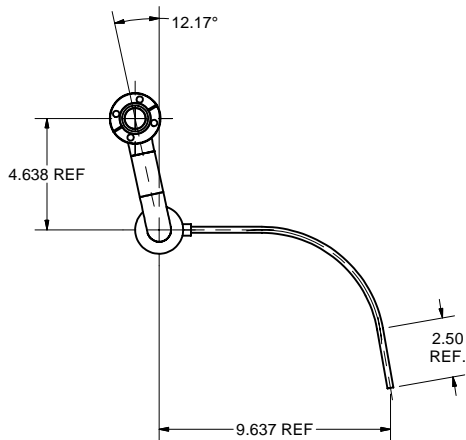
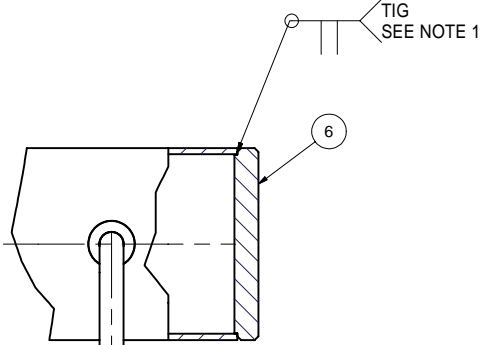
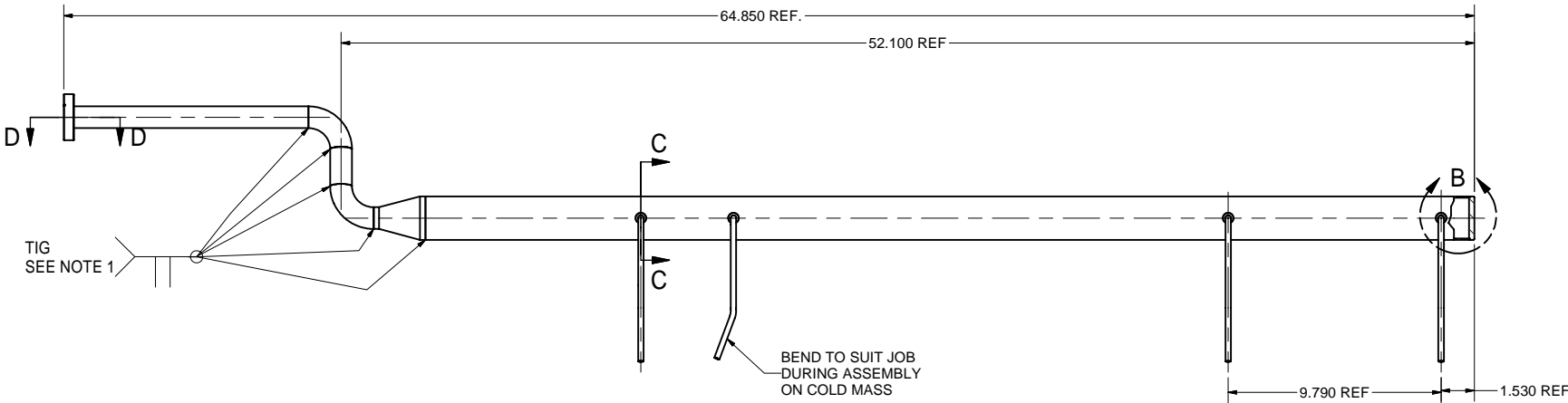
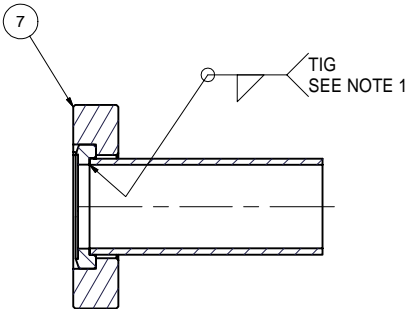


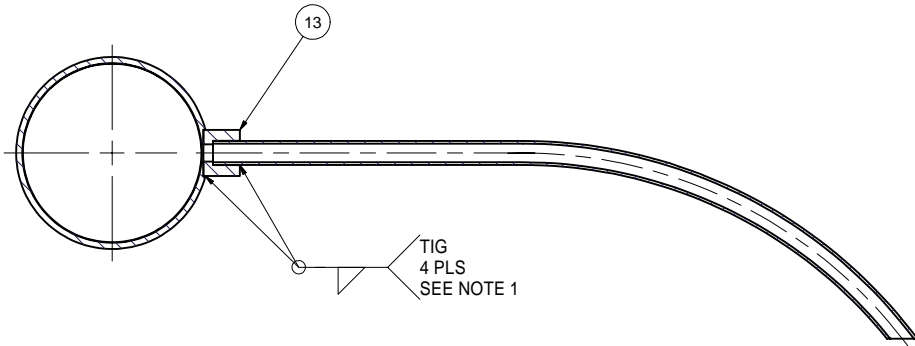
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ADDED ITEM #13 TO P.L. & UPDATED VIEWS TO REFLECT THIS JGL	12/7/06	JOS
B	D5	Added note regarding bent tube during assembly.	12/18/06	TOC



SECTION D-D
SCALE 1 : 1






DETAIL B
SCALE 1 : 1



SECTION C-C
SCALE 1 : 1

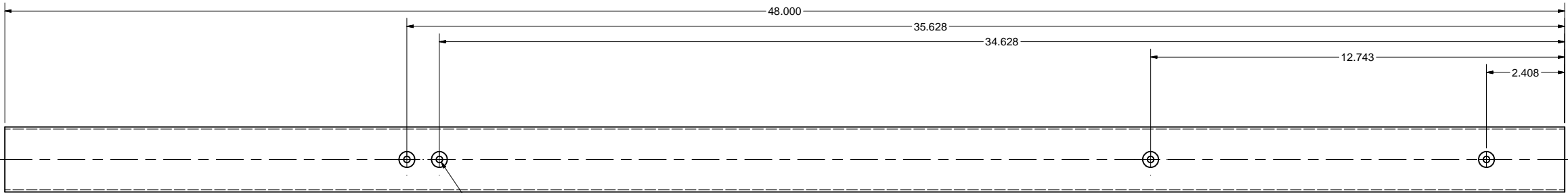
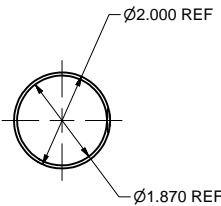
- 1 5 K LEFT TUBE ASSEMBLY**
FILE NAME: 7110-019
SHEET NO.: 1
DFT. SCALE: 1 : 4
MATERIAL:
QTY: 1
NOTES: 1. WELDS CONFORM TO UHV SPEC
2. MAKE LN THERMAL COLD SHOCK AND LEAK TEST;
LEAK RATE: < 2.0E-10 TORR-L/SEC.

13	SEE 7110-007 ITEM 12	1/4" WELD COUPLING (PUR. & MODIFIED)	4				
9	PUR.	1" OD, 90 DEG. ELBOW, 316L S.S.	2				VARIAN'S WE90100 OR EQUIV.
8	PUR.	2" OD TO 1" OD CONICAL REDUCER, 316L S.S.	1				VARIAN'S WRC200100 OR EQUIV.
7	PUR.	2-1/8" CF 1" TUBE Rotatable Flange, 316L S.S.	1				VARIAN'S F0212-0100-RC OR EQUIV.
6	SEE 7110-007 ITEM 3	2" END CAP	1				
5	SEE 7110-007 ITEM 7	1" OD TUBE II	1				
4	7110-019 (SH. 3)	SMALL TUBE - LEFT	4				
3	7110-019 (SH. 2)	1" OD TUBE C	1				
2	7110-019 (SH. 2)	5 K TUBE - LEFT	1				
1	7110-019 (SH. 1)	5 K LEFT TUBE ASSEMBLY	X				

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
D	PRINT DISTR.	PLOT DATE: 12/18/2006 CAD FILE NAME: 7110-019.idw								
7110-019 SH. NO. 1 OF 4	CR1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 			 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
		ERL HORIZONTAL TEST CRYOMODULE 5 K COOLING PIPES 5 K LEFT TUBE ASSEMBLY DETAILS								
B	REV.	CHECKED BY: VM		DRAWN BY applin	DRAWN FOR VM	DATE 8/16/2006	SCALE	D	7110-019	REV. B
		APPROVED BY: ML		SH. NO. 1 OF 4						

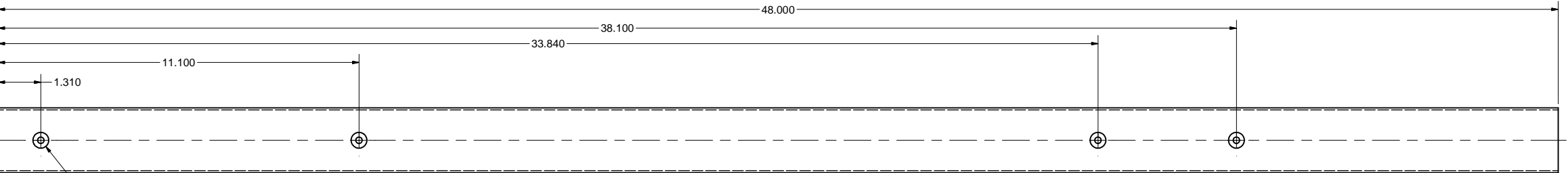
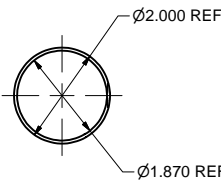
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	C8,E6	ON ITEMS 2 & 11, CHANGED C'BORE DIA. - WAS 0.26 JGL	12/7/06	JOS



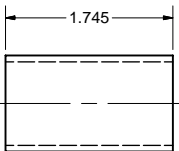
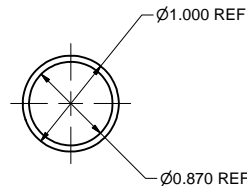
Ø0.196 ∇ THRU WALL
└─┘ Ø0.485 ∇ 0.050
(4 PLS)

11 5 K TUBE - RIGHT
FILE NAME: 7110-019
SHEET NO.: 2
DFT. SCALE: 1 : 2
MATERIAL: 2" OD x 0.065" W 316 L, STAINLESS STEEL TUBE
QTY: 1
NOTES:








Ø0.196 ∇ THRU WALL
└─┘ Ø0.485 ∇ 0.050
(4 PLS)

2 5 K TUBE - LEFT
FILE NAME: 7110-019
SHEET NO.: 2
DFT. SCALE: 1 : 2
MATERIAL: 2" OD x 0.065" W 316 L, STAINLESS STEEL TUBE
QTY: 1
NOTES:

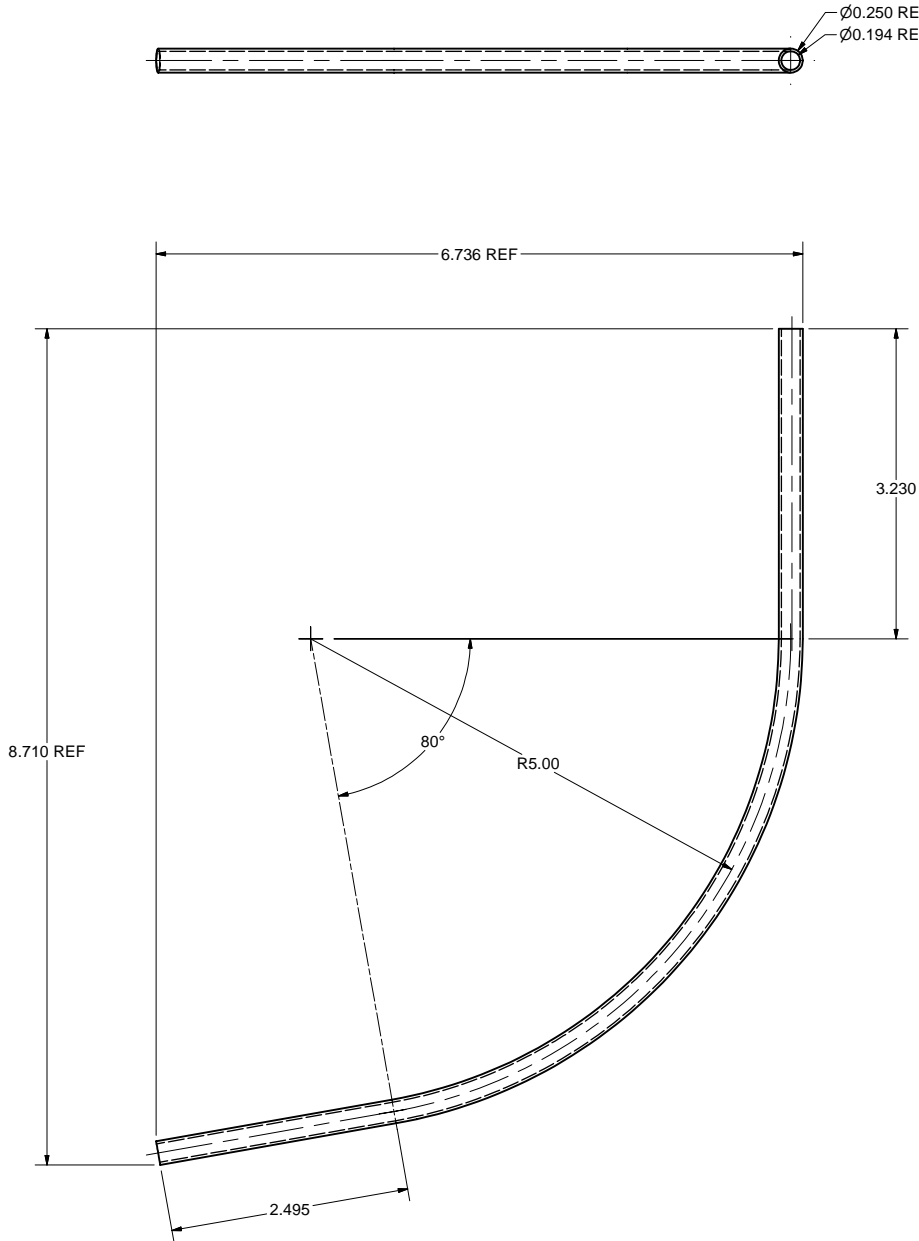


3 1" OD TUBE C
FILE NAME: 7110-019
SHEET NO.: 2
DFT. SCALE: 1 : 1
MATERIAL: 1" OD x 0.065" W 316 L, STAINLESS STEEL TUBE
QTY: 1 PER ASSEMBLY
NOTES:

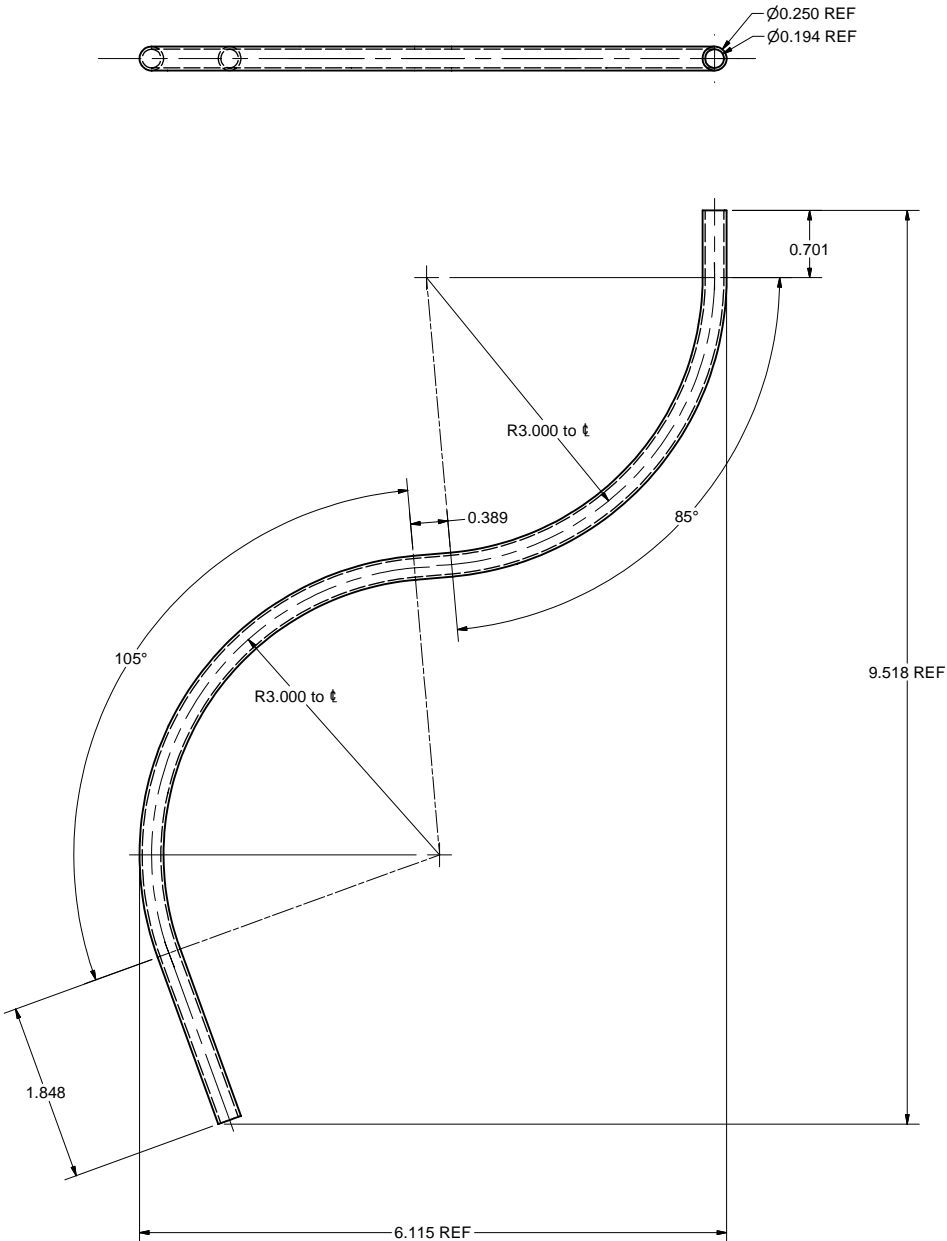
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
	QUANTITY									
	PLOT DATE: 12/18/2006 CAD FILE NAME: 7110-019.idw									
7110-019 SH. NO. 2 OF 4	CR1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 		<div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>ERL HORIZONTAL TEST CRYOMODULE 5 K COOLING PIPES 5K LEFT AND RIGHT TUBE DETAILS</div>						
		CHECKED BY: VM APPROVED BY: ML		DRAWN BY applin	DRAWN FOR VM	DATE 8/16/2006	SCALE		7110-019 SH. NO. 2 OF 4	REV. A

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		PART ITEM 4: DIM. 3.230 WAS 3.330. PART ITEM 12: DIM. 0.701 WAS 0.801.	12/18/06	VM






4 **SMALL TUBE LEFT**
FILE NAME: 7110-019
SHEET NO.: 3
DFT. SCALE: 1 : 1
MATERIAL: 0.25" OD x 0.028" W 316L, STAINLESS STEEL TUBE
QTY: 4 PER ASSEMBLY
NOTES:



12 **SMALL TUBE RIGHT**
FILE NAME: 7110-019
SHEET NO.: 3
DFT. SCALE: 1 : 1
MATERIAL: 0.25" OD x 0.028" W 316L, STAINLESS STEEL TUBE
QTY: 4 PER ASSEMBLY
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.
							QUANTITY					
D		PRINT DISTR.	PLOT DATE: 12/18/2006 CAD FILE NAME: 7110-019.idw									
7110-019 SH. NO. 3 OF 4		CR1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853							
			ERL HORIZONTAL TEST CRYOMODULE 5 K COOLING PIPES LEFT AND RIGHT SMALL TUBE DETAILS									
A		REV.	CHECKED BY: VM		DRAWN BY applin		DRAWN FOR VM		DATE 8/16/2006		SCALE D	7110-019 SH. NO. 3 OF 4 REV. A
			APPROVED BY: ML									

