



- NOTES (UNLESS OTHERWISE SPECIFIED):
- ASSEMBLY MUST BE FREE OF DIRT, GREASE, OIL AND CHIPS.
 - ASSEMBLY TO BE FREE OF ALL SHARP EDGES, CORNERS, AND BURRS.
 - ALL WELDS TO BE VACUUM LEAK TIGHT. LEAK TEST: NO LEAK SHALL BE DETECTABLE ON THE MOST SENSITIVE SCALE OF A HELIUM LEAK DETECTOR WITH A MINIMUM SENSITIVITY OF 10⁻⁶ ATM. CC/SEC.
 - WELDS TO COMPLY WITH MOST RECENT VERSION OF PROCESS PIPING CODE ASME B31.3 FOR NORMAL FLUID SERVICE. GROOVE WELDS TO BE COMPLETE PENETRATION. RELATED DOCUMENTATION OF MATERIALS, WELDING, AND IN-PROCESS INSPECTION MUST BE INCLUDED WITH THE FINAL PRODUCT DELIVERY.
 - WELDS AS NOTED TO COMPLY WITH MOST RECENT VERSION OF PROCESS PIPING CODE ASME B31.3 FOR CATEGORY D FLUID SERVICE. GROOVE WELDS MAY BE PARTIAL PENETRATION. RELATED DOCUMENTATION OF MATERIALS MUST BE INCLUDED WITH THE FINAL PRODUCT DELIVERY.
 - INSTALL INTERNAL PIPING ASSEMBLY (ITEM 10) INTO ITEM 7. WELD ITEMS 1 AND 4, ITEMS 2 AND 3, OR ITEMS 2 AND 11 TO ITEM 10 AS SHOWN. AFTER WRAPPING FLEX HOSE WITH ML1, PLACE ITEMS 8 AND 12 LOW ENOUGH TO WELD BAYONET SEALS TO 1-1/2" BAYONET TUBES.

ITEM	FERMI #	PART NAME	QTY
17	FC0073289	PIPE, 2-1/2" SCH.10 304 SS	A/R
16	FC0053642	CAP, TUBE, 6" O.D. X .109 WALL, 316L SS	1
15	FC0051571	ML1 BLANKET SPACER MATERIAL - REMAY	A/R
14	FC0051570	REFLECTOR, FLAT - ENERGY DOUBLER, CRYOSTAT	A/R
13	FC0030259	REDUCER, PIPE, 3 1/2x2 1/2xSch 5, 304SS	6
12	F10137564	CONTOURED PIPE, LONG	2
11	F10137559	FLEXHOSE ASSEMBLY, 80K RETURN LINE	2
10	F10136778	INTERNAL PIPING ASSEMBLY	1
9	F10136162	MODIFIED TUBE CAP	1
8	F10126719	MODIFIED PIPE, CONTOURED	4
7	F10126718	MANIFOLD, VACUUM JACKET	1
6	F10118651	VALVE, VAC SEAL-OFF, MODIFIED, CVI V-1046	1
5	F10117214	ASSEMBLY, BAYONET, 1.500" FEM W/RELIEF	6
4	F10092301	FLEXHOSE, 0.75" ID X 8.50" LOA	2
3	F10092300	FLEXHOSE, 1.00" ID X 8.50" LOA	2
2	F09084115	FEM BAY SEAL 1.500 X 1.05 168591-08	4
1	F09084113	FEM BAY SEAL 1.500 X 0.84 168591-06	2

UNLESS OTHERWISE SPECIFIED: 1:1X 1:2X 1:4X 1:8X 1:16X 1:32X 1:64X 1:128X 1:256X 1:512X 1:1024X 1:2048X 1:4096X BREAK ALL SHARP EDGES, MAX - .015 DO NOT SCALE DRAWING DIMENSIONS BASED ON ASME Y14.5-2009 MAX MACHINE ALL SURFACES 125/ DRAWING UNITS: INCHES	DRAWN: C, REID CHECKED: DATE APPROVED: DATE	DATE: 01-Apr-2020	DATE: DATE
THIRD ANGLE PROJECTION	SEE PARTS LIST	F10129146	
MATERIAL:		SCALE: 3/16	SIZE: DRAWING NUMBER: F10126703
GROUP: Technical Division - Design and Drafting/CASE CODE: CUBSR		SHEET: 1 of 1	REV: -

FERMI NATIONAL ACCELERATOR LABORATORY
 UNITED STATES DEPARTMENT OF ENERGY

LAYOUT - PIP-11-IT INTERMEDIATE
 TL FOR 650 TEST STAND

SCALE: 3/16
 SIZE: DRAWING NUMBER: F10126703
 SHEET: 1 of 1
 REV: -