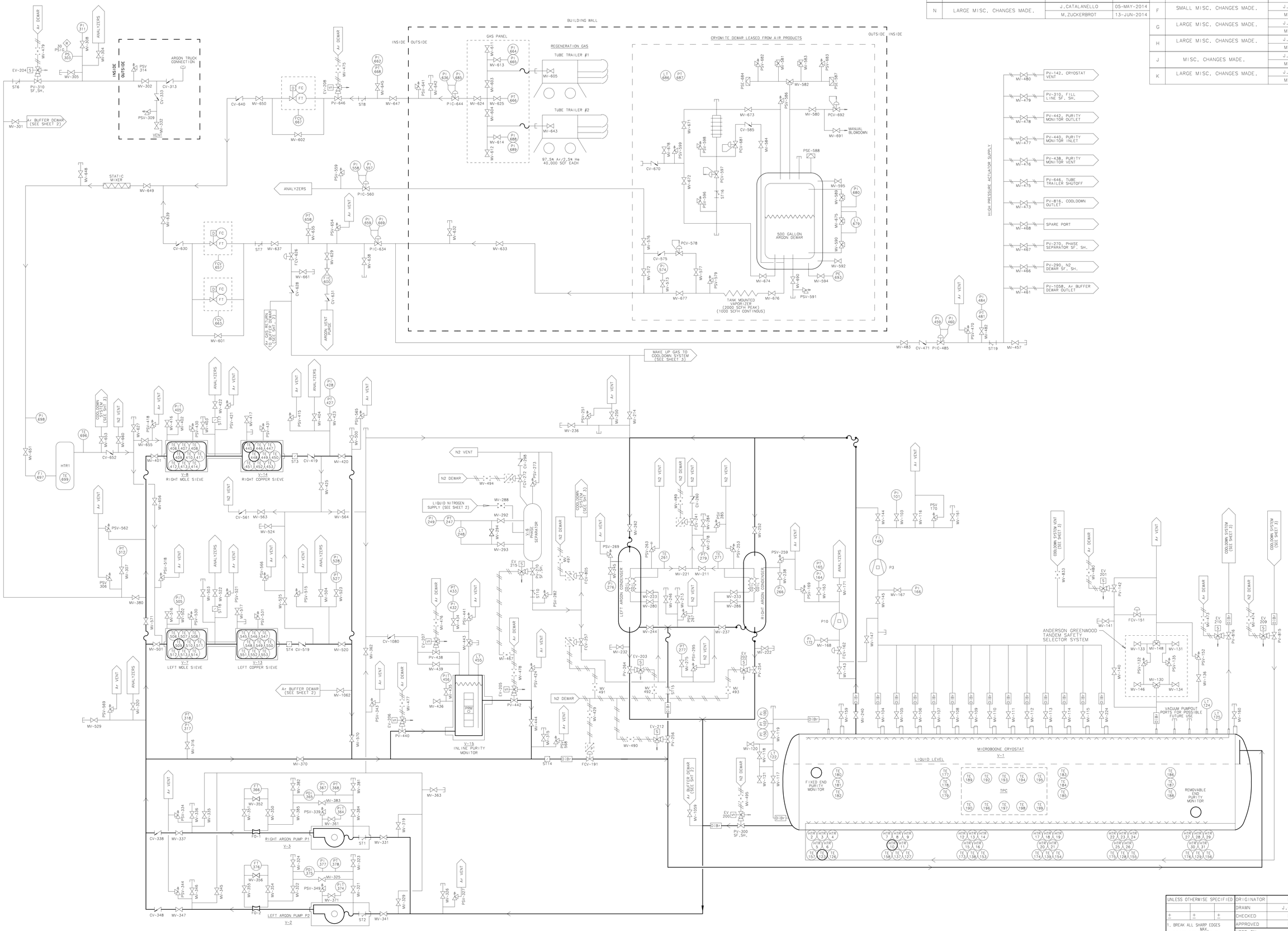
REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE
L	LARGE MISC. CHANGES MADE.	J.CATALANELLO	29-MAY-2013
		M.ZUCKERBROT	10-JUN-2013
M	CHANGES MADE TO SHEETS 1 & 2.	J.CATALANELLO	23-AUG-2013
		M.ZUCKERBROT	05-SEP-2013
N	LARGE MISC. CHANGES MADE.	J.CATALANELLO	05-MAY-2014
		M.ZUCKERBROT	13-JUN-2014
E	SMALL MISC. CHANGES MADE.	J.CATALANELLO	02-MAR-2011
		R.SCHMITT	13-MAY-2011
F	SMALL MISC. CHANGES MADE.	J.CATALANELLO	13-JUN-2011
		M.ZUCKERBROT	28-JUL-2011
G	LARGE MISC. CHANGES MADE.	J.CATALANELLO	28-SEP-2011
		M.ZUCKERBROT	03-OCT-2011
H	LARGE MISC. CHANGES MADE.	J.CATALANELLO	29-NOV-2011
		M.ZUCKERBROT	30-MAY-2012
J	MISC. CHANGES MADE.	J.CATALANELLO	12-SEP-2012
		M.ZUCKERBROT	19-SEP-2012
K	LARGE MISC. CHANGES MADE.	J.CATALANELLO	29-JAN-2013
		M.ZUCKERBROT	06-FEB-2013



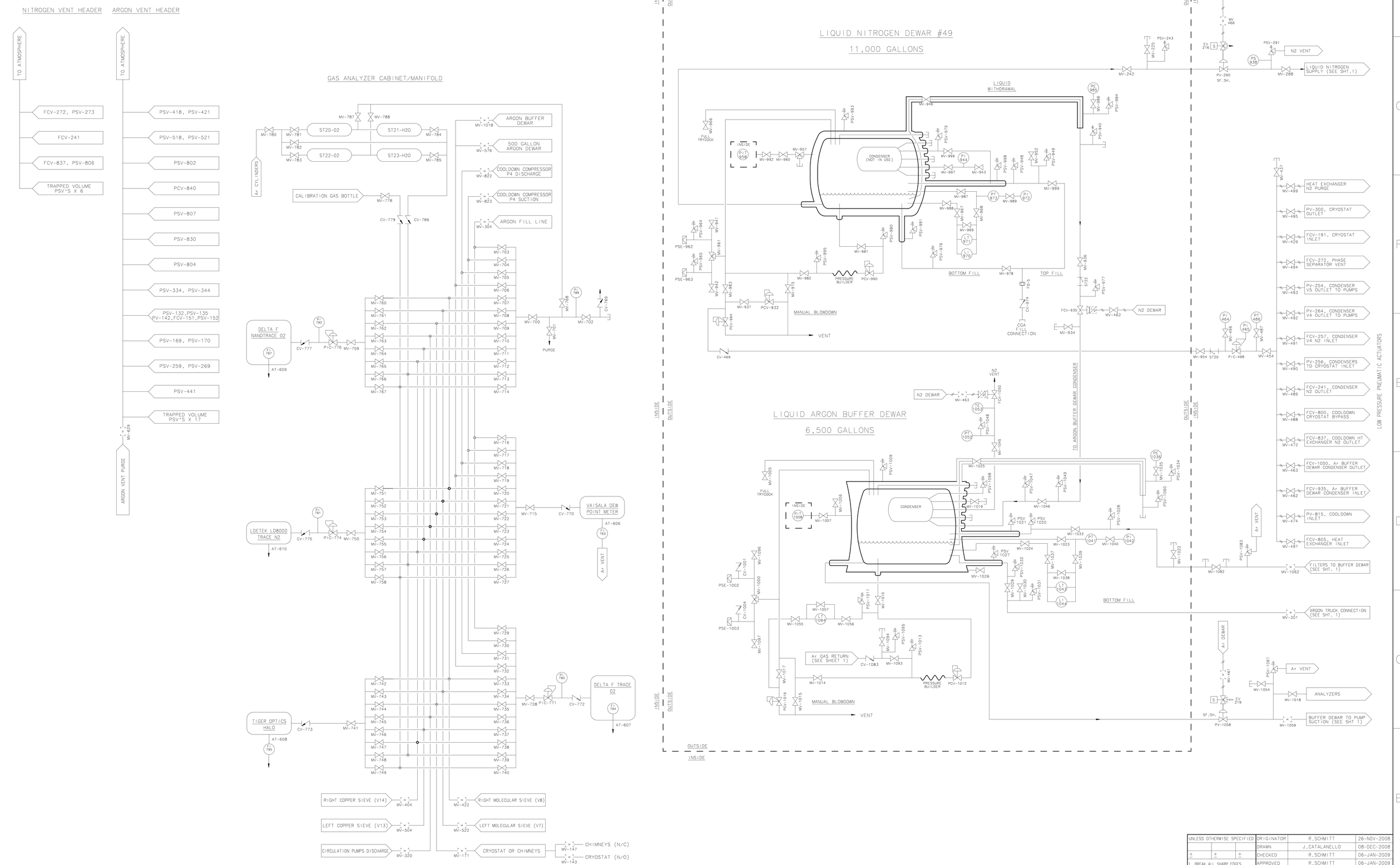
UNLESS OTHERWISE SPECIFIED	ORIGINATOR	R.SCHMITT	26-NOV-2008
	DRAWN	J.CATALANELLO	08-DEC-2008
± ± ±	CHECKED	R.SCHMITT	06-JAN-2009
1. BREAK ALL SHARP EDGES MAX.	APPROVED	R.SCHMITT	06-JAN-2009
2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES	USED ON		
5. DRAWING UNITS: U.S.INCH	MATERIAL		

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

MICROBOONE LAR TPC PIPING AND INSTRUMENT DIAGRAM CRYOGENIC SYSTEM

SCALE	DRAWING NUMBER	SHEET	REV
NONE	3974.200-ME-466281	1 OF 3	N

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT



UNLESS OTHERWISE SPECIFIED	ORIGINATOR	R.SCHMITT	26-NOV-2008
	DRAWN	J.CATALANELLO	08-DEC-2008
± ± ±	CHECKED	R.SCHMITT	06-JAN-2009
1. BREAK ALL SHARP EDGES MAX.	APPROVED	R.SCHMITT	06-JAN-2009
2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994	USED ON		
4. MAX. ALL MACH. SURFACES √	MATERIAL		
5. DRAWING UNITS: U.S. INCH			

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MICROBOONE LAR TPC PIPING AND INSTRUMENT DIAGRAM CRYOGENIC SYSTEM

SCALE	DRAWING NUMBER	SHEET	REV
NONE	3974.200-ME-466281	2 OF 3	N

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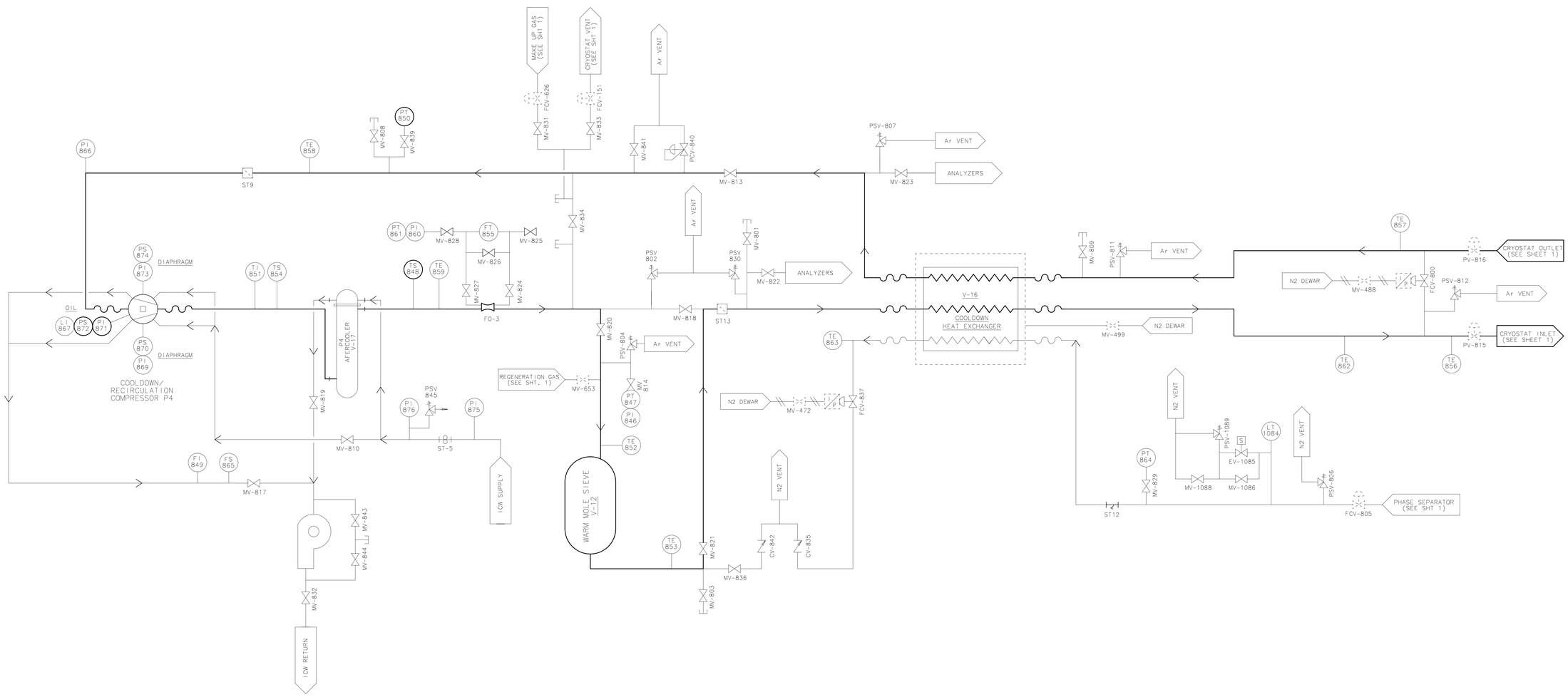
COOLDOWN/RECIRCULATION SYSTEM



UNLESS OTHERWISE SPECIFIED	ORIGINATOR	R.SCHMITT	26-NOV-2008
	DRAWN	J.CATALANELLO	08-DEC-2008
± ± ±	CHECKED	R.SCHMITT	06-JAN-2009
1. BREAK ALL SHARP EDGES MAX.	APPROVED	R.SCHMITT	06-JAN-2009
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		

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MICROBOONE LAR TPC
PIPING AND INSTRUMENT DIAGRAM
CRYOGENIC SYSTEM

SCALE	DRAWING NUMBER	SHEET	REV
NONE	3974.200-ME-466281	3 OF 3	N

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT