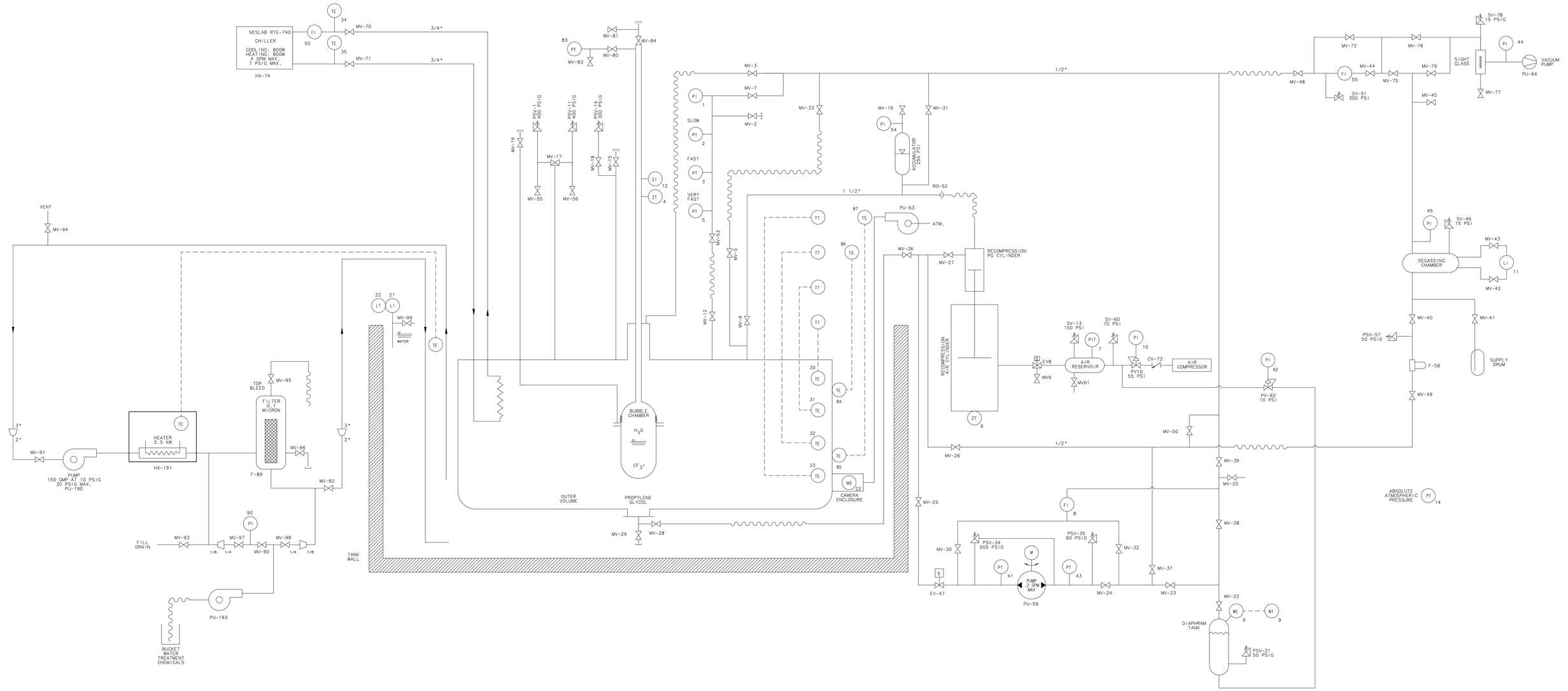
REV	DESCRIPTION	DRAWN / APPROVED	DATE / DATE
A	GENERAL REVISION MADE	J.CATALANELLO	12-JUN-2007
		R.SCHMITT	12-JUN-2007
B	REMOVED VALVES "CV-31" & "CV-33" FROM DRAWING.	J.CATALANELLO	25-JUN-2007
		R.SCHMITT	25-JUN-2007
C	MV-84, MV-85 & CV-73 ADDED.	J.CATALANELLO	29-OCT-2007
		R.SCHMITT	30-OCT-2007
D	GENERAL REVISION MADE	J.CATALANELLO	22-FEB-2008
		R.SCHMITT	22-FEB-2008
E	GENERAL REVISION MADE	J.CATALANELLO	29-APR-2008
		R.SCHMITT	08-MAY-2008
F	GENERAL REVISION MADE	J.CATALANELLO	15-JAN-2009
		R.SCHMITT	27-JAN-2009
G	GENERAL REVISION MADE	J.CATALANELLO	02-FEB-2009
		R.RUCINSKI	02-FEB-2009
H	VALVES MV-3,5,6,33,36,81,90,96 & MV-99 ADDED. RO-52 ADDED. "D" SIZE DRAWING CHANGED TO "E" SIZE.	J.CATALANELLO	23-APR-2009
		R.RUCINSKI	05-MAY-2009
J	MOVED MV-20. ADDED PSV-57, LT-22 & PT-14. DELETED HTR 82, HTR 83 & PT13. ADDED DESCRIPTIVE TEXT.	J.CATALANELLO	26-JUN-2009
		R.RUCINSKI	30-JUN-2009
K	ADDED NOTES. ADDED TAG NAMES TO PUMPS AND HEAT EXCHANGERS. ADDED CAMERA ENCLOSURE & PU-63 & WATER CHEMICAL INJECTON PUMP PU-193.	J.CATALANELLO	03-NOV-2009
		R.RUCINSKI	11-NOV-2009



NOTES

1. GLYCOL RECOMPRESSION PRESSURE TO AIR RESERVOIR PRESSURE = 4:1 APPROX. 55 PSIG AIR RESERVOIR PRESSURE YIELDS 200 PSIG GLYCOL PRESSURE.
2. GLYCOL CYLINDER VOLUME CHANGE IS 0.2 LITERS PER INCH OF TRAVEL ON ZT-6. ZT-6 RANGE IS 0.0 INCHES TO 8.0 INCHES.
3. BUBBLE CHAMBER VOLUME CHANGE IS 2.0 LITERS PER INCH OF TRAVEL ON ZT-4. ZT-4 RANGE IS -2.18 INCHES TO +1.60 INCHES. BELLOWS FREE LENGTH IS AT ZT-4 = 0.0 INCHES.
4. DIAPHRAGM TANK WORKING RANGE IS 60 LBS TO 90 LBS ON WT-9. THIS CORRESPONDS TO 0 TO 25 LITERS OF GLYCOL.

UNLESS OTHERWISE SPECIFIED	ORIGINATOR	R.SCHMITT	15-MAY-2007
	DRAWN	J.CATALANELLO	21-MAY-2007
± ± ±	CHECKED	R.SCHMITT	23-MAY-2007
1. BREAK ALL SHARP EDGES MAX.	APPROVED	R.SCHMITT	23-MAY-2007
2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES √	USED ON		
5. DRAWING UNITS: U.S.INCH	MATERIAL		

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

MECHANICAL/ENG. DESIGN LAYOUTS COUPP_BUBBLE_CHAMBER COUPP-60, E.961 FLOW DIAGRAM

SCALE	DRAWING NUMBER	SHEET	REV
NONE	9219.000-ME-444682	1 OF 1	K

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT