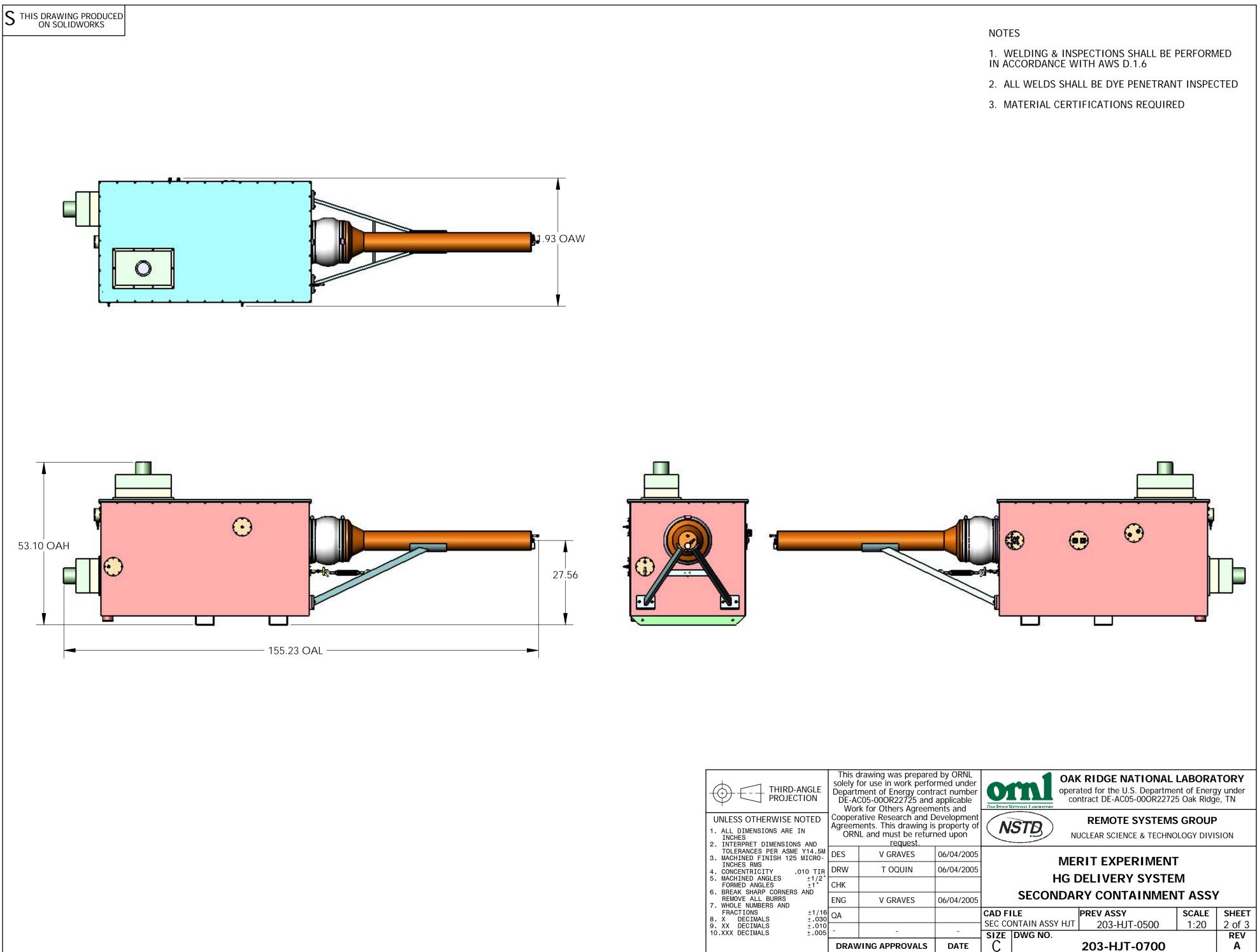


- 1. WELDING & INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH AWS D.1.6
- 2. ALL WELDS SHALL BE DYE PENETRANT INSPECTED
- 3. MATERIAL CERTIFICATIONS REQUIRED

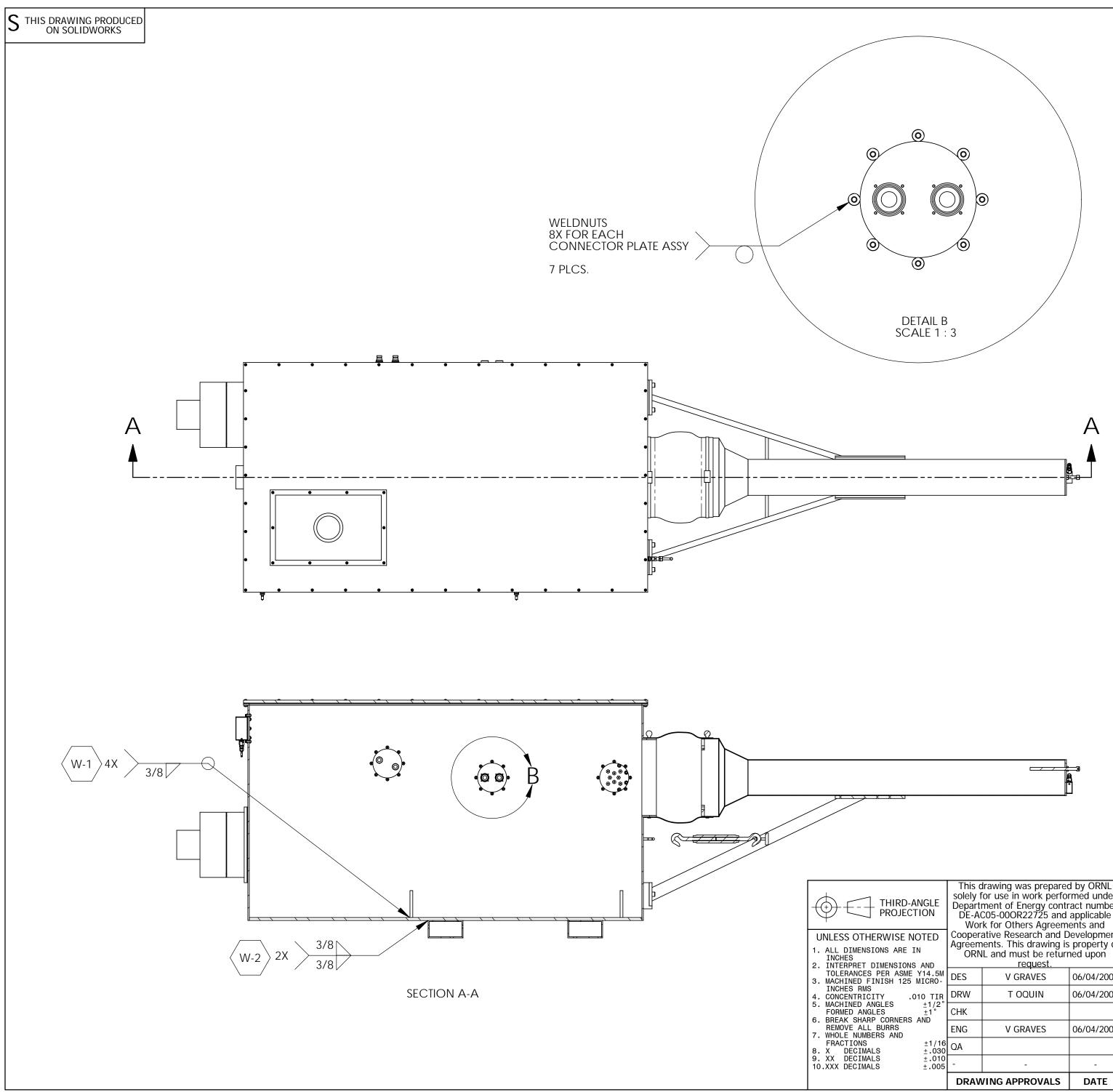
.XXX DECI		- DRAWING	- APPROVALS	- DATE		DWG NO.	I	203-HJT-0700	1	REV	
	MALS $\pm .030$	QA			-	I LE ONTAIN ASSY H		203-HJT-0500	1:22	SHEET	
REMOVE A	ARP CORNERS AND LL BURRS MBERS AND	ENG	V GRAVES	06/04/20	005 CAD F			Y CONTAINME	NT ASS		
MACHINED	NGLES ±1°	СНК					_	ELIVERY SYSTE		_	
INCHES F	MS ICITY .010 TIR	DRW	T OQUIN	06/04/20	005						
INTERPRE TOLERANC	T DIMENSIONS AND ES PER ASME Y14.5M FINISH 125 MICRO-	DES	request. V GRAVES	06/04/20	005						
ALL DIME INCHES	NSIONS ARE IN	Agreements.	. This drawing is d must be returr	s property	/of (🔥	STD)	NU	CLEAR SCIENCE & TECHN			
INLESS O	THERWISE NOTED	Work for Cooperative	Others Agreem Research and D	ents and Developme	ent	ATIONAL LABORATORY)	
	THIRD-ANGLE	solely for us Department DE-AC05-0	se in work perfor of Energy contr DOOR22725 and	rmed und ract numb applicable	under		OAK RIDGE NATIONAL LABORATORY operated for the U.S. Department of Energy under contract DE-AC05-000R22725 Oak Ridge, TN			y under	
ITEM	with brace/QTY.		NAME		MATE		DESCRIPTION DWG				
1	1 with		ec base hjt					SECONDARY DNTAINMENT BASE	203-HJT-070		
2	1	sec t	top cover hjt		LEXAN	LEXAN - 1/2" 69.50 X 39.50 X .500					
3	2		bing support hj	jt	AL - 6061 T52, ASTM B221			00 X 6.00 X 38.00 X .188 WALL	203-HJ		
4	1	supp	oort cradle hjt		B-221		S	UPPORT CRADLE	203-HJ	Γ-0704	
5	1		e cover gasket	-	AL 6061-T6511, ASTM			#86715K869	203-HJ		
					BUNA-N SHEET - 50A		N	ICMASTER-CARR			
7 6	1		tube assy hjt /indow monitor	red				DOWNSTREAM	203-HJ ⁻ 203-HJ ⁻		
8	4		eld stud hjt		SS - 1		W	ELD STUD, 0.5 X 3.0	N/		
9	1		tor plate assy f	hjt			A	ONNECTOR PLATE SSY - HYDRAULICS	203-HJ		
10	1	connec	tor plate assy h	hjt		A		ONNECTOR PLATE SSY - EXTRACTION	203-HJT-0740		
11	1	connec ⁻	connector plate assy hjt					ONNECTOR PLATE ASSY - OPTICS	203-HJ	T-0750	
12	1	connector plate assy hjt						ONNECTOR PLATE ASSY - DRAIN	203-HJ	Γ-0760	
13	1	connec	connector plate assy hjt				C A	ONNECTOR PLATE SSY - ELECTRICAL	203-HJ	Γ-0770	
14	1	connec	tor plate assy I	hjt				ONNECTOR PLATE ASSY - HG INLET	203-HJ	Γ-0780	
15	1		3022T652			-	N	1CMASTER-CARR 3022T652	N/	A	
16	1	sec contain bladder hjt		njt					N/	A	
17	2		ose Clamp		SS - 316 O			DDER HOSE CLAMP	N/		
19	4		CS 0.5-13x1x1-N					38 X .5 -16 SHCS	N/		
20	40	5	outton head ca screw_ai /NS-0420-0N	·	SS - 18-8 SS - 18-8			BHCS - 1/4-20 / WELDNUT - 1/4-20	N/A N/A		
21	10	0.25-2	BHCSCREW 20x0.875-HX-N	20	SS - 8			BHCS - 1/4-20	N/		
22	1		tronix assy hjt		N//	4		AIR FILTER ASSY - RECTANGULAR	N/	A	
23	1	airfilt	tronix assy hjt		N//	4		AIR FILTER ASSY - SQUARE	N/	A	
	1	omog	ga level sensor						N/	/ \	



203-HJT-0700

NO.

DWG

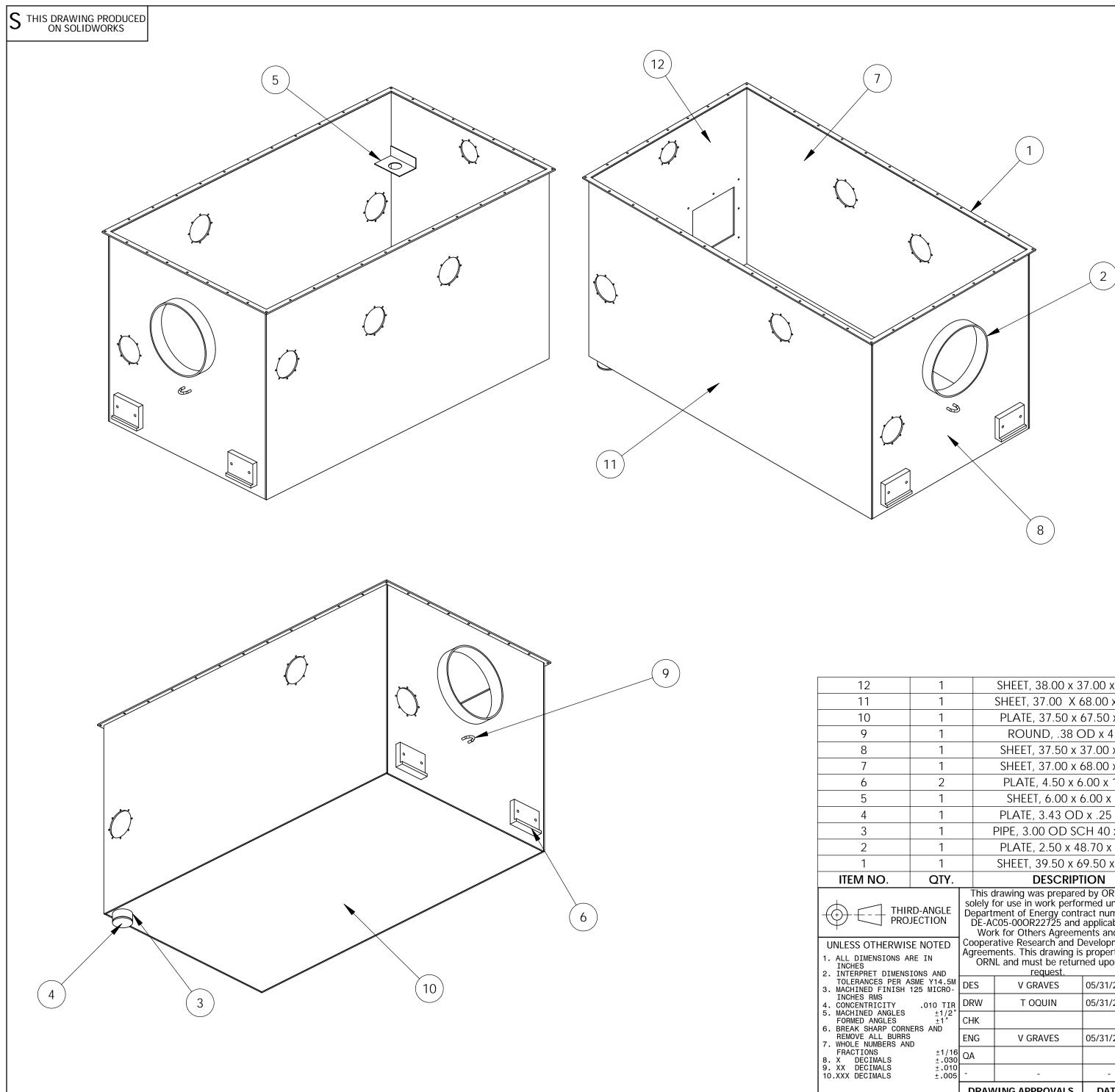


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- 3. MATERIAL CERTIFICATIONS REQUIRED

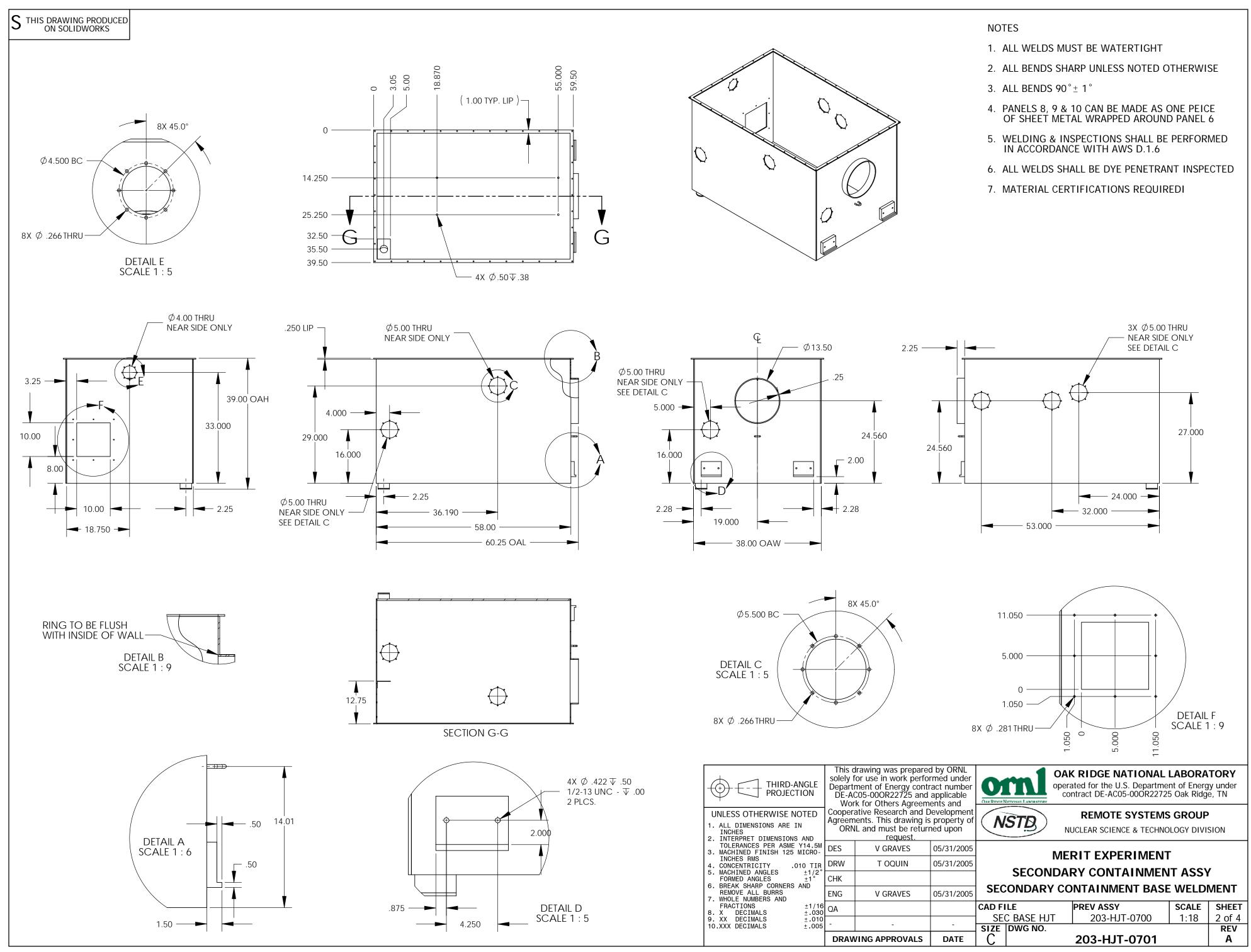
	solely f Departi DE-A	Irawing was prepared or use in work perfo ment of Energy conti C05-000R22725 and k for Others Agreem	rmed under ract number applicable	OAK RIDGE NATIONAL LABORATORY operated for the U.S. Department of Energy under contract DE-AC05-000R22725 Oak Ridge, TN						
LESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND	Coopera Agreem ORN	ative Research and E ents. This drawing is L and must be return request.	Development Sproperty of		STD	REMOTE SYSTEMS GROUP NUCLEAR SCIENCE & TECHNOLOGY DIVISION				
FOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO-	DES	V GRAVES	06/04/2005	5 MERIT EXPERIMENT						
INCHES RMS CONCENTRICITY .010 TIR	DRW	T OQUIN	06/04/2005	95						
ACHINED ANGLES ±1/2° FORMED ANGLES ±1°	СНК			HG DELIVERY SYSTEM						
REAK SHARP CORNERS AND	ENG	V GRAVES	06/04/2005		SECONDA	RY CONTAINMEN	IT ASSY			
FRACTIONS ±1/16 (DECIMALS ±.030	QA			CAD FI		PREV ASSY	SCALE	SHEET		
(X DECIMALS ±.010		_			NTAIN ASSY HJT	203-HJT-0500	1:12	3 of 3		
XXX DECIMALS ±.005		-	-	SIZE	DWG NO.			REV		
	DRAW	ING APPROVALS	DATE	С		203-HJT-0700		Α		

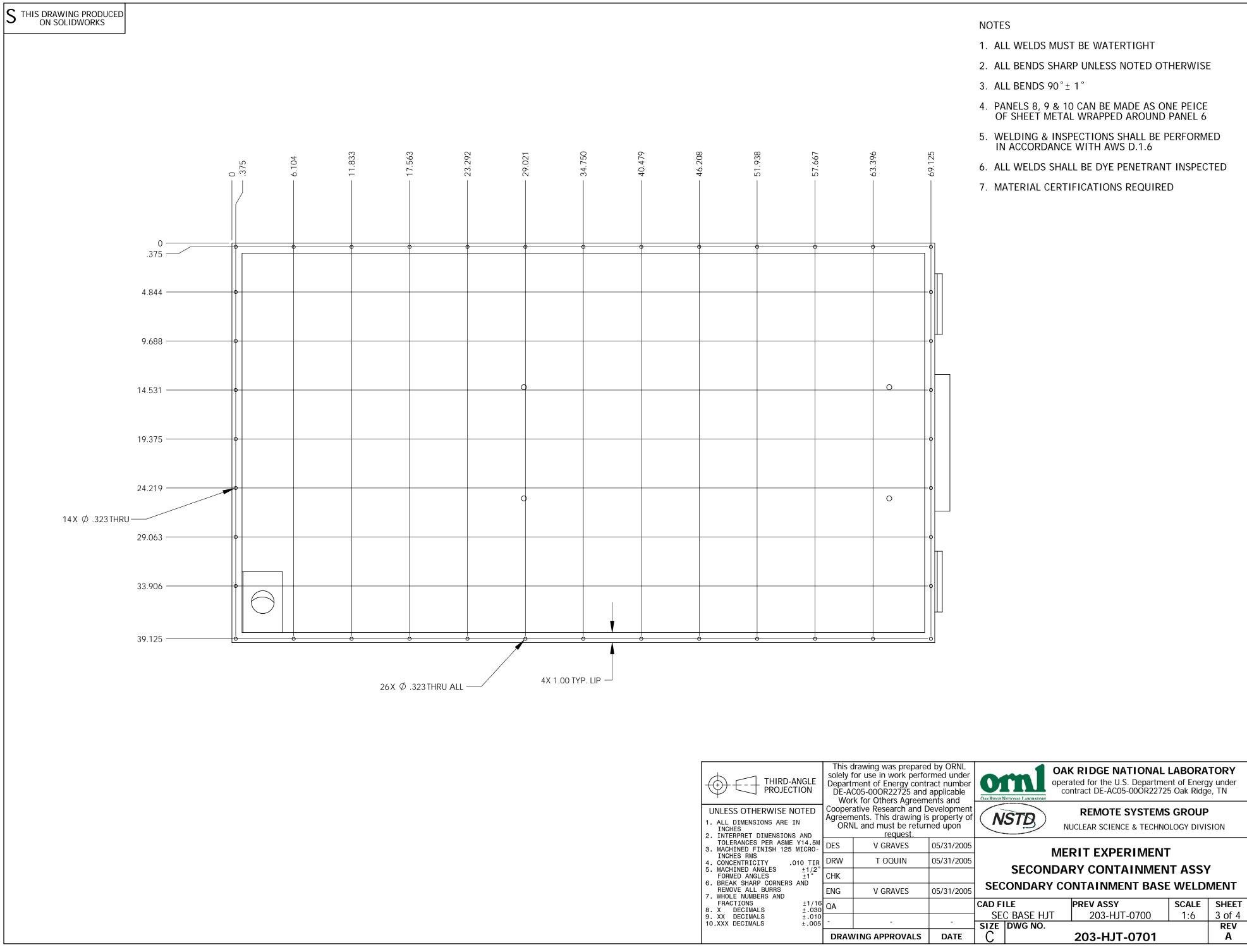
203-HJT-0700

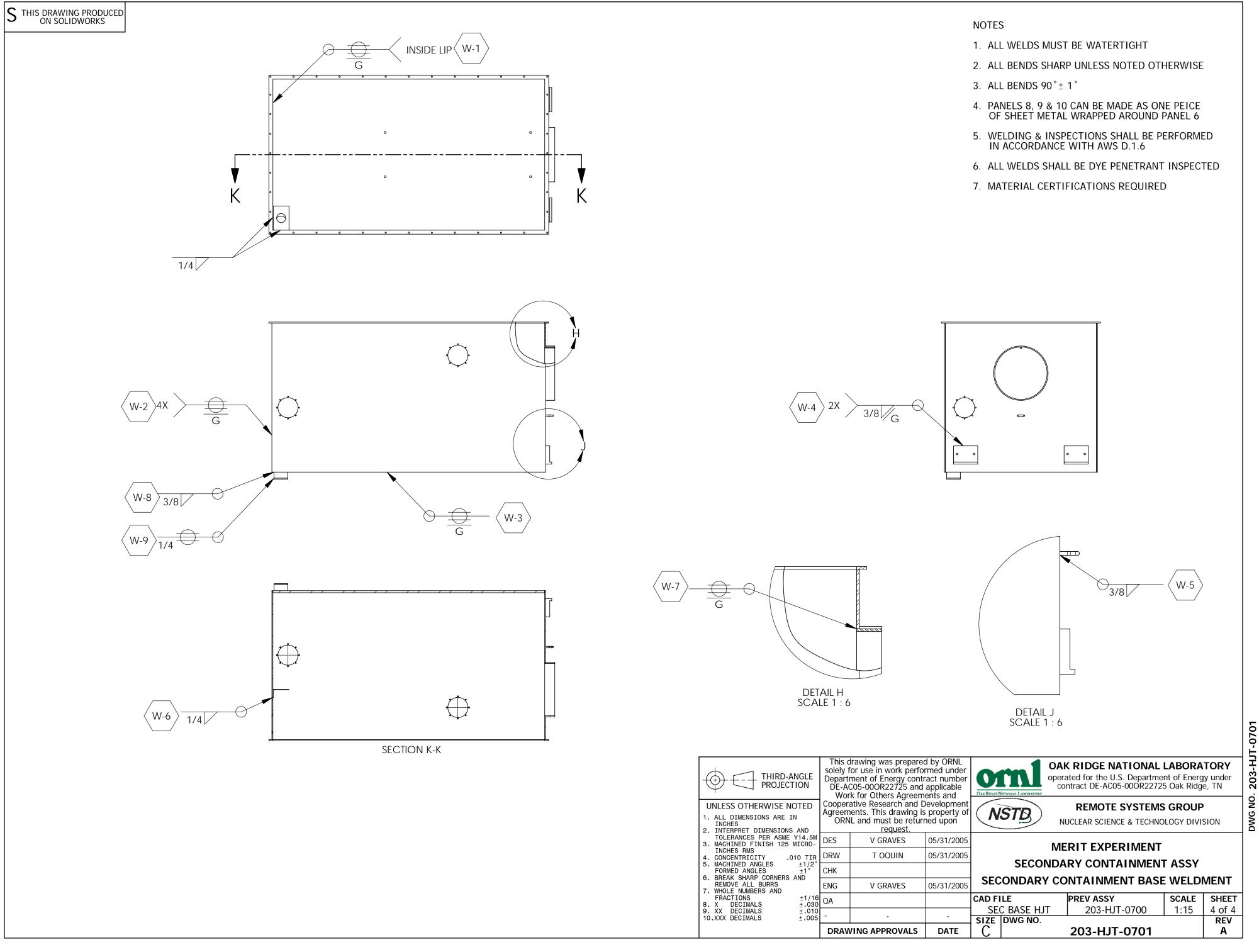


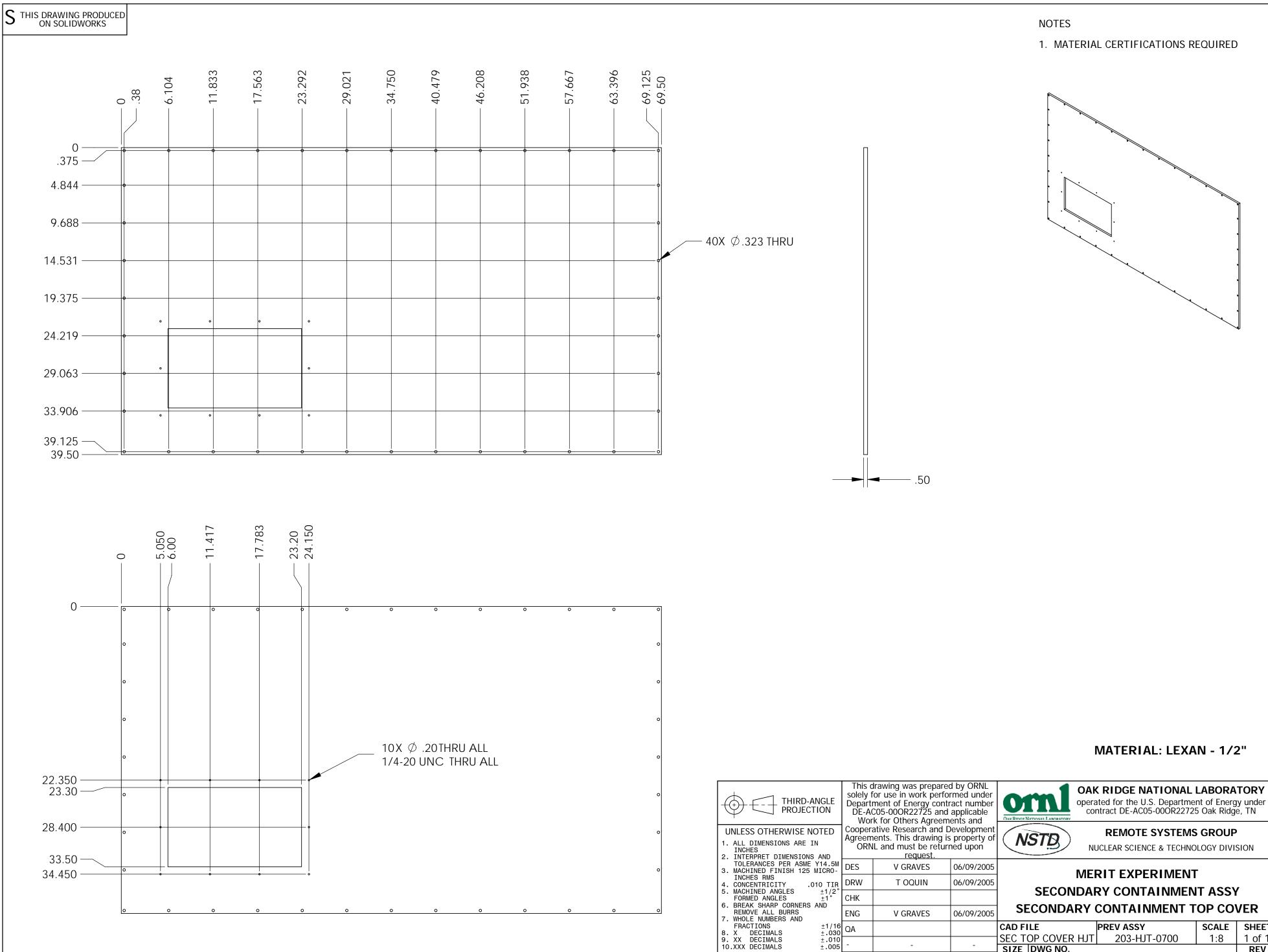
- 1. ALL WELDS MUST BE WATERTIGHT
- 2. ALL BENDS SHARP UNLESS NOTED OTHERWISE
- 3. ALL BENDS 90 $^{\circ} \pm$ 1 $^{\circ}$
- 4. PANELS 8, 9 & 10 CAN BE MADE AS ONE PEICE OF SHEET METAL WRAPPED AROUND PANEL 6
- 5. WELDING & INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH AWS D.1.6
- 6. ALL WELDS SHALL BE DYE PENETRANT INSPECTED
- 7. MATERIAL CERTIFICATIONS REQUIRED

		DRAV	VING APPROVALS	DATE			203-HJT-0701		Α	
0.XXX DECIMALS ±.005				DWG NO.		•	REV			
B. X DECIMALS D. XX DECIMALS	DECIMALS ±.030		-	C BASE HJT	203-HJT-0700	1:12	1 of 4			
WHOLE NUMBERS AND					PREV ASSY		SHEET			
FORMED ANGLES B. BREAK SHARP CORN	±1 [°] ERS AND	СНК			SEC					
A CONCENTRICITY	+1/2°	DRW	T OQUIN	05/31/2005	-		ARY CONTAINMEN		,	
TOLERANCES PER A MACHINED FINISH INCHES RMS	SME Y14.5M 125 MICRO-	DES	V GRAVES	05/31/2005		М	ERIT EXPERIMEN	г		
INCHES INTERPRET DIMENS	IONS AND	ORN	IL and must be return request.	ned upon			NUCLEAR SCIENCE & TECHNO		SION	
UNLESS OTHERWIS		Agreen	ative Research and E pents. This drawing is	s property of		ISTA	REMOTE SYSTEMS GROUP			
)		Wor	C05-00OR22725 and k for Others Agreem	ents and	OAK RIDGE	NATIONAL LABORATORY		J OAK KIUY		
	RD-ANGLE	Depart	for use in work perfo ment of Energy conti	ract number	0	ope	erated for the U.S. Departmeterated for the U	ent of Energ	y under	
		This o	drawing was prepare	d by ORNL			AK RIDGE NATIONAL	LABORA	TORY	
ITEM NO.	QTY.		DESCRIP		0	MATERIAL LEN				
1	1		PLATE, 2.50 x 48.70 x .250 SHEET, 39.50 x 69.50 x .250			SS - 304L, ASTM A240 48.7			-	
3	1		PIPE, 3.00 OD SCH 40 x 1.5			SS - 304L, ASTM A312 SS - 304L, ASTM A240			50 .70	
4	1		PLATE, 3.43 OD x .25 THK PIPE 3.00 OD SCH 40 x 1.5				04L, ASTM A240		/A	
5	1		SHEET, 6.00 x 6.00 x .10				04L, ASTM A240	-	00	
6	2		PLATE, 4.50 x 6.00 x 1.50				04L, ASTM A240		50	
7	1		SHEET, 37.00 x 68.00 x .25				94L, ASTM A240	240 68.00		
8	1		SHEET, 37.50 x 37.00 x .25			SS - 30	SS - 304L, ASTM A240 37.5			
9	1		ROUND, .38 C	DD x 4.25		SS - 304L, ASTM A276 4.2				
10	1		PLATE, 37.50 x	67.50 x .50)	SS - 304L, ASTM A240 67.				
11	1		SHEET, 37.00 X (68.00 x .25	50	SS - 30	14L, ASTM A240	68	.00	
12	1		SHEET, 38.00 x 3	37.00 x .25	0	SS - 304L, ASTM A240 37.				



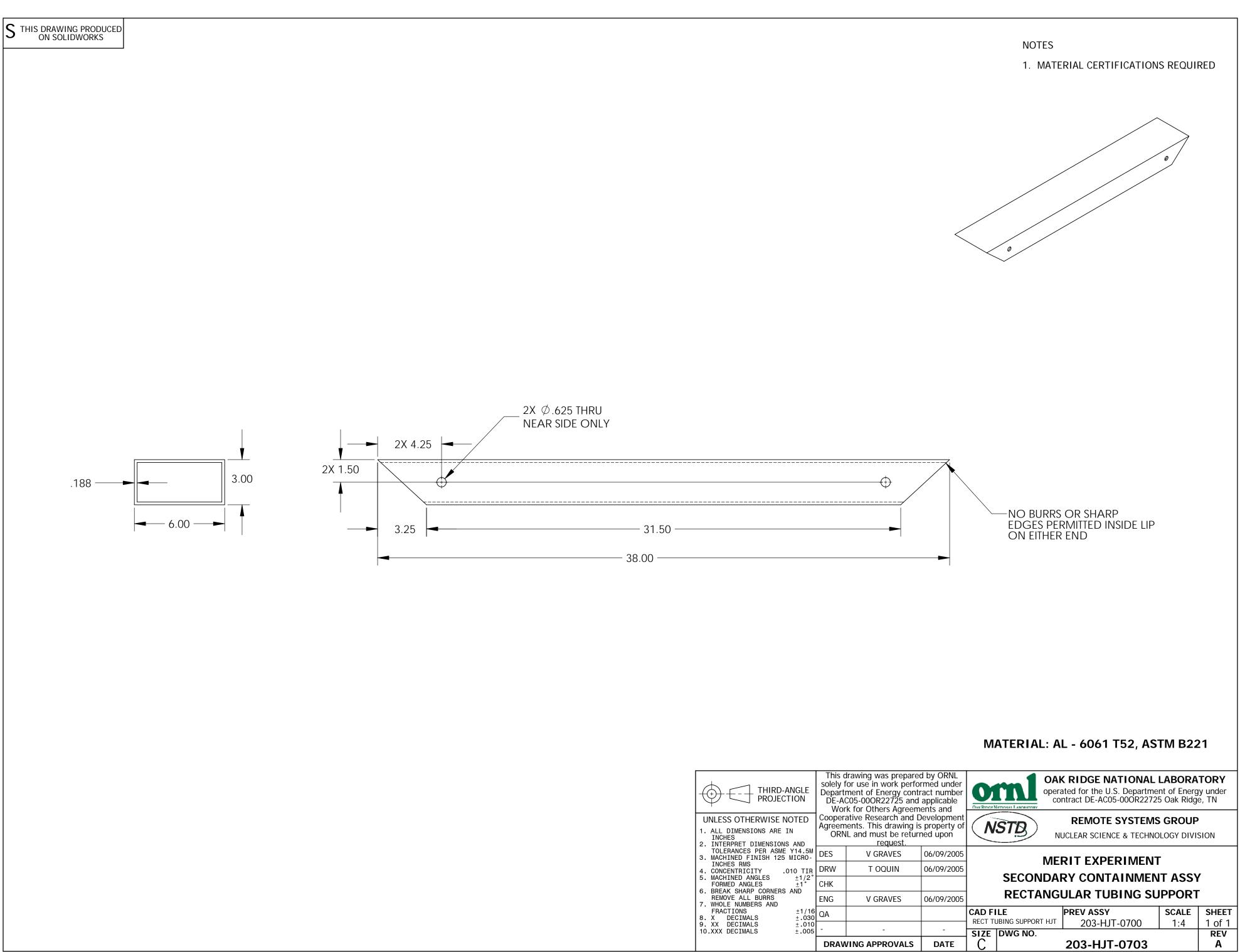




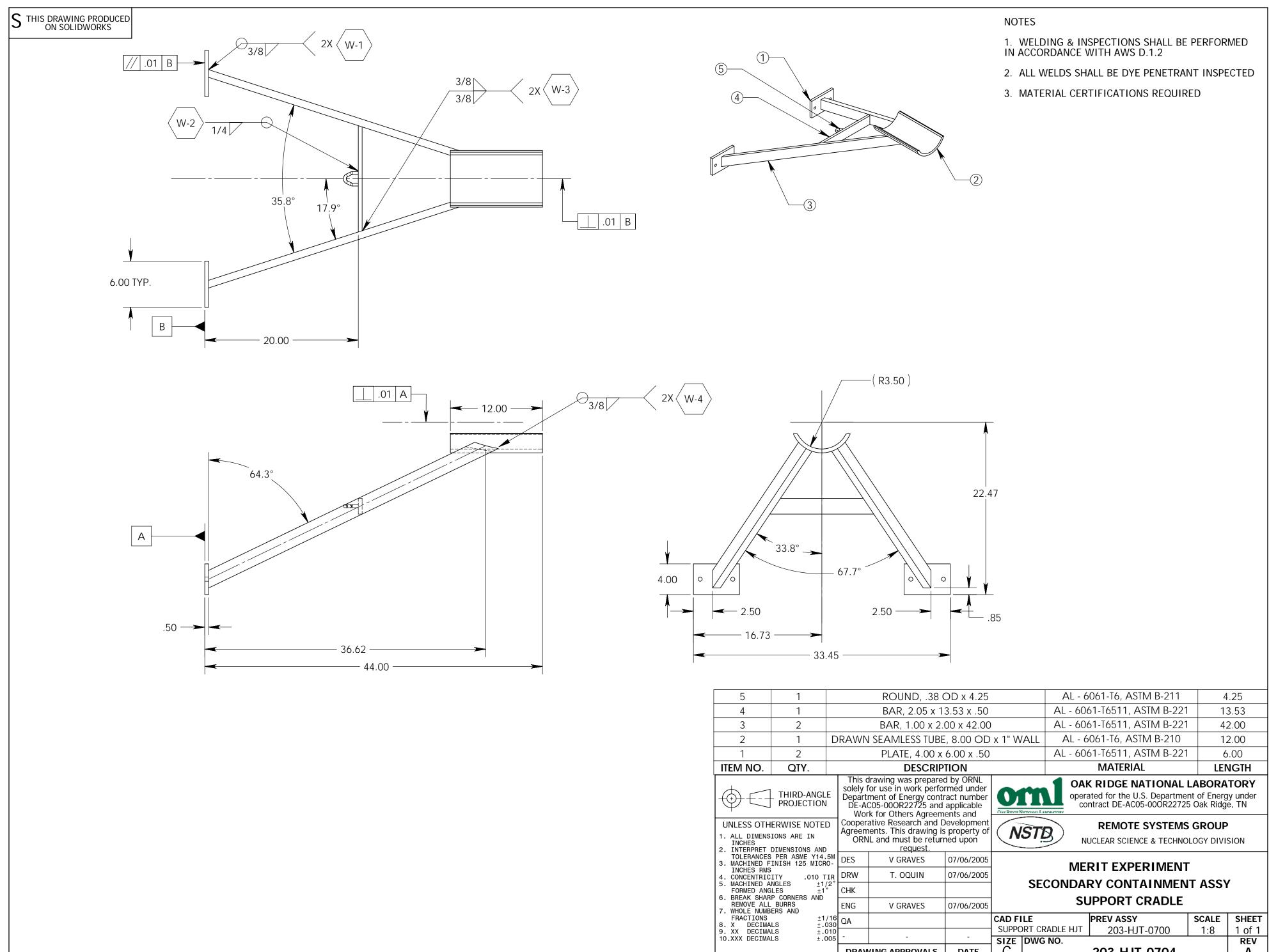


THIRD-ANGLE PROJECTION	solely f Departi DE-A	frawing was prepared or use in work performent of Energy contr C05-00OR22725 and k for Others Agreem	rmed under act number applicable		op	AK RIDGE NATIONAL erated for the U.S. Departme contract DE-AC05-000R2272	nt of Enera	v under
NLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES	Coopera Agreem	ative Research and D ents. This drawing is L and must be return request.	evelopment property of	N	STB	REMOTE SYSTEMS		
INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO-	DES	V GRAVES	06/09/2005		ГЛ		r	
INCHES RMS CONCENTRICITY .010 TIR	DRW	T OQUIN	06/09/2005					,
MACHINED ANGLES ±1/2° FORMED ANGLES ±1° BREAK SHARP CORNERS AND	СНК			0.5				
REMOVE ALL BURRS	ENG	V GRAVES	06/09/2005	SE	CONDARY	CONTAINMENT T	OP CO	VER
FRACTIONS ±1/16 X DECIMALS ±.030				CAD FI		PREV ASSY	SCALE	SHEET
XX DECIMALS ±.010 .XXX DECIMALS ±.005	-	-	-		OP COVER HJ DWG NO.	IT 203-HJT-0700	1:8	1 of 1 REV
			DATE	C		203-HJT-0702		A

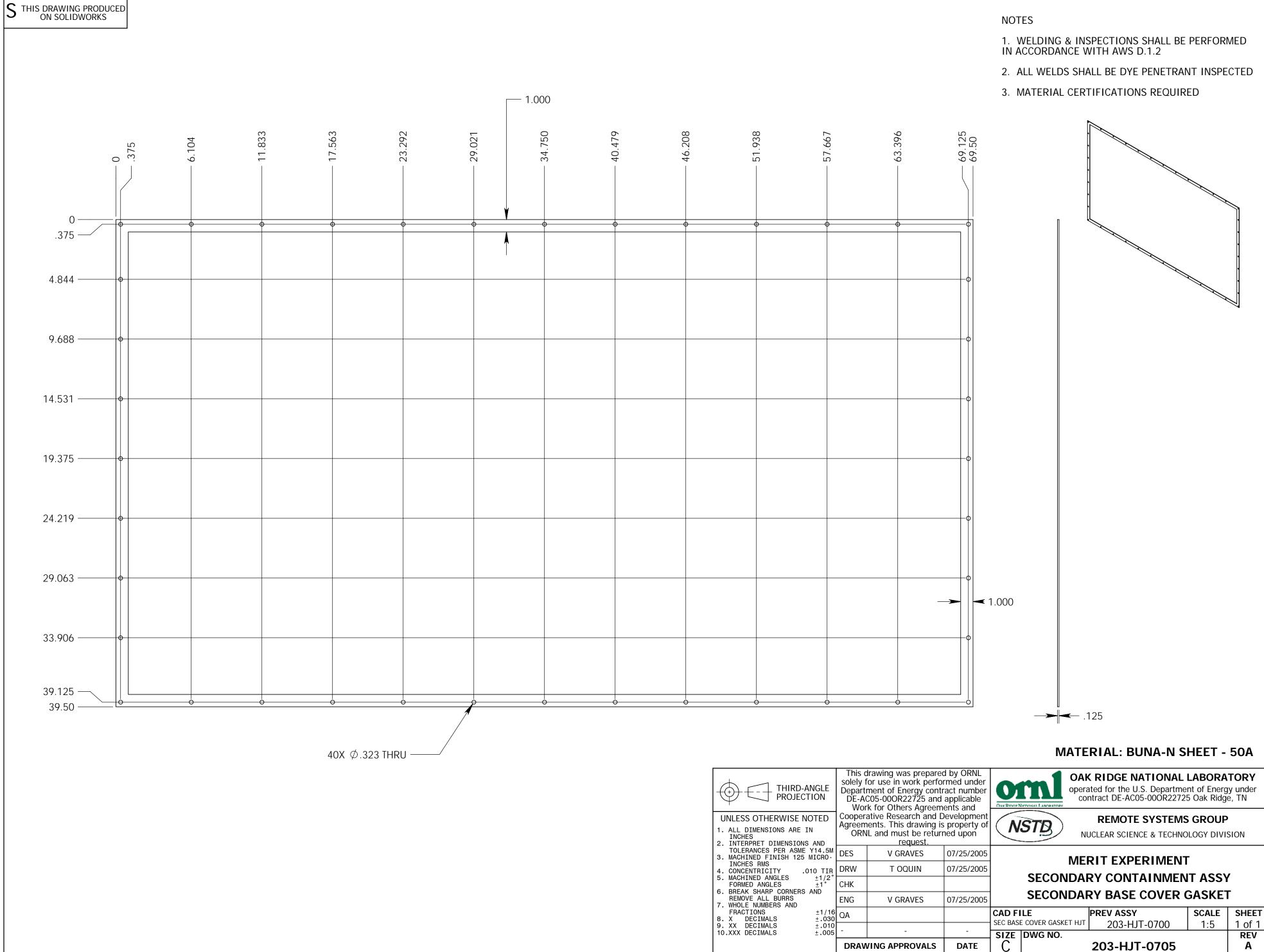
DWG NO. 203-HJT-0702



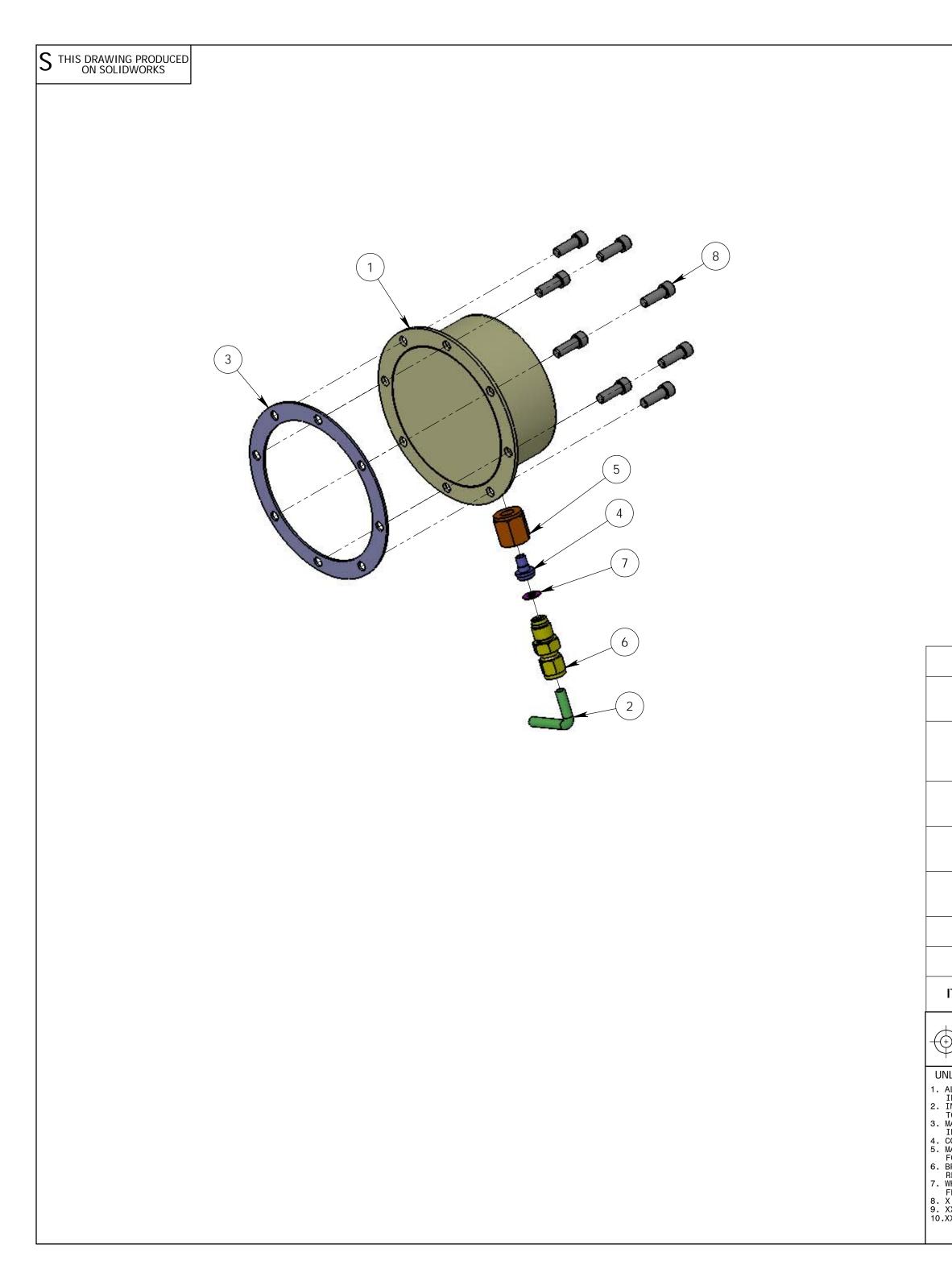
THIRD-ANGLE PROJECTION	solely f Departi DE-A	Irawing was prepared or use in work performent of Energy contro C05-000R22725 and k for Others Agreem	rmed under act number applicable		CONTRACT DE-AC05-000K22725 Oak Kidge, Th					
NLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND	Coopera Agreem ORN	ative Research and D ents. This drawing is L and must be return request.	evelopment property of	(NSTR)	REMOTE SYSTEMS GROUND NUCLEAR SCIENCE & TECHNOLOGY DI					
TOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO-	DES	V GRAVES	06/09/2005	МЕ	RIT EXPERIMENT	-				
INCHES RMS CONCENTRICITY .010 TIR	DRW	T OQUIN	06/09/2005				,			
MACHINED ANGLES ±1/2° FORMED ANGLES ±1° BREAK SHARP CORNERS AND	СНК				RY CONTAINMEN					
REMOVE ALL BURRS WHOLE NUMBERS AND	ENG	V GRAVES	06/09/2005	RECTANG	ULAR TUBING SU	PPORT	-			
FRACTIONS ±1/16 X DECIMALS ±.030	QA			CAD FILE	PREV ASSY	SCALE	SHEET			
XX DECIMALS ±.010				RECT TUBING SUPPORT HJT	203-HJT-0700	1:4	1 of 1			
YYY DECTMALS + 005	-	-	-				D D V			



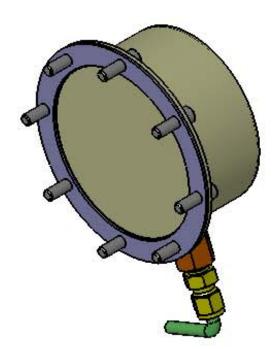
MENSIONS ARE IN RET DIMENSIONS AND	ORN	IL and must be return request.			N	UCLEAR SCIENCE & TECHNO	LOGY DIVI	SION		
NCES PER ASME Y14.5M ED FINISH 125 MICRO-	DES	V GRAVES	07/06/2005		ME	RIT EXPERIMENT	-			
RMS TRICITY .010 TIR	DRW	T. OQUIN	07/06/2005							
ED ANGLES ±1/2° ANGLES ±1° SHARP CORNERS AND	СНК					JPPORT CRADLE	II A221	,		
ALL BURRS	ENG V GRAVES		07/06/2005		SI					
ONS ±1/16 CIMALS ±.030	QA					PREV ASSY	SCALE	SHEET		
CIMALS ±.010 CIMALS ±.010 CIMALS ±.005				SUPPC	ORT CRADLE HJT	203-HJT-0700	1:8	1 of 1		
	_	-	-	SIZE	DWG NO.			REV		
	DRAW	/ING APPROVALS	DATE	С		203-HJT-0704		Α		



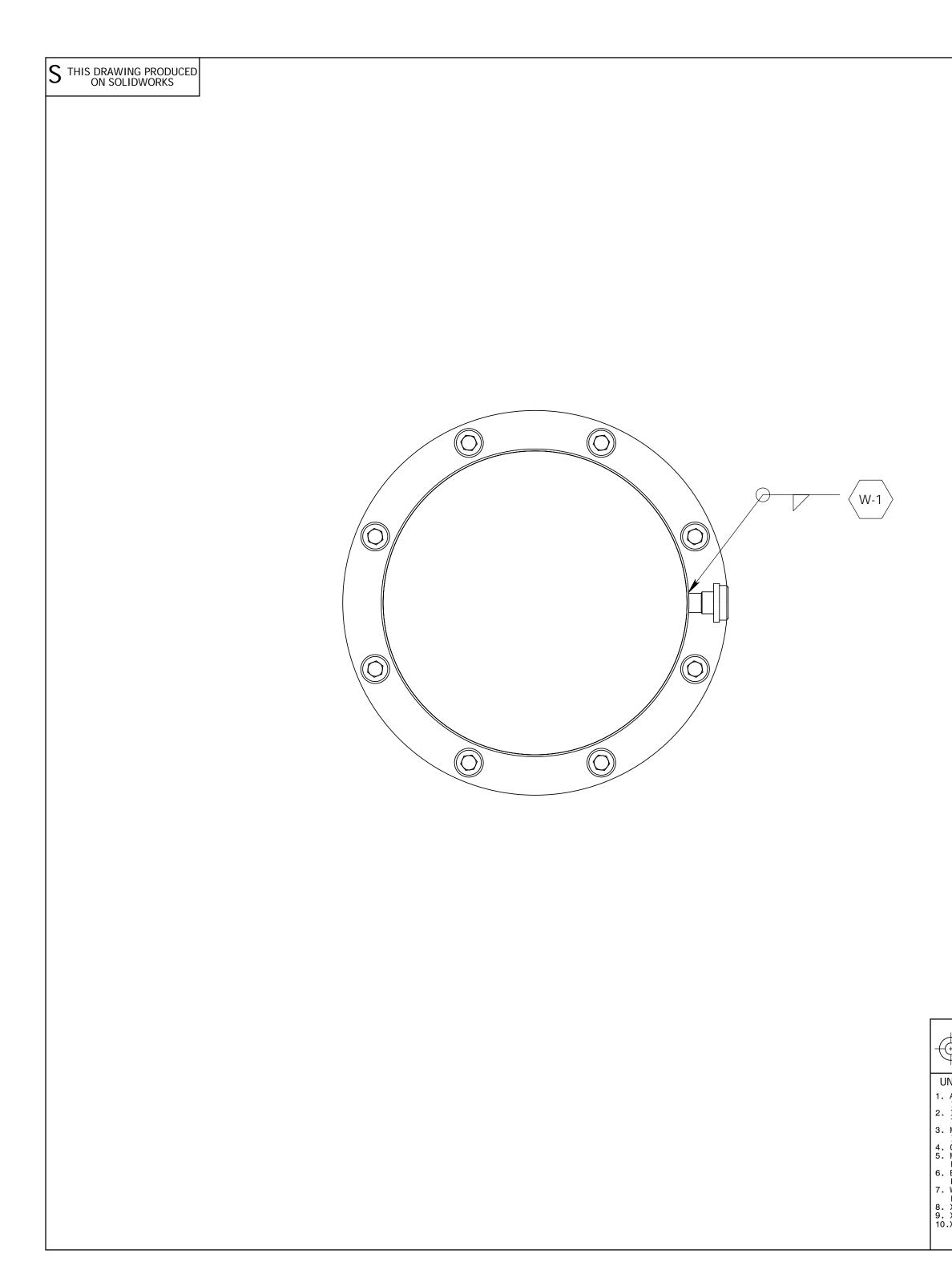
-0705 203-HJ ОN N DWG



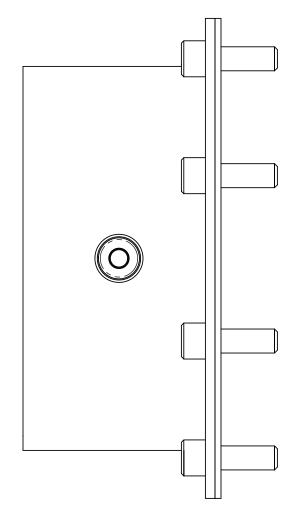
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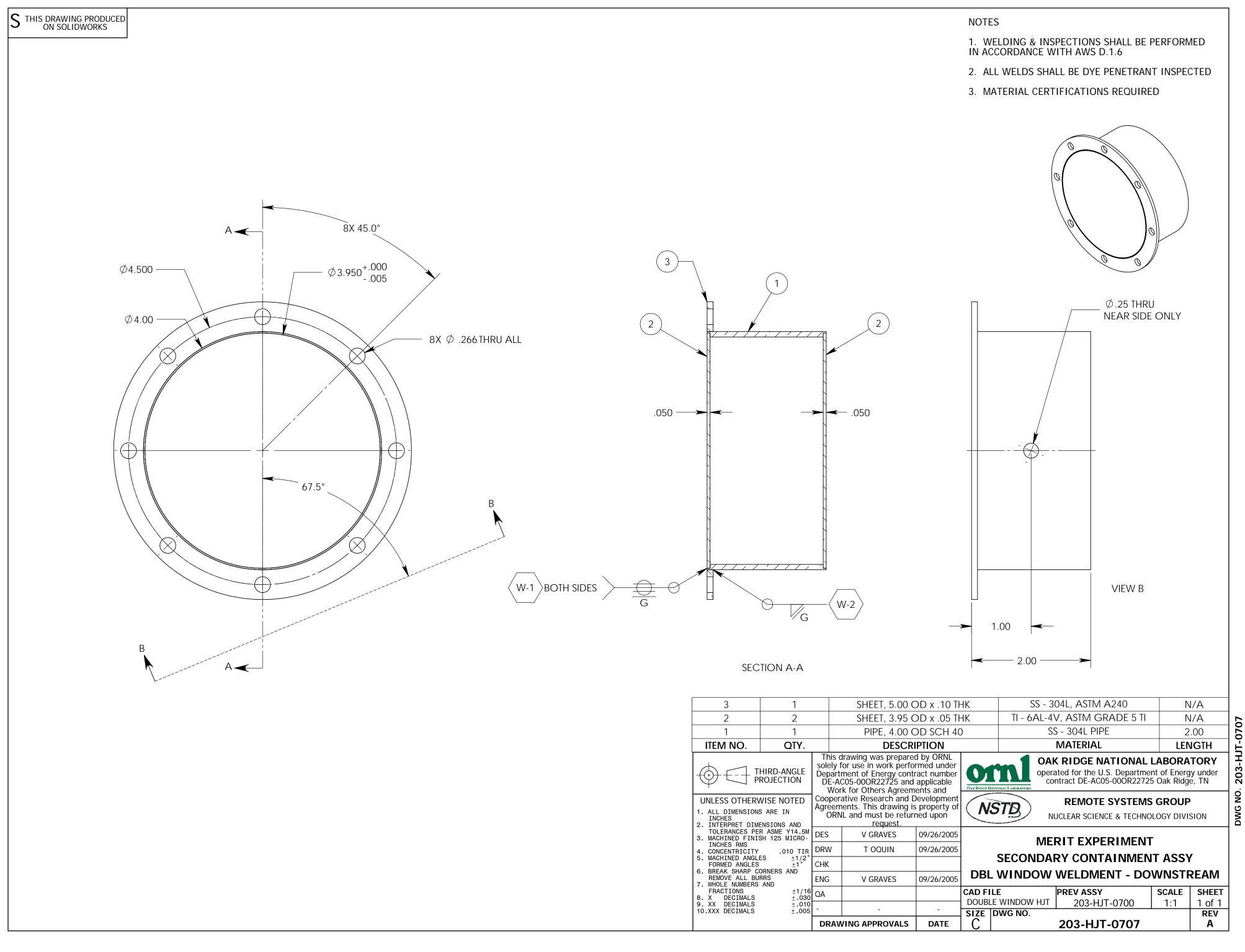
8	8		HX-SHC	CS 0.25-20x0	.75x0.75-N	SS - 18-8	.38 X .5 -16 SHCS	N	/A			
7	1		Style CU-4-	Non-Retained Style_CU-4-VCR-2-VS_0.22_Swagelo Company15DD_4F3B7			NON-RETAIN ED STYLE	N	/A			
6	1		Connector_	Swagelok Tube Fitting Connector_SS-4-VCR-6-400_1_4_Swage lok Company184F3_575E59			onnector_SS-4-VCR-6-400_1_4_Swage			SWAGELOK TUBE FITTING CONNECTO R	N	/A
5	1		Nuts,Caps and Plugs_SS-4-VCR-1_3_4_Swagelok CompanyDDB7_31464D			Plugs_SS-4-VCR-1_3_4_Swagelok			/A			
4	1		Fractional 6	ort Tube Butt LV-4-VCR-39 ompany4	S-4TB2 1 4 Swa		SHORT TUBE BUTT WELD, FRACTIONAL	N	/A			
3	1		w	indow gask	et hjt	1/16" BUNA-N SHEET, 50A	McMASTER-C ARR #86715K279		JT-0709			
2	1		doub	double window tubing hjt			.250" OD X 22 GA	203-H.	JT-0708			
1	1		de	ouble windo	ow hjt		4.00 OD x 2.00	203-H.	JT-0707			
ITEM	downstrear	m/QTY.		NAME		MATERIAL	DESCRIPTI ON	DV	VG			
	THIRD-ANGLE PROJECTION	solely for Departme DE-AC0 Work	wing was prepare use in work perfo ent of Energy cont 5-000R22725 and for Others Agreen	rmed under ract number applicable nents and		OAK RIDGE NATIONAL LABORATOR operated for the U.S. Department of Energy und contract DE-AC05-000R22725 Oak Ridge, TN			under			
ALL DIMENS INCHES INTERPRET	HERWISE NOTED SIONS ARE IN DIMENSIONS AND	Agreemer	ve Research and I nts. This drawing i and must be retur request.	s property of	NSTE)	TE SYSTEMS ENCE & TECHNOL		ION			
MACHINED F	S PER ASME Y14.5M FINISH 125 MICRO-	DES	V GRAVES	09/26/2005		MERIT EX	DEDIMENIT					
INCHES RMS CONCENTRIC	CITY .010 TIR	DRW	T OQUIN	09/26/2005	SE00			Γ Λςςν				
MACHINED A FORMED AND BREAK SHAP		СНК										
REMOVE ALI WHOLE NUME	L BURRS	ENG	V GRAVES	09/26/2005				-				
X DECIMALS ±.030		QA			CAD FILE		-	SCALE	SHEET			
					SIZE DWG NO.							
	ALS ±.010	-	- NG APPROVALS	- DATE).	JT-0706	1.2	1 of 2 REV A			



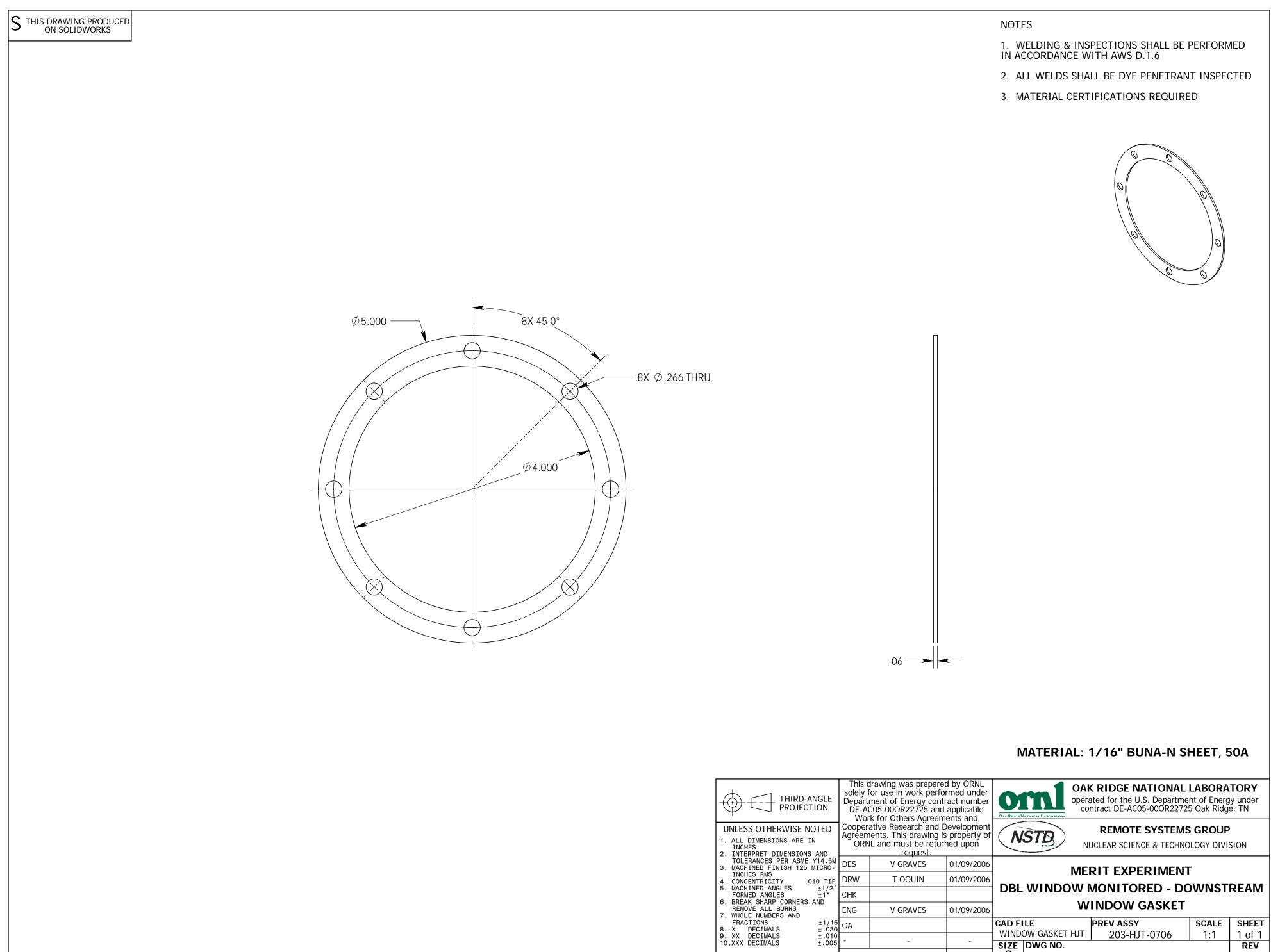
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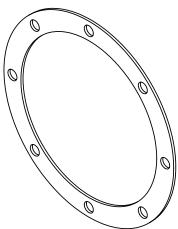


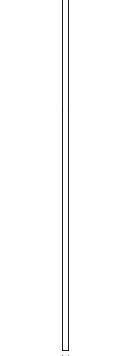
									IT-0706
THIRD-ANGLE PROJECTION	solely f Depart DE-A Wor	frawing was prepared for use in work perfor ment of Energy contr C05-000R22725 and k for Others Agreem	rmed under ract number applicable ents and		oper	K RIDGE NATIONAL rated for the U.S. Departme ontract DE-AC05-000R2272	nt of Energ	y under	NO. 203-HJT
NLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND	Cooper Agreem	ative Research and D eents. This drawing is IL and must be returr request.	Development s property of	N	STD	REMOTE SYSTEMS GROUP NUCLEAR SCIENCE & TECHNOLOGY DIVISION			
TOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO-	DES	V GRAVES	09/26/2005				F		
INCHES RMS CONCENTRICITY .010 TIR	DRW	T OQUIN	09/26/2005						
MACHINED ANGLES ±1/2° FORMED ANGLES ±1°	СНК					RY CONTAINMEN			
BREAK SHARP CORNERS AND REMOVE ALL BURRS WHOLE NUMBERS AND	ENG	V GRAVES	09/26/2005		WINDOW	MONITORED - DO	OWNST	REAM	
FRACTIONS ±1/16 X DECIMALS ±.030	QA			CAD FI		PREV ASSY	SCALE	SHEET	
XX DECIMALS ±.010 XXX DECIMALS ±.005		-	_			^D 203-HJT-0700	1:1	2 of 2	
	DRAV	DA DRAWING APPROVALS DATE			DWG NO.	203-HJT-0706		REV A	











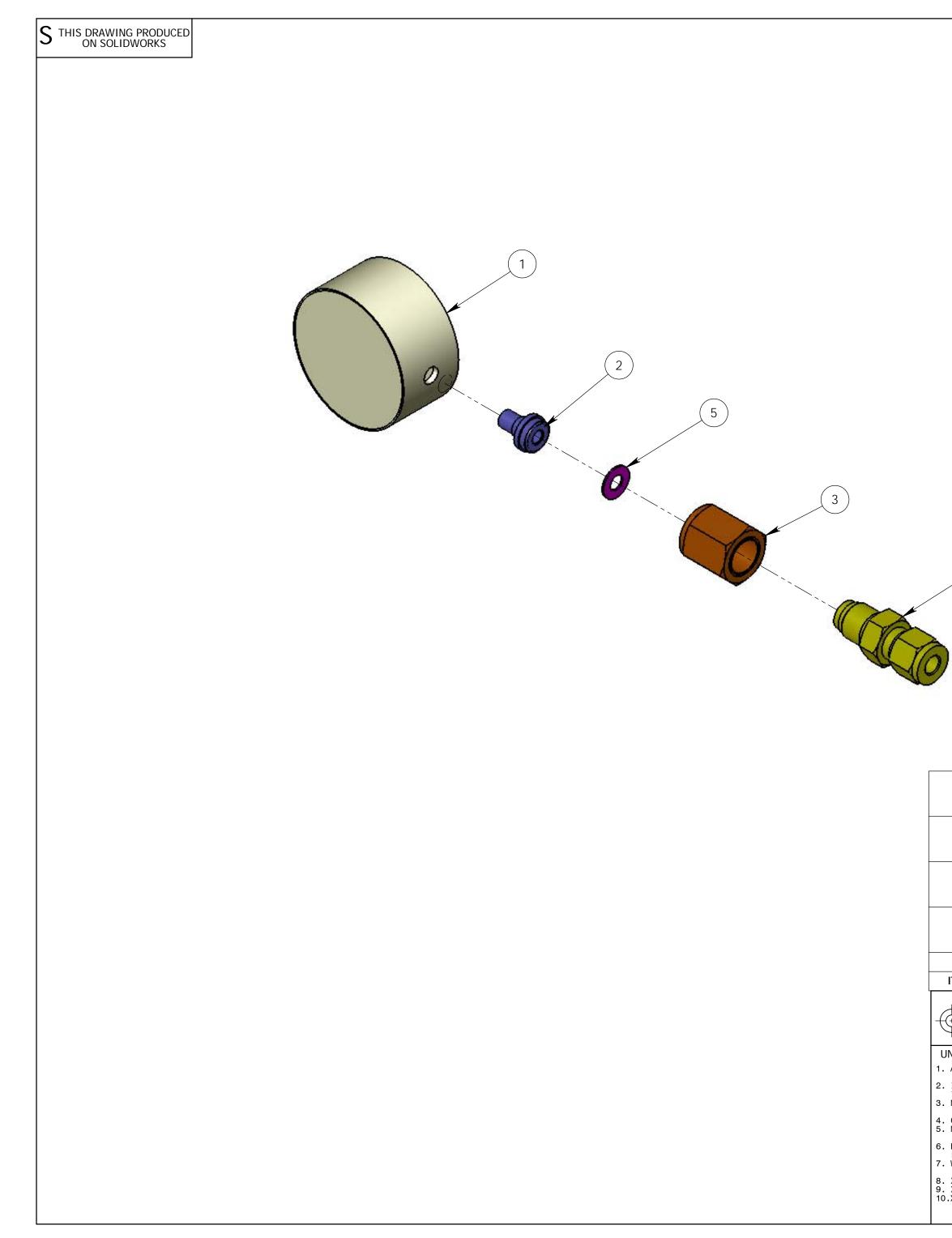
DRAWING APPROVALS

DATE

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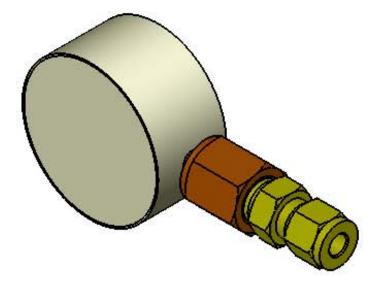
203-HJT-0709

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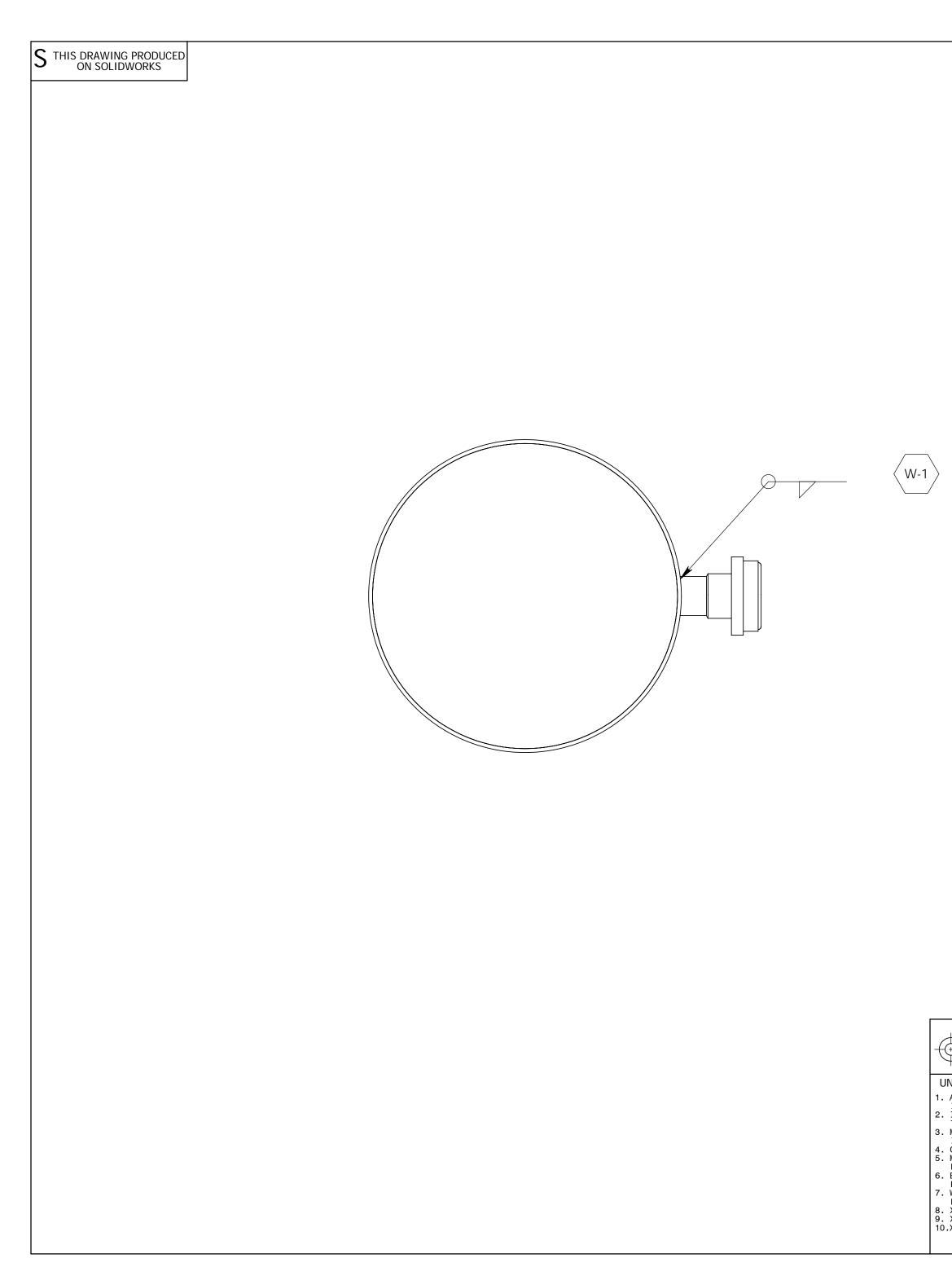
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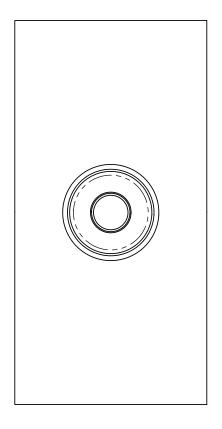


4

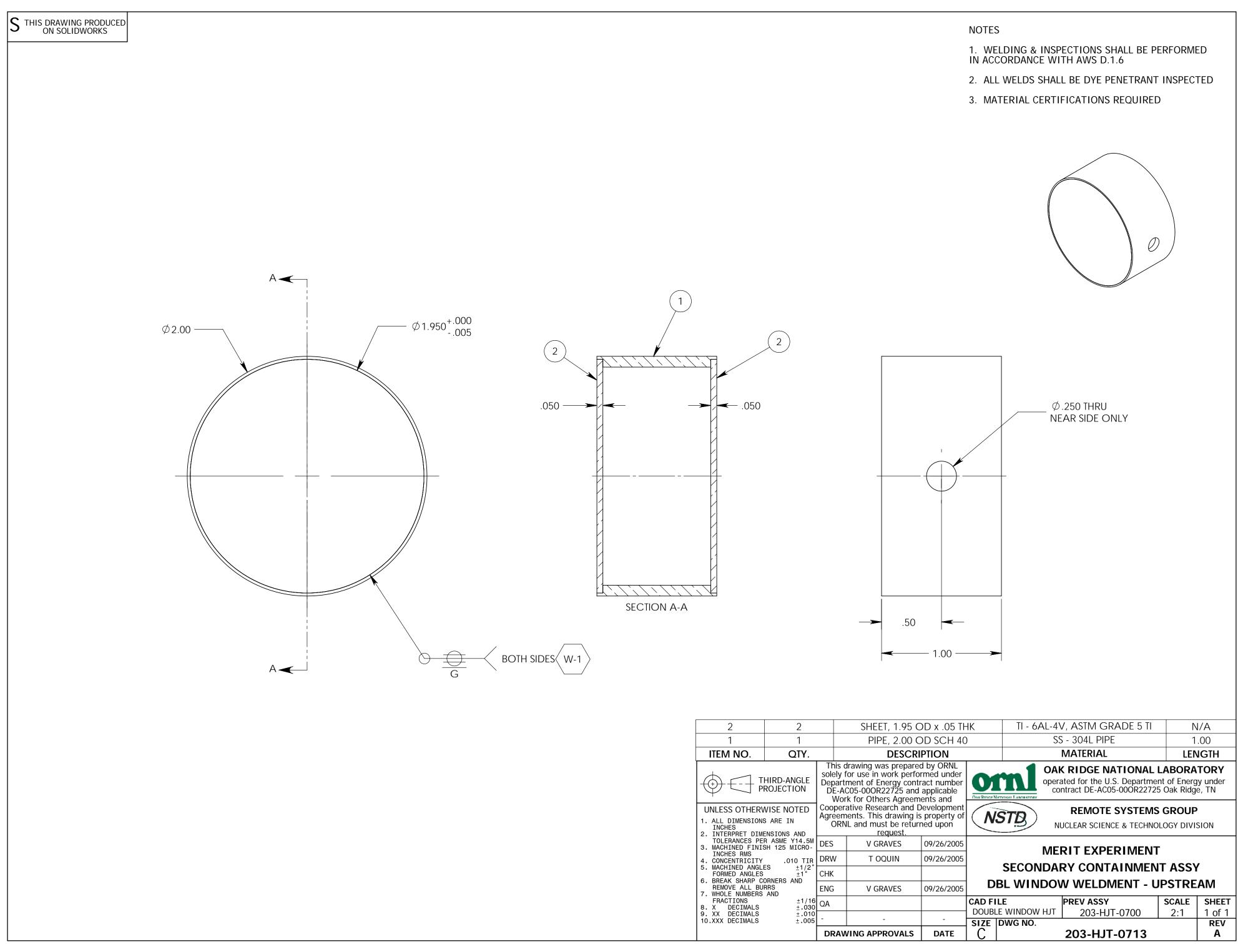
5	1	Sty	Non-Re yle_CU-4-VCR-2-\ Company^	VS_0.22_Swa	gelok		NON-RETAINED STYLE	N/	A
4	1	Conr	Swagelok Tube FittingSWAGELOK TUBEConnector_SS-4-VCR-6-400_1_4_SwagelokFITTINGCompany_184F3_575E59CONNECTORCONNECTOR				N/	Â	
3	1		Nuts,Caps andNUTS,CAPS ANDPlugs_SS-4-VCR-1_3_4_SwagelokCompanyDDB7_31464DPLUGS				N/	A	
2	1	Fract	Short Tube tional_6LV-4-VCR ok Company_	-3S-4TB2_1_4	_Swagel 1		SHORT TUBE BUTT WELD, FRACTIONAL	N/	Â
1	1		double wi	indow hjt			2.00 OD x 1.00	203-HJ	T-0713
ITEM	Default/QTY.		NAI	=		MATERIAL	DESCRIPTION	DW	/G
JNLESS O	Default/QTY. THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN	solely fo Departn DE-AC Worl Coopera Agreemo	Irawing was prepar for use in work perf ment of Energy cor C05-000R22725 an k for Others Agreen ative Research and ents. This drawing L and must be retu	ed by ORNL formed under ntract number d applicable ments and Development is property of		OAK operat cont	DESCRIPTION RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS CLEAR SCIENCE & TECHNO	LABORA nt of Energ 5 Oak Ridge 6 GROUP	TORY y under e, TN
JNLESS O ⁻ . ALL DIME INCHES INTERPRE TOLERANC	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN T DIMENSIONS AND DES PER ASME Y14.5M	solely fo Departn DE-AC Worl Coopera Agreem ORNI	rawing was prepar for use in work perf ment of Energy cor 205-000R22725 an k for Others Agree ative Research and ents. This drawing L and must be retu request.	ed by ORNL formed under ntract number d applicable ments and Development is property of urned upon	NS	OAK operat cont	RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS	LABORA nt of Energ 5 Oak Ridge 6 GROUP	TORY y under e, TN
JNLESS O JNLESS O ALL DIME INCHES INTERPRE TOLERANC MACHINED INCHES R	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN T DIMENSIONS AND CES PER ASME Y14.5M O FINISH 125 MICRO-	solely fo Departn DE-AC Work Coopera Agreemo ORNI DES	Irawing was prepar for use in work perf ment of Energy cor C05-00OR22725 an k for Others Agree ative Research and ents. This drawing L and must be retu- request. V GRAVES	ed by ORNL formed under ntract number id applicable ments and Development is property of urned upon	Oak Rings Nation	OAK operat cont	RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS	LABORA nt of Energ 5 Oak Ridge 6 GROUP	TORY y under e, TN
JNLESS O ALL DIME INCHES INTERPRE TOLERANC MACHINED	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN T DIMENSIONS AND DES PER ASME Y14.5M D FINISH 125 MICRO- MS AICLITY .010 TIR D ANGLES ±1/2°	solely fo Departn DE-AC Work Coopera Agreemo ORN DES DRW	rawing was prepar for use in work perf ment of Energy cor 205-000R22725 an k for Others Agree ative Research and ents. This drawing L and must be retu request.	ed by ORNL formed under ntract number d applicable ments and Development is property of urned upon	Orac Rimore Namora	OAK operat cont TE NUC	RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS CLEAR SCIENCE & TECHNO	LABORA nt of Energ 5 Oak Ridge 6 GROUP DLOGY DIVIS	TORY y under e, TN
JNLESS O JNLESS O ALL DIME INCHES INTERPRE TOLERANC MACHINED INCHES R CONCENTR CONCENTR MACHINED FORMED A BREAK SH REMOVE A	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN T DIMENSIONS AND DES PER ASME Y14.5M O FINISH 125 MICRO- AMS RICITY .010 TIR O ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1° ARP CORNERS AND ALL BURRS	solely fo Departn DE-AC Work Coopera Agreemo ORNI DES	Irawing was prepar for use in work perf ment of Energy cor C05-00OR22725 an k for Others Agree ative Research and ents. This drawing L and must be retu- request. V GRAVES	ed by ORNL formed under ntract number id applicable ments and Development is property of urned upon		NUC	RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS CLEAR SCIENCE & TECHNO IT EXPERIMENT	LABORA nt of Energ 5 Oak Ridge 6 GROUP 0LOGY DIVIS	TORY y under e, TN
JNLESS O JNLESS O ALL DIME INCHES INTERPRE TOLERANC MACHINED INCHES R NACHINED FORMED A BREAK SH REMOVE A BREAK SH REMOVE A WHOLE NU FRACTION	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN T DIMENSIONS AND CES PER ASME Y14.5M FINISH 125 MICRO- MS FICITY .010 TIR O ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° MBERS AND S ±1/16	solely fo Departm DE-AC Work Coopera Agreemo ORNI DES DRW CHK ENG	rawing was prepar for use in work perf ment of Energy cor C05-00OR22725 an k for Others Agreel ative Research and ents. This drawing L and must be retu request. V GRAVES T OQUIN	ed by ORNL formed under ntract number d applicable ments and Development is property of urned upon 09/26/2005	DBL CAD FILE	OAK operat cont TE NUC MER SECONDAR WINDOW	RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS CLEAR SCIENCE & TECHNO IT EXPERIMENT Y CONTAINMEN MONITORED - U PREV ASSY	LABORA nt of Energ 5 Oak Ridge G GROUP DLOGY DIVIS	TORY y under e, TN SION SION
JNLESS O JNLESS O ALL DIME INCHES INTERPRE TOLERANC MACHINED INCHES R NACHINED FORMED A BREAK SH REMOVE A BREAK SH REMOVE A WHOLE NU FRACTION	THIRD-ANGLE PROJECTION THERWISE NOTED INSIONS ARE IN TDIMENSIONS AND CES PER ASME Y14.5M OFINISH 125 MICRO- MS ICITY .010 TIR O ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±1/2° ANGLES ±100 MBERS AND NS ±1/16 IMALS ±.030 IMALS ±.010	solely fo Departr DE-AC Work Coopera Agreemo ORNI DES DRW CHK ENG	rawing was prepar for use in work perf ment of Energy cor C05-00OR22725 an k for Others Agreel ative Research and ents. This drawing L and must be retu request. V GRAVES T OQUIN	ed by ORNL formed under ntract number d applicable ments and Development is property of urned upon 09/26/2005	DBL CAD FILE		RIDGE NATIONAL ed for the U.S. Departme ract DE-AC05-000R2272 REMOTE SYSTEMS CLEAR SCIENCE & TECHNO IT EXPERIMENT Y CONTAINMEN MONITORED - U	LABORA nt of Energ 5 Oak Ridge GROUP DLOGY DIVIS	TORY y under e, TN SION



- 1. WELDING & INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH AWS D.1.6
- 2. ALL WELDS SHALL BE DYE PENETRANT INSPECTED
- 3. MATERIAL CERTIFICATIONS REQUIRED

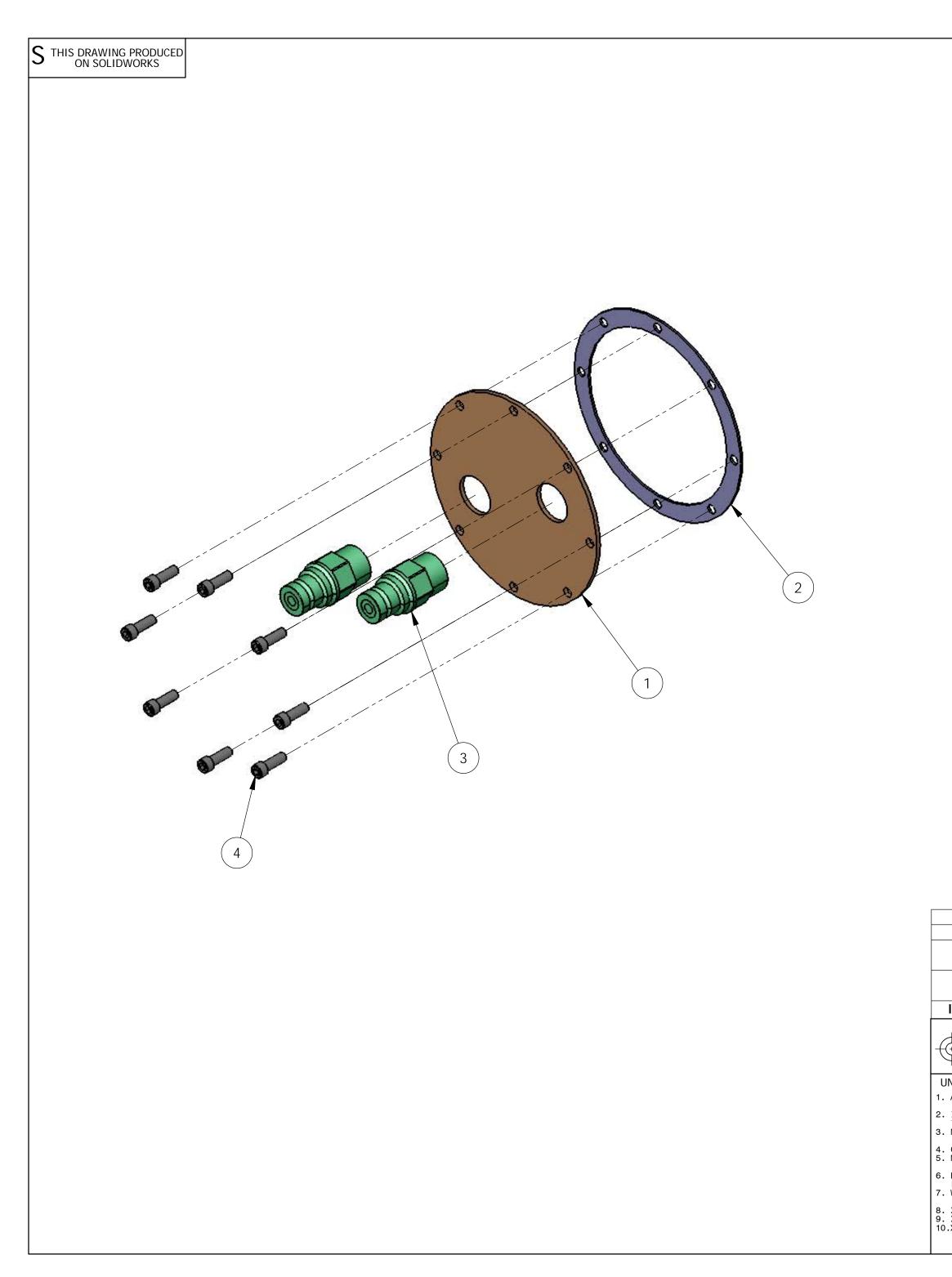


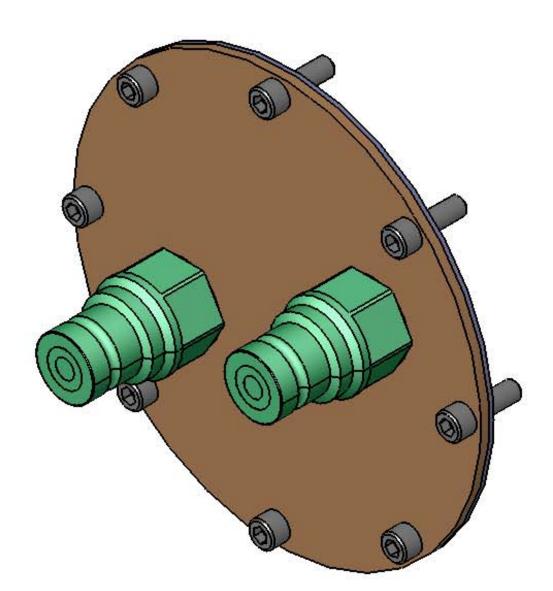
										HJT-0712
THIRD-ANGLE PROJECTION	solely f Departi DE-A Wor	Irawing was prepared for use in work performent of Energy contr C05-000R22725 and k for Others Agreem	OAKRINGEN	OAK RIDGE NATIONAL LABORATO operated for the U.S. Department of Energy contract DE-AC05-000R22725 Oak Ridge,						
NLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND	Coopera Agreem	ative Research and D hents. This drawing is IL and must be return request.	N	STD	REMOTE SYSTEMS GROUP					
TOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO-	DES	V GRAVES	09/26/2005		Ν			-		
INCHES RMS CONCENTRICITY .010 TIR	DRW	T OQUIN	09/26/2005							
MACHINED ANGLES $\pm 1/2^{\circ}$ FORMED ANGLES $\pm 1^{\circ}$ PREMIX OUTPER CONTROL	СНК						RY CONTAINMEN			
BREAK SHARP CORNERS AND REMOVE ALL BURRS WHOLE NUMBERS AND	ENG	V GRAVES	09/26/2005		BL WIND	OW	MONITORED - U	JPSTRE	AM	
FRACTIONS ±1/16 X DECIMALS ±.030	QA			CAD FI			PREV ASSY	SCALE	SHEET	
XX DECIMALS ±.010 XXX DECIMALS ±.005		_	_			ORED	203-HJT-0700	2:1	2 of 2	1
	DRAW	OA			DWG NO.		203-HJT-0712		REV A	



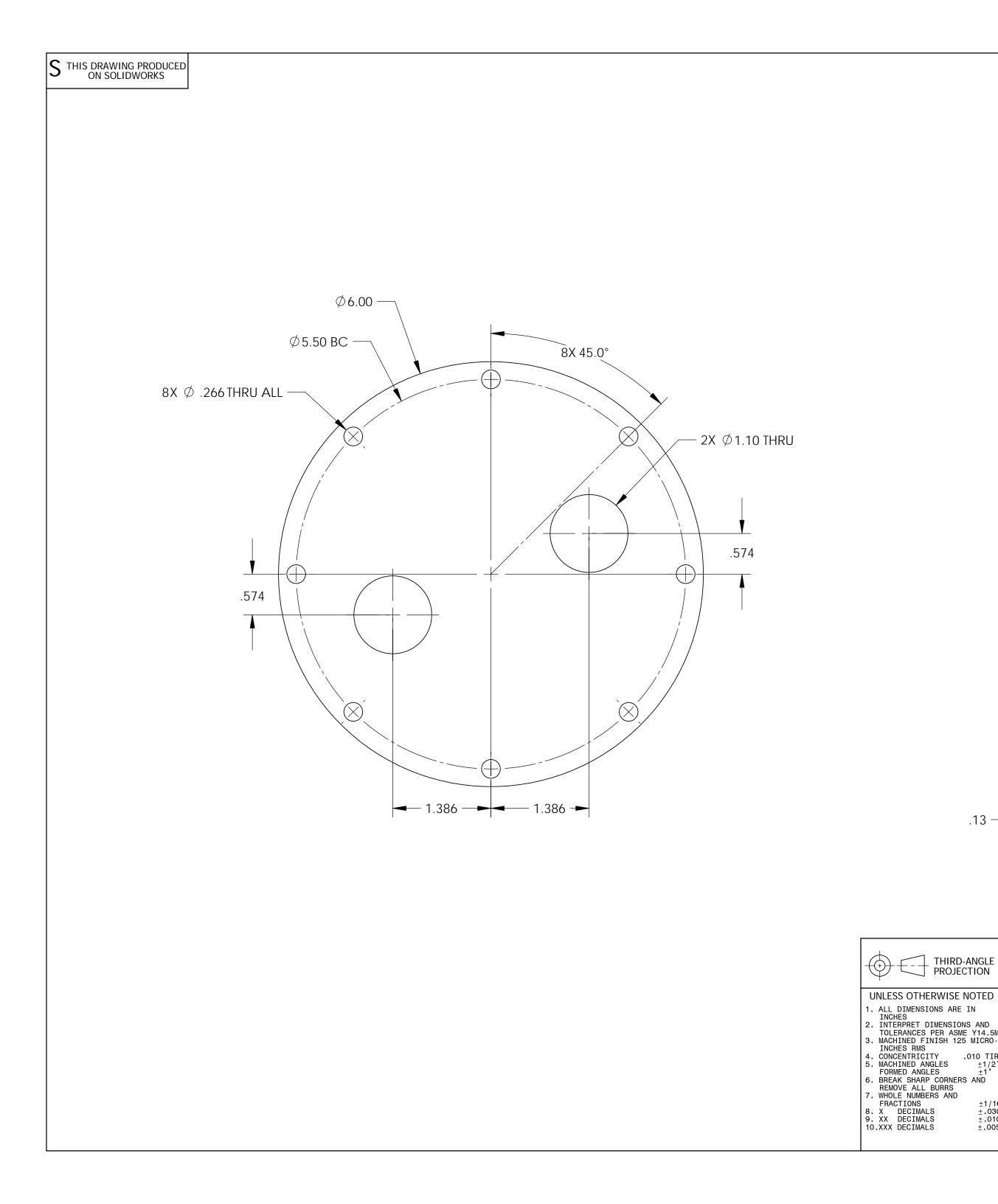


2	2		SHEEL, 1.95 OD x .05 I			- 6AL-4\	7, ASIM GRADE 5 II		I/A	2
1	1		PIPE, 2.00 C	OD SCH 40)	SS	5 - 304L PIPE	1	.00	ŗ
ITEM NO.	QTY.		DESCR	IPTION		MATERIAL LENGTH				
	HIRD-ANGLE ROJECTION	solely Depar DE-A Wo	drawing was prepare for use in work perfo tment of Energy cont \C05-00OR22725 and ork for Others Agreem	rmed under ract number applicable nents and		opera	K RIDGE NATIONAL I ated for the U.S. Department ntract DE-AC05-000R22725	nt of Energ	ıv under	
JNLESS OTHERV ALL DIMENSIONS INCHES INTERPRET DIME	S ARE IN	Coope Agreer OR	rative Research and I nents. This drawing is NL and must be retur request.	Development s property of	NS	REMOTE SYSTEMS GROUP				
TOLERANCES PER MACHINED FINIS	R ASME Y14.5M SH 125 MICRO-	DES	V GRAVES	09/26/2005		МЕ	RIT EXPERIMENT			
INCHES RMS CONCENTRICITY	.010 TIR	DRW	T OQUIN	09/26/2005					,	
MACHINED ANGLE FORMED ANGLES	±1°	СНК					RY CONTAINMEN			
BREAK SHARP CO REMOVE ALL BUF WHOLE NUMBERS		ENG	V GRAVES	09/26/2005	DB		N WELDMENT - U	PSTRE	AM	
FRACTIONS X DECIMALS	±1/16 ±.030	QA			CAD FIL		PREV ASSY	SCALE	SHEET	
XX DECIMALS	±.010					WINDOW HJT	203-HJT-0700	2:1	1 of 1	l l
.XXX DECIMALS	±.005		-	-	SIZE [DWG NO.			REV	

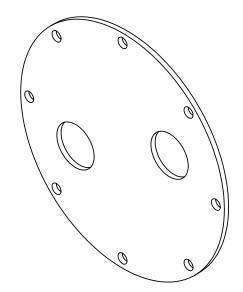


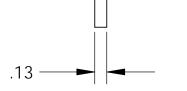


		DRA	WING APPROVALS	DATE	C			203-HJT-0730		A
.XXX DECI		-	-	-	SIZE	DWG NO.		2001010700	1 1.2	REV
FRACTION X DECI XX DECI	S ±1/16 MALS ±.030	QA			CAD FI	LE TOR PLATE AS		PREV ASSY 203-HJT-0700	SCALE 1:2	SHEET 1 of 1
REMOVE A		ENG	V GRAVES	01/06/2006			HY	DRAULICS ASSY		
FORMED A		СНК			1	SECON		RY CONTAINMEN		
INCHES R . CONCENTR	MS ICITY .010 TIR	DRW	T OQUIN	01/06/2006		05001			-	,
TOLERANC MACHINED	ES PER ASME Y14.5M FINISH 125 MICRO-	DES	V GRAVES	01/06/2006			М		r	
INCHES	NSIONS ARE IN T DIMENSIONS AND	ΟR	NL and must be return request.	ned upon		ريان	N	JCLEAR SCIENCE & TECHNO	DLOGY DIVIS	SION
	HERWISE NOTED	Coope	rative Research and E ments. This drawing is	Development	N	GTD		REMOTE SYSTEMS	6 GROUP	
\oplus \in	THIRD-ANGLE	Depar DE-A	tment of Energy contr AC05-00OR22725 and ork for Others Agreem	applicable	OAKRIDGEN	ATIONAL LABORATORY	opera co	ated for the U.S. Departme ntract DE-AC05-000R2272	nt of Energ 5 Oak Ridge	y under e, TN
		This solely	drawing was prepared for use in work perfo	d by ORNL rmed under				RIDGE NATIONAL		-
ITEM	hydraulics/QI	Υ.	NAME		MA	TERIAL		DESCRIPTION	DW	/G
1	1		hydraulics pl	ate	SS ASTI	- 304L, M A-240	PL	ATE, 6.000 x .125 THK	203-HJ	Т-0731
2	1		connector plate g	gasket hjt		' BUNA-N Et. 50A		McMASTER-CARR #86715K279	203-HJ	T-0732
3	2		staubli_plug_spx(06_7202				OEM	N/	A
4	8		HX-SHCS 0.25-20x0.	75x0.75-N	SS	- 18-8		.38 X .5 -16 SHCS	N/	A



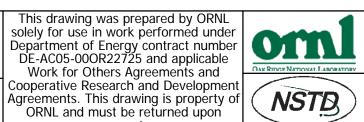
1. MATERIAL CERTIFICATIONS REQUIRED





THIRD-ANGLE PROJECTION

MATERIAL: SS - 304L, ASTM A-240

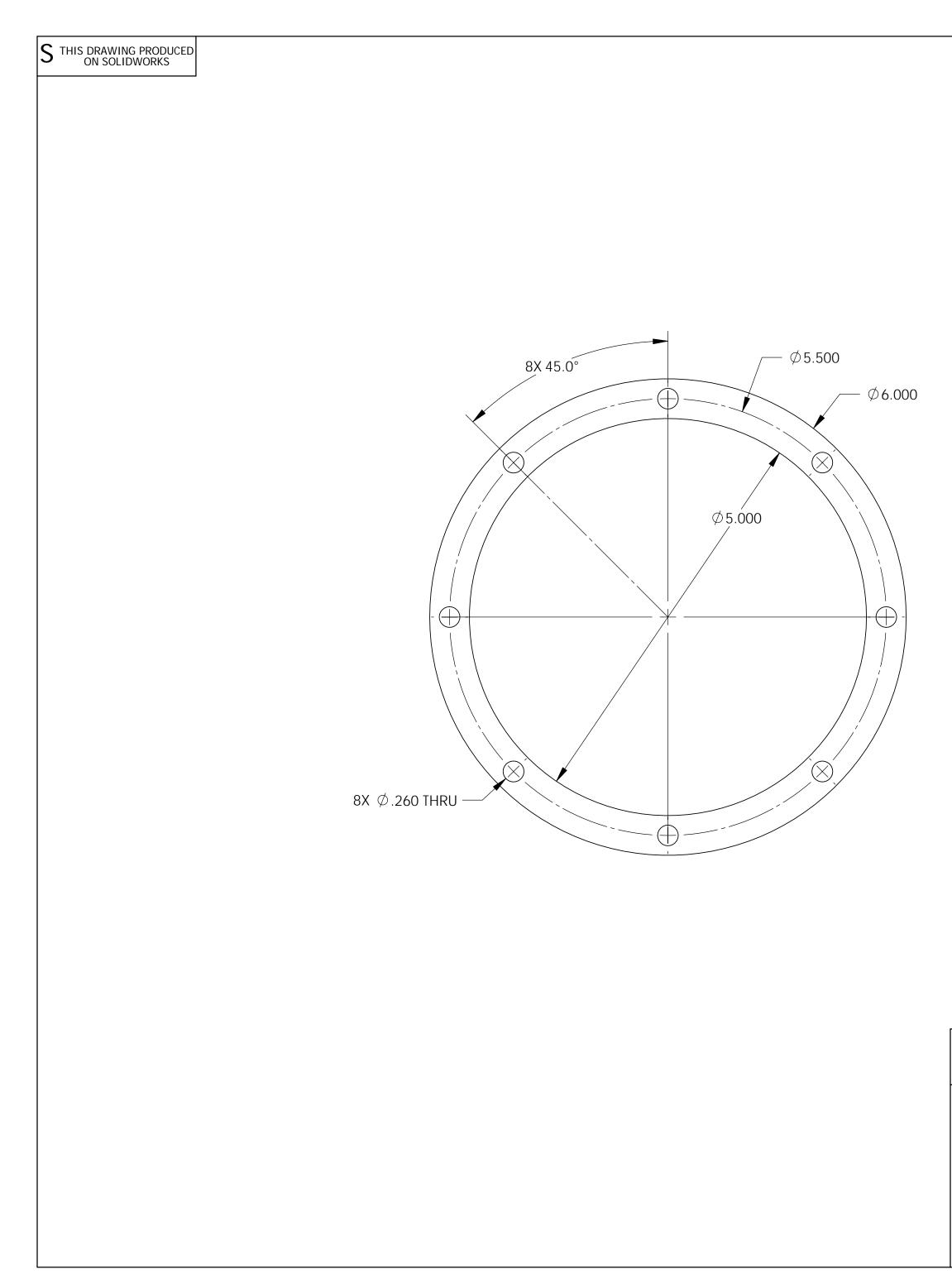


OAK RIDGE NATIONAL LABORATORY operated for the U.S. Department of Energy under contract DE-AC05-00OR22725 Oak Ridge, TN

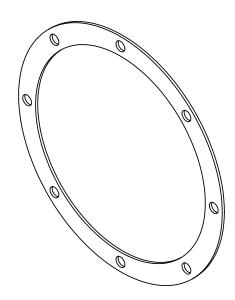
REMOTE SYSTEMS GROUP NUCLEAR SCIENCE & TECHNOLOGY DIVISION

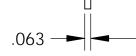
MERIT EXPERIMENT SECONDARY CONTAINMENT ASSY HYDRAULICS CONNECTOR PLATE

INCLESS OTHERWISE NOTED 1. ALL DIMENSIONS ARE IN INCHES	Agreem	lents. This drawing is IL and must be return	property of		STP) NI	REMOTE SYSTEMS JCLEAR SCIENCE & TECHNO		
 INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M MACHINED FINISH 125 MICRO- 	DES	request. V GRAVES	01/06/2006				_	
INCHES RMS 4. CONCENTRICITY .010 TIR	DRW	T OQUIN	01/06/2006					-
5. MACHINED ANGLES ±1/2° FORMED ANGLES ±1° 6. BREAK SHARP CORNERS AND	СНК							
REMOVE ALL BURRS 7. WHOLE NUMBERS AND	ENG	V GRAVES	01/06/2006		HYDRAUL	ICS CONNECTOR	PLATE	
FRACTIONS ±1/16 8. X DECIMALS ±.030	QA					PREV ASSY	SCALE	SHEET
9. XX DECIMALS ±.010 10.XXX DECIMALS ±.005		-	-		CTOR PLATE HJT	203-HJT-0730	1:1	1 of 1 REV
	DRAV	VING APPROVALS	DATE	C		203-HJT-0731		A



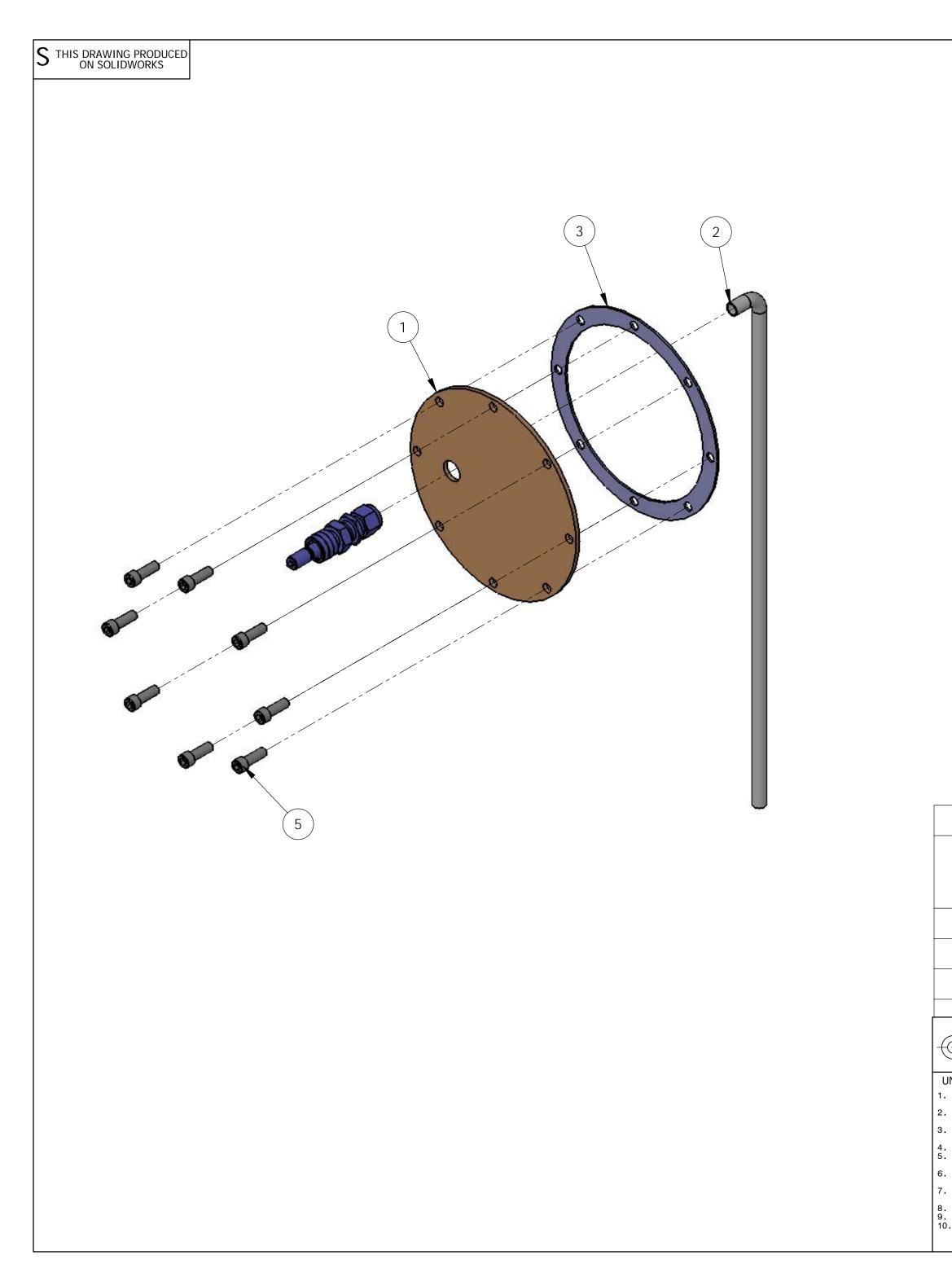
1. MATERIAL CERTIFICATIONS REQUIRED

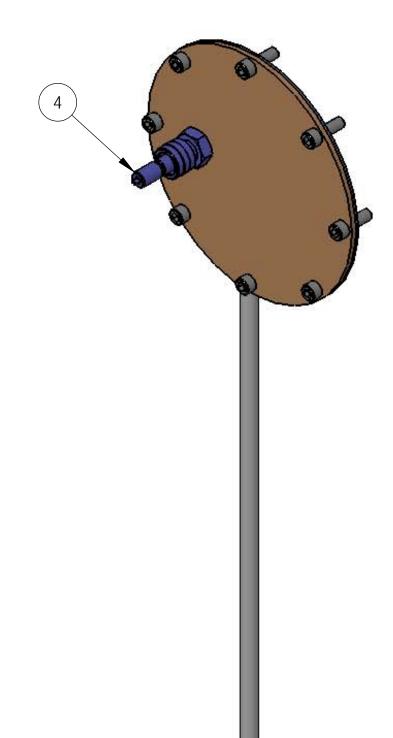




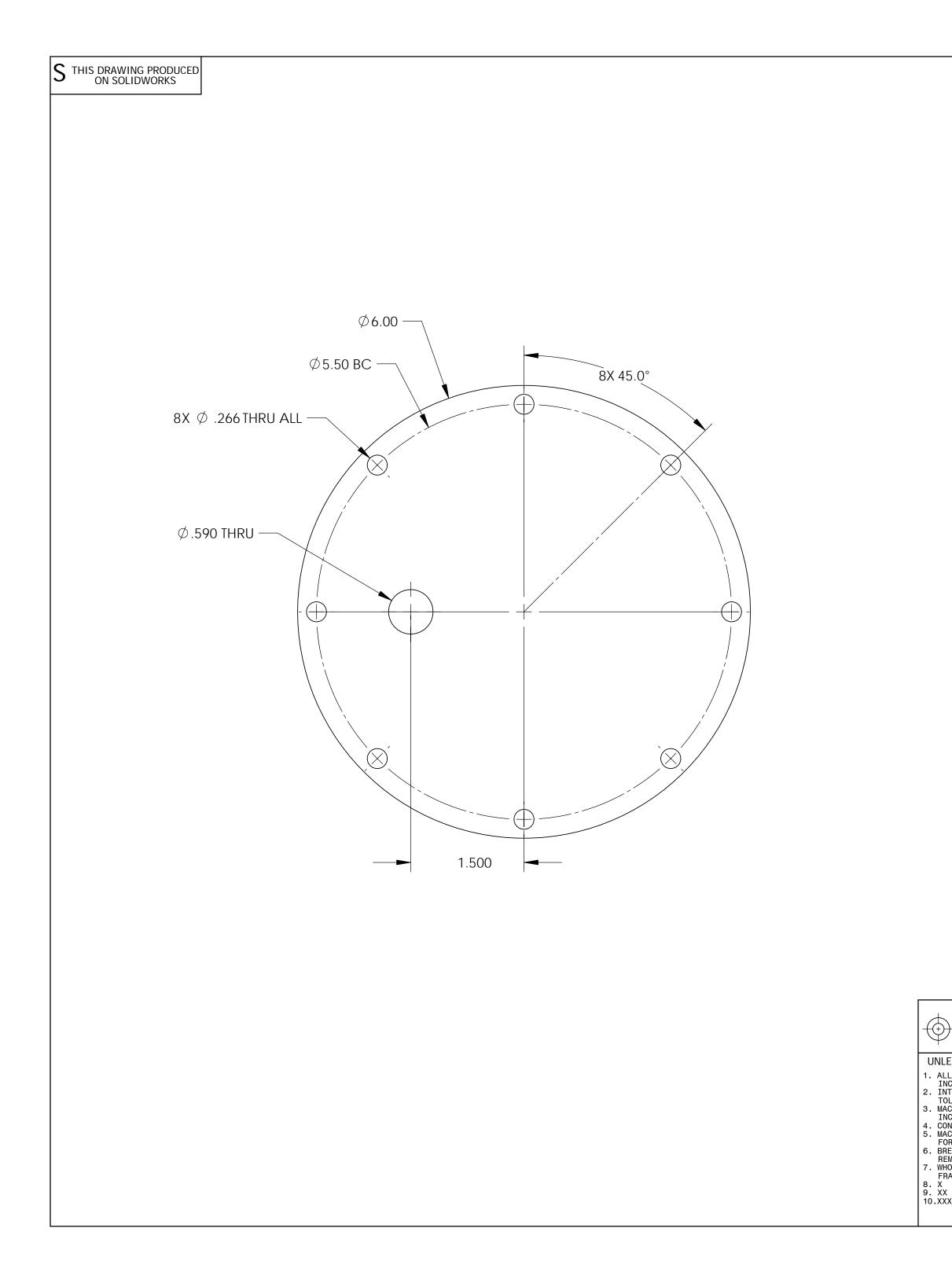
MATERIAL: 1/16" BUNA-N SHEET. 50A

	solely f Depart DE-A	Irawing was prepare for use in work perfo ment of Energy conti C05-000R22725 and k for Others Agreem	rmed under ract number applicable		OD6	K RIDGE NATIONAL erated for the U.S. Departmeter contract DE-AC05-000R2272	ent of Enera	v under
UNLESS OTHERWISE NOTED 1. ALL DIMENSIONS ARE IN INCHES 2. INTERPRET DIMENSIONS AND	Cooper Agreem	ative Research and E nents. This drawing is IL and must be return request.	Development s property of		STD	REMOTE SYSTEMS		
TOLERANCES PER ASME Y14.5M 3. MACHINED FINISH 125 MICRO- INCHES RMS 4. CONCENTRICITY .010 TIR 5. MACHINED ANGLES ±1/2° FORMED ANGLES ±1°	DES DRW CHK	V GRAVES T OQUIN	01/06/2006			ERIT EXPERIMEN		,
6. BREAK SHARP CORNERS AND REMOVE ALL BURRS 7. WHOLE NUMBERS AND	ENG	V GRAVES	01/06/2006		CONN	ECTOR PLATE GAS	SKET	
FRACTIONS ±1/16 8. X DECIMALS ±.030 9. XX DECIMALS ±.010	QA				OR PLATE GASKET HJ	PREV ASSY 203-HJT-0700	SCALE 1:1	SHEET 1 of 1
10.XXX DECIMALS ±.005	DRAV	- VING APPROVALS	DATE	size C	DWG NO.	203-HJT-0732		REV A

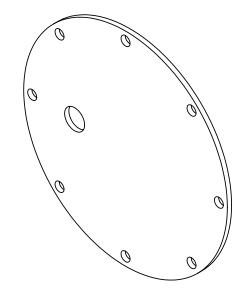


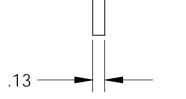


8		HX-SHCS 0.25-20x0.75x0.75	ō-N	SS -	18-8		38 X .5 -16 SHCS	N/A	
1		- Quick-Connects Series_SS-QC6-D1-60	QC)0_3_8	N	I/A			N/A	
1		connector plate g hjt	asket			N	ICMASTER-CARR #86715K279	203-HJT-(0732
1		extraction tube	hjt			TUE	3E, .375 OD X .035 WALL	203-HJT-()742
1		extraction plat	e			F	PLATE, 6 x 0 THK	203-HJT-(0 7 41
extraction/QT	Υ.	NAME		MAT	ERIAL		DESCRIPTION	DWC	, L
THIRD-ANGLE PROJECTION ERWISE NOTED IONS ARE IN	solely Depar DE-A Wo Coope Agree	for use in work perfort tment of Energy contro- AC05-000R22725 and ork for Others Agreem rative Research and D ments. This drawing is	rmed unde act numbe applicable ents and evelopmer property o			opera cor	ted for the U.S. Depart htract DE-AC05-000R22 REMOTE SYSTE	ment of Energ 725 Oak Ridge MS GROUP	y under e, TN ON S
DIMENSIONS AND PER ASME Y14.5M		request.	01/0//200						
INISH 125 MICRO-				-		MEF		NT	
NGLES ±1/2°			01/00/200	0	SECON	DAF	RY CONTAINM	ENT ASSY	,
P CORNERS AND BURRS	ENG	V GRAVES	01/06/200	6		EX	TRACTION ASS	SY .	
	QA			-				SCALE	SHEET
LS ±.010 LS ±.005	-	-	-			I LH Y	203-HJT-0700	1:2	1 of 1 REV
	DRA	WING APPROVALS	DATE				203-HJT-0740		A
	1 1 1 1 extraction/QT 1 ERWISE NOTED IONS ARE IN DIMENSIONS AND PER ASME Y14.5M INISH 125 MICRO- ITY .010 TIR NGLES ±1/2° LES ±1° P CORNERS AND BURRS ERS AND ±1/16 LS ±.030 LS ±.010	1 1 <td< td=""><td>8 0.25-20x0.75x0.75 1 Instrumentation Quick-Connects - Series_SS-QC6-D1-60 _Swagelok Bulkhor Tube Fitting 1 connector plate g. hjt 1 extraction tube 1 extraction tube 1 extraction plate hjt 1 extraction plate bill 1 extraction plate hjt 1 extraction plate bill 1 bill 1 bill 1 bill 1 bill 1 bill 1 bill 1 bill</td><td>8 0.25-20x0.75x0.75-N 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bulkhead Tube Fitting 1 connector plate gasket hjt 1 connector plate gasket hjt 1 extraction tube hjt 1 extraction plate extraction/QTY. NAME This drawing was prepared by ORNL solely for use in work performed unde Department of Energy contract number DE-AC05-000R22725 and applicable Work for Others Agreements and Cooperative Research and Developmer Agreements. This drawing is property of ORNL and must be returned upon request. DIMENSIONS AND PER ASME Y14.5M INISH 125 MICR0- ITY DES V GRAVES 01/06/200 ITY .010 TIR NGLES DRW T OQUIN 01/06/200 LS ±1/16 LS ENG V GRAVES 01/06/200</td><td>8 0.25-20x0.75x0.75-N 35 - 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _ Swagelok Bulkhead Tube Fitting N 1 Connector plate gasket hjt 1/16" I 1 extraction tube hjt SS - 30 A 1 extraction plate SS - 30 A Extraction/QTY. NAME MAI Dimensions AND DIMENSIONS AND DER ASME Y14.5MI This drawing was prepared by ORNL solely for use in work performed under Department of Energy contract number DE-AC05-000R22725 and applicable Work for Others Agreements and Cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. DES V GRAVES 01/06/2006 ITY .010 TIR NALES DRW T OQUIN 01/06/2006 IS ±.010 LS ENG V GRAVES 01/06/2006 LS ±.010 LS - - SIZE</td><td>8 0.25-20x0.75x0.75-N 33 - 18-8 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bulkhead Tube Fitting N/A 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A 1 extraction tube hjt SS - 304L, ASTM A269 1 extraction plate SS - 304L, CASTM A269 1 extraction plate SS - 304L, ORTM A269 1 cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. Image: State St</td><td>8 0.25-20x0.75x0.75-N 35 - 16-8 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bukhead Tube Fitting N/A N/A 1 Connector plate gasket hjt 1/16" BUNA-N SHEET. 50A N/A 1 extraction tube hjt SS - 304L, ASTM A269 M 1 extraction plate SS - 304L, ASTM A269 TUE 1 extraction plate SS - 304L, ASTM A269 F 1 extraction plate SS - 304L, ASTM A240 F 1 work for Others Agreements and Cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. F DES V GRAVES 01/06/2006 MEF DRW T OOUIN 01/06/2006 MEF SECONDAF EX CAD FILE CONNECTOR PLATE ASSY HJT Ls ±.000 - -</td><td>8 0.25-20x0.75x0.75x0.75x0 35 - 18-8 38 X.3 - 10 SHCS 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3.8 _Swagelok Bulkhead Tube Fitting N/A INSTRUMENTATION QUICK-CONNECTS - QC SERIES 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A McMASTER-CARR #86715K279 1 extraction tube hjt SS - 304L, ASTM A269 JUBE, .375 OD X.035 WALL 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK A-240 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 004L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 004L, ASTM A269 PLATE, 6 x 0 THK 1 bit drawing was prepared by ORNL solely for use in work performed under DE-AC05-000R22725 and applicable Work for Others Agreements and Coperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. SECONDARY CONTAINMIE SECONDARY CONTAINMIE EXTRACTION ASS EXTRACTION ASS 203-HJT-0700 11 US V GRAVES 01/06/2006 MERIT EXPERIMEI SECONDARY CONTAINMIE EXTRACTION ASS</td><td>8 0.25-20x0.75x0.75x0 35 - 18-8 35 A.5 - 16 SHCS N/A 1 Instrumentation Quick-Connects - QC Series_SC-0C-0D-00_3.8 _Swagelok Bukhead Tube Fitting N/A INSTRUMENTATION QUICK-CONNECTS - QC SERIES N/A 1 connector plate gasket hjt 1/16* BUNA-N SHEET. 50A MCMASTER-CARR #86715K279 203-HJT-C 1 extraction tube hjt SS - 304L, ASTM A269 MCMASTER-CARR #86715K279 203-HJT-C 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SE extraction plate 1 THIRD-ANGLE PROJECTION THIRD-A</td></td<>	8 0.25-20x0.75x0.75 1 Instrumentation Quick-Connects - Series_SS-QC6-D1-60 _Swagelok Bulkhor Tube Fitting 1 connector plate g. hjt 1 extraction tube 1 extraction tube 1 extraction plate hjt 1 extraction plate bill 1 extraction plate hjt 1 extraction plate bill 1 bill 1 bill 1 bill 1 bill 1 bill 1 bill 1 bill	8 0.25-20x0.75x0.75-N 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bulkhead Tube Fitting 1 connector plate gasket hjt 1 connector plate gasket hjt 1 extraction tube hjt 1 extraction plate extraction/QTY. NAME This drawing was prepared by ORNL solely for use in work performed unde Department of Energy contract number DE-AC05-000R22725 and applicable Work for Others Agreements and Cooperative Research and Developmer Agreements. This drawing is property of ORNL and must be returned upon request. DIMENSIONS AND PER ASME Y14.5M INISH 125 MICR0- ITY DES V GRAVES 01/06/200 ITY .010 TIR NGLES DRW T OQUIN 01/06/200 LS ±1/16 LS ENG V GRAVES 01/06/200	8 0.25-20x0.75x0.75-N 35 - 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _ Swagelok Bulkhead Tube Fitting N 1 Connector plate gasket hjt 1/16" I 1 extraction tube hjt SS - 30 A 1 extraction plate SS - 30 A Extraction/QTY. NAME MAI Dimensions AND DIMENSIONS AND DER ASME Y14.5MI This drawing was prepared by ORNL solely for use in work performed under Department of Energy contract number DE-AC05-000R22725 and applicable Work for Others Agreements and Cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. DES V GRAVES 01/06/2006 ITY .010 TIR NALES DRW T OQUIN 01/06/2006 IS ±.010 LS ENG V GRAVES 01/06/2006 LS ±.010 LS - - SIZE	8 0.25-20x0.75x0.75-N 33 - 18-8 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bulkhead Tube Fitting N/A 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A 1 extraction tube hjt SS - 304L, ASTM A269 1 extraction plate SS - 304L, CASTM A269 1 extraction plate SS - 304L, ORTM A269 1 cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. Image: State St	8 0.25-20x0.75x0.75-N 35 - 16-8 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3_8 _Swagelok Bukhead Tube Fitting N/A N/A 1 Connector plate gasket hjt 1/16" BUNA-N SHEET. 50A N/A 1 extraction tube hjt SS - 304L, ASTM A269 M 1 extraction plate SS - 304L, ASTM A269 TUE 1 extraction plate SS - 304L, ASTM A269 F 1 extraction plate SS - 304L, ASTM A240 F 1 work for Others Agreements and Cooperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. F DES V GRAVES 01/06/2006 MEF DRW T OOUIN 01/06/2006 MEF SECONDAF EX CAD FILE CONNECTOR PLATE ASSY HJT Ls ±.000 - -	8 0.25-20x0.75x0.75x0.75x0 35 - 18-8 38 X.3 - 10 SHCS 1 Instrumentation Quick-Connects - QC Series_SS-QC6-D1-600_3.8 _Swagelok Bulkhead Tube Fitting N/A INSTRUMENTATION QUICK-CONNECTS - QC SERIES 1 connector plate gasket hjt 1/16" BUNA-N SHEET. 50A McMASTER-CARR #86715K279 1 extraction tube hjt SS - 304L, ASTM A269 JUBE, .375 OD X.035 WALL 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK A-240 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 004L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 1 extraction plate SS - 004L, ASTM A269 PLATE, 6 x 0 THK 1 bit drawing was prepared by ORNL solely for use in work performed under DE-AC05-000R22725 and applicable Work for Others Agreements and Coperative Research and Development Agreements. This drawing is property of ORNL and must be returned upon request. SECONDARY CONTAINMIE SECONDARY CONTAINMIE EXTRACTION ASS EXTRACTION ASS 203-HJT-0700 11 US V GRAVES 01/06/2006 MERIT EXPERIMEI SECONDARY CONTAINMIE EXTRACTION ASS	8 0.25-20x0.75x0.75x0 35 - 18-8 35 A.5 - 16 SHCS N/A 1 Instrumentation Quick-Connects - QC Series_SC-0C-0D-00_3.8 _Swagelok Bukhead Tube Fitting N/A INSTRUMENTATION QUICK-CONNECTS - QC SERIES N/A 1 connector plate gasket hjt 1/16* BUNA-N SHEET. 50A MCMASTER-CARR #86715K279 203-HJT-C 1 extraction tube hjt SS - 304L, ASTM A269 MCMASTER-CARR #86715K279 203-HJT-C 1 extraction plate SS - 304L, ASTM A269 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SS - 304L, ASTM A240 PLATE, 6 x 0 THK 203-HJT-C 1 extraction plate SE extraction plate 1 THIRD-ANGLE PROJECTION THIRD-A

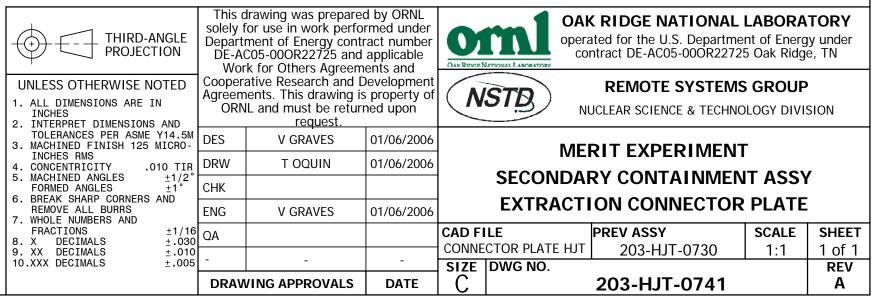


1. MATERIAL CERTIFICATIONS REQUIRED

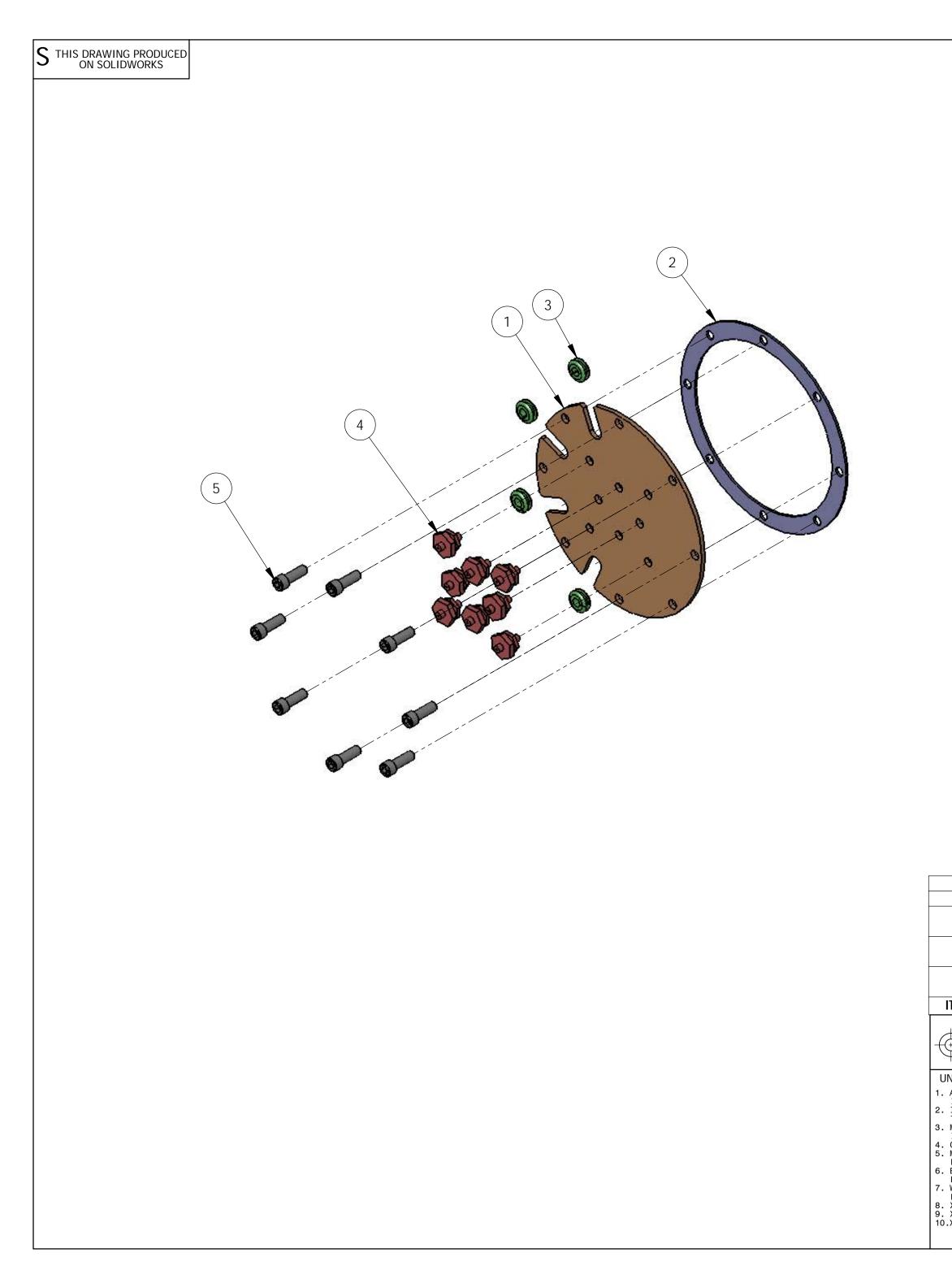


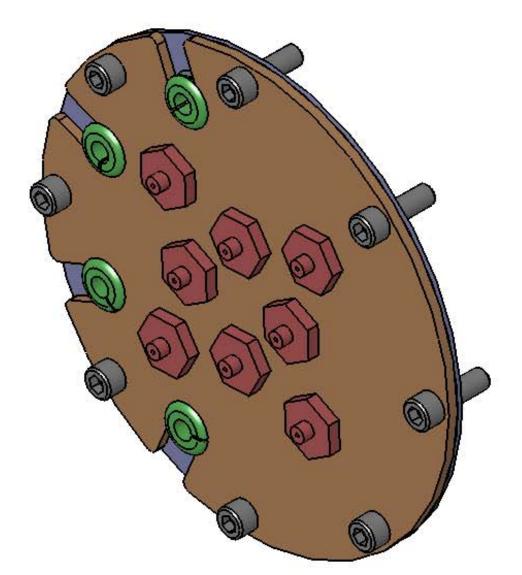


MATERIAL: SS - 304L, ASTM A-240

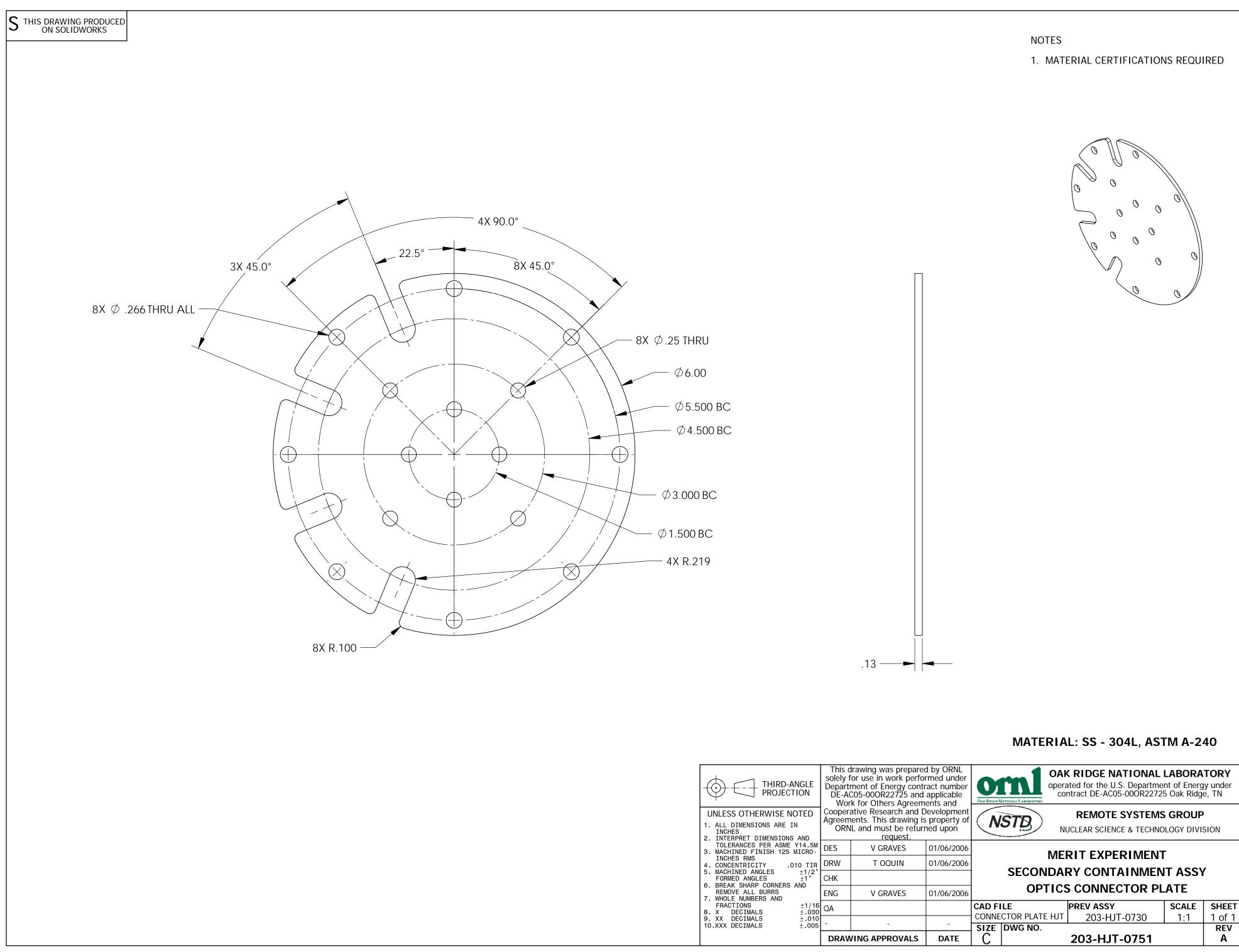


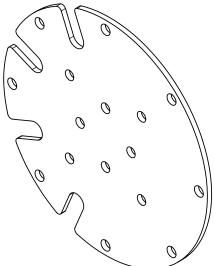
DWG NO. 203-HJT-0741



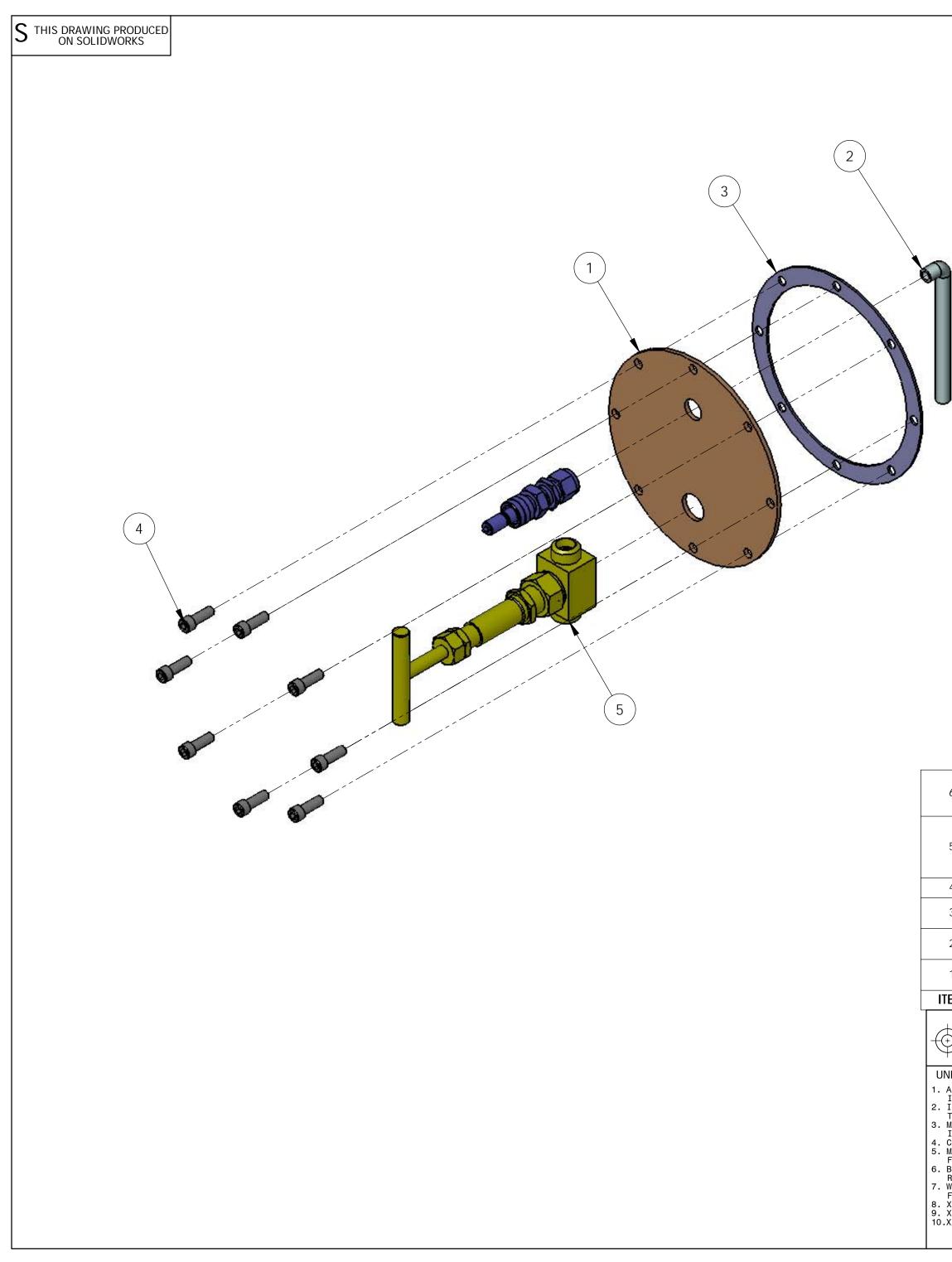


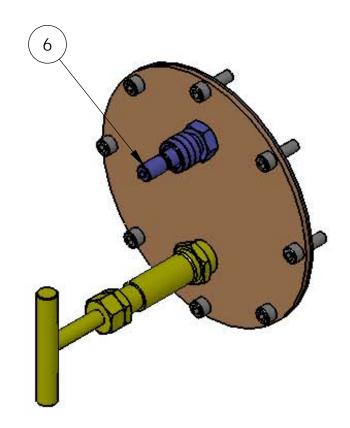
		DRAW	/ING APPROVALS	DATE	C		2	03-HJT-0750		A
.XXX DECI		-	-	-	SIZE	DWG NO.		2001101-0700		REV
FRACTION X DECI XX DECI	MALS ±.030				CAD FI	LE TOR PLATE ASSY		203-HJT-0700	SCALE 1:2	SHEET 1 of 1
REMOVE A	IARP CORNERS AND ALL BURRS IMBERS AND	ENG	V GRAVES	01/06/2006	1	C		NOSTICS ASS	(
MACHINED	ANGLES ±1°	СНК]			CONTAINMEN		7
INCHES R CONCENTR	ICITY .010 TIR	DRW	T OQUIN	01/06/2006					-	
TOLERANC	ES PER ASME Y14.5M FINISH 125 MICRO-	DES	V GRAVES	01/06/2006		Γ		T EXPERIMEN	г	
ALL DIME INCHES	THERWISE NOTED INSIONS ARE IN IT DIMENSIONS AND	Agreem	ative Research and D ents. This drawing is L and must be return request.	s property of	N	STB	-	REMOTE SYSTEM		
	THIRD-ANGLE	solely f Departr DE-A(Wor	Irawing was prepared or use in work performent of Energy contro C05-000R22725 and k for Others Agreem	rmed under ract number applicable ents and			perated	d for the U.S. Department of the DE-AC05-000R2272	ent of Energ	y under
ITEM	optics/QTY.		NAME		MA	TERIAL		DESCRIPTION	DW	/G
1	1		optics plate)4L, ASTM -240	I	PLATE, 6 x 0 THK	203-HJ	T-0751
2	1	со	nnector plate gask	ket hjt		BUNA-N ET. 50A	N	1cMASTER-CARR #86715K279	203-HJ	T-0732
3	4	C	ptic fiber gromme	t hjt	I	N/A	G	GROMMET - FIBER OPTIC	N/	A
4	8	illu	mination fiber slee	ve hjt				THOR ADAMSA	N/	A
5	8	HX-	SHCS 0.25-20x0.75x	0.75-N	SS	- 18-8		38 X .5 -16 SHCS	N/	A



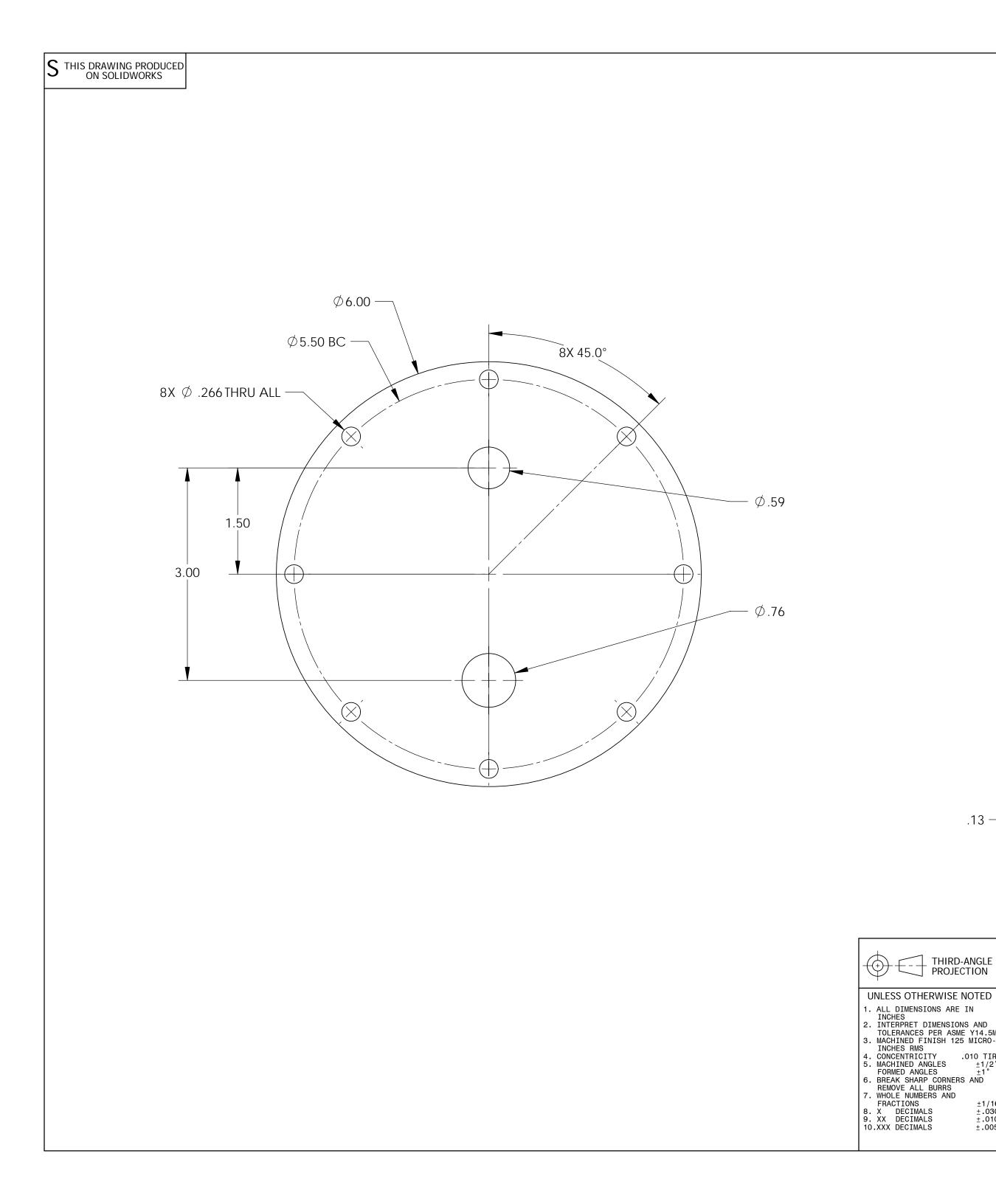


-0751 203-HJT NO. DWG

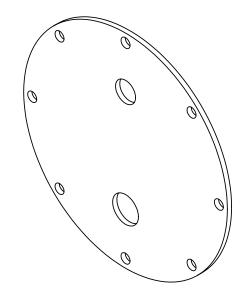


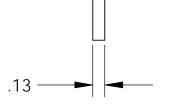


REMOVE A WHOLE N FRACTIO	HARP CORNERS AND ALL BURRS UMBERS AND NS ±1/16 IMALS ±.030 IMALS ±.010	ENG	V GRAVES	01/06/2006	CAD FILE CONNECTOR PLATE ASSY	PREV ASSY	SCALE 1:2	SHEET 1 of 1 REV	
REMOVE WHOLE N FRACTIO X DEC	HARP CORNERS AND ALL BURRS UMBERS AND NS ±1/16 IMALS ±.030	ENG	V GRAVES	01/06/2006	CAD FILE	PREV ASSY			
REMOVE	HARP CORNERS AND ALL BURRS		V GRAVES	01/06/2006	-		_		
BREAK SI		OTIK			VACUUM ASSY				
FORMED	D ANGLES $\pm 1/2^{\circ}$	СНК			SECONE	DARY CONTAINMEN	NT ASSY		
INCHES CONCENT	RMS RICITY .010 TIR	DRW	T OQUIN	01/06/2006					
TOLERAN	CES PER ASME Y14.5M D FINISH 125 MICRO-	DES	V GRAVES	01/06/2006			.		
ALL DIM INCHES	ENSIONS ARE IN ET DIMENSIONS AND	Agreem	nents. This drawing i IL and must be retur request.	s property of	NSTE	NUCLEAR SCIENCE & TECHN			
JNLESS O	THERWISE NOTED	Coopera	rk for Others Agreen ative Research and	Development		REMOTE SYSTEM			
\oplus	THIRD-ANGLE	solely f Departi DE-A	drawing was prepare for use in work performent of Energy cont C05-000R22725 and	brmed under tract number applicable		DAK RIDGE NATIONAL perated for the U.S. Departm contract DE-AC05-000R2272	ent of Energ	y under	
ITEM	drain/QTY.		NAME		MATERIAL	DESCRIPTION	DV	/G	
1	1		drain plate		SS - 304L, ASTM A-240	PLATE, 6 x 0 THK	203-HJ	T-0761	
2	1		vacuum port tubi	ng hjt	SS - 304L, ASTM A269	VACUUM PORT TUBING	203-HJ	T-0762	
3	1	С	connector plate ga	asket hjt	1/16" BUNA-N SHEET. 50A	McMASTER-CARR #86715K279	203-HJ	T-0732	
4	8	НХ	K-SHCS 0.25-20x0.7	5x0.75-N	SS - 18-8	.38 X .5 -16 SHCS	N/	Ά	
5	1		eries_SS-8UW-TP3_T 1_2 or 3_4_Swag Company_Create PartSpec2DC48_	elok d with	N/A	U SERIES	N	Ά	
6	1	QC	umentation Quick- Series_SS-QC6-D1 agelok Bulkhead Tu	-600 3 8	N/A	INSTRUMENTATION QUICK-CONNECTS - QC SERIES	N	Ά	



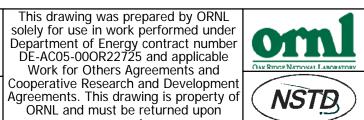
1. MATERIAL CERTIFICATIONS REQUIRED





THIRD-ANGLE PROJECTION

MATERIAL: SS - 304L, ASTM A-240

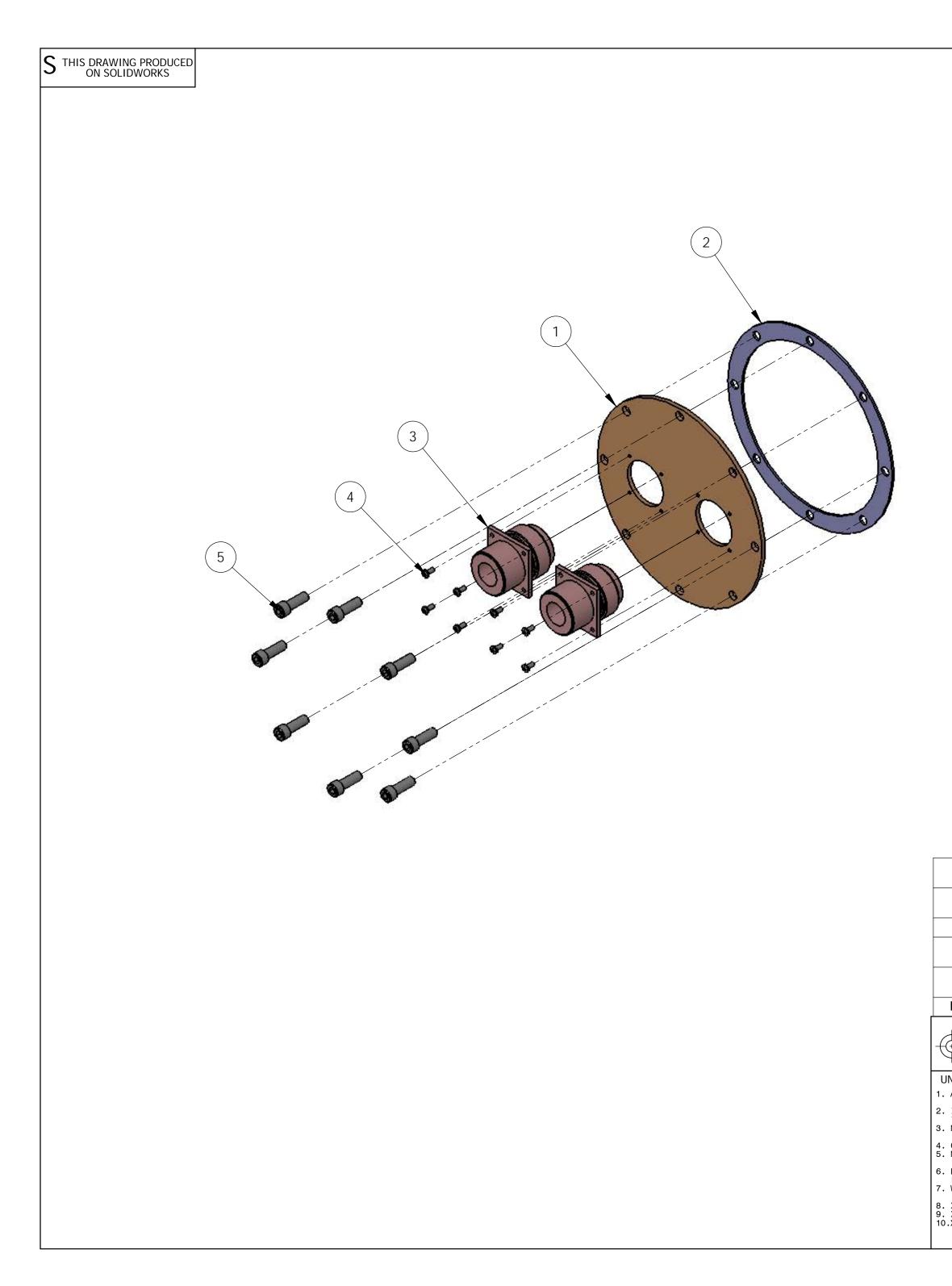


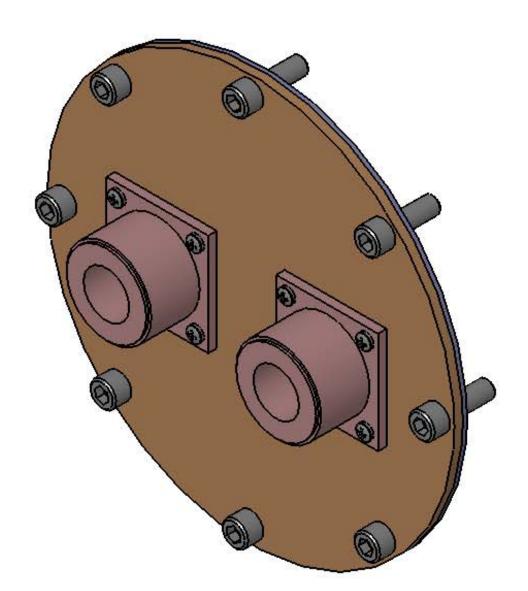
OAK RIDGE NATIONAL LABORATORY operated for the U.S. Department of Energy under contract DE-AC05-00OR22725 Oak Ridge, TN

REMOTE SYSTEMS GROUP NUCLEAR SCIENCE & TECHNOLOGY DIVISION

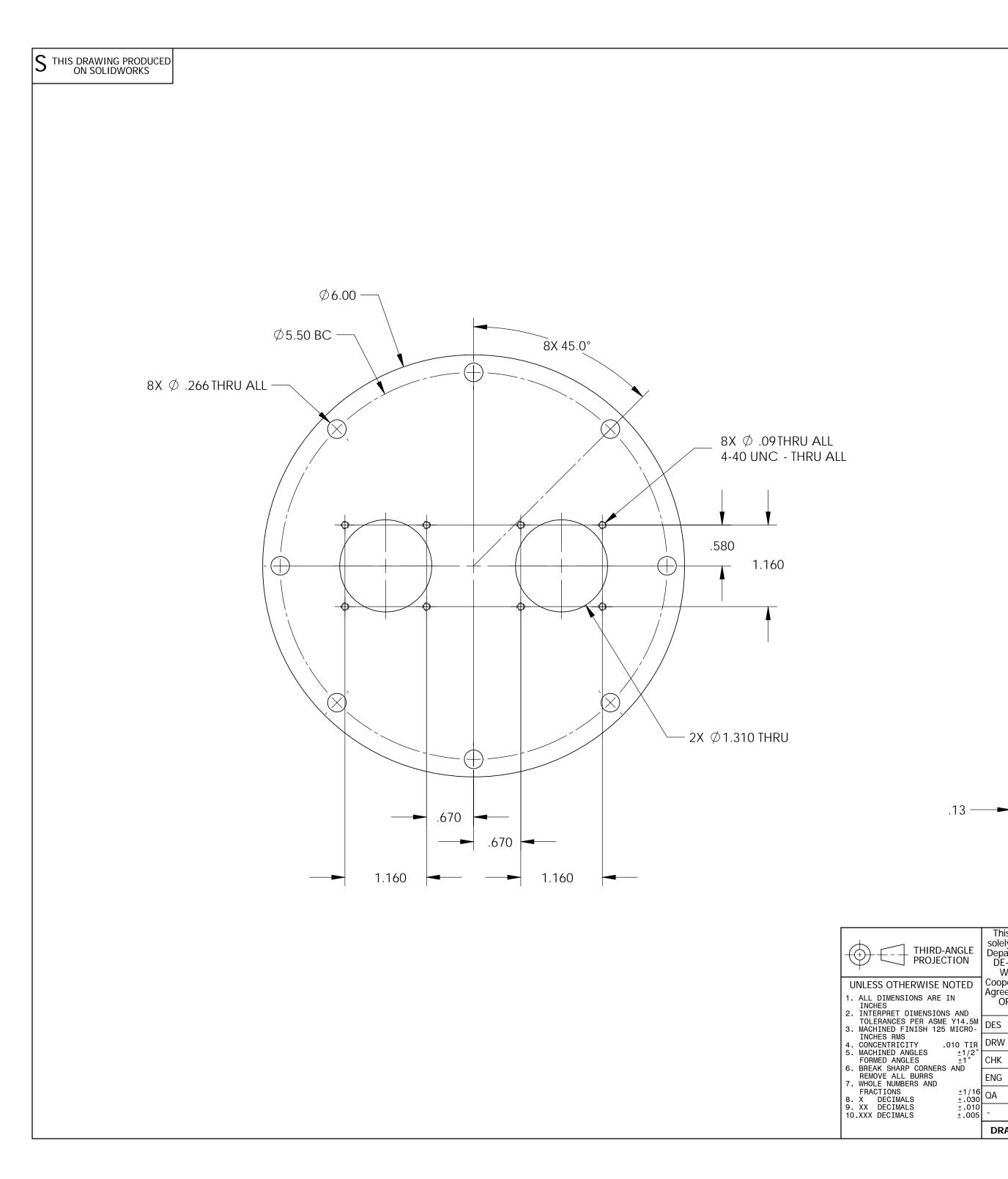
MERIT EXPERIMENT SECONDARY CONTAINMENT ASSY DRAIN CONNECTOR PLATE

1. ALL DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND	Agreen ORN	hents. This drawing is IL and must be return request.	property of		STD NU	CLEAR SCIENCE & TECHNO		
TOLERANCES PER ASME Y14.5M 3. MACHINED FINISH 125 MICRO-	DES	V GRAVES	01/06/2006		МЕС		-	
INCHES RMS 4. CONCENTRICITY .010 TIR 5. MACHINED ANGLES +1/2°	DRW	T OQUIN	01/06/2006					,
5. MACHINED ANGLES ±1/2° FORMED ANGLES ±1° 6. BREAK SHARP CORNERS AND	СНК							
REMOVE ALL BURRS 7. WHOLE NUMBERS AND	ENG	V GRAVES	01/06/2006		DRAIN	CONNECTOR PL	AIE	
FRACTIONS ±1/16 8. X DECIMALS ±.030	QA					PREV ASSY	SCALE	SHEET
9. XX DECIMALS ±.010 10.XXX DECIMALS ±.005		-	-		CTOR PLATE HJT DWG NO.	203-HJT-0730	1:1	1 of 1 REV
	DRAV	VING APPROVALS	DATE	С		203-HJT-0761		Α

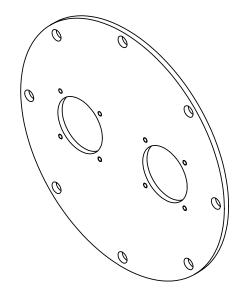


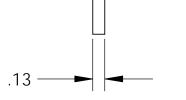


5	8	0.	HX-SHCS 25-20x0.75x0.75-N	S	S - 18-8		38 X .5 -16 SHCS	N/	Ά
4	8	0.1	CR-PHMS 112-40x0.25x0.25-N	S	S - 316		ROSS HEAD MACHINE CREW - 4-40 x 1/4	N/	Ά
3	2		20			AMPHEN	NOL 97-4100 - SERIES 20	N/	Ά
2	1		connector plate gasket hjt		5" BUNA- Eet. 50A		TER-CARR #86715K279	203-HJ	T-0732
1	1		electrical plate		304L, AS1 A-240	M F	PLATE, 6 x 0 THK	203-HJ	T-0771
ITEM	Default/QTY.		NAME	M	ATERIAI	_ I	DESCRIPTION	DW	/G
ALL DIMEN INCHES	THIRD-ANGLE PROJECTION HERWISE NOTED ISIONS ARE IN	solely f Departi DE-A0 Wor Coopera Agreem	Irawing was prepared or use in work perfor ment of Energy contro C05-00OR22725 and k for Others Agreeme ative Research and D ents. This drawing is L and must be return request.	med under act number applicable ents and evelopment property of			K RIDGE NATIONAL ated for the U.S. Departme ntract DE-AC05-000R2272 REMOTE SYSTEMS UCLEAR SCIENCE & TECHNO	nt of Energ 5 Oak Ridgo 6 GROUP	y under e, TN
	ES PER ASME Y14.5M FINISH 125 MICRO-	DES	V GRAVES	01/06/2006		MF		г	
CONCENTRI MACHINED	ICITY .010 TIR	DRW	T OQUIN	01/06/2006			RY CONTAINMEN		,
FORMED AN		СНК						II AJJI	
REMOVE AL	LL BURRS	ENG	V GRAVES	01/06/2006			SENSOR ASSY		
FRACTIONS X DECIN	MALS ±.030	QA			CAD FI	LE OR PLATE ASSY HJT	PREV ASSY	SCALE	SHEET
XX DECIN		-	-	-		DWG NO.	203-HJT-0700	1:2	1 of 1 REV
		DRAW	/ING APPROVALS	DATE	C		203-HJT-0770		A



1. MATERIAL CERTIFICATIONS REQUIRED





DRW

СНК

.010 TIR

±1/2° ±1°

ORNL and must be returned upon

request V GRAVES

T OQUIN

MATERIAL: SS - 304L, ASTM A-240



OAK RIDGE NATIONAL LABORATORY operated for the U.S. Department of Energy under contract DE-AC05-000R22725 Oak Ridge, TN

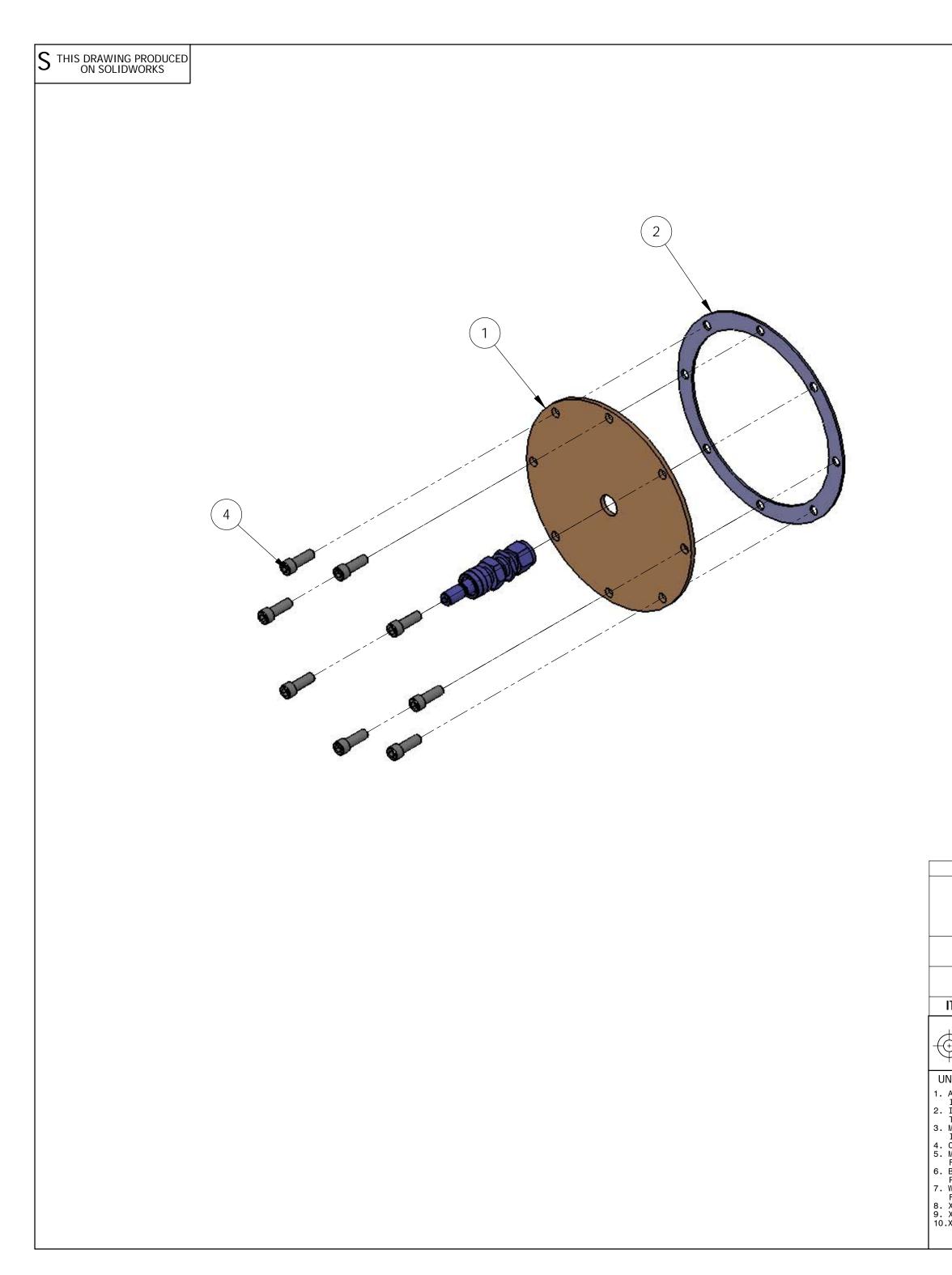
REMOTE SYSTEMS GROUP NUCLEAR SCIENCE & TECHNOLOGY DIVISION

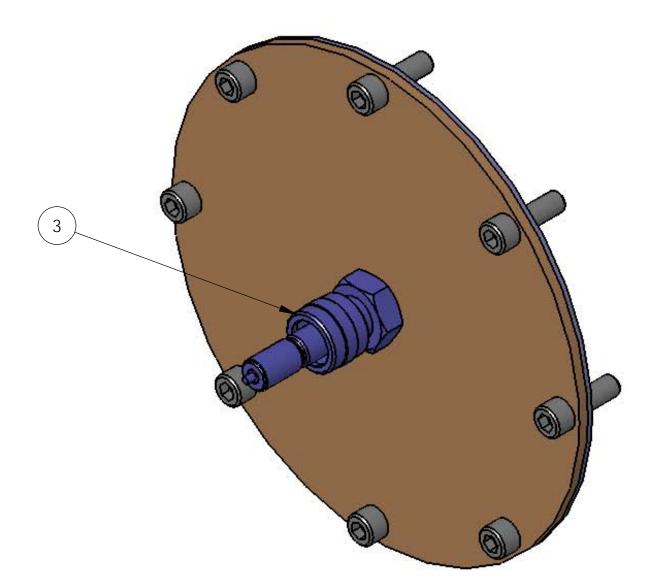
MERIT EXPERIMENT SECONDARY CONTAINMENT ASSY FLECTRICAL CONNECTOR PLATE

OVE ALL BURRS _E NUMBERS AND		ENG	V GRAVES	01/06/2006		ELECTRIC	AL CONNECTOR	FLAIL	
CTIONS DECIMALS	±1/16 ±.030	QA			CAD FI		PREV ASSY	SCALE	SHEET
DECIMALS	±.010				CONNE	CTOR PLATE HJT	203-HJT-0730	1:1	1 of 1
DECIMALS	±.005	-	-	-	SIZE	DWG NO.			REV
		DRAW	ING APPROVALS	DATE	С		203-HJT-0771		Α

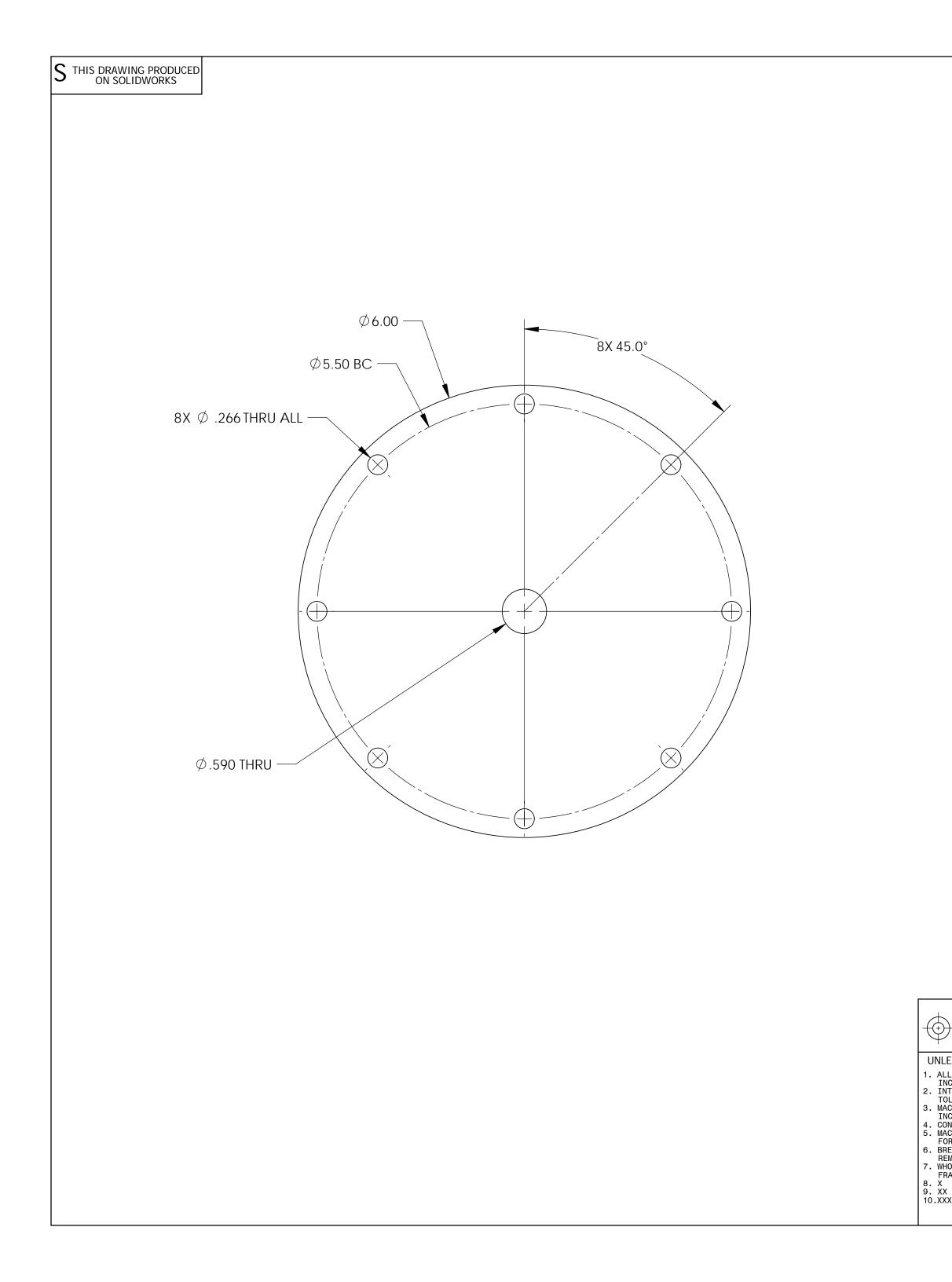
01/06/2006

01/06/2006

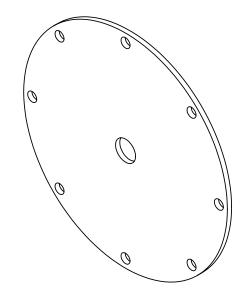


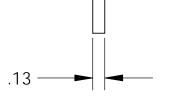


. MACHINED		СНК	1 0 2011	01/00/2000	SEC		RY CONTAINME NLET PLATE AS		'
		DES DRW	V GRAVES	01/06/2006		ME		JT	
. ALL DIMEN	THERWISE NOTED NSIONS ARE IN T DIMENSIONS AND	Coopera Agreem	ative Research and E ents. This drawing is L and must be retur request.	Development s property of	NSTE		REMOTE SYSTEN		
⊕ €-	THIRD-ANGLE	solely f Departi DE-A	lrawing was prepare or use in work perfo ment of Energy cont C05-00OR22725 and k for Others Agreem	rmed under ract number applicable		opera	K RIDGE NATIONA ated for the U.S. Departmentract DE-AC05-000R22		
ITEM	hg inlet/QTY.		NAME		MATERIA	L	DESCRIPTION	DWG	G
1	1		connector plate	e hjt	SS - 304L, AS A-240	TM PL	ATE, 6.00 x .13 THK	203-HJT-	0781
2	1	С	onnector plate ga	sket hjt	1/16" BUNA SHEET. 504		McMASTER-CARR #86715K279	203-HJT-	0732
3	1	Se Swa	Instrumentatic Quick-Connects eries_SS-QC6-D1-60 Igelok Bulkhead Tu	- QC	N/A		NSTRUMENTATION UICK-CONNECTS - QC SERIES	N/A	Λ
4	8	ΗУ	(-SHCS 0.25-20x0.7	5x0.75-N	SS - 18-8		.38 X .5 -16 SHCS	N/A	1

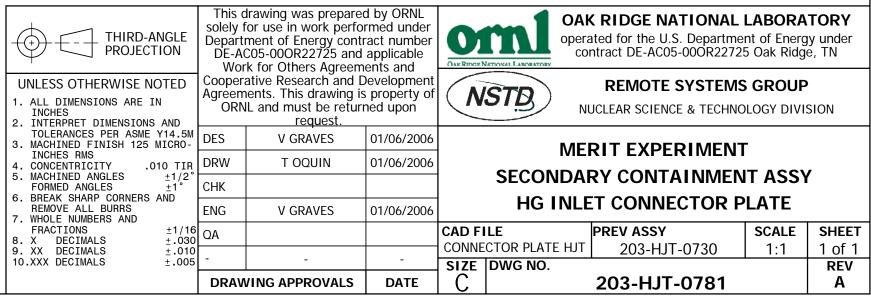


1. MATERIAL CERTIFICATIONS REQUIRED





MATERIAL: SS - 304L, ASTM A-240



DWG NO. 203-HJT-0781