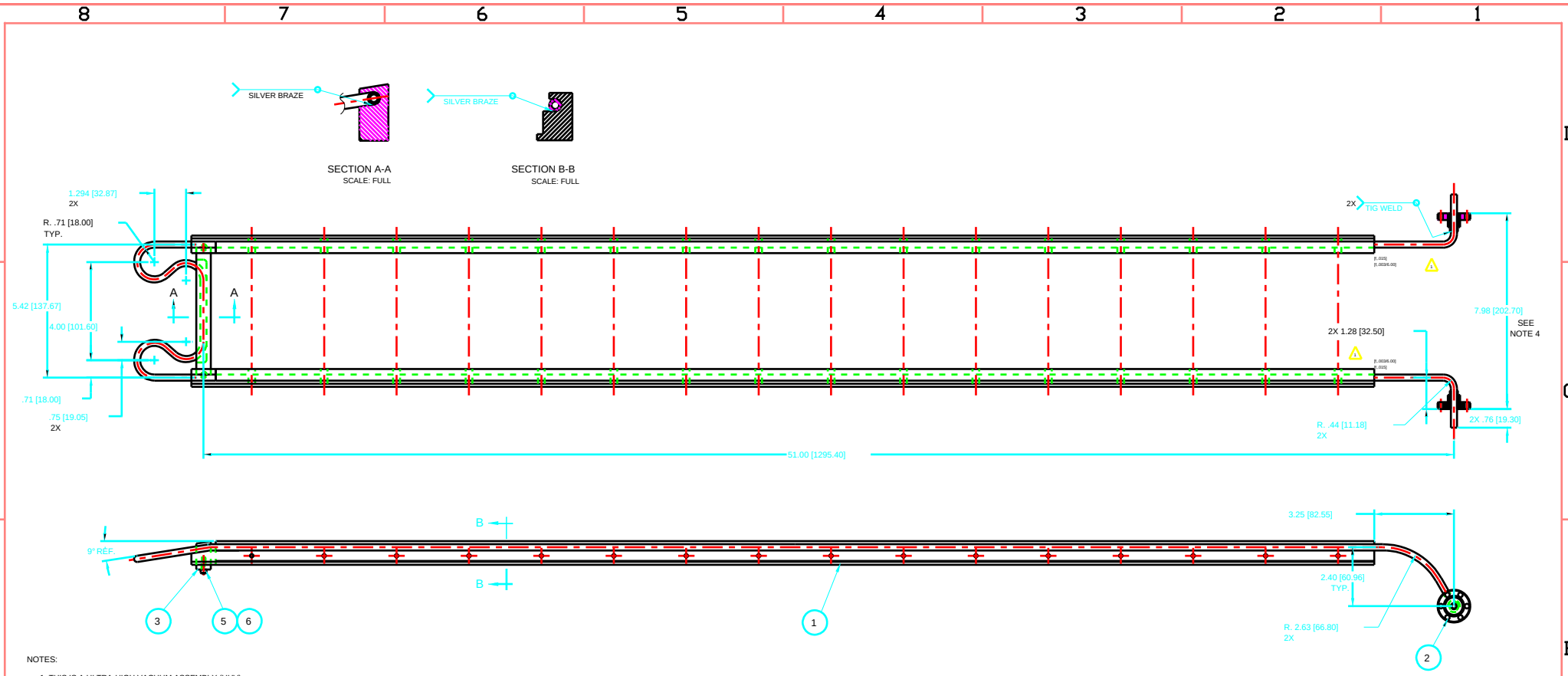

NOTES:

1. THIS IS A ULTRA-HIGH VACUUM ASSEMBLY (UHV)
   KEEP THE UHV PARTS CLEAN DURING ASSEMBLY,
   AND WRAP UP FOR PACKING WITH ALUMINUM FOIL

2. THE ASSEMBLY SHALL BE LEAK TESTED
   USING A MASS SPECTROMETER WITH
   MINIMUM SENSITIVITY FOR HELIUM
   OF 2X 10 -10 STANDARD CC/SEC PER
   LEAK METER DIVISION, SUCH AS:

   ALCATEL ASM-11OTCL
   VARIAN NCR 925 OR 936
   VEECO MS-9, MS-90 OR MS-18
   Du PONT CEC 24-120B

   CALIBRATION OF THE LEAK DETECTOR
   SENSITIVITY SHALL BE PERFORMED JUST
   PRIOR TO TESTING.

   FINAL TEST WILL CONSIST OF SURROUNDING
   THE ASSEMBLY (BAGGING) WITH HELIUM. THE
   ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION
   IN THE MOST SENSITIVE RANGE OF THE LEAK
   DETECTOR IS SENSED WITHIN 1 MIN.

3. WELD SHALL BE GAS TUNGSTEN ARC (GTAW) OR TUNGSTEN
   INERT GAS (TIG) ON VACUUM SIDE OF JOINTS.

4. USE PART P4105091203-300002 AS A FIXTURE TO LOCATE FLANGES.

5. DIMENSIONS IN [ ] ARE MILLIMETERS AND FOR REF. ONLY.

ITEM	EQUIPMENT NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
6		.174 I.D. X .04 THK. LOCK WASHER	SST	2
5		#8-32 X 1-1/2 LG. SOC. HD. SCREW	SST	2
4		Ø.250 x .032 WALL TUBING	OFHC COPPER	1
3	P4105091203-240103	FIXED MASK	OFHC COPPER	1
2	P4105091203-340102	COOLING TUBE VACUUM FLANGE	SST	2
1	P4105091203-340101	COOLING RAIL SET	OFHC COPPER	1

PARTS LIST

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
1	OFHC COPPER WAS SST	RAF	JC	10/96
1	ADDED GEOMETRIC TOLERANCES	RAF	JC	10/96

REVISIONS

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES
DECIMALS: ANGLES
.X ± .03 ± 25°
.XX ± .01
.XXX ± .005
SURFACE ROUGHNESS 63

DO NOT SCALE DRAWING

CODE IDENT A2416001

ARGONNE NATIONAL LABORATORY

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DRAWN BY R. KRAKORA	DATE 5/8/96	CHIEF DESIGN ENGINEER D.SHU	DATE 6/24/96
CHECKED BY J.CHANG	6/18/96	DP LEADER T.M.KUZAY	6/26/96
REVIEWED KRAKORA/CHANG	6/8/96	PROJECT MGR.	
ENGINEERING MANAGER J.CHANG	6/18/96	ASSOCIATE DIRECTOR	

MATERIAL SEE B.O.M.

SCALE 1:2
SHEET 1 OF 1

SIZE D

DRAWING NUMBER P4105091203-340100-01

ADVANCED PHOTON SOURCE

Y3-30 MIRROR MOUNT
ASSEMBLY FOR SRICAT
2-BM-A 1200mm MIRROR
COOLING TUBE, RAIL & FLANGE