPB		1	
25	ELBTH1801W		Return 180 Deg 1" Threaded M.I.	M.I.		1	
26	EXPMET.759		EXPANDED METAL - 3/4-9 FLAT	MS	1 sq.ft.	1	
27	FLB.25(1.5)ST		Flat Bar 1/4" x 1-1/2"	SA-36/44W	17 13/16"	1	
28	FRFBL3AA		Blind 3" 150 ANSI RF	SA-105N		2	
29	FRFSO2AA		FLANGE 2" 150 ANSI RF SO	SA-105N		1	
30	FRFSO3AA		FLANGE 3" 150 ANSI RF SO	SA-105N		2	
31	FRFSO8AA		FLANGE 8" 150 ANSI RF SO	SA-105N		2	
32	FRFTH2AA		FLANGE 2" 150 ANSI RF THRD	SA-105N		1	
33	GAS2ASWAA		Gasket 2" 150 ANSI Spiralwound 316L Flexicarb	316SS		1	
34	GAS3ASWAA		Gasket 3" 150 ANSI Spiralwound 316L Flexicarb	316SS		3	
35	GAS8ASWAA		Gasket 8" 150 ANSI Spiralwound 316L Flexicarb	316SS		1	
36	GASCHIMELAP		CHIME LAP GASKET NEOPRENE	NEOPRENE		4	
37	GASMANWAY		MANWAY GASKET 1 3/4" x 1/8" THK NEOPRENE	NEOPRENE	144"	1	



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BILL OF MATERIAL							
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38	LGB20		GAUGE BOARD F/ 400 BBL, 2 PC DESIGN C/W PULLEY ASSY	-		1	
39	BUY		SOR ELECTRONIC LEVEL SWITCH 2" NPT (1510B-G2A-C-W9-ES-CS-MC)	303 SS		1	
40	NIP.52Y80EA		NIPPLE 1/2" x 2" SCH XS/80	SA-106B		5	
41	NIP1(2.5)80C		NIPPLE 1" x 2 1/2" SCH XH/80	SA-106B	-	2	
42	NIP1(4)80C		NIPPLE 1" x 4" SCH XH/80	SA-106B	-	2	
43	NIP2(3)80C		Nipple 2 " X 3 " S/80	SA-106B		1	
44	NIP2(4)80C		Nipple 2 " X 4 " S/80	SA-106B		1	
45	NIP2(6)80C		Nipple 2 " X 6 " S/80	SA-106B		1	
46	NUT.5YBAA		HEX NUT 1/2" DIA.	GRADE 2		20	
47	NUT.5YBAA		NUT 1/2" HEX PLATED	GRADE 2		80	
48	NUT.625M		NUT (HEX): 5/8" DIA.	SA-194-2HM		32	
49	NUT.75M		NUT (HEX): 3/4" DIA.	SA-194-2HM		16	
50	PIP280C		PIPE 2" SCH XH/80	SA-106B	8 5/8"	1	
51	PIP340C		PIPE: 3" NOM SCH 40 BBE	SA-106B SMLS	7"	2	
52	PIP840C		Pipe 8" S/40 SA106B	SA-106-B	7"	1	
53	PLA.188(4896)ST		DUOVAULT REPAD PLATE 3/16" X 69 5/8" X 26 1/16"	SA36	0.3938	1	
54	PLA.188(4896)ST		MANWAY PLATE 3/16" X 40" X 28"	SA36	0.2431	1	
55	TK-LDF	NWPL-00062	UPPER LADDER CLIP-FIXED	SA-36/G40.21-44W	8"	2	
56	TK-LDS	NWPL-00063	INTERMEDIATE & LOWER LADDER CLIP-SLIDING	SA-36/G40.21-44W	8"	4	
57	PLH1XA		PLUG HEX 1" 6M THRD SA105N	SA-105N		1	
58	PLH2XA		PLUG HEX 2" 6M THRD	SA-105N		2	
59	STU.625(3.5)K		STUD: 5/8" DIA.	SA-193-B7M	3 1/2"	4	
60	STU.625(4)K		STUD: 5/8" DIA.	SA-193-B7M	4"	12	
61	STU.75(4.5)K		STUD: 3/4" DIA.	SA-193-B7M	4 1/2"	8	
62	SUPPLIED ENVIROVAULT	NWPL-00097	400 BBL DUOVAULT TANK-IN-TANK c/w INLET,OUTLET & HLSD (VERSION 1)			1	
63	TANKSLING.75		400 BBL TANK SLING	STEEL		1	
64	TEE.5GYEE		Tee 1/2" 3M THRD SA105N	SA-105		2	
65	TESTH2WA		Tee 2" 3M THRD	SA-105N		1	
66	TH8S-16		THIEF HATCH WENCO 16oz/-0.4oz c/w NEOPRENE GASKET	ALUMINUM		1	
67	TK400D-BARE-2		TANK 400 BBL DW BARE STD FOR DUOVAULT			1	
68	TK-BRACKETGB-1		TANK GAUGE BOARD BRACKET	SA-36		6	
69	TK-FGANCHOR-1		TANK FLOAT GUIDE ANCHOR PLATE	SA-36		4	
70	TK-FLOAT		TANK FLOAT FOR GAUGE BOARD SYSTEM	-		1	
71	TK-LADDER-400-3		TANK LADDER 400 BBL PIP STANDARD			1	
72	TK-MANWAY-1		MANWAY ASSEMBLY - 24" x 36" x 9"	SA-36		1	
73	TK-NAMEPLATE-2		TANK NAMEPLATE BLACK/SILVER DW TANK	ALUMINUM		1	
74	TK-OILDROP-1		OIL DROP INDICATOR FOR TANK GAUGE BOARD	MILD STEEL		1	

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400 BBL DUOVAULT TANK-IN-TANK

TANK ASSEMBLY

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SHEET: 4 OF 4		