

RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving
PWGSC
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5
Bid Fax: (905) 615-2095

Revision to a Request for a Standing Offer

Révision à une demande d'offre à commandes

Regional Individual Standing Offer (RISO)

Offre à commandes individuelle régionale (OCIR)

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Offer remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'offre demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Public Works and Government Services Canada
Ontario Region
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5

Title - Sujet Storage Tanks		
Solicitation No. - N° de l'invitation K3D33-121331/B		Date 2013-06-11
Client Reference No. - N° de référence du client K3D33-121331		Amendment No. - N° modif. 001
File No. - N° de dossier TOR-2-35308 (015)	CCC No./N° CCC - FMS No./N° VME	
GETS Reference No. - N° de référence de SEAG PW-\$TOR-015-6276		
Date of Original Request for Standing Offer		2013-05-14
Date de la demande de l'offre à commandes originale		
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-06-25		Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
Address Enquiries to: - Adresser toutes questions à: Abela, Aaron		Buyer Id - Id de l'acheteur tor015
Telephone No. - N° de téléphone (905) 615-2061 ()	FAX No. - N° de FAX (905) 615-2060	
Delivery Required - Livraison exigée		
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: As per Call-up		
Security - Sécurité This revision does not change the security requirements of the Offer. Cette révision ne change pas les besoins en matière de sécurité de la présente offre.		

Instructions: See Herein

Instructions: Voir aux présentes

Acknowledgement copy required	Yes - Oui	No - Non
Accusé de réception requis	<input type="checkbox"/>	<input type="checkbox"/>
The Offeror hereby acknowledges this revision to its Offer. Le proposant constate, par la présente, cette révision à son offre.		
Signature	Date	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
For the Minister - Pour le Ministre		

Solicitation Amendment No. 001 is being issued to address the following:**A) Questions & Answers****B) Updated Drawings**

A) Questions & Answers

Q1. We work with swadgelock fittings all the time. We have never had to get certified before but also have no problem doing so. It will cost me approx. \$1000.00 to have it completed. I have no problem with it if I'm successful but do I need to have this certificate prior to the bid because if I'm unsuccessful the costs to have it done is really not helping as all my clients do not require our mill wrights and welders to be "certified". Let me know your thoughts so that if it is a requirement, I will need to get this completed immediately.

The remainder of the certifications are no issue other than our certificate for B51 does not specifically say H fittings. The certificate we will send covers the H fittings

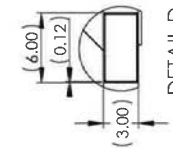
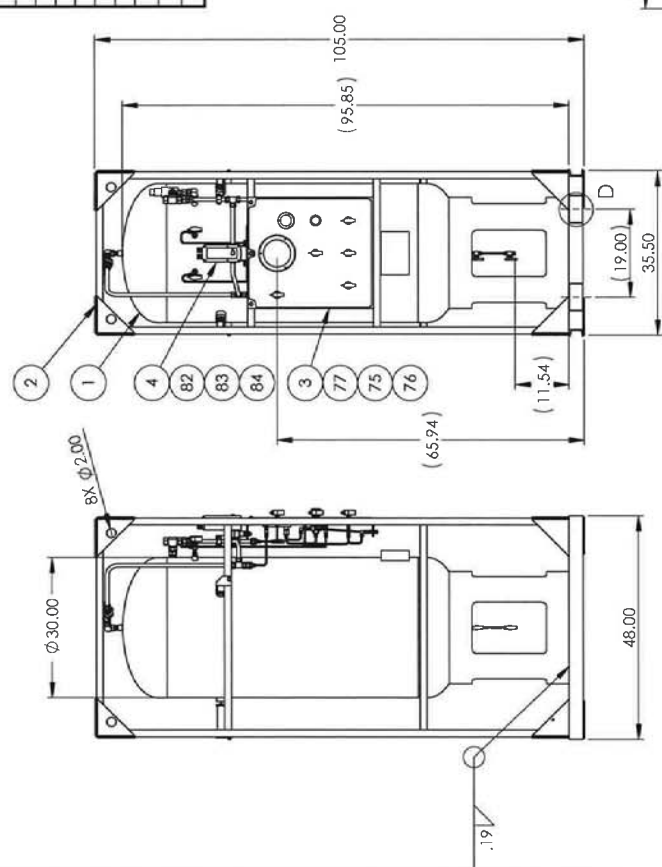
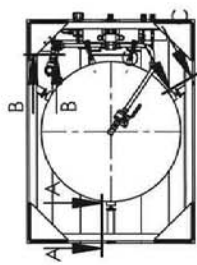
I will write a note on the copy so you see it.

A1. This listed as a mandatory technical criteria required with the bid. We have no way of assessing one's skills without this documentation.

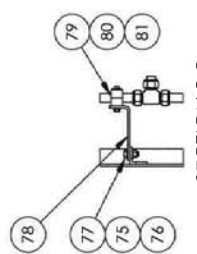
B) Updated Drawings

Environment Canada has updated a part number which is across many drawings. The revision level on the drawings that are at 01 are the latest that were affected. The others did not change, but the complete drawing package is attached to this amendment for ease of reference.

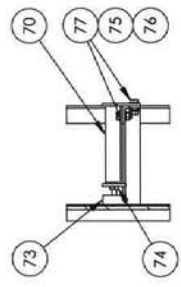
ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.



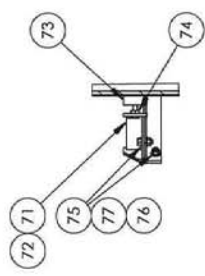
DETAIL D
SCALE 1 : 10



SECTION B-B
SCALE 1 : 10



SECTION A-A
SCALE 1 : 10



SECTION C-C
SCALE 1 : 10

NOTES:

1. ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.
2. USE PTFE TAPE ON ALL NPT FITTINGS.
3. USE LOCITE NICKEL ANTI-SEIZE FOR ALL BOLTED JOINTS.
4. ALL OPENINGS MUST BE CAPPED OR PLUGGED FOR STORAGE AND TRANSPORTATION.

BILL OF MATERIALS				
Item	QTY	PartNo	MATERIAL	DESCRIPTION
1	1	5826-0 C-Vessel	Stainless Steel	Vessel
2	1	5826-0-0-Frame	SS 304	Frame
3	1		See BOM	Panel
4	1	ExMax-45.90-SF-A-CSA		Emergency Dump valve actuator - Schischek
70	1			Pad Mount, Rear
71	1			Pad Mount, Left
72	1			Pad Mount, Right
73	3	315-242 (Spentaur)	Vulcanized Natural Rubber	Foot Pad
74	3		SS 316	Nut, Hex, Jam - .375-16 UNC
75	22		SS 316	Washer, Narrow - .375
76	11		SS 316	Nut, Hex - .375-16 UNC
77	11		SS 316	Bolt, Hex - .375-16 UNC x 1.00
78	1		SS 304	Mfg Bld - 18 x 2.50 x 6.00
79	1	304 S3 PA-12T	Polyamide	Clamp Support, Swagelok - .75 Tube
80	2		SS 316	Washer, Narrow - .250
81	2		SS 316	Nut, Hex - .25-20 UNF
82	4		SS 316	Bolt, Hex - .50-13 UNC x 1.25
83	4		SS 316	Nut, Hex - .50-13 UNC
84	8		SS 316	Washer, Narrow - .50

Notes

- See dwg UA-TANK-0010-01
- See dwg UA-TANK-0050-00
- See dwg UA-TANK-0100-01
- CSA Cert. 2236405 + supp. 2344616
- Mate with UA-TANK-0200 and UA-TANK-0201 using Swagelok SS-MB-63-F05-17 ISO-M

Pressure Vessel Engineering, Ltd.
2500 Highway 7 East, Unit 10
Woodbine, Ontario, Canada
M1V 4C3
www.pveng.com
Tel: 313-605-2008
Fax: 313-880-9930

Environment Canada
Météorologique Service of Canada
Service Météorologique du Canada

TITLE:
HYDROGEN STORAGE TANK
ASSEMBLY

DRAWING NUMBER:
UA-TANK-0000-01

REVISION:
01

DATE: 21MAY13

BILL OF MATERIALS					Notes	
Item	QTY	PartNo	MATERIAL	CRN	DESCRIPTION	
1	1	5626-0.0-Vessel	Stainless Steel	Q6787 540125975	Vessel	See dwg UA-TANK-0010-01
35	1	918BDC0E1BKE0275 1/2" x 3/4"	Bronze	91TYN	Relief Valve - Kunkle 275 psi	
36	1	Swagelok SS-LG3TS12-JL	SS 316	OA12577 5C	Valve - 750 Tube, 1/4 Turn	
37	2	Swagelok SS-1210-9	SS 316	OA12577 5C	Elbow, 90 - 75 Tube	
38	2	Swagelok SS-1211-PC	SS 316	OA12577 5C	Port Connector - 750 Tube	
39	2	Swagelok SS-12-TA-1-8	SS 316	OA12577 5C	Tube Adapter, Male - 750 OD, 1/2 NPT	
41	1	Swagelok SS-1610-1-12	SS 316	OA12577 5C	Str Male Conn - 1.00 Tube to 3/4 NPT	
42	1	Swagelok SS-1610-3	SS 316	OA12577 5C	Tee, Union - 1.00 Tube	
43	1	Swagelok SS-1610-8-12	SS 316	OA12577 5C	Union - 1.00 Tube, 75 Tube	
44	2	Swagelok SS-1210-3	SS 316	OA12577 5C	Tee Union - 75 Tube	
45	2	Swagelok SS-1210-6-4	SS 316	OA12577 5C	Union - 75 Tube, 25 Tube	
46	1	Swagelok SS-400-3-41FT	SS 316	OA12577 5C	Tee, Run, Female - 25 Tube, 1/4 NPT	
48	3	Swagelok SS-4-TA-1-8	SS 316	OA12577 5C	Tube Adapt - 25 Tube 1/2 NPT	
49	2	Swagelok SS-43GS4-LH-SH-D	SS 316	OA12577 5C	Valve, 2 Way - 25 Tube	
50	1		TP31621161 SMLS	NA	Tube - 750 OD 18 Ga. (.049) x 37.59	See Detail on UA-TANK-0012-00
51	1		TP31621161 SMLS	NA	Tube - 750 OD 18 Ga. (.049) x 11.56	See Detail on UA-TANK-0012-00
52	1		TP31621161 SMLS	NA	Tube - 750 OD 18 Ga. (.049) x 9.44	
53	1		TP31621161 SMLS	NA	Tube - 750 OD 18 Ga. (.049) x 9.69	
54	1		TP31621161 SMLS	NA	Tube - 750 OD 18 Ga. (.049) x 4.00	
56	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 38.09	See Detail on UA-TANK-0012-00
57	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 9.29	See Detail on UA-TANK-0012-00
58	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 34.68	See Detail on UA-TANK-0012-00
59	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 3.72	
60	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 23.55	See Detail on UA-TANK-0012-00
61	1		TP31621161 SMLS	NA	Tube - 250 OD 20 Ga. (.035) x 6.00	
62	1		SA-182 F316/316L	NA	Plug - 1/4 NPT	
63	2	Swagelok SS-1611-PC	SS 316	OA12577 5C	Connector, Port - 1.00 Tube	
64	1	Swagelok SS-12-TA-7-8	SS 316	OA12577 5C	Tube Adapt, Fem - 75 Tube, 3/4 NPT	
65	1	Swagelok SS-LG3TS12-NH	SS 316	OA12577 5C	Valve, 2 Way - 25 Tube, 1/4 Turn, No handle, Normally Closed - Actuator to open	
66	1	Swagelok SS-MB-63-F08-71SO-M	SS 316	NA	Bracket, Actuator Mounting	
104	2	Swagelok SS-43GS4-A-LL	SS 316	OC6054 5C	BA1.1 VALVE WITH LATCH LOCK HANDLE IS OPEN	VERTICAL ORIENTATION OF HANDLE IS OPEN

NOTES:

- ALL COMPONENTS ARE SWAGELOK SUPPLY UNLESS OTHERWISE NOTED.
- ASSEMBLY BY SWAGELOK TRAINED TECHNICIAN ONLY
- USE PTFE TAPE ON ALL NPT FITTINGS.
- USE LOCTITE ANTI-SEIZE ON ALL BOLTED JOINTS.
- USE ONLY SEAMLESS TUBING.

Pressure Vessel Engineering, Ltd.
 1700 Highway 104
 Unit 10
 Waterloo, Ontario, Canada
 N2L 2K5
 Tel: 519-885-9910
 Fax: 519-885-9910

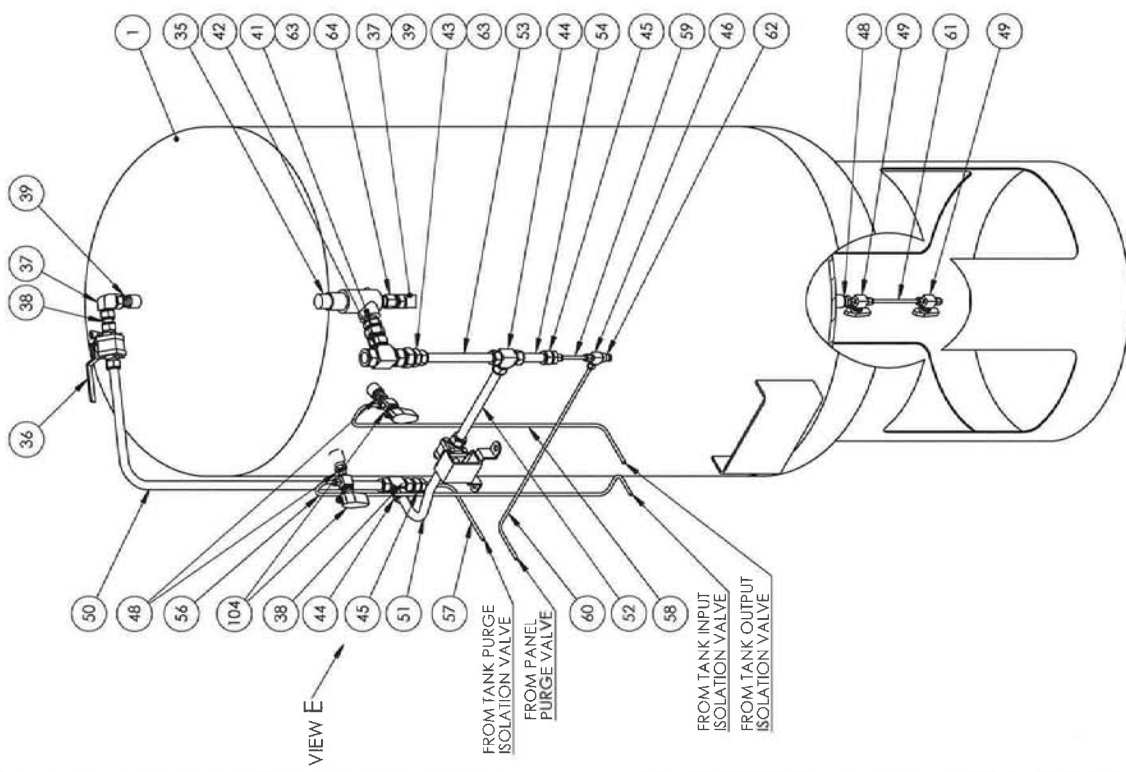
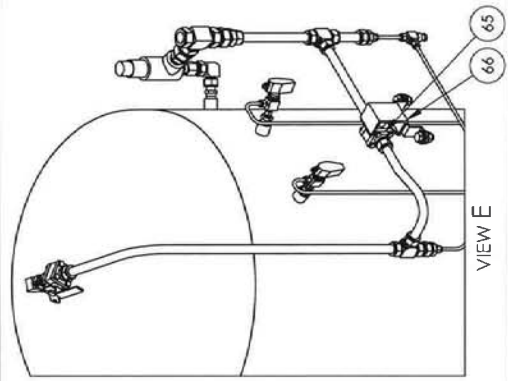
Environment Canada
 Métrologique Service of Canada
 Service Métrologique du Canada

TITLE:
 HYDROGEN STORAGE TANK

DRAWING NUMBER:
 UA-TANK-0010-01

REVISION:
 01

DATE: 21MAY11



BILL OF MATERIALS		
ITEM	QTY	MATERIAL
5	1	Shell - 30.00 OD, 31 THK, 54.00 Long
6	2	Head Nemo-50 Imperial - 30.00 OD, 2.1", 312 THK, 54.00 Long
7	1	Skirt - 24.00 OD, 13 THK, 25.75 Long
8	5	Threaded Full Coupling, Class 3000, 0.50 NPS
9	1	Bracket, Nameplate
		SS

NOTES:

- All dimensions in inches.
- All welds shall be neat in appearance, free from slag and other defects.
- Vessel to be cleaned of scale, oil, weld spatter and all other foreign material, prior to hydrostatic test.
- All welds to be tested by radiography.
- Maximum misalignment of flange joints is limited to .25T (Category A, B, C, D up to 1/2" thick).
- All couplings conform to B16.11 standards.
- Nozzle elevations are critical.
- Material used for nozzle and fittings.
- All unspecified welds to be 25% fill.
- Welding in accordance with ASME Section IX.
- Nameplate bracket by fabricator.
- External surfaces of the tank and skirt to have a uniform glass bead finish.



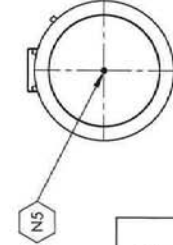
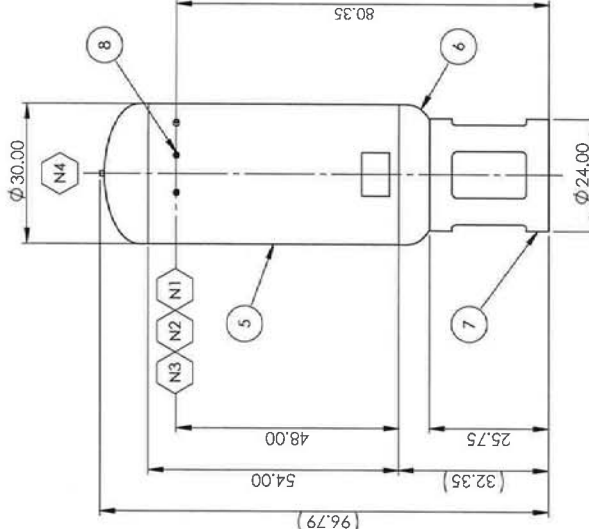
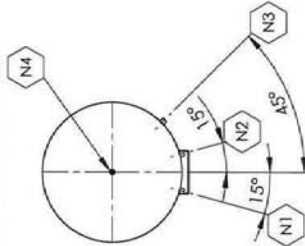
DESIGN DATA

Code	Design Code: ASME VIII-1 2010 ed. 2011 add.
	Seismic Code: UBC-1197
	Wind Code: N/A
Design Conditions	
MAWP - Int. Ext.	300 / 0 psi @ 122 °F
MDMT: -85 °F @ 300 psi	
Corrosion Allowance	0 in. For non-corrosive service
Examination	
Impact Testing	Exempt per UHA-51(d)
Radiography	RT 3: Spot Long and Circ seams
PWHT: None	
Hydro Test: 390 psi	
Service	
Fluid: Hydrogen gas	
Capacity: 26.6 cu. ft./199 Gal/753.3 L	
Weight - Empty: 730 lb	
Weight - Operating: 880 lbs	



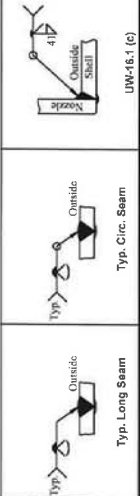
Environment
Canada
Meteorological Service of Canada
Service Météorologique du Canada

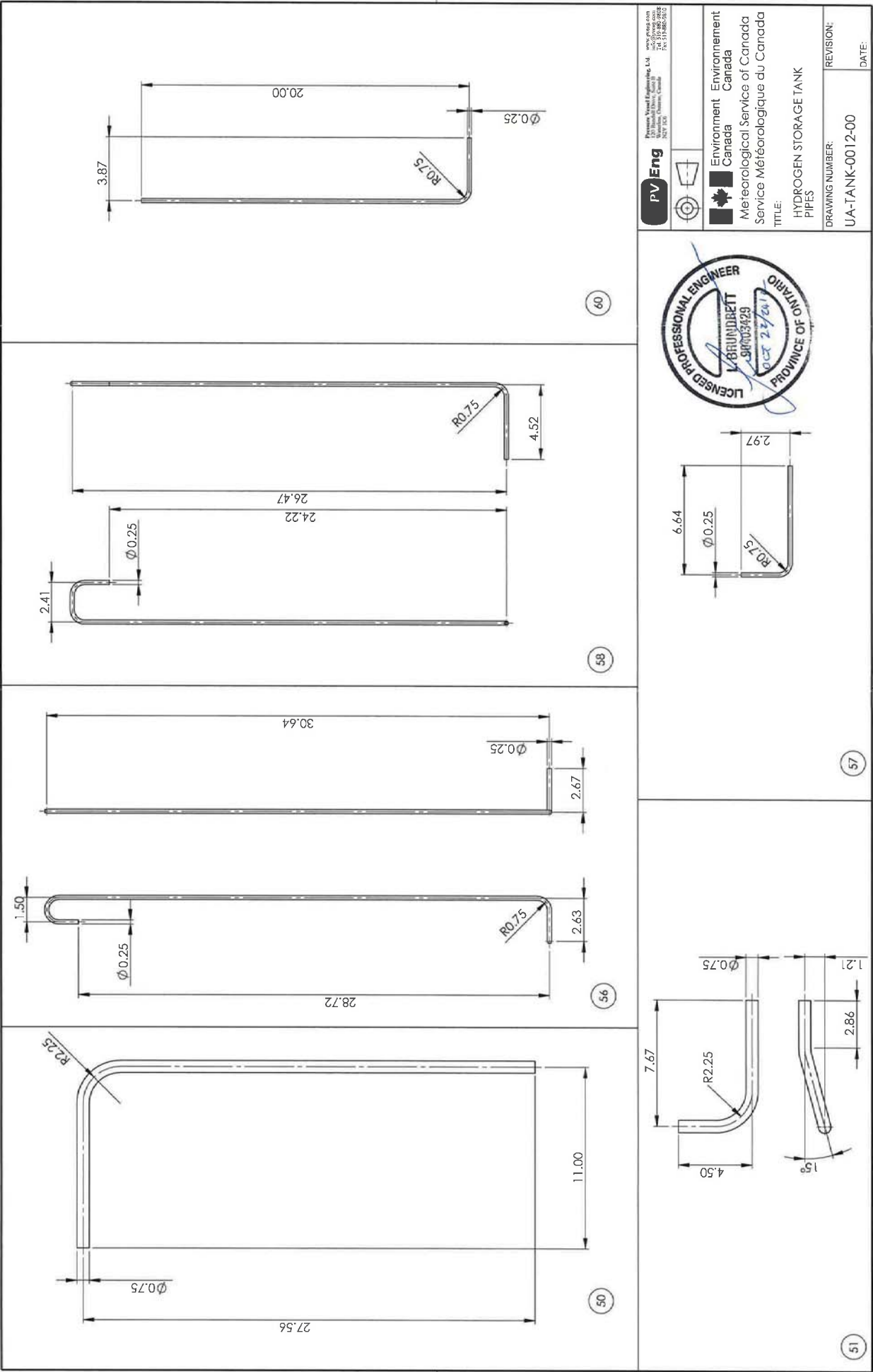
TITLE:	HYDROGEN STORAGE TANK VESSEL
REVISION:	UA-TANK-0011-00
DATE:	



NOZZLE SCHEDULE

NOZZLE		WELDS		BOM ITEM #
Mark	Size	Qty	Type	
N1	1/2"	1	Input	41
N2	1/2"	1	Output	42
N3	1/2"	1	Relief	43
N4	1/2"	1	Purge	44
N5	1/2"	1	Drain	45





PV Eng
Preston Vent Engineering, Ltd.
1000 Highway 10, Suite 100
Windsor, Ontario, Canada
N9T 1K3
www.pve.com
Tel: 519-946-7888
Fax: 519-946-5813

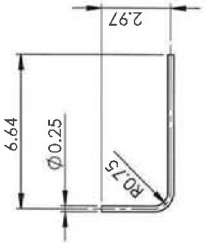
Environment Canada
Meeteorological Service of Canada
Service Météorologique du Canada

TITLE:
HYDROGEN STORAGE TANK
PIPES

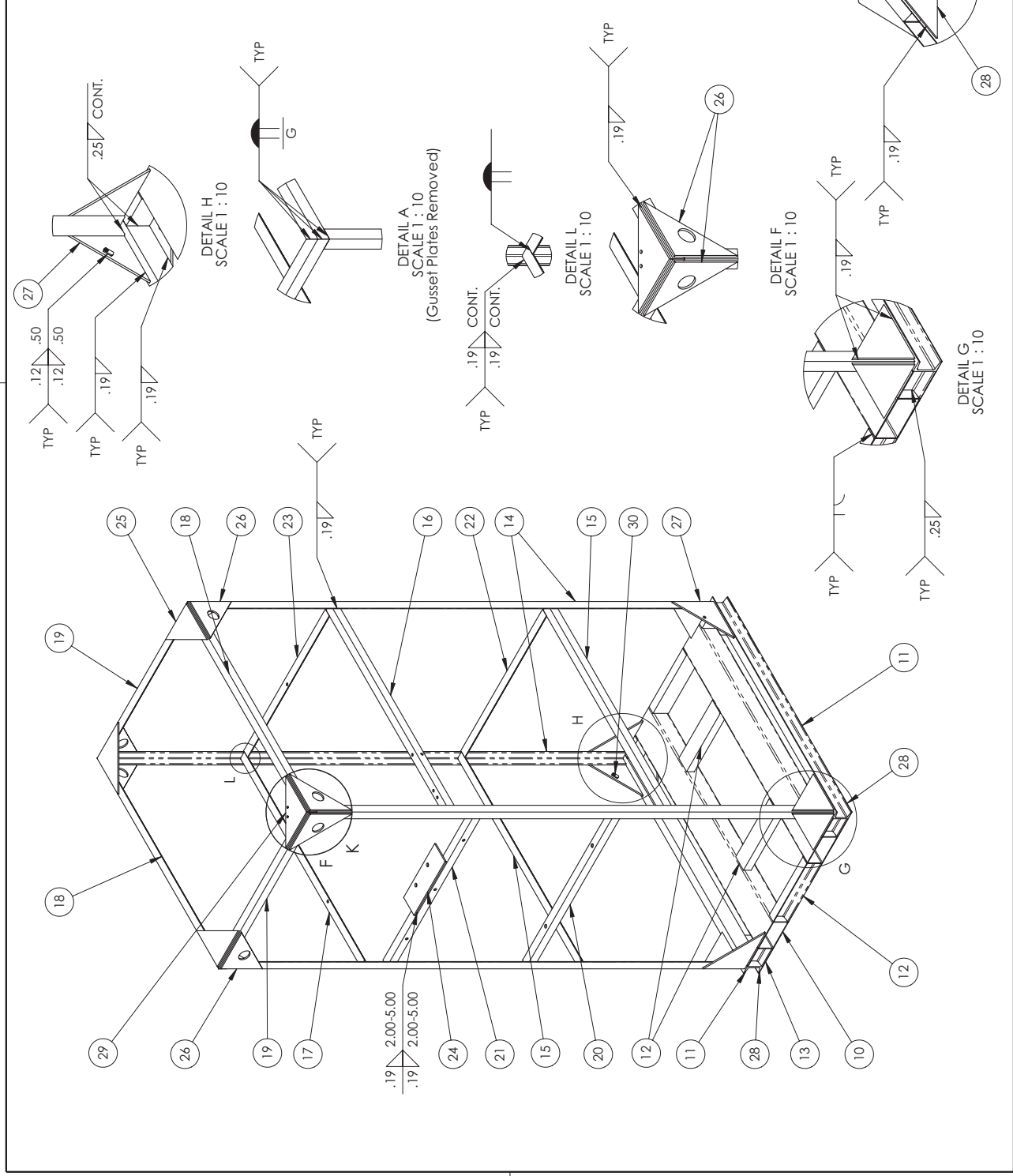
DRAWING NUMBER:
UA-TANK-0012-00

REVISION:

DATE:



BILL OF MATERIALS			
Item	QTY	DESCRIPTION	MATERIAL
10	2	Tube, Rect. - 6.00 x 3.00 x .12 x 48.00	SS 304
11	2	Channel - C3 x 5 x 48.00	SS 304
12	4	Channel - C3 x 5 x 13.00	SS 304
13	4	Channel - C3 x 5 x 4.00	SS 304
14	4	Angle - 1.50 x 1.50 x .19 x 100.00	SS 304
15	2	Angle - 1.50 x 1.50 x .19 x 46.50	SS 304
16	1	Angle - 1.50 x 1.50 x .19 x 46.50	SS 304
17	1	Angle - 1.50 x 1.50 x .19 x 47.00	SS 304
18	2	Angle - 1.50 x 1.50 x .19 x 35.00	SS 304
19	2	Angle - 1.50 x 1.50 x .19 x 34.50	SS 304
20	1	Angle - 1.50 x 1.50 x .19 x 32.00	SS 304
21	1	Angle - 1.50 x 1.50 x .19 x 32.00	SS 304
22	1	Angle - 1.50 x 1.50 x .19 x 32.00	SS 304
23	1	Angle - 1.50 x 1.50 x .19 x 32.00	SS 304
24	1	Plate, Cover - .25 x 4.00 x 24.50	SS 304
25	9	Plate, Gusset - .25 x 8.00 x 8.00	SS 304
26	8	Plate, Lifting - .25 x 8.00 x 8.00	SS 304
27	2	Plate, Grd Lug - .25 x 8.00 x 8.00	SS 304
28	4	Plate, Mounting - .25 x 8.00 x 8.00	SS 304
29	1	Plate, Brkt Mtg - .25 x 8.00 x 8.00	SS 304
30	2	Weld Nut, Offset - 3/5-16 UNC (94581A148)	18-8 SS



NOTES:

1. ESTIMATED WEIGHT: 320 LBS
2. ALL WELDS CONTINUOUS UNLESS OTHERWISE STATED
3. FIT-UP AND EDGE PREP AS REQUIRED
4. ALL WELDS TO BE NEAT AND CLEAN IN APPEARANCE
5. DE-BURR ALL HOLES AND REMOVE SHARP EDGES
6. EXTERNAL SURFACES OF THE FRAME TO HAVE A UNIFORM GLASS BEAD FINISH.

Primeval Asset Engineering Ltd.
 www.pveng.com
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Environment Canada
 Meteorological Service of Canada
 Service Météorologique du Canada

TITLE:

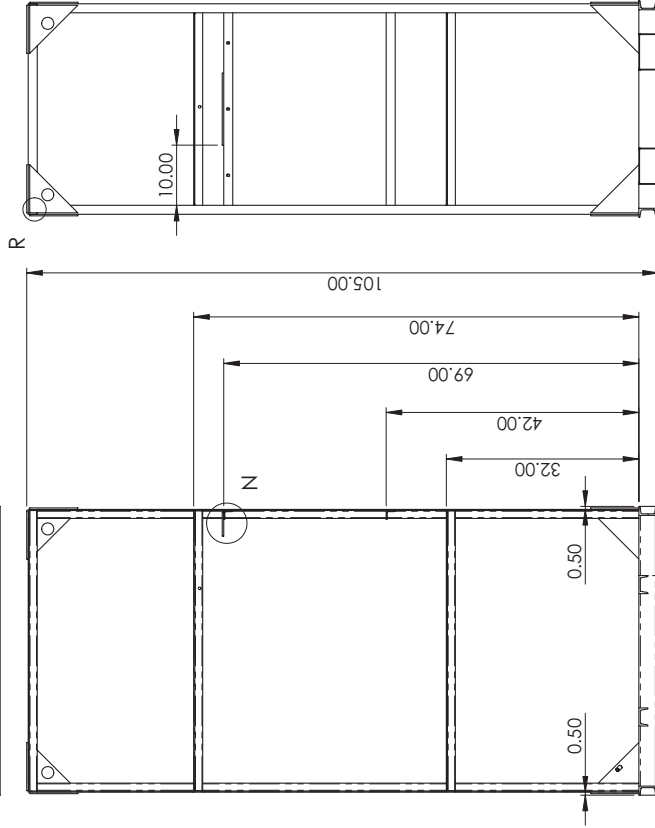
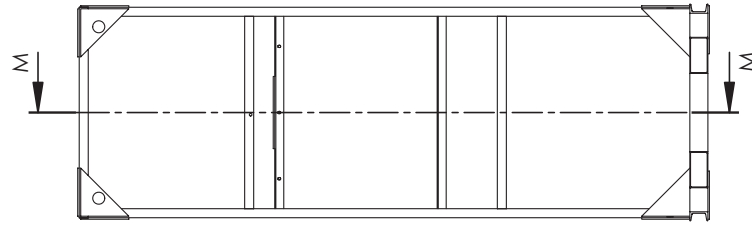
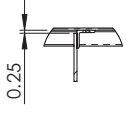
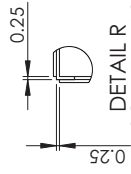
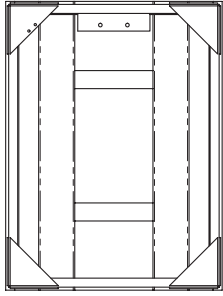
HYDROGEN STORAGE TANK FRAME COMP.

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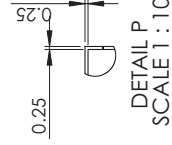
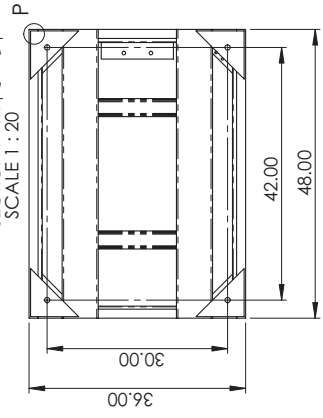
UA-TANK-0050-00

REVISION:

DATE:



SECTION M-M
SCALE 1:20



NOTES:



Primus Vireo Engineering Ltd.
www.pve.com
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Environment Canada
Environnement Canada
Meteorological Service of Canada
Service Météorologique du Canada

TITLE:

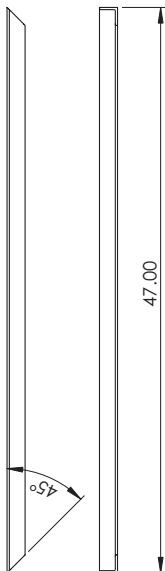
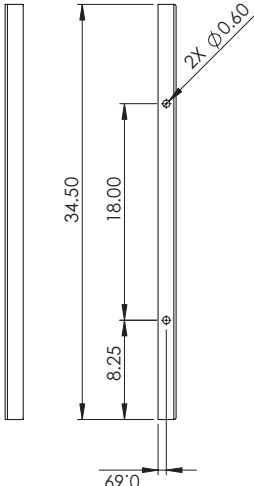
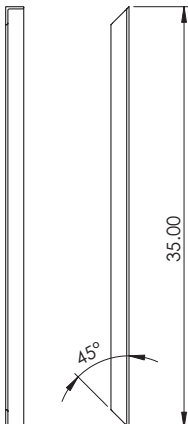
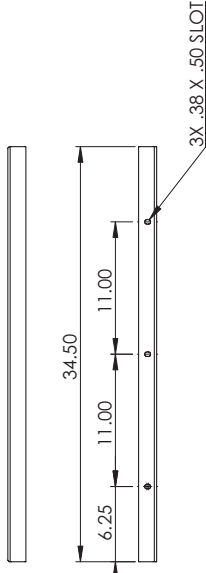
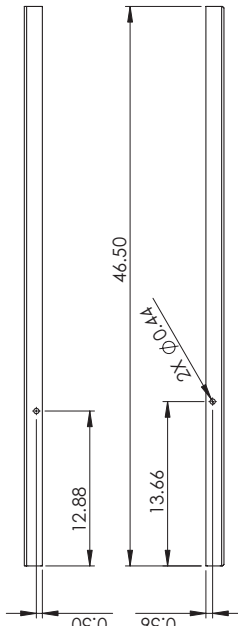
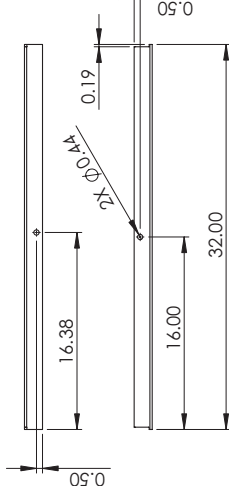
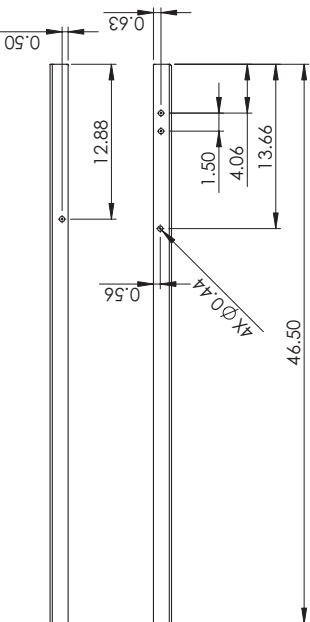
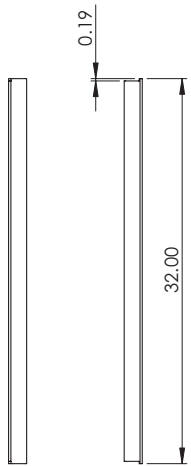


HYDROGEN STORAGE TANK
FRAME

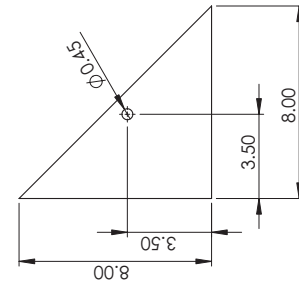
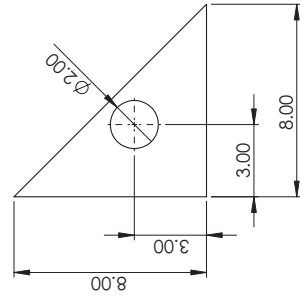
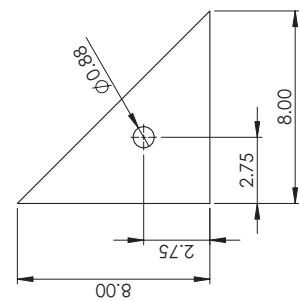
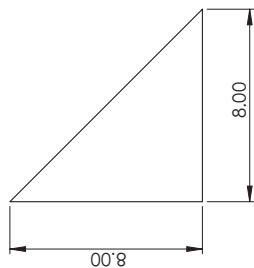
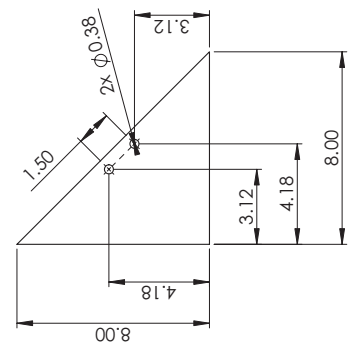
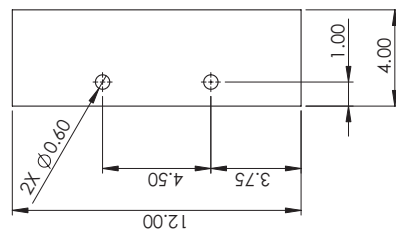
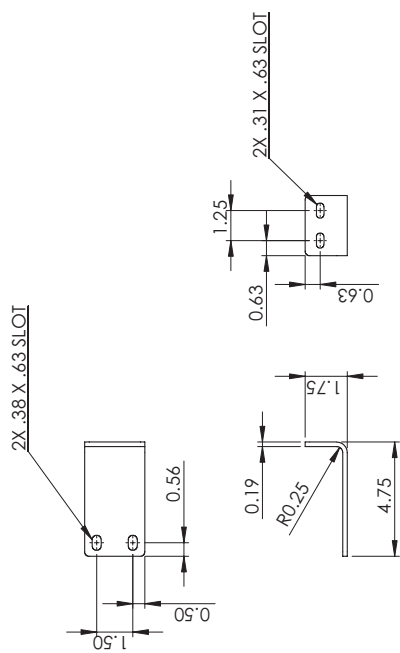
DRAWING NUMBER:

UA-TANK-0051-00

REVISION:

DATE:

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<div></div> <div>(17)</div>	<div></div> <div>(23)</div>
<div></div> <div>(16)</div>	<div></div> <div>(22)</div>
<div>NOTES:</div>	
<div><div><div><div>PV Eng</div><div><div>Pressure Vessel Engineering Ltd.</div><div>www.pveng.com</div><div>info@pveng.com</div><div>14211 14th Ave</div><div>Markham, Ontario, Canada</div><div>L3R 9V3</div></div></div><div><div>Environment Canada</div><div><div>Meteorological Service of Canada</div><div>Service Météorologique du Canada</div><div>TITLE:</div><div>HYDROGEN STORAGE TANK</div><div>FRAME CROSS MEMBERS</div></div></div><div><div>DRAWING NUMBER:</div><div>UA-TANK-0052-00</div></div><div><div>REVISION:</div><div>DATE:</div></div></div></div>	

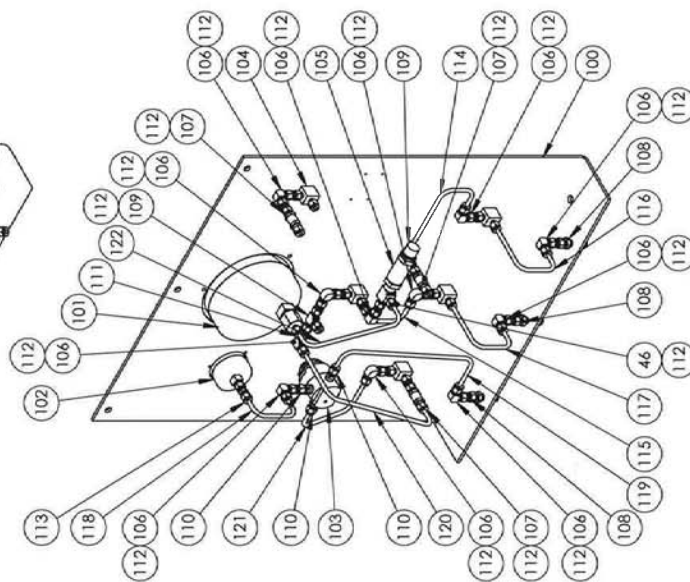
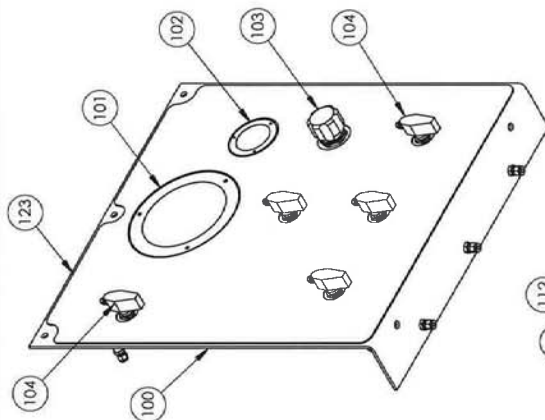
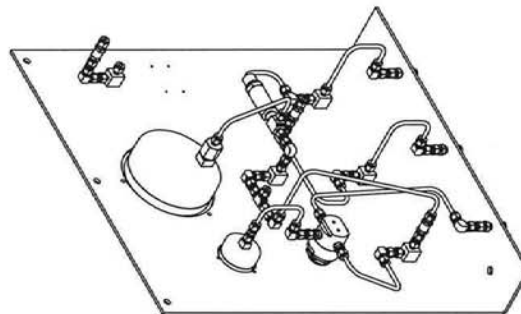


NOTES:



BILL OF MATERIALS					Notes	
Item	QTY	PartNo	MATERIAL	CRN	DESCRIPTION	
100	1	1UA-TANK-0101	SS 304		Panel Plate	See dwg UA-TANK-0101-01
101	1	Swagelok PGI-160B-PG300-BAPX-BGJ	SS 316	OF02026.2C	6" DIAL PRESSURE GAUGE UP TO 300PSI WITH DUAL SCALE	FRONT FLANGE MOUNTING
102	1	Swagelok PGI-63B-PG300-CAQX-BGJ	SS 316	OF02026.2C	2.5" DIAL PRESSURE GAUGE TO 300PSI DUAL SCALE	FRONT FLANGE MOUNTING
103	1	Swagelok KPR-GJC417A60C3BK	SS 316	OC6054.5C	SS REGULATOR WITH GAUGE OUTLET	VERTICAL ORIENTATION OF HANDLE IS OPEN
104	5	Swagelok SS-43CS4-A-LL	SS 316	OC6054.5C	BALL VALVE WITH LATCH LOCK HANDLE	PTFE TAPE TO BE USED ON ALL NPT FITTINGS
105	1	WIKA E-10-A-PB1-NB-Z02X67-ZZ			4-20mA, 2 WIRE 100 NPT PRESS SENSING, STAINLESS STEEL, PROCOF CSA CERTIFIED CLASS II/III	
106	11	Swagelok SS-400-9	SS 316	OA12577.5C	Flow, 90 - 25 Tube	
107	3	Swagelok SS-4C-EP-1	SS 316	OC12577.5C	0.25" NPT 316 PRESSURE	FLOW DIRECTION IS CRITICAL
108	3	Swagelok SS-400-61	SS 316	OA12577.5C	Bulkhead Union - 25 Tube	
109	2	Swagelok SS-400-3	SS 316	OA12577.5C	Tee, Union - 25 Tube	
110	3	Swagelok SS-400-1-4	SS 316	OA12577.5C	Str. Iron Conn. - 25 Tube to 1/4 NPT	
111	1	Swagelok SS-400-7-8	SS 316	OA12577.5C	Str. Iron Conn. - 25 Tube to 1/2 NPT	
112	16	Swagelok SS-401-4PC	SS 316	OA12577.5C	Port Connector - 25 Tube	
113	1	Swagelok SS-400-6	SS 316	OA12577.5C	Union - 25 Tube	
114	1	Swagelok SS-400-3-4TFT	SS 316	OA12577.5C	Tee, Run, Female - 25 Tube, 1/4 NPT	
115	1		SA-213		Tube - 250 OD 20 Ga. (035) X -9.36	
116	1		TP316/316L SMLS		TUBE 250 OD 20 Ga. (035) X -9.36	
117	1		SA-213		TUBE 250 OD 20 Ga. (035) X -8.50	
118	1		TP316/316L SMLS		TUBE 250 OD 20 Ga. (035) X -8.50	
119	1		SA-213		TUBE 250 OD 20 Ga. (035) X -6.65	
120	1		TP316/316L SMLS		TUBE 250 OD 20 Ga. (035) X -14.30	
121	1		SA-213		Tube - 250 OD 20 Ga. (035) X -15.62	
122	1		TP316/316L SMLS		Tube - 250 OD 20 Ga. (035) X -9.33	
123	1	1UA-TANK-0199	TP316/316L SMLS		Tube - 250 OD 20 Ga. (035) X -9.97	See dwg UA-TANK-0199-00

- Notes:
- The manufacturer shall have a valid certificate of authorization to assemble and register category H fittings in accordance with CSA B51
 - PTFE tape to be used on all NPT connections
 - Use Loctite Nickel Anti-seize on all bolted joints
 - All tubing shall be deburred
 - Assembly by Swagelok trained technician only
 - Each assembly manufactured shall be pneumatically pressure tested to 300 psi with helium in accordance with ASME B31.3. Each joint shall be verified leak free by applying Swagelok Snoop, no bubbles permitted.
 - Use only seamless tubing
 - Only use stainless steel fasteners and nylock nuts for the pressure gauges
 - All components are Swagelok supply unless otherwise noted
 - Logo plate to be fixed with stainless steel rivets after assembly, refer to dwg UA-TANK-0198.



PV Eng
Professional Engineering & Ltd.
1201 10th Avenue, Suite 100
Calgary, Alberta, Canada
T2C 1A5
Phone: 403-243-8888

Environment Canada
Metéorologique Service of Canada
Service Météorologique du Canada

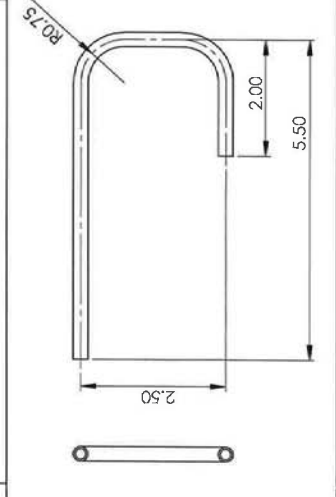
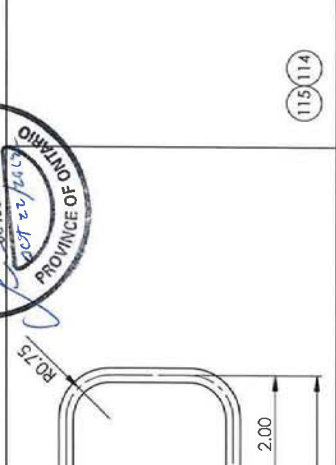
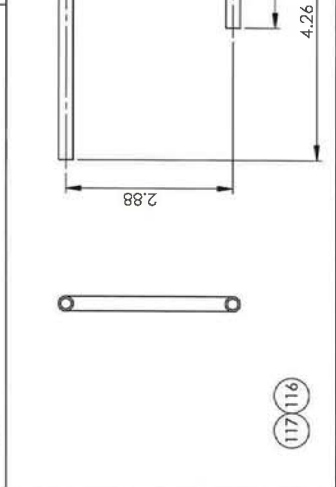
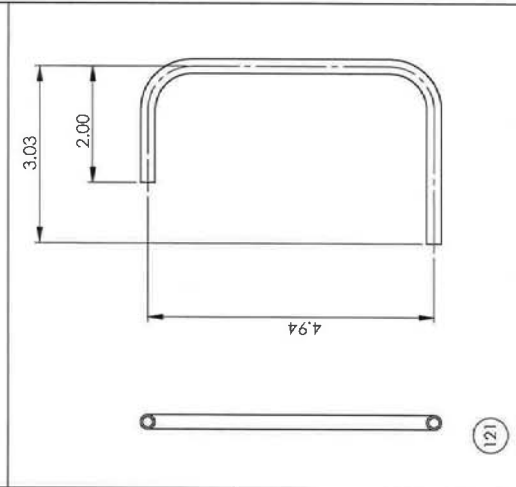
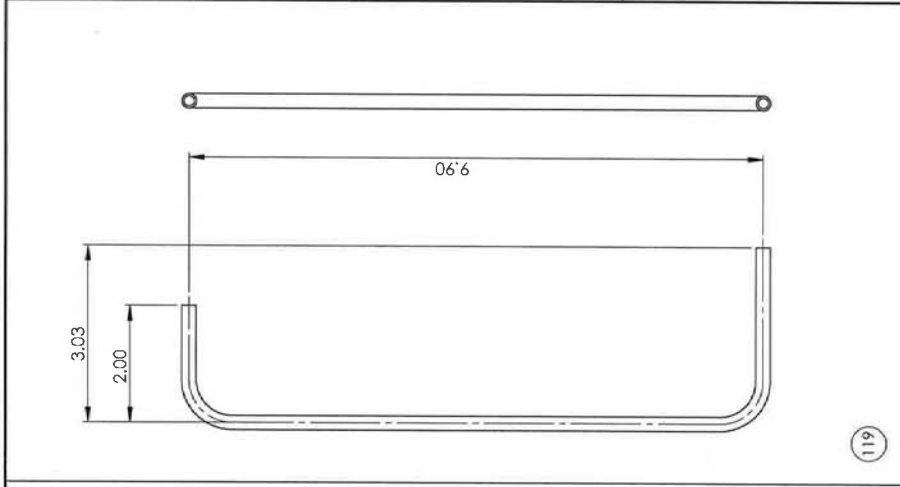
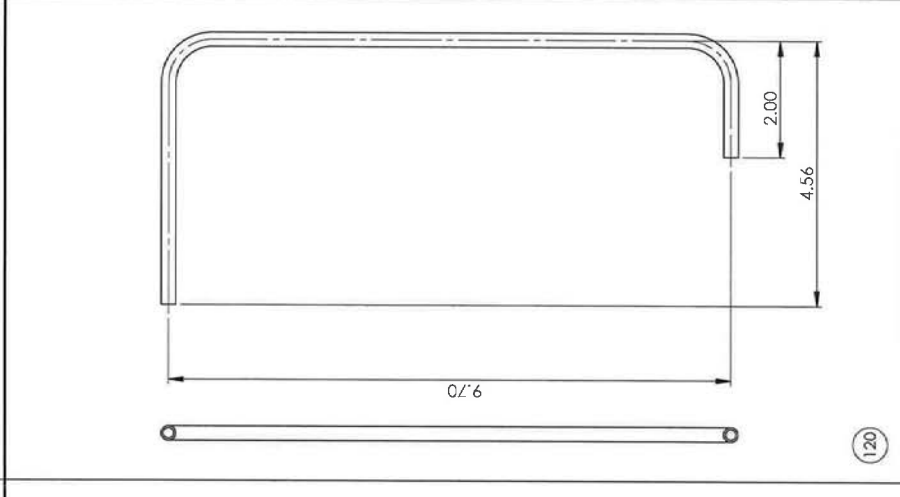
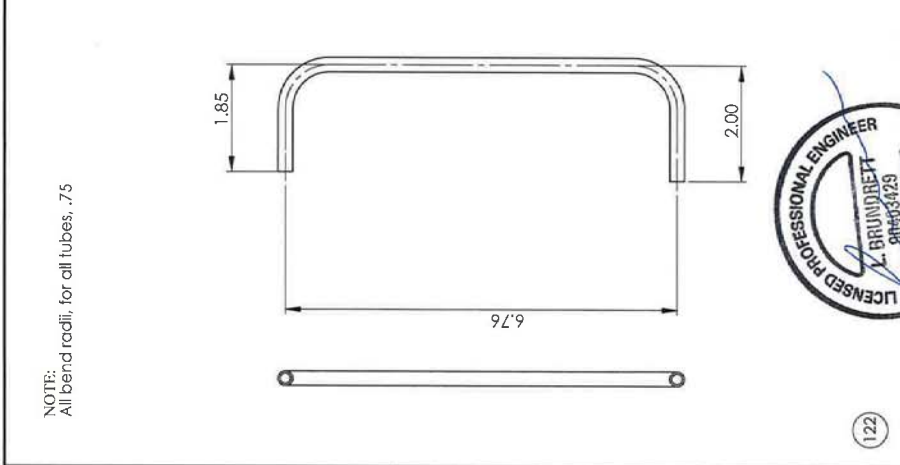
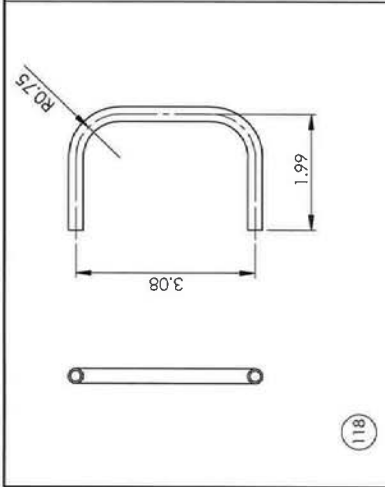
TITLE:
HYDROGEN STORAGE TANK
PANEL ASSEMBLY

DRAWING NUMBER:
UA-TANK-0100-01

REVISION:
01

DATE: 21 MAY 13





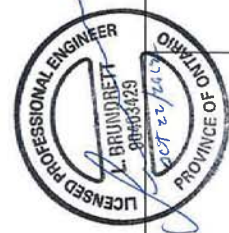
pV Eng
 Professional Engineering Ltd.
 1000 Yonge Street, Suite 100
 Toronto, Ontario, Canada
 Tel: 416 593 8888
 Fax: 416 593 8889
 www.pveng.com

Environment Canada
 Meteorological Service of Canada
 Service Météorologique du Canada

TITLE:
 HYDROGEN STORAGE TANK
 PIPES

DRAWING NUMBER:
 UA-TANK-0102-00

REVISION:
 DATE:



[illegible]

REV	DESCRIPTION	DATE	INITIALS

- 1) PLATE THICKNESS 16 gauge
MATERIAL 304SS
- 2) "LOGO" TO BE REPLACED
WITH COMPANY TRADEMARK
- 3) CRN NUMBER TO BE COMPLETED BY
REPLACING X
- 4) MANUFACTURER NAME TO BE
REPLACED WITH COMPANY NAME
INCLUDING TELEPHONE NUMBER
- 5) SERIAL NUMBER (S/N) TO BE
COMPLETED BY REPLACING X ONLY
- 6) PART NUMBER AND HYDROGEN
STORAGE SYSTEM NOT TO BE CHANGED
- 7) SAMPLE TO BE SENT TO
ENVIRONMENT CANADA FOR
APPROVAL

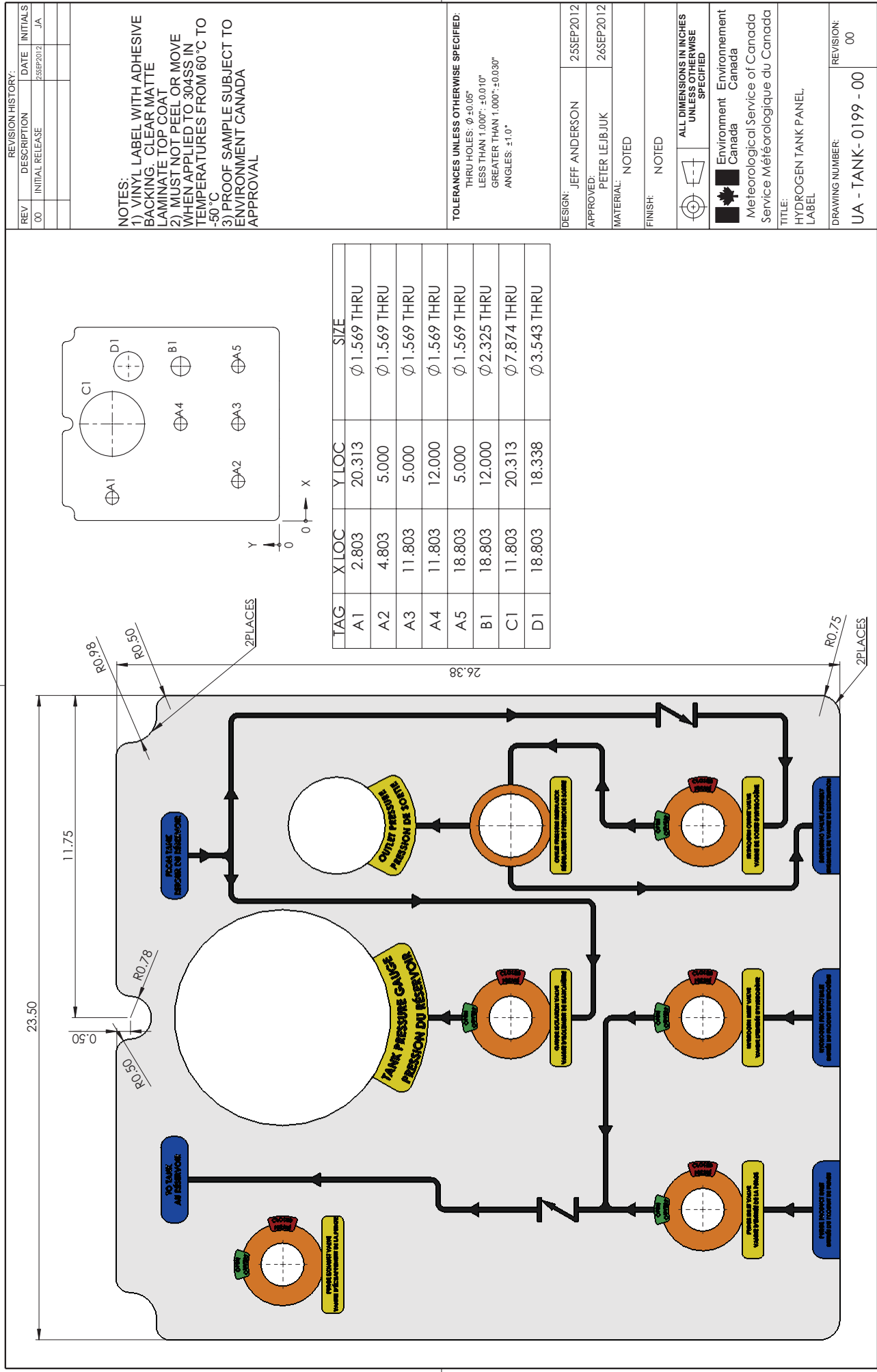
DESIGN: JEFF ANDERSON	25OCT2012
APPROVED: PETER LEJB, JUK	25OCT2012
MATERIAL: LISTED	

AS FINISHED



Meteorological Service of Canada
Service Météorologique du Canada

DRAWING NUMBER:	UA-TANK-0198
REVISION:	DATE:



REVISION HISTORY:

REV	DESCRIPTION	DATE	INITIALS
00	INITIAL RELEASE	25SEP2012	JA

NOTES:

1) VINYL LABEL WITH ADHESIVE BACKING. CLEAR MATTE LAMINATE TOP COAT

2) MUST NOT PEEL OR MOVE WHEN APPLIED TO 304SS IN TEMPERATURES FROM 60 °C TO -50 °C

3) PROOF SAMPLE SUBJECT TO ENVIRONMENT CANADA APPROVAL

TOLERANCES UNLESS OTHERWISE SPECIFIED:

THRU HOLES: $\phi \pm 0.05"$

LESS THAN 1.000": $\pm 0.010"$

GREATER THAN 1.000": $\pm 0.030"$

ANGLES: $\pm 1.0^\circ$

DESIGN:

JEFF ANDERSON

25SEP2012

APPROVED:

PETER LEJB JUK

26SEP2012

MATERIAL:

NOTED

FINISH:

NOTED

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED

Environment Canada

Meteorological Service of Canada

Service Météorologique du Canada

TITLE:

HYDROGEN TANK PANEL LABEL

DRAWING NUMBER:

UA - TANK- 0199 - 00

REVISION:

00

REVISION HISTORY:			
REV	DESCRIPTION	DATE	INITIALS
00	INITIAL RELEASE	30OCT2012	J.A

NOTES:

- 1) REMOVE ALL SHARP EDGES AND BURRS

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 $\pm 0.01"$
 ALL RADII = ± 0.025
 ALL ANGLES = $\pm 1.0^\circ$

DESIGN: JEFF ANDERSON 03OCT2012

APPROVED: PETER LEJBUK 04OCT2012

MATERIAL: ALUMINIUM 6061

FINISH: AS SUPPLIED

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED

Environment Canada

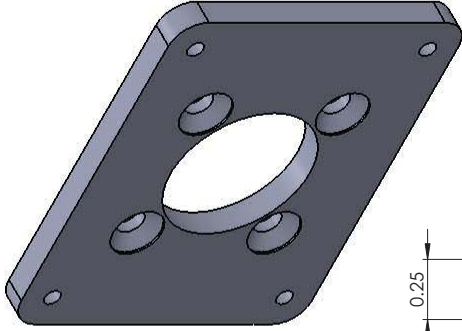
Meteorological Service of Canada

Service Météorologique du Canada

TITLE: HYDROGEN TANK, ACTUATOR PLATE

DRAWING NUMBER: UA - TANK - 0200 - 00

REVISION: 00



0.25

0.02

A

DETAIL A

$\phi 0.26$ (4 PLACES)
COUNTERSINK FOR M6
FLAT HEAD SCREW

3.54

2.91

0.31

0.30

$\phi 0.16$ (4 PLACES)

$\phi 1.97$

$\phi 1.42$

2.95

2.36

R0.28

