

D0 PIPING COMPONENTS

D0 ENGINEERING NOTE 3740.510-EN-193

BY

MANY HARD WORKING RD/D0 MECH. CO-OPS PAST AND PRESENT

&

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Refer to FNAL drawing no.s
3740-ME-222394 (rev. Z)
3740-MA-273995 (rev. G)
3740-ME-194531 (rev. B)
3740-ME-194085 (rev. B, Sht. 2)

SECTION: II-C. Component List

INTRODUCTION

The convention for the added helium refrigerator system is an extension of the previous (11/23/92) cryogenic convention used for the liquid argon calorimeter cryogenic system. Additionally, since the system is very similar to the helium refrigerator at CDF, wherever possible, the numerical component of the tag number matches that used at CDF except with an additional prefixing number.

Some key active components such as "D0EVHISUC" or "D0EVDEW" were given tag number designations that help readily identify their function. This philosophy matches that used for other existing "STAR" refrigerators at the lab. (PS1, PS4, CDF...)

A specific description of the Device or Tag number follows:

The system nomenclature is represented by an alphanumeric code, XXX-YYYY-ZZ, that can be broken down into three parts:

XXX is the functional designation given to each component which includes the following abbreviations:

(Reference ISA-S5.1 Instrumentation Symbols and Identification standard.)

BU	= bubbler
CC	= cold cathode gage
CV	= check valve
DPS	= differential pressure switch
DPI	= differential pressure indicator
DPT	= differential pressure transducer
EH	= electrical heater
EI	= voltage indicator
EV	= electro-magnetically operated valve
F	= filter
FE	= flow element
FCV	= flow control needle valve
FI	= flow indicator
FM	= flow meter
FS	= flow switch
FT	= flow transmitter
FTC	= flow transmitter and controller
GB	= gas bottle
HT	= humidity transmitter
HX	= heat exchanger
I/P	= current to pressure transducer
LIC	= level indicator controller
LT	= level transmitter
MV	= manually operated valve

PI = pressure indicator
PIC = pressure indicator controller
PRV = pressure regulating valve
PS = pressure switch
PSV = pressure safety relief valve
PT = pressure transmitter
PV = pressure control valve, or pneumatically operated valve
RD = rupture disk
RO = restricting orifice
TE = temperature sensor
TG = thermocouple gage
TI = temperature indicator
TIC = temperature indicating controller
TS = temperature switch
TT = temperature transmitter
VP = vacuum pump

No functional designation indicates a piping line

YYYY is the location/identification numerical code which can be further broken down into QRST.

Q: The first digit designates the system

R: The second digit designates the location of the component.

S & T: The second and third represent the identification number of the component.

Here is how we utilize the convention:

Q = no digit or 0: Cryogenic system for Argon, Nitrogen dewars and calorimeters

Q = 1: Instrument air components for the Argon, Nitrogen dewars and calorimeters

For both the above choices, Q= no digit, 0, or 1, the second digit R designates the following locations

1YY or 11YY = North End Calorimeter Area
2YY or 12YY = Central Calorimeter Area
3YY or 13YY = South End Calorimeter Area
4YY or 14YY = Transfer Lines Area
5YY or 15YY = Nitrogen Storage Dewar Area
6YY or 16YY = Argon Storage Dewar Area
7YY or 17YY = Vacuum Pumping Area
8YY or 18YY = Argon Twelve Pack Area
9YY or 19YY = ATC - Argon Test Cell Area

Q = 2: Helium refrigerator system components

The second digit R designates the following locations

20YY= Helium Compressor/storage before HX
21YY= Heat exchanger area, high press. side
22YY= Heat exchanger area, low press. side
23YY= Dry engine area
24YY= Wet engine area
25YY= LHe storage dewar area
26YY= Helium purifier
27YY= Liquid nitrogen system
28YY= Purity monitoring system
29YY= Vacuum system

Q = 3: Solenoid system

The second digit R designates the following locations

30YY & 31YY= Valve box and transfer line for solenoid
32YY= Solenoid control dewar
33YY= Solenoid magnet components
34YY= Solenoid vapor cooled current lead components
35YY thru 39YY= open

Q = 4: VLPC system

The second digit R designates the following locations

40YY & 41YY= Valve box and transfer line for VLPC
42YY= VLCP system on platform
43YY= East VLPC cryostat components
44YY= West VLPC cryostat components
45YY thru 49YY= open

Q = 5: Silicon system

The second digit R designates the following locations

50YY= open
51YY= Near chillers/supply side lines on south sidewalk
52YY= On the detector platform
53YY= Return lines on south sidewalk
54YY thru 59YY= open

Q = 6: Utility Components

The second digit R designates the following locations

60YY & 61YY = Air components in room 604

62YY= Instrument/purge air components not in room 604 or on detector

63YY= Platform mounted air/purge system fed from room 604

64YY thru 69YY= open

ZZ is the abbreviation of the fluid associated with the component or in the case of gas systems which change gas mixtures, it is the name of the gas system. The used abbreviations are as follows:

A	= argon
C2	= carbon dioxide
CW	= chilled water
E	= exhaust
GA	= gaseous argon
GL	= glycol coolant
GN	= gaseous nitrogen
H	= helium
I	= instrument air
LA	= liquid argon
LN	= liquid nitrogen
MG	= mixed gas
N	= nitrogen
OIL	= oil
UV	= utility vacuum
V	= vacuum
XE	= xenon

EN193-D0 PIPING COMPONENTS

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
100	NOT ASSIGNED		
135	NOT ASSIGNED		
1400	I/A SHUT-OFF VALVE FOR SEC,CC,NEC	NIBCO CF-8M	1-1/2" 300psi WOG
1401	I/A SHUT-OFF VALVE, CRYOSTATS, DEWARS	NIBCO CF-8M	1-1/2" 300psi WOG
1402LN	CRYOSTAT LN2 SUBCOOLING LINE	FNAL DESIGN	3/8" tube
157	NOT ASSIGNED		
159	NOT ASSIGNED		
1603	NOT ASSIGNED		
170	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
1700	NOT ASSIGNED		
171	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
172	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
173	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
174	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
175	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
176	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
177	NOT ASSIGNED	RESERVED FOR SAMPLE PANEL	
178	NOT ASSIGNED		
179	NOT ASSIGNED		

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
1790 VACUUM PUMP COOLANT RETURN BLEED	PARKER	1/4"	
180 NOT ASSIGNED			
181 NOT ASSIGNED			
182 NOT ASSIGNED			
200 NOT ASSIGNED			
252 SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		(-40) TO 60 DEGREES F
259 NOT ASSIGNED			
260 NOT ASSIGNED			
300 NOT ASSIGNED			
335 NOT ASSIGNED			
357 NOT ASSIGNED			
359 NOT ASSIGNED			
370 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
371 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
372 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
373 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
374 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
375 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
376 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
377 NOT ASSIGNED	RESERVED FOR SAMPLE PANEL		
378 NOT ASSIGNED			

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>	
379	NOT ASSIGNED			
380	NOT ASSIGNED			
381	NOT ASSIGNED			
382	NOT ASSIGNED			
400	NOT ASSIGNED			
401UV	PLATFORM TO NORTH EC JUMPER (2 PCS) CRYOSTAT UTILITY VACUUM	FNAL DESIGN	4"	100 psig
403V	PLATF TO NEC JUMPER(2 PCS) ON CRYOSTAT INSULATING JACKET/ FO	FNAL DESIGN	6"	15 psi external pressure
404V	PLATFORM CRYOSTAT INSULATING JACKET/ FORELINE	FNAL DESIGN	6"	15 psi external pressure
405V	PLATF TO SEC JUMPER(2 PCS) ON CRYOSTAT INSULATING JACKET/ FO	FNAL DESIGN	6"	15 psi external pressure
406V	PLATF TO PIPE CHASE JUMPER(1 PC) ON CRYOSTAT INSUL JACKET/FO	FNAL DESIGN	6"	15 psi external pressure
407V	BLOWER TO PLATFORM CONNECTION INSULATING JACKET/ FORELINE	FNAL DESIGN	6"	15 psi external pressure
408LN	PLATFORM TO NEC JUMPER(2 PCS) ON CRYOSTAT CONDENSER INLET	FNAL DESIGN	1-1/2" x 3"	100 psi
409LN	PLATFORM CRYOSTAT CONDENSER INLET LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
410LN	PLATFORM TO SEC JUMPER(2 PCS) ON CRYOSTAT CONDENSER INLET	FNAL DESIGN	1-1/2" x 3"	100 psi
411LN	PLATF TO PIPE CHASE JUMPER (1 PC) ON CRYOSTAT CONDENSER INLE	FNAL DESIGN	1-1/2" x 3"	100 psi
412LN	NITROGEN DEWAR TO PLATF CONNECT CRYOSTAT CONDENSER INLET	FNAL DESIGN	1-1/2" x 3"	100 psi
413E	PLATFORM TO NORTH EC JUMPER(2 PCS) ON CRYOSTAT VENT LINE	FNAL DESIGN	4" x 6"	100 psi
414E	PLATFORM CRYOSTAT VENT LINE	FNAL DESIGN	4" x 6"	100 psi
415E	PLATFORM TO SEC JUMPER(2 PCS) CRYOSTAT VENT LINE	FNAL DESIGN	4" x 6"	100 psi
416E	PLATFORM TO PIPE CHASE VENT LINE JUMPER (1 PC)	FNAL DESIGN	4" x 6"	100 psi
417E	VENT LINE FROM PLATFORM CONNECTION TO OUTSIDE	FNAL DESIGN	4" x 6"	100 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
418GA PLATFORM TO NEC JUMPER(2 PCS) ON CRYOSTAT ARGON GAS LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
419GA PLATFORM CRYOSTAT ARGON GAS LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
420GA PLATFORM TO SEC JUMPER(2 PCS) ON CRYOSTAT ARGON GAS LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
421GA PIPE CHASE TO PLATFORM JUMPER (1 PC) ON CRYOSTAT ARGON GAS	FNAL DESIGN	1-1/2" x 3"	100 psi
422GA ARGON DEWAR TO PLATFORM CONNECTION	FNAL DESIGN	1-1/2" x 3"	100 psi
423UV PLATFORM CRYOSTAT UTILITY VACUUM LINE	FNAL DESIGN	4"	3psi, vacuum service
424UV PIPE CHASE TO PLATFORM JUMPER (1 PC) ON CRYOSTAT UV LINE	FNAL DESIGN	4"	3psi, vacuum service
425UV VACUUM PUMP TO PLATFORM CONNECTION OF UV LINE	FNAL DESIGN	4"	3psi, vacuum service
426LA PLATFORM TO NEC JUMPER(2 PCS) ON CRYOSTAT FILL/ DRAIN LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
427LA ARGON DEWAR TO PLATFORM CONNECTION CRYOSTAT FILL/DRAIN LIN	FNAL DESIGN	1-1/2" x 3"	100 psi
428LA PLATFORM TO SEC JUMPER(2 PCS) ON CRYOSTAT FILL/DRAIN LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
429LA PLATFORM CRYOSTAT FILL/ DRAIN LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
430LA PIPE CHASE TO PLATFORM JUMPER (1 PC) ON CRYOSTAT FILL/ DRAIN L	FNAL DESIGN	1-1/2" x 3"	100 psi
431UV PLATFORM TO SEC JUMPER(2 PCS) ON CRYOSTAT UV LINE	FNAL DESIGN	1-1/2" x 3"	3 psi
440LA FILL/ DRAIN LINE JUMPER AT ARGON DEWAR	FNAL DESIGN	1-1/2" x 3"	100 psi
441GA ARGON GAS LINE JUMPER AT ARGON DEWAR	FNAL DESIGN	1-1/2" x 3"	100 psi
442LN CONDENSER FEEDLINE JUMPER AT ARGON DEWAR	FNAL DESIGN	1-1/2" x 3"	100 psi
443LN CRYOSTAT CONDENSER JUMPER AT NITROGEN DEWAR	FNAL DESIGN	1-1/2" x 3"	100 psi
444LN DEWAR CONDENSER JUMPER AT NITROGEN DEWAR	FNAL DESIGN	1-1/2" x 3"	100 psi
445LN ARGON DEWAR CONDENSER FEEDLINE ARGON DEWAR VENT LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
447LA ARGON DEWAR FILL LINE	FNAL DESIGN	1-1/2" x 3"	100 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
448E VENT LINE FOR VACUUM PUMPS	FNAL DESIGN	3"	
449GN BACKFILLING SUPPLY TO UV HEADER	FNAL DESIGN	1"	
452 NOT ASSIGNED	WAS MV452N		
460LA JUMPER ON ARGON DEWAR FILL LINE USED TO TRANSFER BACK TO T	FNAL DESIGN	1-1/2" x 3"	100 psi
463H HELIUM SUPPLY LINE TO PIPE CHASE	FNAL DESIGN	1/4" tube	
464H PLATFORM HELIUM COLD VALVE MANIFOLD	FNAL DESIGN	1/4" tube	
465LA JUMPER ON ARGON DEWAR FILL LINE	FNAL DESIGN	1-1/2" x 3"	100 psi
466E JUMPER ON ARGON DEWAR VENT LINE	FNAL DESIGN	1-1/2" x 3"	
488GN RELIEF MANIFOLD NITROGEN WARM-UP LINE ON PLATFORM	FNAL DESIGN	1/4"	
489GN PIPE CHASE TO PLATFORM JUMPER NITROGEN WARM-UP LINE	Hose	1"	
490GN NITROGEN DEWAR TO PLATFORM CONNECTION NITROGEN WARM-UP LI	FNAL DESIGN	1"	
500 NOT ASSIGNED			
559 NOT ASSIGNED	WAS mv559N		
562 NOT ASSIGNED	WAS mv562N		
574 NOT ASSIGNED			
600 NOT ASSIGNED			
631 NOT ASSIGNED			
651 NOT ASSIGNED			
652 NOT ASSIGNED			
654 NOT ASSIGNED			
659 NOT ASSIGNED			

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
662	NOT ASSIGNED		
666	NOT ASSIGNED	WAS DPS666A	
682	NOT ASSIGNED		
687	NOT ASSIGNED	WASMV687N	
693	NOT ASSIGNED	WAS MV693A	
699	NOT ASSIGNED		
750	I/A COMPRESSOR NORTH GLY. HEAT EXC.	BASCO 03024	1" 0-150 psi
756	I/A RECEIVING TANK SUPPLY SHUT-OFF VALVE	WORCESTER (STK#1075-0031)	1/2" BRASS 250psi
758	I/A RECEIVING TANK BLOWDOWN VALVE	ASCO	1/2" 150psi
807	NOT ASSIGNED		
808	NOT ASSIGNED		
809	NOT ASSIGNED		
810	NOT ASSIGNED		
811	NOT ASSIGNED		
812	NOT ASSIGNED		
813	NOT ASSIGNED		
814	NOT ASSIGNED		
815	NOT ASSIGNED		
816	NOT ASSIGNED		
824	NOT ASSIGNED		
825	NOT ASSIGNED		

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
826 NOT ASSIGNED			
828 NOT ASSIGNED			
829 NOT ASSIGNED			
830 NOT ASSIGNED			
CC127V NEC DIFFUSION PUMP INLET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAGNETS SHV CONNE	KF20	
CC131V NEC INSULATING JACKET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAG	KF20	
CC227V CC DIFFUSION PUMP INLET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAGNETS	KF20	
CC231V CC INSULATING JACKET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAGNETS	KF20	
CC327V SEC DIFFUSION PUMP INLET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAGNETS	KF20	
CC331V SEC INSULATING JACKET COLD CATHODE GAGE	TROY ONIC INC. CCG W/ MAGNETS	KF20	
CC721V COLD CATHODE GAGE ON BLOWER INLET CRYOSTAT INS JACKET FORE	GRANVILLE PHILLIPS	1/4"	
CV119H NEC CHECK VALVE FOR PV119A ACTUATOR	CIRCLE SEAL SERIES 200 BRASS	1/4"	1500 psi max/2-4 psi pop pressure
CV1404 LN2 SUBCOOL VENT LINE CHECK VALVE	MB-103275		
CV1717I SOUTH I/A COMPRESSOR OUTLET CHECK VALVE	CIRCLE SEAL 2497-6PP	3/4"	3000 psi
CV1732 PUMP 1 GLYCOL EXIT CHECK VALVE	NIBCO	1 1/2"	125 SWP 200 WOG
CV1737 PUMP 2 GLYCOL EXIT CHECK VALVE	NIBCO	1 1/2"	125 SWP 200 WOG
CV219H CC CHECK VALVE FOR PV219 ACTUATOR	CIRCLE SEAL SERIES 200	1/4"	1500 psi max,
CV319H SEC CHECK VALVE FOR PV319 ACTUATOR	CIRCLE SEAL SERIES 200	1/4"	1500 psi max,2-4 psi pop
CV455N AR DEWAR CONDENSER N2 CHECK VALVE	CIRCLE SEAL	2"	
CV473N VENT MAN. WARM LINE TO I/A SYSTEM CHECK VALVE	REPUBLIC MFG 453-1SS2-6	1"	5000 psi
CV522N FILL LINE CHECK VALVE, NITROGEN DEWAR	POWELL SWING TYPE	1-1/2"	

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
CV549N LN2 FILL CHECK VALVE	LADISH 5260 STAINLESS STEEL	1-1/2"	
CV703I NORTH I/A COMPRESSOR OUTLET CHECK VALVE	CIRCLE SEAL 249T-6PP	3/4"	3000 psi
CV726N GN2 BACKFILL LINE CHECK VALVE	CIRCLE SEAL	1/2"	3000psi
CV787I I/A SUPPLY CHECK VALVE	CIRCLE SEAL 259B-8PP	1"	3000psi.
CV788I GN2 BACKUP AIR CHECK VALVE	CIRCLE SEAL 259B-8PP	1"	3000psi
DPI450N FILTER ON 443 LN	MIDWEST 120-AL-00-00		0-5 psid, 6000 psig max
DPI470A DIFF. PRESS. IND. FOR F476A	MIDWEST INSTRUMENT	1/4"	0-5psid
DPI567N SOUTH END DPI (DEWAR LEVEL INDICATOR)	BARTON 227A-B021503	1/4"	0-100" W.C.
DPI606A LIQUID LEVEL GAGE ARGON DEWAR	BARTON	6" dia	0- 150 wc range
DPI669A DIFF PRESS INDICATOR FOR FILTER ON CRYOSTAT LIQUID LINE, 440LA	Mid-West 120-AL-00-00		0-5 psid,6000 psig max
DPI676A DIFF PRESS INDICATOR for FILTER, CRYOSTAT AR GAS FILL LINE, 441GA	Mid-West 120-AL-00-00		0-5 psid,6000 psig max
DPI692N DPI FOR F690N	Mid-West 120-AL-00-00	1/4"	0-5 psid,6000 psig max
DPR576 AUTOMATIC LN2 OVERFILL SHUTOFF RELAY	FAIRCHILD MODEL 24	1/4"	1-60, 120 psig max
DPS138 NEC FLOW SWITCH ON FM139A	ASHCROFT D420BXTM	1/4"	0-15psid, 250psi
DPS238 FLOW SWITCH ON FM139A	ASHCROFT D420BTXM	1/4"	0-15psid 250psi
DPS338 FLOW SWITCH ON FM139A	ASHCROFT D420BXTM	1/4"	0-15psid, 250psi
DPS560 SWITCH FOR FM558N	AMERICAN FLUIDPOWER SERIES 20 #22TA-K61	1/4"	2.5"-45 W.C.
DPS563 SWITCH FOR FM561N	AMERICAN FLUIDPOWER SERIES 20 #22TA-K61	1/4"	2.5"-45 W.C.
DPS702 BLOWER DIFFERENTIAL PRES. SWITCH INSULATION ROUGHING PUMP	DWYER 1823	1/4"	10 psi max
DPT122 NEC CRYOSTAT LEVEL TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	0-10 psid range
DPT222 CC CRYOSTAT LEVEL TRANSMITTER	ROSEMOUNT SERIES 1151	1/4"	0-10 psi differential

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
DPT235 CC CRYOSTAT DIF. PRESS TRANSMITTER FOR VAPOR PRESS BULB LIN	ROSEMOUNT MODEL 1151	1/4"	0- 2.5 psid range
DPT322 SOUTH EC CRYOSTAT LEVEL TRANSMITTER	ROSEMOUNT SERIES 1151		0-10 psi range
DPT637 LIQUID LEVEL TRANSMITTER ARGON DEWAR	ROSEMOUNT	1/4" dia	0-125" W.C.
DPT665 DIFF PRESS TRANSDUCER FOR FLOWMETER, CRYOSTAT LIQUID LINE, 4	ROSEMOUNT SERIES 1151	1/4"	-15"-15"
DPT688 DIFF PRESS TRANSMITTER FOR DEWAR CONDENSER INLET FLOWMETER	ROSEMOUNT SERIES 1151	1/4"	0-15psid
DPT766I I/A SYSTEM DIFF PRESS TRANS	ROSEMOUNT SERIES 1151	1.4"	0-15psid, 2000 WP
EH120A NEC FINNED STRIP ELECTRIC HEATER	TEMPCO FCX0200-4208T3	42-1/2" LONG	4150 watts/240 volts
EH220A CC FINNED STRIP ELECTRIC HEATER	#3575K31 McMASTER-CARR	30-1/2" long	18@2800 watts, 240V
EH320A SEC FINNED STRIP HEATER	TEMPCO FCX0200-4208T3	42-1/2" long	4150 watts, 240 volts
EH785I I/A DRYER REGENERATIVE HEAT EXCHANGER	CHROMALOX	1/2"	150 psi
EI123A NEC LED CRYOSTAT LEVEL INDICATOR	FNAL DWG#MC-255635	8"	16 point 4 to 20 mA
EI129E NEC CRYOSTAT VENT MANIFOLD TEMP INDICATOR AT RD112A	FNAL DWG#ME-273505	1/2" coupling, platform RTD	
EI150A VOLTAGE ARGON LEVEL INDICATOR	FNAL DWG#ME-255523	16"	16 point 4-20mA
EI223A CC CRYOSTAT LED LEVEL INDICATOR	FNAL DWG#MC-255635	8"	16 point 4-20mA
EI229E CC CRYOSTAT VENT MANIFOLD TEMP INDICATOR AT RD212A	FNAL DWG#ME-273505	1/2"coupling	
EI250A VOLTAGE CC ARGON LEVEL INDICATOR	FNAL DWG#ME-255523	16"	16 point 4-20mA
EI323A SEC CRYOSTAT LED LEVEL INDICATOR	FNAL DWG#MC-255635	8"	16 point 4-20mA
EI329E SEC CRYOSTAT VENT MANIFOLD TEMP INDICATOR AT RD312A	FNAL DWG#ME-273505	1/2" coupling	
EI350A VOLTAGE CC ARGON LEVEL INDICATOR	FNAL DWG#ME255523	16"	(-40) TO 60 DEGREES F
EV119H 4-WAY VALVE CONTROLLING PV119A	ASCO #8345E11	1/4"	150 psi max,60 Hz, 120 V
EV128I 4-WAY VALVE CONTROLLING PV128A	SKINNER 1713N4A2A 24DC	1/4"	230 psi

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
EV219H 4-WAY VALVE CONTROLLING PV219A	ASCO #8345E11	1/4"	150 psi max, 60 Hz, 120 V
EV228I 4-WAY VALVE CONTROLLING PV228A	SKINNER 1713N4A2A24DC	1/4"	230psi
EV319H 4-WAY VALVE CONTROLLING PV319A	ASCO #8345E11	1/4"	150 psi max, 60 Hz, 120 V
EV328I 4-WAY VALVE CONTROLLING PV328A	SKINNER 1713N4A2A24DC	1/4"	230psi
EV501I SOLENOID VALVE COOLING LOOP SHUT OFF	SKINNER #V53ALB2150	1/4"	120V /150 psi max
EV513I SOLENOID VALVE LN2 SHUT OFF	SKINNER #V53ALB2150	1/4"	120V/150 psi max
EV548I SOLENOID VALVE SHUT OFF LN2 FOR AR TANK	SKINNER #V53ALB2150	1/4"	120V, 150 psi max
EV570I 3-WAY AMBIENT HEATER SWITCHING SOLENOID VALVE	WORCESTER SERIES 75 1275 R1	1"	
EV714U UV BACKFILLING VALVE			
EV773I 1/4 DRYER BLOWDOWN VALVE	ASCO 8320A19	1/4"	150psi
EV781I PV772I/PV 780I ACTUATOR CONTOLLING VALVE	ASCO 8320A19	1/4"	150 psi
EV782I PV772I/PV 780I ACTUATOR CONTOLLING VALVE	ASCO 8320A19	1/4"	150 psi
F1705I 1/4 DRYER SOLENOID SUPPLY FILTER			
F1789I UPSTREAM 1/4 FILTER	WATTS A963-000	1"	250 psi
F467A LAr FILL LINE FILTER	FNAL DESIGN	1-1/2"	100psi w/particle size 2 microns
F484N CRYOSTAT CONDENSER INLET FILTER	FNAL DESIGN	1-1/2"	100 psi w/particle size of
F670A ARGON DEWAR TO CRYOSTAT,	FNAL DESIGN	1-1/2"	100 psig w/part size: 2/10 mcm (90/99% flo
F672A ARGON DEWAR TO CRYOSTAT	FNAL DESIGN	1-1/2"	100 psig w/part size: 2/10 mcm (90/99% flo
F690N DEWAR CONDENSER INLET FILTER	FNAL DESIGN	1-1/2"; MAWP is 215 psig	100 psig w/part size: 2/10 mcm (90/99% flo
F736UV UTILITY VACUUM INLET FILTER	FNAL DESIGN	4"	3psi-VACUUM SERVICE
F739V INSULATING VACUUM INLET FILTER	FNAL DESIGN	4"	3psi -VACUUM SERVICE

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
F767I UPSTREAM I/A FILTER	WATTS F602-08WJRM4	1"	300 psi
F770I DOWNSTREAM I/A FILTER	WATTS F601-08EL	1"	300psi
F786I I/A POST DRYER FILTER	WATTS F602-08-WJR M4	1"	300psi
FM139A NEC FLOWMETER ON LIQUID ARGON FILL/DRAIN LINE	DIETERICH STANDARD, STYLE-ANNUBAR	MO 1-1/2"	1480 psi @ 100°F
FM239A CC FLOWMETER ON ARGON FILL/DRAIN LINE	DIETERICH STANDARD, STYLE-ANNUBAR	MO 1-1/2"	1480 psi @ 100°F
FM270A CC FLOWMETER ON CC SAMPLE PANEL	DWYER, VFA-8-SSV	1/4"	
FM339A SEC FLOWMETER ON ARGON FILL/DRAIN LINE	DIETERICH STANDARD, STYLE-ANNUBAR	MO 1-1/2"	1480 psi @ 100°F
FM558N CRYOSTAT CONDENSER OVERFLOW SENSOR	DEITERICH STANDARD DNW-10	1-1/2", SCH. 40	
FM561N DEWAR CONDENSER OVERFLOW SENSOR	FNAL DESIGN, VENTURI TYPE	1"	150 PSI
FM671A FLOWMETER ON CRYOSTAT LIQUID LINE, 440LA	DIETERICH STANDARD, STYLE-ANNUBAR	MO 1-1/2"	1480 psi @ 100°F
FM684N DEWAR CONDENSER INLET COOLDOWN FLOWMETER	DIETERICH STANDARD, STYLE-ANNUBAR	MO 3/4"	
FM685N DEWAR CONDENSER INLET STEADY STATE FLOWMETER	FNAL DESIGN	1/2"	
FM790I I/A SUPPLY FLOW METER	HEDLAND	1"	600psi
FS1740G PUMP SKID GLYCOL RETURN FLOW SWITCH	MCDONNEL		
GB119H PV119A ACTUATOR BACKUP HE SUPPLY			
GB219H PV219A ACTUATOR BACKUP HE SUPPLY			
GB319H PV319A ACTUATOR BACKUP HE SUPPLY			
HT1602I I/A SYSTEM HUMIDITY TRANSMITTER /USE TAG NAME HT794I FOR DMAC	EG&G ENVIRONMENTAL EQ. M200	1/4"	150psi
HT794I ALSO HT1602I			
HX106N NEC STEADY STATE OPERATING COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi
HX107N NEC COOL DOWN COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
HX1408 LN2 SUBCOOL HEAT EXCHANGER	FNAL DESIGN dwg# 3823.124-ME-399599		
HX1713I 1/4 COMPRESSOR SOUTH GLY. HEAT EXC.	BASCO 03024	1"	0-150 psi
HX1781 TRIM COOLER	AMERICAN PRECISION		300 max WP, 300 deg F.
HX206N CC STEADY STATE OPERATING COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi
HX207N CC COOLDOWN OPERATING COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi
HX306N SEC STEADY STATE OPERATING COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi
HX307N SEC COOLDOWN COIL	FNAL DESIGN	3/4" OD x 0.065 WT	150 psi
HX502N PRESS BUILD COIL NITROGEN DEWAR	PROCESS ENGR A14921	FINS: 8" O.D. AI BORE	150psi
HX571N NORTH AMBIENT COLD GAS HEATER	THERMAX INC., ALL ALUMINUM,MODEL #TF0410	3/4"	400 psi design pressure
HX572N SOUTH AMBIENT COLD GAS HEATER	THERMAX INC., ALL ALUMINUM,MODEL #TF0410	3/4"	400 psi design pressure
HX602A PRESSURE BUILD COIL ARGON DEWAR	PROCESS ENGR	8"OD, (4)10'9"lengths	150 psi
HX613N CONDENSER COIL ARGON DEWAR	PROCESS ENGR	1-1/2"NPS,(8)20'ins	5 psi min, 60 kw
HX752I 1/4 HEAT EXCHANGER (AFTERCOOLER)	BASCO 05036	2"	0-150psi
I/P118A I/P TRANSMITTER FOR PV118A			
I/P1403N I/P TRANSMITTER FOR PV1403N			
I/P218A I/P TRANSMITTER FOR PV218A			
I/P318A I/P TRANSMITTER FOR PV318A			
I/P501I I/P TRANSMITTER FOR PV501N	FAIRCHILD TA6000-41	1/4"	150 psig max,4-20 mA in
I/P513I I/P TRANSMITTER FOR PV513N	FAIRCHILD TA6000-41	1/4"	150 psig max,4-20 mA in
I/P548I I/P TRANSMITTER FOR PV548N	FAIRCHILD TA6000-41	1/4"	150 psig max,4-20 mA in
I/P601I I/P TRANSMITTER FOR PV601A	FAIRCHILD TA6000-41	1/4"	150 psig max,4-20 mA in

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV144A TEST VALVE FOR PT130A	NUPRO SERIES B BELLOWS	1/4" tube	1000psi max
MV145A ISOLATION VALVE FOR PT130A	NUPRO SERIES B BELLOWS	1/4" tube	1000psi max
MV147V VACUUM JACKET COLD CATHODE OFF VALVE			
MV148V DIFFUSION PUMP COLD CATHODE OFF VALVE	LEYBOLD, RIGHT ANGLE	KF25	2.5 BAR
MV149V JACKET PUMP INLET TC GAUGE OFF VALVE			
MV1500I I/A SHUT-OFF VALVE FOR LN2 DEWAR	NIBCO CF-8M	1"	300psi WOG
MV1502I I/A SHUT-OFF VALVE	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1503I I/A SHUT-OFF VALVE	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1504I I/A SHUT-OFF VALVE FOR I/P501I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1505I I/A SHUT-OFF VALVE FOR EV501I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1506I I/A SHUT-OFF VALVE FOR I/P513I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1507I I/A SHUT-OFF VALVE FOR EV513I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1508I I/A SHUT-OFF VALVE FOR I/P548I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1509I I/A SHUT-OFF VALVE FOR EV548I	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV1510I I/A SHUT-OFF VALVE	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV153A NEC UPPER V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV154A NEC LOWER V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV155A NEC MID V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV1600I I/A SHUT-OFF VALVE, LAr DEWAR	NIBCO CF-8M	1"	300psi WOG
MV1604I I/A SHUT-OFF VALVE FOR I/P601I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1605I I/A SHUT-OFF VALVE FOR PV601A	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV1606I I/A SHUT-OFF VALVE FOR I/P611I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1607I I/A SHUT-OFF VALVE FOR PV611A	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1608I I/A SHUT-OFF VALVE FOR I/P612I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1609I I/A SHUT-OFF VALVE FOR PV612N	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV160I I/A SHUT-OFF VALVE FOR NEC			
MV1610I I/A SHUT-OFF VALVE FOR I/P615I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1611I I/A SHUT-OFF VALVE FOR PV615N	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1612I I/A SHUT-OFF VALVE FOR I/P625I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1613I I/A SHUT-OFF VALVE FOR PV625A	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1614I I/A SHUT-OFF VALVE FOR I/P638I	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1615I I/A SHUT-OFF VALVE FOR PV638A	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1616I I/A SHUT-OFF VALVE: FOR TRD I/A SUPPLY	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1617I I/A SHUT-OFF VALVE: NOT IN USE	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1618I I/A SHUT-OFF VALVE: NOT IN USE	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV1619I I/A SHUT-OFF VALVE: NOT IN USE	WORCESTER (STK#1075-0029)	1/4" BRASS	250 psi
MV161I I/A SHUT-OFF VALVE FOR PV114A	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV162I I/A SHUT-OFF VALVE FOR PV110A	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV163I I/A SHUT-OFF VALVE FOR PV128A	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV164I I/A SHUT-OFF VALVE FOR PV115A	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV165I I/A SHUT-OFF VALVE FOR PV102N	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV166I I/A SHUT-OFF VALVE FOR PV101N	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV1671 I/A SHUT-OFF VALVE FOR PV108N	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV1681 I/A SHUT-OFF VALVE FOR PV125N	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV1691 I/A SHUT-OFF VALVE FOR PV121N	WORCESTOR (STK#1075-0029)	1/4" BRASS	250psi
MV1701I PI743I ISOLATION VALVE	PARKER CPI	1/4" BRASS	3000 psi
MV1702I PI746I ISOLATION VALVE	PARKER CPI	1/4" BRASS	3000 psi
MV1704I I/A DRYER SOLENOID SUPPLY SHUTOFF VALVE	UNITED	1/4"	200psi WOG
MV1708I SMALL AUXILIARY I/A SUPPLY SHUTOFF	NUPRO B-4HK	1/4"	600 psi
MV1709I ROOM 510 I/A SUPPLY SHUTOFF	PARKER	1/4"	
MV1710I I/A SHIELDING WALL SUPPLY	CIRCLE SEAL	1/4"	
MV1711 DPS702V ISOLATION VALVE	NUPRO B-4HK	1/4"	600psi
MV1712 TG720V ISOLATION VALVE	NUPRO B-4HK	1/4"	600psi
MV1716I SUPPLY DEWAR TO PV540N AND BUFFER TANK	WHITEY B-1VM4	1/4"	2200 psi
MV1718I SOUTH I/A COMPRESSOR OUTLET ISOLATION	WORCESTER CF8M	3/4"	GWP 1500
MV1721 GL. EXP. TANK SIGHT GLASS UPPER VALVE	CONBRACO	1/2"	
MV1722 GL. EXP. TANK SIGHT GLASS LOWER VALVE	CONBRACO	1/2"	
MV1723 GL. EXP. TANK SHUT OFF	WORCESTER	1" BRASS	WP 300 psi
MV1724 GL. EXP. TANK SHUT OFF	CRANE	1/4"	WOG 600
MV1726 GLYCOL BYPASS	WORCESTER	1 1/2" BRASS	
MV1727 GLYCOL BLEED	WHITEY B-4HK2	1/4"	1000 psig WP @ 100 F
MV1728I DRAIN ON GREEN COMPRESSOR DISCHARGE	WHITEY SS-4VF4	1/4"	3000 psi
MV1729I GREEN COMPRESSOR DISCHARGE ISOLATION	DRAGON 816033KR	1/4"	6000 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV1730 PUMP 1 GLYCOL RETURN SHUT OFF	CRANE	1 1/2"	WOG 600
MV1733 PUMP 1 GLYCOL OUTLET SHUT OFF	CRANE	1 1/2"	WOG 600
MV1735 PUMP 2 GLYCOL RETURN SHUT OFF	CRANE	1 1/2"	WOG 600
MV1738 PUMP 2 GLYCOL OUTLET SHUT OFF	CRANE	1 1/2"	WOG 600
MV1739 GLYCOL EXPANSION TANK ISOLATION	CRANE	1"	600 WOG
MV1742 PUMP SKID GLYCOL RETURN ISOLATION	STOCKHAM B-104	1 1/2"	SWP 125, WOG 200
MV1743 GLYCOL BLEED	WORCESTER	1" BRASS	WP 300 psi
MV1745 PS1744GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg.F
MV1746 PI17477GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000psi WP@100 deg F
MV1748 GLY. SUPPLY, TRIM COOLER INLET ISOLATION	STOCKHAM B-104	1 1/2"	SWP 125, WOG 200
MV1749 GLY. SUPPLY, TRIM COOLER OUTLET ISOLATION	NIBCO T133	1 1/2"	SWP 150, WOG 300
MV1750 NORTH COMPRESSOR GLY. RETURN ISOLATION	WORCESTER	1/2" BRASS	WP 300
MV1751 SOUTH COMPRESSOR GLY. RETURN ISOLATION	WORCESTER	1" BRASS	WP300
MV1752 HX752I GLYCOL RETURN ISOLATION	WORCESTER	1/2" BRASS	WP300
MV1753 VAC. PUMP/CRYOSTAT GLY.RET. ISOLATION	WORCESTER	1/2" BRASS	WP300
MV1754 VAC.PUMP/UTILITY GLY.RETURN ISOLATION	WORCESTER	1/2" BRASS	WP300
MV1757 PS1756GL AND PI1755GL ISOLATION	WHITEY	B IV4M	3000 psi@ 100 deg F
MV1758 PS1756GL AND PI1755GL ISOLATION	WHITEY	B IV4M	3000 psi@ 100 deg F
MV1759 SOUTH I/A COMPRESSOR GLYCOL BLEED	WHITEY	B1V4M	3000 psi@ 100 deg F
MV1760 NORTH COMPRESSOR GLY. SUPPLY ISOLATION	WORCESTER	1/2" BRASS	WP 300
MV1761 SOUTH COMPRESSOR GLY. SUPPLY ISOLATION	WORCESTER	1" BRASS	WP 300

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV1762 HX752I GLYCOL SUPPLY ISOLATION	WORCESTER	1/2" BRASS	WP 300
MV1763 VAC.PUMP/CRYOSTAT GLY. SUP. ISOLATION	WORCESTER	1/2" BRASS	WP 300
MV1764 VAC.PUMP/UTILITY GLY.SUP. ISOLATION	WORCESTER	1/2" BRASS	WP 300
MV1765 PS1772GL,PS1766GL, PI1769 ISOLATION	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1767 PS1766GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1768 PI1769GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1770 PS1772GL, PI1771GL ISOLATION VALVE	WHITEY	B IV4M	3000 psi@ 100 deg F
MV1774 PI1773GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1776 PS1775GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1778 PI1777GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1780 PS1779GL ISOLATION VALVE	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1782 PI1783GL ISOLATION VALVE	PARKER	1/4"	3000 psi max
MV1784 PI1785GL ISOLATION VALVE	PARKER	1/4"	3000 psi max
MV1786I GN2 BACKUP AUXILIARY OUTLET	WHITEY SS6372 12T	1/2"	2200 psi
MV1787 VACUUM PUMP COOLANT SUPPLY BLEED	PARKER	1/4"	
MV1788I F770I DRAIN SHUT OFF	PARKER	1/4"	3000 psi max
MV1791I CRYO I/A SUPPLY TO ROOM 215 DRYER			
MV1792I GREEN COMPRESSOR SUCTION	WHITEY B63TF8	1/2"	2200 psi
MV1793I PI-1700-H ISOLATION	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1794I BLEED I/A BUFFER TANK	NUPRO B-4HK2	1/4"	1000 psi WP@100 deg F
MV1795I ADS DRIER BYPASS	APOLLO BALL VALVE	1"	1000 psi

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
MV1796I BACKUP TT AIR TO ROOM 510 HYGROMETER	WHITEY B-1VM4	1/4"	2200 psi
MV184V TG183V ISOLATION VALVE	NUPRO	1/4"	
MV185V ARGON EXCLUDER VACUUM SHUTOFF VALVE	WORCESTER	1"	WP 300
MV203A ISOLATION VALVE FOR PT204A	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV205A CC TEST VALVE FOR PT204A	NUPRO B-4HK2	1/4"	1000 psi max
MV216N PT210N ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV217N PT210N TEST VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV224A NEC LEVEL GAGE, 3-VALVE MANIFOLD	HOKE ROTOFLOW BALL VALVE MAN.	1/4" tube	6000 psi
MV237A 3-VALVE MANIFOLD FOR DPS138A	HOKE ROTOFLOW BALL VALVE	1/4" tube	6000psi
MV241A TOP SAMPLE ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV243A BOTTOM SAMPLE ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV244A TEST VALVE FOR PT230A	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV245A ISOLATION VALVE FOR PT230A	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV247V COLD CATHODE GAUGE SHUT OFF			
MV248V PUMP INLET P. GAUGE & TC SHUT OFF VALVE	LEYBOLD, RIGHT ANGLE	KF25	2.5 BAR
MV249V PUMP INLET TC SHUT OFF VALVE			
MV253A CC UPPER V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV254A CC LOWER V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV255A CC MIDDLE V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV257A 3 VALVE MANIFOLD FOR DPT235A			
MV261I 1/4 SHUT-OFF VALVE FOR PV214A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV262I I/A SHUT-OFF VALVE FOR PV210A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV263I I/A SHUT-OFF VALVE FOR PV228A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV264I I/A SHUT-OFF VALVE FOR PV215A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV265I I/A SHUT-OFF VALVE FOR PV202N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV266U I/A SHUT-OFF VALVE FOR PV201N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV267I I/A SHUT-OFF VALVE FOR PV208N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV268I I/A SHUT-OFF VALVE FOR PV225N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV269I I/A SHUT-OFF VALVE FOR PV221N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV272A FLOWMETER SHUT OFF VALVE ON CC PANEL	NUPRO SS-4BK-TW	1/4" tube	100 psi
MV273A ANALYZER SHUT OFF VALVE ON CC PANEL	NUPRO SS-4BK-TW	1/4" tube	100 psi
MV274A UTILITY VACUUM SHUT OFF VALVE ON CC PANEL	NUPRO SS-4BK-TW	1/4" tube	100 psi
MV275A CC PANEL SHUT OFF VALVE FROM mv241A	NUPRO SS-4BK-TW	1/4" tube	100 psi
MV276A CC PANEL SHUT OFF VALVE FROM mv243A	NUPRO SS-4BK-TW	1/4" tube	100 psi
MV303A ISOLATION VALVE FOR PT304A	NUPRO SERIES B BELLOWS	1/4"	100psi
MV305A SEC TEST VALVE FOR PT304A	NUPRO B-4HK2	1/4"	1000 psi max
MV316N PT310N ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV317N PT310N TEST VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV324A NEC LEVEL GAGE, 3-VALVE MANIFOLD	HOKE ROTOFLOW BALL VALVE MAN.	1/4" tube	6000 psi
MV337A 3-VALVE MANIFOLD FOR DPS338A	HOKE ROTOFLOW BALL VALVE	1/4"	6000psi
MV341A TOP SAMPLE ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV343A BOTTOM SAMPLE ISOLATION VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV344A TEST VALVE FOR PT330A	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV345A ISOLATION VALVE FOR PT330A	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV347V COLD CATHODE GAUGE SHUT OFF			
MV348V PUMP INLET P. GAUGE & TC SHUT OFF VALVE	LEYBOLD, RIGHT ANGLE	KF25	2.5 BAR
MV349V PUMP INLET TC SHUT OFF VALVE			
MV353A SEC UPPER V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV354A SEC LOWER V.P. BULB SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV355A SEC MID V.P. BULB LINE SHUTOFF VALVE	NUPRO SERIES B BELLOWS	1/4" tube	100 psi
MV360I I/A SHUT-OFF VALVE FOR SEC			
MV361I I/A SHUT-OFF VALVE FOR PV314A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV363I I/A SHUT-OFF VALVE FOR PV328A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV364I I/A SHUT-OFF VALVE FOR PV315A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV365I I/A SHUT-OFF VALVE FOR PV302N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV3668 I/A SHUT-OFF VALVE FOR PV301N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV367I I/A SHUT-OFF VALVE FOR PV308N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV368I I/A SHUT-OFF VALVE FOR PV325N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV369I I/A SHUT-OFF VALVE FOR PV321N	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV384V TG383V ISOLATION VALVE	NUPRO	1/4"	
MV385V ARGON EXCLUDER VACUUM SHUTOFF VALVE	WORCESTER	1"	WP 300
MV433E CRYOSTAT VENT LINE BLEED AT BAYONET CAP	NUPRO B-4HK2	1/4"	1000psi
MV435A GAS ARGON LINE BLEED AT BAYONET CAP	NUPRO B-4HK2	1/4"	

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV437A FILL/DRAIN LINE BLEED AT BAYONET CAP	NUPRO B-4HK2	1/4"	
MV439N CRYOSTAT CONDENSER INLET BLEED AT BAYONET CAP	NUPRO B-4HK2	1/4"	600 psi
MV451N VPT ISOLATION/FILL 443LN	NUPRO SS-4BK-TW	1/4"	
MV453V CRYOSTAT VAC JAC PLATFORM ISOLATION	VAT VALVE	6"	
MV454U CRYOSTAT VESSEL PLATFORM ISOLATION	VAT VALVE	6"	
MV456A GA _r TRAILER CONNECTION SHUTOFF VALVE	CRYOLAB ES2-84-2TPG1	1/2"	Cv=3.1, 300psig ambient
MV457A ARGON TEST CELL SHUTOFF VALVE	NUPRO SS-4BK-V51	1/4"	Cv=0.36, 1000psig
MV461U RGA SAMPLE VALVE	NUPRO SS-4BK-VCO		
MV462A LA _r TRUCK CONNECTION SHUTOFF VALVE	WORCESTER C466PMSW	1/2"	1500psig max
MV469A 3-WAY VALVE MANIFOLD FOR DPI470A	WHITEY SS-M3NBF8	1/4"	600psi
MV472N VENT MAN. WARM LINE TO I/A SYSTEM VALVE	APOLLO	1"	1000psi WOG
MV474A SHUT-OFF VALVE PLATFORM CRYOSTAT ARGON GAS LINE	CRYOLAB SERIES CV8	1-1/2"	400psi
MV476A SHUT-OFF VALVE PLATFORM CRYOSTAT FILL/DRAIN LINE	CRYOLAB SERIES CV8	1-1/2"	400psi
MV481N 3-WAY MANIFOLD FOR DPT482N	HOKE ROTOFLOW BALL VALVE	1/4"	6000psi
MV483A PUMP & PURGE VALVE ON LINE 419GA	WHITEY SS65TSW12P	3/4"	2200psi WOG
MV485N 3-VALVE MANIFOLD FOR DPT486N ON CRYOSTAT CONDENSER INLET	Hoke Rotofold 8211F4Y	1/4"	5000 psig max
MV491N SHUT-OFF VALVE PLATFORM CRYOSTAT LIQUID NITROGEN	CRYOLAB SERIES CV8	1-1/2"	400psi
MV493N PUMP & PURGE VALVE ON LINE 409LN	WHITEY SS65TSW12P	3/4"	2200psi WOG
MV494A PUMP & PURGE VALVE ON LINE 429LA	WHITEY SS65TSW12P	3/4"	2200psi WOG
MV495A 4-WAY VALVE FOR F467A	WHITEY	1/4"	100psi
MV497U PLATFORM UV SHUTOFF VALVE			

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV498N ASS'Y HALL GN2 WARMING LINE SHUTOFF VALVE	NIBCO	1"	800psi
MV499N COLL.HALL GN2 WARMING LINE SHUTOFF VALVE	NIBCO	1"	800psi
MV503N ISOLATION VALVE GAS SPACE TO	NUPRO B-4JA1	1/4"	600 psi
MV504N ISOLATION VALVE LIQUID SPACE TO	NUPRO B-4JA1	1/4"	600 psi
MV505N LEVEL GAGE BYPASS VALVE NITROGEN DEWAR	NUPRO B-4JA1	1/4"	600 psi
MV507N GAGE ISOLATION VALVE NITROGEN	NUPRO B-4JA1	1/4"	600 psi
MV510N VAPOR RETURN VALVE PRESSURE BUILD CIRCUIT NITROGEN DEWAR	POWELL 70-102	1-1/2"	400 psi
MV511N BOTTOM FILL VALVE NITROGEN DEWAR	POWELL 70-102	1-1/2"	400 psi
MV512N AUXILIARY LIQUID WITHDRAWAL VALVE NITROGEN DEWAR	POWELL 70-102	1/2"	400 psi
MV515N BLOW DOWN VENT VALVE NITROGEN DEWAR	POWELL 70-102	1-1/2"	400 psi
MV516N FULL TRYCOCK VALVE NITROGEN DEWAR	POWELL 70-102	1/4"	400 psi
MV517N RELIEF 3-WAY SELECTOR VALVE, NITROGEN DEWAR	WORCESTER #C416PMSE1	2"	
MV524N HOSE DRAIN VALVE FOR FILL LINE NITROGEN DEWAR	POWELL 70-102	1/2"	400 psi
MV525N TOP FILL VALVE NITROGEN DEWAR	POWELL 70-102	1-1/2"	400 psi
MV527V INSULATING JACKET EVACUATION VALVE, NITROGEN DEWAR	SAUNDERS, SV-UK, A40	1-1/2"	
MV528V VACUUM GAGE TUBE ISOLATION VALVE NITROGEN DEWAR	SUPERIOR DP	5/8"	500 psig
MV531N PT501N ISOLATION, NITROGEN DEWAR	NUPRO	1/4"	
MV532N AUX. LN2 WITHDRAWAL MANIFOLD	POWELL EXTENDED STEM	1/2"	200 psi
MV533N AUX. LN2 WITHDRAWAL MANIFOLD	REGO B9403TE	1/2"	200 psi
MV535N PUMPDOWN FOR CRYOSTAT COND-R FEEDLINE OUTSIDE BLDG ON LIN	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max
MV538N CROSS OVER VALVE, STORAGE TO CALORIMETER	CRYOLAB	1/2"	

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV543N SHUT-OFF FOR CRYOSTAT COND-R FEEDLINE OUTSIDE BLDG ON LINE	CRYOLAB SERIES CV8	1-1/2"	150 psi
MV544N SHUT-OFF VALVE DEWAR CONDENSER FEEDLINE ON LINE 445LN	CRYOLAB SERIES CV8	1-1/2"	150 psi
MV546N PUMP & PURGE VALVE, DEWAR CONDENSER FEEDLINE, ON LINE 445LN	WHITEY MODEL 316L	1/2"	2200 psi max
MV550N VAPORIZER LIQUID SHUT OFF	POWELL 70-102	1/2"	400 psi
MV552N RELIEF MANIFOLD TEST VALVE FOR NITROGEN DEWAR	NUPRO B-4JA1	1/4"	600 psi
MV554N RELIEF MANIFOLD TEST VALVE FOR NITROGEN DEWAR	NUPRO B-4JA1	1/4"	600 psi
MV556N GAS SUPPLY SHUT-OFF NITROGEN DEWAR	POWELL 70-102	1"	400 psi
MV564N SOUTH PRESSURE INDICATOR SHUT OFF VALVE	NUPRO B-4HK	1/4"	1000 psi
MV566N SOUTH END DPI 3 VALVE MANIFOLD	ANDERSON GREENWOOD MM1VDB-2	1/4"	3000 psi
MV568N ST569 DRAIN VALVE	REGO 9454DA	1/2"	
MV573U UV LINE SHUTOFF AT NITROGEN DEWAR	NIBCO	1"	800 psi
MV575N PRV530N SHUT OFF VALVE	WORCESTER C466PMSW	1/2"	1500 psi max
MV603A TOP ISOLATION VALVE ARGON DEWAR LI LINE	NUPRO B-4JA1	1/4"	600 psi
MV604A BOTTOM ISOLATION VALVE Ar DEWAR LI LINE	NUPRO B-4JA1	1/4"	600 psi
MV605A DPT637A BYPASS VALVE ARGON DEWAR	NUPRO B-4JA1	1/4"	600 psi
MV607A PI6038A ISOLATION VALVE ARGON DEWAR	NUPRO B-4JA1	1/4"	600 psi
MV610A PRESS BUILD VAPOR SHUT-OFF, Ar DEWAR	POWELL 70-102	1-1/2"	400 psi
MV616A FULL TRY COCK AR DEWAR PRESS BUILD	POWELL	1/4"	200psi WOG
MV617A RELIEF SELECTOR 3-WAY VALVE, Ar DEWAR	TBV INC.	2"	200psi WOG
MV622N GN2 SUPPLY SHUTOFF VALVE, Ar DEWAR RM	WORCESTER (STK#1075-0029)	1/2" BRASS	250 psi
MV624A PUMP & PURGE VALVE ARGON DEWAR FILL LINE	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
MV627V INSULATING JACKET EVACUATION VALVE, ARGON DEWAR	SAUNDERS A40	1-1/2"	
MV628V TG629V ISOLATION VALVE, ARGON DEWAR	SUPERIOR DP	5/8"	500 psig
MV632A MANUAL VENT VALVE ARGON DEWAR	POWELL MODEL CJ	1-1/2"	400 psi
MV633A OPERATING MODE RELIEF TEST VALVE, ARGON DEWAR	HOKE SERIES 4100	1/4"	0.35 maximum Cv
MV635A FILLING MODE RELIEF TEST VALVE, ARGON DEWAR	HOKE SERIES 4100	1/4"	0.35 maximum Cv
MV639A PT653 SHUT-OFF, ARGON DEWAR LI/PI LINE	NUPRO B-4JA1	1/4"	600 psi
MV640E ARGON DEWAR MANIFOLD VENT DRAIN	WORCESTER #R16CWP300	1/2" BRASS	250 psi
MV643A PUMP & PURGE VALVE ON LINE 422GA	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max
MV644N GN2 SUPPLY TO RM.215, IN LAr DEWAR ROOM	WORCESTER (STK#1075-0029)	1/2" BRASS	250 psi
MV646A PUMP & PURGE VALVE ON U-TUBE 441GA	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max
MV648A SHUT-OFF VALVE , Ar GAS LINE, 422GA	CRYOLAB CV8 SERIES	1-1/2"	400 psig max at ambient
MV649N GN2 UTILITY PORT IN ARGON DEWAR ROOM	WORCESTER (STK#1075-0029)	1/2" BRASS	250 psi
MV656N PT655 SHUT-OFF, Ar DEWAR CONDENSER OUTLET	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
MV658A P & P VALVE CRYOSTAT FILL/DRAIN LINE AT RELIEF NEAR ARGON DEW	WHITEY #SS-63T3W8P	1/2"	max 2500 psi for body
MV660A SHUT-OFF VALVE CRYOSTAT FILL/DRAIN LINE NEAR ARGON DEWAR	CRYOLAB SERIES CV8	1-1/2"	400 psig max at ambient
MV661A 440LA PUMP & PURGE VALVE	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max
MV664A LIQUID SHUT-OFF VALVE FOR PRESSURE BUILD CIRCUIT	POWELL 70-102	1/2"	400 psi
MV667A 3-VALVE MANIFOLD FOR FILTER, CRYOSTAT LIQUID LINE, 440LA	Whitey SS-M3NBF8	1/4"	6000 psig max
MV668A 3-VALVE MANIFOLD FOR FLOWMETER, CRYOSTAT LIQUID LINE, 440LA	ANDERSEN GREENWOOD	1/4" BRASS	3000 psi
MV674A LINE 460LA UV SHUTOFF	WHITEY SS-63TSW8P	1/2"	Cv=15, 2200 psi max
MV675U PI679UV/TG680UV ISOLATION VALVE	NUPRO B-4HK	1/4"	600psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV677A 3-VALVE MANIFOLD FOR FILTER, CRYOSTAT ARGON GAS FILL LINE, 441	Hoke Rotofold 8211F4Y	1/4"	5000 psig max
MV678U UV MANUAL VALVE AT DEWAR FRONT	NIBCO	1"	800 psi
MV681U UV LINE SHUTOFF UNDER PIPE CHASE	NIBCO	1"	800 psi
MV683N DEWAR CONDENSER FLOWMETER SELECTING VALVE	CRYOLAB CV8-86-SWPY2	3/4"	Cv=12, 400 psi max amb.
MV686N CRYOSTAT COND-R FLOWMETER UP-STREAM TAP 3-WAY MANIFOLD SE	Whitey B-44XF4	1/4"	Cv=1.7, 1500 psi max
MV691N 3-VALVE MANIFOLD FOR DPI692N ON DEWAR CONDENSER INLET	ANDERSON GREENWOOD MM1VDB-2		
MV694N FLOWMETER SELECTION VALVE	CRYOLAB CV8-86-SWPY2	3/4"	Cv=12, 400 psi max amb.
MV695A 4-WAY VALVE FOR DPI669A	Whitey B-43YF2	1/4"	Cv=.08, 2500 psi max
MV705V INLET VALVE, UTILITY ROUGHING PUMP	NIBCO MODEL CF8M	2"	800 psig
MV712U UV BLEED TO VENT SHUT-OFF VALVE	APOLLO	1"	1000psi WOG
MV722A ARGON BACKFILL SHUT OFF	APOLLO	1/2"	1000 psi WOG
MV723I NORTH I/A COMPRESSOR OUTLET ISOLATION	WORCHESTER CF8M	3/4"	GWP 1500
MV727N NITROGEN BACKFILL SUPPLY SHUTOFF	APOLLO	1/2"	1000psi WOG
MV728U ROUGHING PUMP P TC GAUGE SHUT OFF VALVE	NUPRO B-4HK	1/4"	600psi
MV729U P. INDICATOR & TRANSMIT SHUT OFF VALVE	APOLLO	1/2"	1000psi WOG
MV730V MECH PUMP P. TC GAUGE SHUT OFF VALVE	NUPRO B-4HK	1/4"	600psi
MV731V BLOWER COLD CATHODE & TC GAUGE VALVE	NUPRO B-4HK	1/4"	600psi
MV732I I/A SHUTOFF TO PURGING ENCLOSURES	WORCESTER (STK#1075-0030)	1/2"	250psi
MV733I PI769I BLED VALVE	NUPRO B-4HK	1/4"	600psi
MV734U TG713UV ISOLATION VALVE	NUPRO B-4HK	1/4"	600psi
MV738U TG737UV ISOLATION VALVE	NUPRU B-4HK	1/4"	600psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV741V TG740V ISOLATION VALVE	NUPRO B-4HK	1/4"	600psi
MV742I GN2 BACKUP AIR SHUT-OFF VALVE	WHITEY 60 SERIES SS BALL VALVE	1/2"	2500psi
MV747I I/A SPARE TAP OFF			
MV748I AUXILIARY I/A SUPPLY SHUTOFF VALVE	NUPRO B4JA-1	1/4"	600psi
MV753I I/A AUXILIARY TAP AND DRAIN	WORCESTER	1/4"	300 WP
MV754I I/A PURGING ENCLOSURES & PI1707I ISOLATION	APOLLO	1/2"	1000 WOG
MV759I I/A RECEIVING TANK P&P VALVE	WORCESTER (STK#1075-0031)	1/2" BRASS	250 psi
MV760I INITIAL I/A SHUTOFF VALVE	NIBCO	1"	800 WOG
MV761I PI762I ISOLATION VALVE	NUPRO B4JA-1	1/4"	600psi
MV763I UPSTREAM I/A FILTER ISOLATION VALVE	WORCESTER	1" S.S.	300 WP
MV764I DPT766I ISOLATION VALVE	NUPRO B4JA-1	1/4"	600psi
MV765I I/A FILTER BYPASS VALVE	WORCESTER	1"	300 WP
MV768I PI769I ISOLATION VALVE	NUPRO B4JA-1	1/4"	600psi
MV771I DOWNSTREAM I/A FILTER ISOLATION VALVE	WORCESTER	1" S.S.	300 WP
MV783I I/A DRYER REGENERATIVE CYCLE SHUTOFF VALVE	UNITED	1/4"	150 psi
MV789I GN2 BACKUP AIR SHUT OFF VALVE	NIBCO CF-8M	1"	300WOG
MV791I FM790I ISOLATION VALVE	WORCESTER	1"	800psi
MV793I PI792I ISOLATION VALVE	NUPRO B4JA-1	1/4"	600psi
MV795I PIPE CHASE I/A SUPPLY SHUT OFF VALVE	WORCESTER	1"	800psi
MV796I DPT766I DOWNSTREAM ISOLATION VALVE	WORCESTER	1/2"	800psi
MV798I PI799I ISOLATION VALVE	NUPRO B4JA-1	1/4"	600psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
MV801I PI-800-I ISOLATION	WHITEY B-1VM4	1/4"	2200 psi
MV802I SUPPLY TO ROOM 510 BUFFER TANK	WHITEY SS62TS6	3/8"	2200 psi
MV803I PV2019H AIR SUPPLY	WHITEY B-1VM4	1/4"	2200 psi
MV804I MDT PURIFIER AIR SUPPLY IN ROOM 510	WHITEY B-1VM4	1/4"	2200 psi
MV805I MDT ACTUATOR AIR SUPPLY IN ROOM 510	WHITEY B-1VM4	1/4"	2200 psi
MV806I RM 510 BUFFER TO MOISTURE ANALYZER	WHITEY B-1VM4	1/4"	2200 psi
MV827A ARGON 12-PACK SHUTOFF VALVE	MATHESON 4071		
PI1409N PRESSURE GAUGE	US GAUGE 0-100 PSI	1/4"	150 psig
PI1411N PLATFORM AUX. GN DELIVERY PRESS	PART OF PRV1410N, 0-100 psig	1/4"	150 psig
PI1501I I/A PRESSURE INDICATOR, LN2 DEWAR LINE	US GAGE	1/4"	0-200psi
PI1601I PRESS. IND. I/A MANIFOLD, LAr DEWAR	US GAGE	1/4"	0-200psi
PI1706I I/A PIPE CHASE SUPPLY PRESS IND	US GAGE	1/4"	0-200psi
PI1707I CLEAN ROOM I/A SUPPLY PRESS IND	US GAGE	1/4"	0-200 psi
PI1731G PUMP 1 GLYCOL EXIT PRESSURE INDICATOR	ASHCROFT	1/4"	0-100 psi
PI1736G PUMP 2 GLYCOL EXIT PRESSURE INDICATOR	U.S. GAGE	1/4"	0-160 psi
PI1741G PUMP SKID GLYCOL RETURN PRESSURE IND.	ASHCROFT	1/4"	0-100 psi
PI1747G HX750I GLYCOL SUPPLY PRESSURE IND.	U.S. GAGE	1/4"	0-60 psi
PI1755G GLYCOL SUPPLY HX1713I P/I	U.S.GAGE	1/4"	0-60 psi
PI1769G HX752I GLYCOL SUPPLY PRESSURE INDICATOR	U.S. GAGE	1/4"	0-60 psi
PI1771G HX752I GLYCOL SUPPLY PRESSURE INDICATOR	U.S. GAGE	1/4"	0-60 psi
PI1773G VAC. PUMP/ CRYOSTAT GLYCOL SUPPLY PI	U.S. GAGE	1/4"	0-160 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
PI1777G VAC. PUMP/ CRYOSTAT GLYCOL SUPPLY PI	U.S. GAGE	1/4"	0-160 psi
PI1783G GLY. SUPPLY, TRIM COOLER INLET PRES. IND.	U.S. GAGE	1/4"	0-60 psi
PI1785G GLY. SUPPLY COOLER OUTLET PRES. IND	U.S. GAGE	1/4"	0-60 psi
PI271A PRESS INDICATOR ON CC SAMPLE PANEL	US GAUGE	1/4" tube	30 - 0 -30 psig
PI400N VPT ON 443 LN	USG		0-200 PSIG
PI432N COMPOUND PRESS GAUGE FOR CRYOSTAT COND INLET LINE AT BAYO	ASHCROFT MODEL 1009 AW	1/4"	30"- 0-100 psi
PI434E COMPOUND PRESS GAGE FOR VENT LINE AT BAYONET CAP	ASHCROFT MODEL 1009 AW	1/4"	30"- 0-100 psi
PI436A COMPOUND PRESS GAGE FOR CRYOSTAT ARGON GAS LINE AT BAYON	ASHCROFT MODEL 1009 AW	1/4"	30"- 0-100 psi
PI438A COMPOUND PRESS GAGE FOR CRYOSTAT FILL/ DRAIN LINE AT BAYON	ASHCROFT MODEL 1009 AW	1/4"	30"- 0-100 psi
PI482N LN2 SUBCOOLER PRESSURE GAGE			-30 Hg - 30 psig
PI496A PRESS. IND. Ar FILL LINE	US GAUGE	1/2"	0-100PSI
PI508N PRESSURE INDICATOR NITROGEN DEWAR	WEKSLER #BA14APF4LWX9	4-1/2" dia	0-100 psi
PI553N RELIEF MANIFOLD PRESSURE INDICATOR NITROGEN DEWAR	ASHCROFT	1/4"	0-160 psi
PI555N RELIEF MANIFOLD PRESSURE INDICATOR NITROGEN DEWAR	ASHCROFT	1/4"	0-160 psi
PI565N SOUTH END DEWAR PRESSURE INDICATOR	U.S. GAGE 33004	1/4"	
PI608A PRESS INDICATOR ARGON DEWAR	WEKSLER	4-1/2" dia	0-100 psi range
PI634A OPERATING MODE COMPOUND PRESS INDICATOR, ARGON DEWAR	US GAGE	1/4" , 2" face	30 - 0 -30 psig
PI636A FILLING MODE ARGON DEWAR COMPOUND PRESSURE INDICATOR	US GAGE	1/4" , 2" face	30 - 0 -30 psig
PI679UV PRESS IND. UV MANIFOLD Ar DEWAR RM	US GAGE	1/4"	30" VAC Hg-15psi
PI716UV PRESSURE INDICATOR ON UV MANIFOLD	ASHCROFT	1/4"	30"Hg VAC-15psi
PI724N GN2 BACKFILL LINE PRESS INDICATOR	ASHCROFT	1/4"	30"Hg VAC -15psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
PI743I GN2 BACKUP AIR PRESS IND	SOLFRUNT	4" PANEL MOUNT	0-3000psi
PI746I GN2 BACKUP AIR, DOME PRESS INDICATOR	SOLFRUNT	4" PANEL MOUNT	160psi
PI762I INITIAL I/A PRESSURE INDICATOR	US GAGE	1/4"	0-200psi
PI769I MID FILTER PRESS INDICATOR	US GAGE	1/4"	0-200 psi
PI776I I/A DRYER LEFT TOWER PRESS INDICATOR	US GAGE	1/4"	0-200 psi
PI777I I/A DRYER RIGHT TOWER PRESS INDICATOR	US GAGE	1/4"	0-200 psi
PI784I I/A DRYER REGENERATIVE CYCLE PRESS IND	US GAGE	1/4"	0-160 psi
PI792I I/A SYSTEM DOWNSTREAM PRESS IND	US GAGE	1/4"	0-200psi
PI799I I/A SYSTEM DOWNSTREAM PRESS IND	US GAGE	1/4"	0-160 psi
PI800I ROOM 510 BUFFER TANK PRESSURE	U.S. GAGE	1/4"	0-200 psi
PI817A GAr BACKFILL MID PRESS INDICATOR	ASHCROFT TYPE 1009		0-300 psi
PI820A GAr 6-PACK PRESSURE INDICATOR	ASHCROFT TYPE 1009	1/4"	0-3000 psi
PI823A GAr BACKFILL LOW PRESS INDICATOR	ASHCROFT TYPE 1009		30"-0-15 psi
PRV119 NEC PRESS REGULATOR FOR PV119 ACTUATOR	FAIRCHILD MODEL 30	1/4"	2 psi set
PRV1410 PRESSURE REGULATOR, TWO STAGE	VICTOR, VTS-450B-580	5/8"	4-50 psig delivery
PRV219 CC PRESS REGULATOR FOR PV219 ACTUATOR	FAIRCHILD MODEL 30	1/4"	2 psi set
PRV319 SEC PRESSURE REGULATOR FOR PV319 ACTUATOR	FAIRCHILD MODEL 30	1/4"	2 psi set
PRV530 TANK VENTING REGULATOR	C-ACME FRM-2SI-50	1/2"	30-50 psi
PRV725 GN2 BACKFILL LINE PRESS REGULATING VALVE	LINDE A9-SSC-5	1/2"	250psi
PRV745I GN2 BACKUP AIR PRESS REGULATOR	GROVE 302G fig.11494P087A	0-3500psi	6000psi
PRV749I I/A DISTRIBUTION PRESSURE REGULATOR	C A NORGREN #R17-800RNLA	1"	0-300psi

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
PRV751I GN2 BACKUP AIR, DOME PRESS REGULATOR	GROVE 15L	1/4"	3000psi max;0-150psi out
PRV818 GAr BACKFILL HIGH PRESS REGULATOR	MATHESON IH-580		2500 max inlet psi
PRV822 GAr BACKFILL LOW PRESS REGULATOR	LINDE V0 SSC 5		250 max inlet psi
PS119H CLOSING SUPPLY PRESS SWITCH FOR PV119A	DUAL SWAP 607464	1/4"	75psi
PS151A SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		(-40) TO 60 DEGREES F
PS152A SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		(-40) TO 60 DEGREES F
PS1703I I/A DRYER REG. CYCLE PRESS SWITCH	ASCO HB26A215	1/4"	20psi SET
PS1744 NORTH I/A COMPRESSOR GLY. PRS. SWITCH	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS1756 SOUTH I/A COMPRESSOR GLY. PRS. SWITCH	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS1766 HX752I GLY. PS FOR NORTH I/A COMPRESSOR	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS1772 HX752I GLY. PS FOR SOUTH I/A COMPRESSOR	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS1775 VAC.PUMP/CRYOSTAT GLY. SUPPLY PS	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS1779 VAC.PUMP/CRYOSTAT GLY. SUPPLY PS	UNITED ELECTRIC J6 266		0-100 psi, 150 psi proof
PS219H CLOSING SUPPLY PRESS SWITCH FOR PV219A	DUAL SWAP 60764	1/4"	75psi
PS251A SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		(-40) TO 60 DEGREES F
PS319H CLOSING SUPPLY PRESSURE SWITCH FOR PV319	DUAL SWAP 60764	1/4"	75psi
PS351A SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		(-40) TO 60 DEGREES F
PS352A SPILL TROUGH VPT THERMAL SPILL SENSOR	ASHCROFT LTDN4KK05A7030XBX		0° C
PS471N VENT MANIFOLD WARM LINE PRESS SWITCH			
PS696A SUMP PIT VPT THERMAL SPILL SENSOR	ASHCROFT LTDNKK05		0° C,range:-40 to 60° F
PS697A SUMP PIT VPT THERMAL SPILL SENSOR	ASHCROFT LTDNKK05		0° C,range:-40 to 60° F

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
PS698A EMER'CY EXHAUST FAN VPT THERMAL SENSOR	ASHCROFT LTDNKK05		-31°C,range:-40 to 60°F
PSC480 LN2 SUBCOOLER RELIEF	ANDERSON-GREENWOOD	1"	20 PSIG SET
PSV109 NEC VACUUM VESSEL RELIEF LIFTING PLATE, ALUMINUM	FNAL DESIGN	16" dia, 1/2" thick	0.85 psi lift pressure
PSV111 NEC CONDENSER RELIEF VALVE	CIRCLE SEAL MODEL 5159B	1/4"	60 psi
PSV113 NEC RELIEF VALVE	ANDERSON GREENWOOD 93T	2" x 3"	13 psi set
PSV119 PV119A ACTUATOR VENT LINE RELIEF VALVE			
PSV156 SAFETY RELIEF VALVE, NEC FILL DRAIN LINE	CRYOLAB 5120T-2M-30	1/4" tube	30psi
PSV1714 GREEN COMPRESSOR SUCTION BUFFER	CIRCLE SEAL 4MP-5159-150	1/2"	150 psi set
PSV1715 SOUTH I/A COMPRESSOR RELIEF VALVE	internal		
PSV1719 BACKUP I/A REGULATOR DOME VALVE RELIEF	F.C. KINGSTON	1/4"	200 psi
PSV1720 GLYCOL EXPANSION TANK RELIEF	KNUCKLE GB88 ED01	3/4"	25 psi
PSV1797 I/A RECIEVER TANK	CIRCLE SEAL M5159N	1/4"	165 psi
PSV209 CC CRYOSTAT VACUUM VESSEL RELIEF LIFTING PLATE ALUMINUM	FNAL DESIGN	16" dia, 1/2" thick	0.85 psi lift pressure
PSV211 CC CONDENSER RELIEF VALVE	CIRCLE SEAL MODEL 5159B	1/4"	60 psi
PSV213 CC RELIEF VALVE	ANDERSON GREENWOOD 93T	2" x 3"	13 psi set
PSV219 PV219A ACTUATOR VENT LINE RELIEF VALVE			
PSV256 SAFETY RELIEF VALVE, CC FILL/DRAIN LINE	CRYOLAB 5120T-2M-30	1/4"	30psi
PSV309 SEC VAC. VESSEL RELIEF LIFTING PLATE, AI	FNAL DESGN	16" dia, 1/2" thick	0.85 psi lift pressure
PSV311 SEC CONDENSER RELIEF VALVE	CIRCLE SEAL MODEL 5159B	1/4"	60 psi
PSV313 SEC RELIEF VALVE	ANDERSON GREENWOOD 93T	2" x 3"	13 psi
PSV319 PV319A ACTUATOR VENT LINE RELIEF VALVE			

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
PSV356 SAFETY RELIEF VALVE, SEC FILL/DRAIN LINE	CRYOLAB 5120T-2M-30	1/4"	30psi
PSV402 PLATFORM LINE RELIEF VALVE ON CRYOSTAT FILL/DRAIN LINE 429LA	CIRCLE SEAL	1/4"	30 psig set pressure
PSV468 SAFETY RELIEF VALVE, A. T. C. FILL LINE	CIRCLE SEAL K5120T-2MP-150	1/4"	100psi set
PSV475 SAFETY RELIEF PLATFORM CRYOSTAT ARGON GAS LINE	NUPRO, CPA TYPE, N-189-5	1/4"	100 psi set pressure
PSV479 LN2 SUBCOOLER RELIEF	ANDERSON-GREENWOOD	1"	20 PSIG SET
PSV492 SAFETY RELIEF PLATFORM CRYOSTAT LIQUID NITROGEN	NUPRO, CPA TYPE, N-189-5	1/4"	100 psi set pressure
PSV509 PRESSURE BUILD COIL RELIEF VALVE NITROGEN DEWAR	NUPRO B-4CPA2-150	1/4"	150 psi set pressure
PSV514 THERMAL RELIEF ON DEWAR COND-R FEEDLINE OUTSIDE BLDG ON LIN	CIRCLE SEAL 5120T-2MP-150	1/4"	100 psi set pressure
PSV519 SAFETY RELIEF VALVE NITROGEN DEWAR	SWENDEMAN MODEL XS0	2"	65 psi set pressure
PSV520 SAFETY RELIEF VALVE NITROGEN DEWAR	SWENDEMAN MODEL XS0	2"	65 psi set pressure
PSV523 FILL LINE SAFETY RELIEF VALVE,NITROGEN DEWAR	CIRCLE SEAL 5120B	1/4"	150 psi
PSV526 (2) JACKET SAFETY HEADS	PROCESS ENGINEERING INC., STAND, DUAL O-	6" dia	0 psig lift
PSV534 TRAPPED VOL., AUX. LN2 WITHDRAWAL MAN.	CIRCLE SEAL 5120T-2MP-100	1/4"	100 psi set
PSV536 THERMAL RELIEF FOR CRYOSTAT COND-R FEEDLINE OUT BLDG ON LIN	CIRCLE SEAL 5120T-2MP-150	1/4"	150 psi set
PSV537 SAFETY RELIEF AT NITROGEN DEWAR ON CRYOSTAT COND-R FEEDLIN	CIRCLE SEAL 5120T-2M-100	1/4"	100 psi set
PSV539 FILL LINE SAFETY RELIEF VALVE, DEWAR 42	CIRCLE SEAL 5120B	1/4"	150 psi
PSV541 FILL LINE SAFETY RELIEF	CIRCLE SEAL 5120T-2MP-275		191 psi set
PSV542 SAFETY RELIEF, DEWAR CONDENSER FEEDLINE, JUMPER LINE 444LN	CIRCLE SEAL 5120T-2M-100	1/4"	100 psi set
PSV545 SAFETY RELIEF, CALORIMETER CONDENSER FEEDLINE, JUMPER LINE	CIRCLE SEAL 5120T-2M-100	1/4"	100 psi set
PSV551 SAFETY RELIEF VALVE, GN2 HEATERS	NUPRO SS-4CPA2-150	1/4"	150psi set
PSV557 PRESSURE BUILD CIRCUIT INLET RELIEF	NUPRO B-4CPA2-150		150 psi

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
PSV609 PRESS BUILD RELIEF VALVE ARGON DEWAR		1/4"	150 psi set pressure
PSV614 ARGON DEWAR CONDENSER RELIEF	NUPRO	1/2"	150 psi set pressure
PSV619 FILLING MODE ARGON DEWAR RELIEF VALVE	SWENDEMAN XSO	1-1/2" x 2"	65 psi set pressure
PSV620 OPERATING MODE Ar DEWAR RELIEF VALVE	AGCO 5262J3 52605J23/S	2" x 3"	20 psi set pressure
PSV623 RELIEF VALVE ARGON DEWAR FILL LINE	CIRCLE SEAL 5120T-2MP-150	1/4"	150 psi set pressure
PSV626 (2) JACKET SAFETY HEADS ARGON DEWAR	PROCESS ENGINEERING INC, STAND, DUAL O-	Dual 6" dia	2 psig set pressure
PSV630 PRESSURE BUILD SAFETY RELIEF VALVE FOR ARGON DEWAR	NUPRO B-4CPA2-150	1/4"	150 psi set pressure
PSV642 THERMAL RELIEF CRYOSTAT GAr LINE, 422GA	CIRCLE SEAL 5120T-2MP-150	1/4"	100 psi set pressure
PSV647 THERMAL RELIEF U-TUBE 441 GA	CIRCLE SEAL 5120T-2MP-150	1/4"	100 psi set pressure
PSV657 CRYOSTAT FILL/DRAIN LINE RELIEF NEAR ARGON DEWAR	CIRCLE SEAL 5120T-2MP-150	1/4"	150 psig
PSV663 440LA RELIEF VALVE	CIRCLE SEAL 5120T-2MP-150	1/4"	150 psi set
PSV673 LINE 460LA RELIEF	CIRCLE SEAL 5120T-2M-150	1/4"	100 psi set
PSV689 THERMAL RELIEF ON U-TUBE 442LN	CIRCLE SEAL 5120T-2M-150	1/4"	100psi
PSV709 UV LINE RELIEF VALVE	CIRCLE SEAL 249TI-8PP	1"	3 psi set pressure
PSV711 FORELINE RELIEF VALVE	CIRCLE SEAL		
PSV735I GN2 BACKUP AIR SAFETY RELIEF VALVE	CIRCLE SEAL 5159B-4MP-85	1/2"	100psi
PSV755I I/A COMPRESSOR SAFETY RELIEF VALVE	EATTON CORP.	1/4"	165psi
PSV757I I/A RECEIVING TANK SAFETY RELIEF VALVE	EATTON CORP.	1/4"	165psi
PSV774I I/A DRYER LEFT TOWER SAFETY RELIEF VALVE	CIRCLE SEAL M5159-N-2ML	1/4"	150 psi set
PSV775I I/A DRYER RIGHT TOWER SAFETY RELIEF VALVE	CIRCLE SEAL M5159-N-2ML	1/4"	150 psi set
PSV821 GAr BACKFILL MID PRESS SAFETY RELIEF VALVE	CIRCLE SEAL 5120T-2M-200		

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
PT104A NEC PRESS MONITOR TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	14-27 psia
PT110N NEC CONDENSER OUTLET PRESSURE TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	0-60 psia
PT130A NEC PRESSURE CONTROL TRANSDUCER	ROSEMOUNT MODEL 12	1/4"	14-27 psia range
PT133A NEC UPPER PRESS TRANSMITTER ON VAPOR PRESS BULB LINE	ROSEMOUNT MODEL 1151	1/4"	14-27 psia range
PT134A NEC LOWER PRESS TRANSMITTER ON VAPOR PRESS BULB LINE	ROSEMOUNT MODEL 1151	1/4"	14-27 psia range
PT140A NEC CRYOSTAT MID PRESS TRANSMITTER FOR VAPOR PRESS BULB LI	ROSEMOUNT	1/4"	14-27psi range
PT204A CC CRYOSTAT PRESS MONITOR TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	14- 27 psia
PT210N CC CONDENSER OUTLET PRESSURE TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	0-60 psia
PT230A CC CRYOSTAT PRESS CONTROL TRANSDUCER	ROSEMOUNT MODEL 12	1/4"	14-27 psia range
PT233A CC CRYOSTAT UPPER PRESS TRANSMITTER FOR VAPOR PRESSURE B	ROSEMOUNT MODEL 1151	1/4"	14 - 27 psia range
PT234A CC CRYOSTAT LOWER PRESS TRANSMITTER FOR VAPOR PRESS BULB	ROSEMOUNT MODEL 1151	1/4"	14 - 27 psia range
PT240A CC CRYOSTAT MID PRESS TRANSMITTER FOR VAPOR PRESS BULB LIN	ROSEMOUNT MODEL 1151	1/4"	14 - 27 psia range
PT304A SEC PRESS MONITOR TRANSDUCER	ROSEMOUNT MODEL 1151	1/4"	14-27 psia range
PT310N SEC CONDENSER OUTLET PRESSURE TRANSMITTER	ROSEMOUNT MODEL 1151	1/4"	0-60 psia
PT330A SEC CRYOSTAT PRESS CONTROL TRANSMITTER	ROSEMOUNT SERIES 1151	1/4"	14-27 psia range
PT333A SEC UPPER PRESS TRANSMITTER FOR VAPOR BULB PRESS LINE	ROSEMOUNT SERIES 1151	1/4"	14- 27 psia range
PT334A SEC LOWER PRESS TRANSMITTER FOR VAPOR BULB PRESS LINE	ROSEMOUNT SERIES 1151	1/4"	14- 27 psia range
PT340A SEC CRYOSTAT MID PRESS TRANSMITTER FOR VAPOR PRESS BULB LI	ROSEMOUNT	1/4"	14-27 psi range
PT486N SUB COOLER U-TUBE VPT	Omega		0-100 psig, 200 psig max
PT501N NITROGEN DEWAR PRESSURE TRANSMITTER	ROSEMOUNT SERIES 1151	1/4"	0- 90 psi
PT529V VACUUM GAGE THERMOCOUPLE TUBE NITROGEN DEWAR	HASTINGS DV-GR		0-1000 microns

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
PT653A PRESS TRANSMITTER, LAr LI/PI LINE	ROSEMOUNT SERIES 1151	1/4"	0-90 psia
PT655N PRESS TRANSMITTER, LAr DEWAR CONDENSER	ROSEMOUNT SERIES 1151	1/4"	0-90 psia
PT717U UV MANIFOLD ABSOLUTE PRESS TRANSMIT	ROSEMOUNT MODEL 1151	1/4"	0- 35 psia
PT744I GN2 BACKUP AIR PRESS TRANS	ROSEMOUNT 1151	1/4"	0-3000psi
PT797I I/A SYSTEM DOWNSTREAM PRESSURE TRANS	ROSEMOUNT SERIES 1151	1/4"	14-27 psia
PT819A GA _r BACKFILL SUPPLY PRESS TRANS	ROSEMONT 1151GP9E2ZB3		4-20 mA, 0-2500 psi
PV101N RIGHT ANGLE VALVE W/ACTUATOR NEC COOL DOWN CONDENSER INLE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2"	400 psi
PV102N RIGHT ANGLE VALVE W/ACTUATOR NEC OPERATIONAL CONDENSER IN	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2"	400 psi
PV108V NEC ROUGHING GATE VALVE FOR CRYOSTAT INSULATING JACKET	VAT SERIES 14	4"	max diff press 29 psi
PV110N RIGHT ANGLE VALVE W/ACTUATOR NEC CONDENSER OUTLET	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	2" valve/25 sq in actuator	100 psi valve/150 psi actuator
PV114A RIGHT ANGLE VALVE W/ACTUATOR NEC CRYOSTAT ARGON GAS LINE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" valve/25 sq in actuat	100 psi for valve/150 psi for actuator
PV115U NEC GATE VALVE CRYOSTAT UV LINE	VAT SERIES 12	KF50	14.7 psi
PV118A REDUNDANT FILL/DRAIN VALVE, NEC	CRYLAB SERIES CV8 W/ ACTUATOR	1-1/2"	400psi max
PV119A NEC COLD FILL VALVE	FNAL DESIGN DRWG #3740.510-MC-224654	1-1/2"	140 psi max internal press
PV121V NEC DIFFUSION PUMP OUTLET GATE VALVE ON CRYOSTAT FORELINE	VAT SERIES 12	KF50	14.7 psi
PV125A NEC HIGH VACUUM GATE VALVE DIFFUSION PUMP INLET	VRC MODEL 4T1	4"	10 atmosphere to vacuum
PV128A NEC VENT MANIFOLD ISOLATION GATE FOR PUMPDOWN	VAT SERIES 14	6"	29 psi
PV1414N LN2 SUBCOOLER CONTROL VALVE	FNAL MD-167453 (EVLN)/BADGER T1068/FISHER	1/2"	Cv = 0.32
PV201N RIGHT ANGLE VALVE W/ACTUATOR CC COOLDOWN CONDENSER INLET	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" valve/25 sq in actuat	100 psi for valve/150 psi for actuator
PV202N RIGHT ANGLE VALVE W/ACTUATOR CC OPERATING CONDENSER INLET	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" valve/25 sq in actuat	100 psi for valve/150 psi for actuator
PV208V CC ROUGHING VALVE FOR INSULATING JACKET	VAT SERIES 14	4"	diff pressure 29 psi

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
PV210N RIGHT ANGLE VALVE W/ACTUATOR CC CRYOSTAT CONDENSER OUTLE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	2" valve/25 sq in actuator	100 psi for valve/150 psi for actuator
PV214A RIGHT ANGLE VALVE W/ACTUATOR CC CRYOSTAT ARGON GAS LINE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" valve/25 sq in actuat	100 psi for valve/150 psi for actuator
PV215U CC GATE VALVE CRYOSTAT UV LINE	VAT SERIES 12	KF50 (2")	14.7 psi
PV218A REDUNDANT FILL/DRAIN VALVE, CC	CRYOLAB SERIES CV8 W/ ACTUATOR	1-1/2"	400psi
PV219A CC COLD FILL VALVE	FNAL DESIGN DRWG #3740.510-MC-224654	1-1/2"	140 psi max internal press
PV221V CC DIFFUSION PUMP OUTLET VALVE ON CRYOSTAT FORELINE	VAT SERIES 12	KF50 (2")	14.7 PSIG
PV225V CC HIGH VACUUM GATE VALVE DIFFUSION PUMP INLET	MODEL 4T1 VRC	4"	10 atmosphere to vacuum
PV228A CC VENT MANIFOLD ISOLATION GATE FOR PUMPDOWN	VAT SERIES 14	4"(3" LP)	29 psi
PV301N RIGHT ANGLE VALVE W/ACTUATOR SEC COOLDOWN CONDENSER INLE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" vlave/25 sq in actuat	100 psi for valve/150 psi for actuator
PV302N RIGHT ANGLE VALVE W/ACTUATOR SEC OPERATIONAL CONDENSER IN	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2" valve/25 sq in actuat	100 psi for valve/150 psi for actuator
PV308V SEC ROUGHING GATE VALVE FOR CRYOSTAT INSULATING JACKET	VAT SERIES 14	4"	max diff press 29 psi
PV310N RIGHT ANGLE VALVE W/ACTUATOR SEC COOLDOWN CONDENSER INLE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	2"	100 psi for valve/150 psi for actuator
PV314A RIGHT ANGLE VALVE W/ACTUATOR SEC CRYOSTAT ARGON GAS LINE	CRYOLAB SERIES CV8 W/VALTEK SERIES 25 A	1-1/2"	100 psi for valve/150 psi for actuator
PV315U SEC GATE VALVE CRYOSTAT UV LINE	VAT SERIES 12	KF50 (2")	14.7 psi
PV318A REDUNDANT FILL/DRAIN VALVE, SEC	CRYOLAB SERIES CV8 W/ ACTUATOR	1-1/2"	400psi
PV319A SEC COLD FILL VALVE	FNAL DESIGN DRWG #3740.510-MC-224654	1-1/2"	140 psi max internal press
PV321V SEC DIFFUSION PUMP OUTLET GATE VALVE ON CRYOSTAT FORELINE	VAT SERIES 12	KF50 (2")	14.7 psi
PV325V SEC HIGH VACUUM GATE VALVE DIFFUSION PUMP INLET	VRC MODEL 4T1	4"	10 atmosphere to vacuum
PV328A VENT MANIFOLD ISOLATION GATE FOR PUMPDOWN	SERIES 14 VAT	6"	29 psi
PV501N PRESS BUILD CONTROL VALVE NITROGEN DEWAR	CRYOLAB ES2. FISHER ACTR. 667 & POS. 3582	1/2"	300 psi max at ambient
PV513N LIQUID WITHDRAWL CONTR VALVE N2 DEWAR TO CRYOSTAT CONDENS	CRYOLAB CV1590 with	1-1/2"	Cv=34

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
PV540N FILL SHUT OFF CONTROL VALVE	WORCESTER VALVE C416PM-SW; ACTUATOR	1-1/2"	1500 psi max
PV548N LIQUID WITHDRAWAL CONTROL VALVE	CRYOLAB CV1590 FISHER ACTR. 667 & POS. 35	1-1/2"	
PV601A PRESSURE BUILD CONTROL VALVE ARGON DEWAR	CRYOLAB ES2 FISHER ACTR. 667 & POS. 3582	1/2"	300 psi max at ambient
PV611A GAS CONTROL VALVE ARGON DEWAR	CRYOLAB CV1590 with FISHER ACTR. 667 & PO	1-1/2"	Cv=34
PV612N CONDENSER INLET CONTROL VALVE, ARGON DEWAR	CRYOLAB CV1590 with FISHER ACTR. 667 & PO	1-1/2"	Cv=34
PV615N ARGON DEWAR CONDENSER OUTLET CONTROL VALVE	CRYOLAB CV1590 with FISHER ACTR. 667 & PO	1-1/2"	Cv=34
PV625A FILL VALVE ARGON DEWAR	CRYOLAB CV1590 with FISHER ACTR. 667 & PO	1-1/2"	Cv=34
PV638A LIQUID WITHDRAWAL VALVE ARGON DEWAR	CRYOLAB CV1590 with FISHER ACTR. 667 & PO	1-1/2"	Cv=34
PV704V INLET VALVE, INSULATION ROUGHING PUMP	NIBCO MODEL CF8M	2"	800 psig
PV706V UV TO CRYOSTAT INSULATION VACUUM TIE IN, PRESS CONTROL VALVE	VAT MODEL #12040-TA44	4"	14.7 psi max,
PV707V UV SHUT-OFF VALVE	VAT MODEL #12040-TA44	4"	14.7 psi max,
PV710V FORE PUMPS SHUT-OFF VALVE	VAT MODEL #12040-TA44	6"	14.7 psi max,
PV772I I/A DRYER INLET 4-WAY VALVE	HOMESTEAD	1"	200 psi
PV780I I/A DRYER OUTLET 4-WAY VALVE	HOMESTEAD	1"	200psi
RD112A NEC DUAL RUPTURE DISK	FIKE METAL PRODUCTS	4"	18 psi set upstream/10 psi set downstrea
RD212A CC DUAL RUPTURE DISK	FIKE METAL PRODUCTS	4"	18 psi set upstream
RD312A SEC DUAL RUPTURE DISK	FIKE METAL PRODUCTS	4"	18 psi upstream/10 psi set downstream
RD458E RUPTURE DISK ON ARGON DEWAR OUTSIDE VENT LINE	CDC TYPE ENV-1	2"	7 psi set pressure
RD459E RUPTURE DISK ON CRYOSTAT OUTSIDE VENT LINE	CDC TYPE ENV-1	6"	5 psi set pressure
RD518N RUPTURE DISK NITROGEN DEWAR	OSECO	2"	95 psi set pressure
RD521N RUPTURE DISK NITROGEN DEWAR	OSECO	2"	95 psi set pressure

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
RD618A FILLING MODE ARGON DEWAR RUPTURE DISK	OSECO H-1986-02	2"	97 psi set pressure
RD621A OPERATING MODE Ar DEWAR RUPTURE DISK	OSECO H-1986-02	2"	95 psi set pressure
RO136N NEC RESTRICTING ORIFICE FOR VENT MANIFOLD WARMING GAS	UNIVERSAL COMPONENTS INC., #5110-1/4-1/4-S	1/4"	1.0 SCFM +/-7.5%, GN2
RO236N CC RESTRICTING MANIFOLD FOR VENT	UNIVERSAL COMPONENTS INC.,	1/4"	1.0 SCFM +/-7.5%, GN2
RO336N SEC RESTRICTING ORIFICE FOR VENT MANIFOLD WARMING GAS	UNIVERSAL COMPONENTS INC.,#5110-1/4-1/4-S	1/4"	1.0 SCFM +/-7.5%, GN2
RO645N RESTRICTING ORIFICE, IN LAr DEWAR ROOM	B20, 0.020" orifice	BRASS	
RO650N RESTRICTING ORIFICE, IN LAr DEWAR ROOM	B63, 0.063" ORIFICE	BRASS	
ST569N FILL STRAINER	MEULLER #351	100 mesh 1-1/2"	225 psig
SV1791I GREEN COMPRESSOR DISCHARGE	AGCO 81S24-2	1/2"	2200 psi set
TCV1725 GLYCOL BYPASS TEMPERATURE CONTROLLED	STERLING 15 2-F	1 1/2"	125 psi max
TG126V NEC DIFFUSION PUMP INLET THERMOCOUPLE GAGE	GRANVILLE PHILLIPS#275071	1/8"	10^-3torr -1000torr
TG142V NEC INSULATING JACKET THERMOCOUPLE GAGE AT INLET OF DIFFUSI	GRANVILLE PHILLIPS#275071	1/8"	1mTORR -1000TORR
TG158A THERMOCOUPLE GAGE AT MV144A		1/8" tube	1000psi
TG183V ARGON EXCLUDER VACUUM INDICATOR Read out on DMACS is as TG158	PIRANI	1/8" tube	1000 psi
TG226A CC DIFFUSION PUMP INLET THERMOCOUPLE GAGE	GRANVILL PHILLIPS #275071	1/8"	1mTORR - 1000 TORR
TG242V CC INSULATING JACKET THERMOCOUPLE GAGE AT INLET OF DIFFUSIO	GRANVILLE PHILLIPS #275071	1/8"	1mTORR - 1000 TORR
TG258A THERMOCOUPLE GAGE AT mv244A		1/8" tube	1000psi
TG277A THERMOCOUPLE GAGE ON CC SAMPLE PANEL	HASTINGS, DV-6R	1/8"	
TG326V SEC DIFFUSION PUMP INLET THERMOCOUPLE GAGE	GRANVILLE PHILLIPS #275071	1/8"	1mTORR - 1000 TORR
TG342V SEC INSULATING JACKET THERMOCOUPLE GAGE AT INLET OF DIFFUSI	GRANVILLE PHILLIPS#275071	1/8"	1mTORR - 1000 TORR
TG358A THERMOCOUPLE GAGE AT mv344A		1/8" tube	1000psi

DEVICE DESCRIPTION	MANUFACTURER/MODEL	SIZE	RATING
TG383V ARGON EXCLUDER VACUUM INDICATOR Read out on DMACS is as TG358	PIRANI	1/8" tube	1000 psi
TG629V INSULATING JACKET THERMOCOUPLE GAGE, ARGON DEWAR	HASTINGS MODEL DV-6R	1/4"	0-1000 microns Hg
TG680U UV MANIFOLD THERMOCOUPLE GAUGE	HASTINGS DV-6	1/4"	0-1000 microns Hg
TG713U THERMOCOUPLE GAUGE UV LINE	GRANVILLE PHILLIPS	1/4"	0-1000microns Hg
TG715U UV MANIFOLD THERMOCOUPLE GAGE- μ 's	GRANVILLE PHILLIPS	1/4"	0-1000micronsHg
TG718U THERMOCOUPLE GAGE FOR UTILITY ROUGHING PUMP INLET	GRANVILLE PHILLIPS	1/4"	0-1000microns Hg
TG719V THERMOCOUPLE GAGE FOR INSULATION MECHANICAL PUMP INLET	GRANVILLE PHILLIPS	1/4"	0-1000microns Hg
TG720V THERMOCOUPLE GAGE ON BLOWER INLET CRYOSTAT INS JACKET FOR	GRANVILLE PHILLIPS	1/4"	0-1000microns Hg
TG737U UPSTREAM THERMOCOUPLE FOR F736UV	GRANVILLE PHILLIPS	1/4"	0-1000microns Hg
TG740V UPSTREAM THERMOCOUPLE FOR F739V	GRANVILLE PHILLIPS	1/4"	0-1000 psi
TI1734G GLYCOL SUPPLY TEMPERATURE INDICATOR	ASHCROFT		0-250 deg. F
TI778I I/A DRYER LEFT TOWER TEMPERATURE IND	PREMIUM INST.	1/4"	500 DEGREES F
TI779I I/A DRYER RIGHT TOWER TEMPERATURE IND	PREMIUM INST.	1/4"	500 DEGREES F
TP478N LN2 SUBCOOLER TEMPERATURE RESISTOR	PLATINUM		
TS132E NEC CRYOSTAT VENT MANIFOLD TEMP SWITCH	FNAL DWG#ME-273505;ASCO #PB11A RF10A44	1/2"coupling freon/n2 VPT	10-100psi
TS232E CC CRYOSTAT VENT MANIFOLD TEMP SWITCH	FNAL DWG#ME-273505/ASCO #PB11ARF10A44	1/2"coupling	10-100psi
TS332E SEC CRYOSTAT VENT MANIFOLD TEMP SWITCH	FNAL DWG#ME-273505 ASCO #PB11ARF10A44	1/2" coupling	10 - 100 psi
VM362I I/A SHUT-OFF VALVE FOR PV310A	WORCESTER (STK#1075-0029)	1/4" BRASS	250psi
VP146V NORTH EC DIFFUSION PUMP	VARIAN MODEL VHS-4	4" NPS	1790 cfm at 1 micron
VP246V CC CRYOSTAT DIFFUSION PUMP	VARIAN MODEL VHS-4	4" NPS	1790 cfm at 1 micron
VP346V SOUTH EC DIFFUSION PUMP	VARIAN MODEL VHS-4	4" NPS	1790 cfm at 1 micron

<i>DEVICE DESCRIPTION</i>	<i>MANUFACTURER/MODEL</i>	<i>SIZE</i>	<i>RATING</i>
VP700V UTILITY ROUGHING PUMP	EDWARDS, SERIES E2M275	1-1/2"	250 cfm pumping speed
VP701U CRYOSTAT INSULATION MECHANICAL PUMP	EDWARDS, SERIES E2M275	1-1/2"	250 cfm pumping speed
VP708V ROOTS BLOWER	LEYBOLD-HERAEUS mod. WSU2000	6"	1100 cfm pumping speed

D0 Upgrade Piping Components

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
CV-2001-H	Lead Flow Return Line Check Valve	1016 BOOV-0.5S	Circle Seal	Check Valve	SOLENOID	120 psi	Spring removed
CV-2008-H	GHe storage purge to atm.	259b-8pp	Circle Seal	Check Valve	He FRIDGE	3000 psi	Crack Press = 0.5 - 1.0
CV-2024-H	Compressor discharge to storage	259b-8pp	Circle Seal	Check Valve	He FRIDGE	3000 psi	Crack Press = 2-4#
CV-2069-H	Ghe tube trailer line	259T-4PP	Circle Seal	Check Valve	He FRIDGE	3000 psi	Crack Press = 0.5 - 1.0
CV-2074-H	Ghe tube trailer line	259T-4PP	Circle Seal	Check Valve	He FRIDGE	3000 psi	Crack Press = 0.5 - 1.0
CV-2268-H	Refer Valve Box He Return Check Val	1650-MB-258040	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-2346-H	Dry Engine downstream vent/relief lin	1650-MB-258040	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-2504-H	Liquid Helium Dewar Outlet Check Va	1650-MB-258277	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-2505-H	Liquid Helium Dewar Supply Check V	1650-MB-258277	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-2515-H	Helium Dewar Supply Line Check Val	1650-MB-258277	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-2619-N	He purifier Ln2 jacket drain line	249T-6PP	Circle Seal	Check Valve	He FRIDGE	3000 psi	Teflon Seat
CV-2623-N	He purifier Nitrogen vent line	249T-6PP	Circle Seal	Check Valve	He FRIDGE	3000 psi	Teflon Seat
CV-2731-N	VLPC nitrogen return at Utility feed ca	1650-MB-258040	FNAL	Check Valve	VLPC	min. 350 psi	Teflon Seat
CV-2733-N	Solenoid N2 return line at Utility feed	1650-MB-258040	FNAL	Check Valve	SOLENOID	min. 350 psi	Teflon Seat
CV-2758-N	Ln2 dewar fill line check valve	N/A	Powell	Check Valve	He FRIDGE	300 WOG	
CV-2F710-N	GN2 Vent Line	1016 BOOV-0.5S	Circle Seal	Check Valve	He FRIDGE	120 psi	Crack Press. = 0.5 psi
CV-3039-H	Solenoid Valve Box At Refer He retur	1650-MB-258040	FNAL	Check Valve	He FRIDGE	min. 350 psi	Teflon Seat
CV-3210-H	Solenoid he return line to SV-3211-H		TOSHIBA	Check Valve	SOLENOID		Cryogenic Checkvalve
CV-3220-H	Ctrl. Dewar Reservoir Relief inlet line		TOSHIBA	Check Valve	SOLENOID		Cryogenic Checkvalve
CV-3261-H	Solenoid he supply to SV-3262-H		TOSHIBA	Check Valve	SOLENOID		Cryogenic Checkvalve
CV-3413-H	Solenoid Lead Flow to Vent Check Va	1016 BOOV-0.5S	Circle Seal	Check Valve	SOLENOID	120 psi	Spring removed
CV-4009-H	VLPC Valve Box AT Refer He Return	1650-MB-258040	FNAL	Check Valve	VLPC	min 350 psi	
CV-4016-H	Helium Return Line Check Valve	1650-MB-258040	FNAL	Check Valve	VLPC	min 350 psi	
D0BEVLP	Heat exchanger 2 bypass	1650-MD-167453	FNAL	Control Valve	He FRIDGE	min 350 psi	Cv = 2.0, =%
D0BEVX1	HTX-1 high pressure inlet	Mark One 1"	Valtek	Control Valve	He FRIDGE	600 PSIG, Equal %	Cv = 3.80
D0BEVX2	HTX-2 high pressure inlet	Mark One 1"	Valtek	Control Valve	He FRIDGE	600 PSIG, Equal %	Cv = 3.80
D0BEVXBY	Refer Valve Box He Dewar Bypass C	CV8283	Cryolab/FNAL	Control Valve	He FRIDGE	300 psig Op. Press.	Cv = 2.0, =%
D0BEVXJT	Refer Valve Box He JT Control Valve	CV8283	Cryolab/FNAL	Control Valve	He FRIDGE	300 psig Op. Press.	Cv = 0.2, LIN.
D0BEVXLN	LN2 supply to HX	1650-MD-167453	FNAL	Control Valve	He FRIDGE	min 350 psi	Cv = 0.5, LIN.
D0BLLXLN	HTX-1 LN2 level	1151DP3E22M3B1	Rosemount	DPT	He FRIDGE	2000 psi	0-6 "H2O
D0BPDEW	Helium Dewar Pressure Transmitter	1151GP5E22B1	Rosemount	Pressure Transmitter	He FRIDGE	2000 psi	0-25 PSIG
D0BPSTORH	GHe Storage Vessel pressure	PX725-300GI	Omega	Pressure Transmitter	He FRIDGE	300 psi	0-300 psig
D0BPX2HP	HTX-2 high press He exit pressure	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	750 psi	0-500 psig

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D0BPX3HP	HTX-3 high press He exit pressure	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	750 psi	0-500 psig
D0BPX4HP	HTX-4 high press He exit pressure	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	750 psi	0-500 psig
D0BPXHP	Heat Exchanger HP inlet	PX725-500GI	Omega	Pressure Transmitter	He FRIDGE	500 psi	0-500 psig
D0BPXLP	HTX-2 He suction pressure	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	50 psi	0-25 PSIG
D0BRDEIN	Dry Engine inlet RTD	CX-1030-AA-4L	Lakeshore	Cernox RTD	He FRIDGE	N/A	Ser# X07784
D0BRDEOUT	Dry Engine outlet RTD	CX-1030-AA-4L	Lakeshore	Cernox RTD	He FRIDGE	N/A	Ser# X07785
D0BRWEIN	Wet Engine Inlet RTD	CX-1030-LR-4L	Lakeshore	Cernox RTD	He FRIDGE	N/A	Ser# X03605
D0BRWEOUT	Wet Engine outlet RTD	CX-1030-AA-4L	Lakeshore	Cernox RTD	He FRIDGE	N/A	Ser# X07783
D0BRXLN	STAR HX N2 vent Temperature	PT-100	Lakeshore	Pt RTD	He FRIDGE	N/A	100 Ohm
D0BRXLN2	HTX-1 LN2 boiloff temp	1/2" LB FORM 85	Appleton Electronic	Pt RTD	He FRIDGE	N/A	100 Ohm
D0BRXLP	HTX-2 He suction temperature	N/A	N/A	Pt RTD	He FRIDGE	N/A	100 Ohm
D0BRXOUT1	HTX-2 upper temperature	PT-100	Lakeshore	Pt RTD	He FRIDGE	N/A	100 OHM
D0BRXOUT2	HTX-2 lower temperature	PT-100	Lakeshore	Pt RTD	He FRIDGE	N/A	100 OHM
D0BTX1HP	HTX-1 high press He exit temp - read	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX2HP	HTX-2 high press He exit temp - read	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX2LP	HTX-2 Shell inlet temp - reads	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX2SHL	HTX-2 Shell temp - reads Ar VPT	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX3HP	HTX-3 high press He exit temp - read	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX3LP	HTX-3 Shell inlet temp - reads H2 VP	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX4HP	HTX-4 high press He exit temp - read	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTX4LP	HTX-4 Shell He inlet temp - reads He	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0BTXDELP	HTX-4 Shell inlet temp from Dry Eng -	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	150 psi	0-100 psig
D0EVDW	Helium Dewar Bypass Return Control	1650-MD-167453	FNAL	Control Valve	He FRIDGE	min 350 psi	Cv=2.0,=%
D0EVHIDIS	Compressor discharge to suction	Mark One 1"	Valtek	Control Valve	He FRIDGE	600 PSIG, Equal %	Cv = 3.80
D0EVHISUC	Compressor discharge to storage	Mark One 1"	Valtek	Control Valve	He FRIDGE	600 PSIG, Equal %	Cv = 2.80
D0EVLOSUC	Compressor suction make up from st	Mark One 1"	Valtek	Control Valve	He FRIDGE	600 PSIG, equal %	Cv = 8.50
D0EVMF	Solenoid helium supply control valve	CV2288	Cryolab	Control Valve	SOLENOID	300 PSIG	Cv = .32 =%
D0FSTOR	GHe Bi-directional flow from storage	HFM-200B	Hastings	Flow Transmitter	He FRIDGE	500 PSI	-10 TO 10 GRAMS/SE
D0FX1HP	Mass Flow to HTX 1	HFM-200B FOR LF	Hastings	Flow Transmitter	He FRIDGE	500 PSI	-10 TO 10 G/S HELIUM
D0FXHP	pressure dif. across FO-2019-H	1151DP4E22B1	Rosemount	DPT	He FRIDGE	2000 PSI	0-5 PSID
D0LLDEW	Helium Dewar Helium Level Transmitter	1151DP3E22B1	Rosemount	DPT	He FRIDGE	2000 PSI	0-9 "H2O
D0PCPDIS	Compressor discharge pressure	PX725-500GI	Omega	Pressure Transmitter	He FRIDGE	1500 PSI	0-500 PSIG
D0PCPSUC	Compressor suction pressure	PX725-400WCGI	Omega	Pressure Transmitter	He FRIDGE	1200 "H2O	0-400 "H2O
DPT-2616-N	He purifier LN2 jacket level transmitter	1151DP4E22B5I5	Rosemount	DPT	He FRIDGE	2000 psi	0-150 "H2O
DPT-2775-N	LN2 Dewar For He System Level Transmitter	1151DP5E22B1	Rosemount	DPT	He FRIDGE	2000 PSI	0-10 PSID
EH-4321	VLPC East Cryostat Lid North Heater	0.125 OD Cable He	Watlow	Heater	VLPC	1500W = 208VAC	131" in Length, "J" TC
EH-4323	VLPC East Cryostat Lid South Heater	0.125 OD Cable He	Watlow	Heater	VLPC	1000W = 208VAC	96" in Length, "J" TC

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EH-4421	VLPC West Cryostat Lid North Heater	0.125 OD Cable He	Watlow	Heater	VLPC	1500W = 208VAC	131" in Length, "J" TC
EH-4422	VLPC West Cryostat Lid South Heater	0.125 OD Cable He	Watlow	Heater	VLPC	1000W = 208VAC	96" in Length, "J" TC
EV-2000-H	Heat Exchanger Isolation (Ball valve)	2" 5966PTSW	Worcester	Control Valve	He FRIDGE	720 psig	Series 39, Model 30 AC
EV-2004-H	Helium Storage Tank (L.P.S.) Isolation	1" 5966PTSW	Worcester	Control Valve	He FRIDGE	1500 psig	Series 39, Model 15 AC
EV-2335-A	EV-2336-H air supply control (120VA)	V53ADB2150	Skinner	Solenoid Valve	He FRIDGE	150 psi	
EV-2336-H	Dry Engine supply shut-off	T1068	Badger Meter	Solenoid Valve	He FRIDGE	4000 psi	
EV-2350-A	Wet Engine Inlet Isolation Control Sol	V53ADB2150	Skinner	Solenoid Valve	He FRIDGE	150 psi	
EV-2351-H	Wet Engine Inlet Isolation Valve	T1068	Badger Meter	Solenoid Valve	He FRIDGE	4000 psi	
EVL1	Solenoid emergency lead flow protection	713N4A2A	Skinner	Solenoid Valve	SOLENOID	1500 psi	Air to Whitey B63TF8
EVL2	Solenoid emergency lead flow protection	713N4A2A	Skinner	Solenoid Valve	SOLENOID	1500 psi	Air to Whitey B63TF8
FI-2807-H	Arc cell flow		AALBORG WST.	Flow Meter	He FRIDGE		
FI-3421-H	Solenoid leads flow flowmeter	40-400scfh air RMC	Dwyer	Flow Meter	He FRIDGE	design flow=6.4 scf	1.8 to 18scfm He
FI-3422-H	Solenoid leads flow flowmeter	40-400scfh air RMC	Dwyer	Flow Meter	He FRIDGE	design flow=6.4 scf	1.8 to 18scfm He
FI-4268-H	East stagnant helium volume			Flow Meter	VLPC		
FI-4269-H	West stagnant helium volume			Flow Meter	VLPC		
FT-2040-H	High pressure helium to subcooler	HFM-200B	Hastings	Flow Transmitter	He FRIDGE	500 PSIG MAX	-10 TO 10 G/S HELIUM
FT-3253-H	Solenoid He Magnet Flow	1151DP4E22B515	Rosemount	DPT	SOLENOID	2000 psi	0-150 "H2O
FT-4052-H	VLPC Valve Box AT Refer He Return	1151DP4E22B1	Rosemount	DPT	VLPC	2000 psi	0-50 "H2O
FT-4053-H	VLPC Valve Box AT Refer He Return	1151DP4E22B1	Rosemount	DPT	VLPC	2000 psi	0-50 "H2O
FT-4278-H	VLPC stagnant helium volumes			Flow Transmitter	VLPC		
FTCLF1H	Solenoid Lead Flow Controller	HFC 203	Hastings	Control Valve	SOLENOID	500 psi	0-1.1 g/s
FTCLF2H	Solenoid Lead Flow Controller	HFC 203	Hastings	Control Valve	SOLENOID	500 psi	0-1.1 g/s
HTRDEW	Helium Dewar Heater	SJ120H-767	Watlow	Heater	He FRIDGE	1000 Watts	120 VAC
HTRLF1	Sol Lead Flow #1 (East) Helium Heat	125CH65A26X	Watlow	Heater	He FRIDGE	675 Watts	240 Volts
HTRLF2	Sol Lead Flow #2 (West) Helium Heat	125CH65A26X	Watlow	Heater	He FRIDGE	675 Watts	240 Volts
LI-2500-H	Liquid helium storage level gage	Custom	Cryofab/Dwyer	Pressure Indicator	He FRIDGE	75 psig	0-3200 Liters
LI-2617-N	LN2 jacket level on helium purifier	4150C	Dwyer	Pressure Indicator	He FRIDGE	500 psi	0-150 "H2O
LI-2773-N	LN2 Dewar 39		ITT Barton	Pressure Indicator	He FRIDGE	500 psi	0-400 "H2O
LL-2726-N	Subcooler LN2 level	184	American Magnetic	Level Transmitter	He FRIDGE	N/A	24" Probe, Model 180
LL-3250A-H	Control dewar liquid level	3D-050	American Magnetic	Level Transmitter	SOLENOID	N/A	50 cm Active Length
LL-3250B-H	Control dewar liquid helium level	3D-050	American Magnetic	Level Transmitter	SOLENOID	N/A	50 cm Active Length
MV-2003-H	Compressor suction to UV Header			Manual Valve	He FRIDGE		
MV-2004-H	Block and bleed D0FXHP	MM1RDB2 028172	Anderson Greenwo	Manual Valve	He FRIDGE	3000 psi	
MV-2005-H	Purifier bypass, compressor discharge	SS 65 TSW 32 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	N/A
MV-2006-H	Purifier outlet, compressor discharge	SS 65 TSW 32 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	N/A
MV-2007-H	Purifier inlet, compressor discharge	SS 65 TSW 32 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	N/A
MV-2011-H	unused tap from suction header	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42

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MV-2012-H	PI-2014-H isolation valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	3000 psi	
MV-2018-H	Utility feed can	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-2022-H	GHe storage purge to atm.	SS 65TF16	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 38
MV-2025-H	DOPCPSUC isolation	B 4HK2	Nupro	Manual Valve	He FRIDGE	3000 psi	
MV-2026-H	GHe cooldown supply vacuum port	SS 63 TSW 8 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 15
MV-2029-H	PI-2042-H and PT-2043-H isolation	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = 28
MV-2046-H	DQBPXHP isolation valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	D0 Fabrication	Cv = 28
MV-2052-H	GHe storage vessel to tube trailer	S/N 18604-1-3	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2053-H	Ghe tank fill line aux. tap	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = 28
MV-2055-H	GHe storage shut off	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2063-H	PI-2073-H isolation	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2064-H	DOPCPDIS isolation	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = 28
MV-2065-H	Tube trailer inlet	S/N 18604-1-7	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2066-H	Tube trailer purge valve	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2067-H	Tube trailer inlet	S/N 18604-1-1	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2068-H	Tube trailer purge valve	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2070-H	Ghe tube trailer isolation	S/N 18604-1-11	Control Component	Manual valve	He FRIDGE	3000 psi	
MV-2075-H	Ghe tube trailer isolation	S/N 18604-1-4	Control Component	Manual valve	He FRIDGE	3000 psi	
MV-2076-H	GHe storage tank PI and PT block val	B 4HK2	Nupro	Manual Valve	He FRIDGE	3000 psi	Cv = 28
MV-2077-H	GHe storage tank drain	12141	Henry Vogt Mach C	Manual Valve	He FRIDGE	1975 psi	
MV-2078-H	Ghe tube trailer fill station block valve	S/N 18604-1-6	Control Component	Manual valve	He FRIDGE	3000 psi	
MV-2079-H	Ghe tube trailer line PI block valve	2152F8Y	Hoke	Manual valve	He FRIDGE	6000 psi	Cv = 1.20
MV-2081-H	Ghe Tube trailer manifold valve	S/N 18604-1-8	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2082-H	Ghe Tube trailer line PI block valve	2152F8Y	Hoke	Manual Valve	He FRIDGE	6000 psig	Cv = 1.20
MV-2084-H	Ghe Tube trailer to purity monitor	SS-4P4T4	Nupro	Manual Valve	He FRIDGE	3000 psi	Cv = .9
MV-2085-H	Ghe tube trailer line #2 PI block valve	2152F8Y	Hoke	Manual Valve	He FRIDGE	6000 psig	Cv = 1.20
MV-2087-H	Ghe tube trailer line #1 PI block valve	2152F8Y	Hoke	Manual Valve	He FRIDGE	6000 psig	Cv = 1.20
MV-2089-H	He storage area valve	S/N 18604-1-12	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2090-H	He storage area valve	2152F8Y	Hoke	Manual Valve	He FRIDGE	6000 psig	Cv = 1.20
MV-2092-H	He storage area valve	S/N 18604-1-2	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2093-H	He storage area valve	S/N 18604-1-	Control Component	Manual Valve	He FRIDGE	3000 psi	
MV-2094-H	He storage area valve	51B	PH	Manual Valve	He FRIDGE		
MV-2095-H	GHe storage shut off	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2096-H	He storage area valve	2152F8Y	Hoke	Manual Valve	He FRIDGE	6000 psig	
MV-2098-H	He storage area valve	N/A	Whitey	Manual Valve	He FRIDGE	N/A	
MV-2102-H	HP manifold isolation valve	CF-8M	Nibco	Manual Valve	He FRIDGE	800 psi WOG	
MV-2106-H	HTX-2 HP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36

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MV-2107-H	HTX-1 HP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2108-H	LP Manifold isolation valve	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2109-H	HTX-2 HP inlet division	8BK-TW	Nupro	Manual Valve	He FRIDGE		Cv = 1.2
MV-2110-H	LP Manifold to Vent	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	Cv = 42
MV-2123-H	HTX-3 HP inlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2124-H	HTX-3 HP inlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2125-H	HTX-3 HP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2127-H	Utility feed can	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi WOG	
MV-2129-H	Utility feed can)	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi WOG	
MV-2133-H	Dry Engine inlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2134-H	Dry Engine inlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2135-H	Dry Engine inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2136-H	HX port to Dry Engine	400 WOG	Nibco	Manual Valve	He FRIDGE	400 psi	
MV-2145-H	BPX2LPH compressor suction isolation	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2151-H	HX port to Valve Box	400 WOG	Nibco	Manual Valve	He FRIDGE	400 psi	
MV-2152-H	Refer Valve box He inlet Valve	1- 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2153-H	HX HP outlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2154-H	HX HP outlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2155-H	HX HP outlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2156-H	Refer Valve Box He HP to Wet Engin	1- 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2157-H	Refer Valve Box He Inlet Vent Valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2163-H	Wet Engine Inlet Isolation	CV8 86 5WTG2	Dyna Quip	Manual Valve	He FRIDGE	275 psig	
MV-2222-N	HTX-1 LN2 block n' bleed	MM1RDB2	Anderson Greenwo	Manual Valve	He FRIDGE	3000 psi	
MV-2223-H	HTX-2 LP inlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2224-H	HTX-2 LP inlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2225-H	HTX-2 LP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2233-H	HTX-3 LP inlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2234-H	HTX-3 LP inlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2235-H	HTX-3 LP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2247-H	HX port from Dry Engine	400 WOG	Nibco	Manual Valve	He FRIDGE	400 psi	
MV-2251-H	HX port from Valve Box	400 WOG	Nibco	Manual Valve	He FRIDGE	400 psi	
MV-2252-H	Refer Valve Box He return to HX	1 -1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2253-H	HX LP inlet to manifolds	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2254-H	HX LP inlet to HP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2255-H	HX LP inlet to LP manifold	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2257-H	Refer Valve Box He Bypass Return (1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2258-H	Refer Valve Box He return form VLPC	1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
MV-2259-H	Refer Valve Box He return to Vent	1/4" Bellows	Nupro	Manual Valve	He FRIDGE		
MV-2260-V	HX vacuum gage isolation valve	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2261-V	HX vacuum jacket pumpout port	1010	Airco	Manual Valve	He FRIDGE		
MV-2266-H	Refer Valve Box He return from engin	1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2267-H	Refer Valve Box He Supply to Dewar	1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2268-H	Refer Valve Box He return (unused b	1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2269-H	Refer Valve Box He Return (unused B	1 1/2" Ball Valve	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2281-V	Refer Valve Box Vacuum Instrumenta	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2283-V	Refer Valve Box Vacuum Shell Pump	1010-V	Airco	Manual Valve	He FRIDGE		
MV-2300-V	Dry Engine VJ pumpout port	V-1046-31	CVI	Manual Valve	He FRIDGE	N/A	
MV-2301-V	Wet Engine VJ pumpout port	V-1046-31	CVI	Manual Valve	He FRIDGE	N/A	
MV-2336-H	Dry Engine inlet port	B 400	Dyna Quip	Manual Valve	He FRIDGE	400 psi	
MV-2337-H	Dry Engine gage line purge valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2338-H	Charging Valve for TI-2338-H	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2339-H	HX to Dry Engine U-Tube	CV8 86 5WTG2	Cryolab	Manual Valve	He FRIDGE	275 psi	
MV-2345-H	Charging Valve for TI-2345-H	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2346-H	Dry Engine gage line purge valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2347-H	Dry Engine outlet port	B 400	Dyna Quip	Manual Valve	He FRIDGE	400 psi	
MV-2351-H	Wet Engine Inlet Isolation Valve (Bay	B 400	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2352-H	Wet Engine Buffer Tank Pressure Ta	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2353-H	Wet Engine Buffer Tank VPT P&P Va	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2364-H	Wet Engine Outlet Pressure Tap	SS-4BK TW	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .36
MV-2365-H	Wet Engine Outlet Pressure Tap	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2366-H	Wet Engine Outlet Isolation Valve (Ba	B 400	Dyna Quip	Manual Valve	He FRIDGE	400 WOG	
MV-2512-H	LHe Dewar Gas Tap	C11	Apollo	Manual Valve	He FRIDGE	800 WOG	
MV-2513-H	Helium Dewar Pressure Tap to ATM	502	Lance	Manual Valve	He FRIDGE	2000 WOG	
MV-2520-H	LHe Dewar Heater Port	1 Piece	Apollo	Manual Valve	He FRIDGE	2000 WOG	
MV-2523-H	Low Press. -Gas Space	JN	Nupro	Manual Valve	He FRIDGE		
MV-2524-H	LN2 Dewar Gauge-block and bleed	8211F4Y	Hoke	Manual Valve	He FRIDGE	6000 psig	
MV-2525-H	High Press. -Liq. Head	EV N	Parker	Manual Valve	He FRIDGE		
MV-2550-V	Helium Dewar Vacuum Shell to ATM	SV7-88-5W1	Cryolab	Manual Valve	He FRIDGE	Crack Press=2 psig	
MV-2601-V	Vacuum Pumpout Port			Manual Valve	He FRIDGE		KF-40 ends
MV-2602-H	He purifier inlet blow down/purge	2"	Apollo	Manual Valve	He FRIDGE	100 WOG	conv. Port (1.5") 2" 85-
MV-2604-H	He purifier outlet blow down/purge	2"	Apollo	Manual Valve	He FRIDGE	100 WOG	conv. Port (1.5") 2" 85-
MV-2606-H	PI-2607-H isolation valve	1/4 SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 WOG	
MV-2613-N	He purifier LN2 jacket hi side tap	8211F4Y	Hoke	Manual Valve	He FRIDGE	6000 psi	Manifold Block "Rotofol
MV-2614-N	He purifier LN2 jacket lo side tap	8211F4Y	Hoke	Manual Valve	He FRIDGE	6000 psi	Manifold Block "Rotofol

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
MV-2615-N	He purifier DPT2616N equalization	8211F4Y	Hoke	Manual Valve	He FRIDGE	6000 psi	Manifold Block "Rotofol
MV-2618-N	He purifier LN2 jacket drain line	1/2 " ES2-084-2TP	Cryolab/NIBCO	Manual Valve	He FRIDGE	300 swp WOG	
MV-2626-H	PI-2627-H isolation valve	B-4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2629-H	He purifier inlet auxilliary port	SS-65TSW16P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	
MV-2630-H	He purifier outlet auxilliary port	SS-65TSW16P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	.875 bore
MV-2631-H	He purifier vent/blowdown	SS-65TSW16P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	.875 bore
MV-2632-H	He purifier regeneration port, vacuum	SS-65TSW12P	Whitey	Manual Valve	He FRIDGE	min 1500 psig	.875 bore
MV-2633-H	PI-2603 ISOLATION	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2634-H	PI-2605 ISOLATION	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2635-H	PI-2625 ISOLATION	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2639-V	He Purifier inner vacuum vessel, not u	CV8B-084-5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psi	
MV-2701-N	PI-2701-N isolation valve	B-4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2702-N	PI-2708-N isolation valve	B-4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2703-N	Purge valve on LN2 press. gage line	B-4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2705-N	Ln2 sub cooler bypass	CV3 84 5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-2714-N	PI-2717-N isolation	B-4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2715-N	Utility feed can	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-2716-N	Ln2 subcooler	CV3 84 5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-2719-N	Ln2 sub cooler supply isolation	CV3 84 5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-2720-N	Utility feed can	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-2730-N	Utility feed can	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-2732-N	Utility feed can	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-2740-N	Ln2 line from dewar to system shutoff	CV8 812 5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 34
MV-2741-N	"U" tube isolation near purifier	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	Cv = 143
MV-2742-N	pump out port on LN2 supply line	SS 63TSW 8P	Whitey	Manual Valve	He FRIDGE	600 psi	Cv = 15
MV-2744-N	LN2supply auxilliary withdrawal	CV3 84 5WPG2	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-2746-N	LN2 Dewar to LN2 Dewar connection	CV8B-088-5WPG2-	Cryolab	Manual Valve	He FRIDGE	275 psi	
MV-2753-N	PT-2755-N isolation	SS-4UG	Nupro	Manual Valve	He FRIDGE	2500 psi	Cv = .36
MV-2759-N	Unused port on Ln2 dewar fill line	9453DA	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2760-N	Ln2 dewar fill top	N/A	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2761-N	Ln2 fill line bottom	B-K9411 SE	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2766-N	PRV-2765-N to atmos Isolation	346 CF8M	Worchester	Manual Valve	He FRIDGE		
MV-2767-N	Unused port on Ln2 dewar	MV30T1-08P	Circle Seal	Manual Valve	He FRIDGE	3000 psi	
MV-2768-N	Blow Down valve	B-K9411 SE	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2771-N	Ln2 vaporizer outlet shutoff	N/A	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2772-N	Ln2 vaporizer supply shutoff	B-K9105 SE	Rego	Manual Valve	He FRIDGE	400 WOG	
MV-2773-N	LN2-Aux. Withdrawal	BHS2110247	Walworth	Manual Valve	He FRIDGE	700 WOG	

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
MV-2776-N	LL-2773-N bypass	MM1RDB2	Anderson Greenwo	Manual Valve	He FRIDGE	3000 psi	
MV-2778-N	DPT-2775-N block n' bleed	MM1RDB2	Anderson Greenwo	Manual Valve	He FRIDGE	3000 psi	
MV-2785-N	Rupture disk three way selector	11/2C4466PMSW	Worcester	Manual Valve	He FRIDGE	1500 psi	
MV-2791-V	Spare vacuum tap on Ln2 dewar	303-115	Grinnell	Manual Valve	He FRIDGE		
MV-2793-V	PT-2790-V isolation	N/A	Hoke	Manual Valve	He FRIDGE	N/A	
MV-2803-H	Arc cell pump block valve	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2804-H	Arc cell purge	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2806-H	Gas analyzer block valve	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2810-H	Compressor Discharge at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2811-H	Gas helium storage at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2815-H	PI-2808-H block valve	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2816-H	Tube trailer at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2820-H	LHe dewar at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2825-H	Solenoid lead flow at arc cell	SS-4BK-VCO	Nupro	Manual Valve	SOLENOID	1000 psi	
MV-2830-H	HTX LP manifold at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2835-H	Sample Block at arc cell	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-2910-V	Turbo Foreline Isolation	L9270313	Varian	Manual Valve	SOLENOID		Air Op.
MV-2911-V	Unused vacuum port isolation at D0 v		Worcester	Manual Valve	SOLENOID		
MV-2926V	Turbo Foreline Isolation	L9270313	Varian	Manual Valve	VLPC		Air Op.
MV-2935-V	PI-2934-V and PI-2936-V Isolate	L6591307	Varian	Manual Valve	VLPC	30 psi	
MV-2940-V	UV block valve at GHe cooldown HX	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	2200 psi	Cv = 42
MV-2943-V	UV block valve at Solenoid valve box	SS 65 TSW 16 P	Whitey	Manual Valve	He FRIDGE	2200 psi	Cv = 42
MV-2944-V	PI-2945-V block valve	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-2971-V	PI-2970-V and PI-2974-V isolation	L6591307	Varian	Manual Valve	SOLENOID	30 psi	
MV-3008-H	Solenoid Valve Box At Refer Pressure	B 4HK2	Nupro	Manual Valve	He FRIDGE	1000 psi	Cv = .28
MV-3015-N	Sol Assembly Hall Feedcan Helium(B	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3023-H	Solenoid Valve Box At Refer He Cool	CV1997B-084	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-3024-H	Solenoid Valve Box At Refer He Cool	CV1997B-084	Cryolab	Manual Valve	He FRIDGE	275 psig	Cv = 5.9
MV-3026-H	Sol Assembly Hall Feedcan Helium(B	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3037-N	Solenoid LN2 supply pump port	N/A	FNAL	Manual Valve	SOLENOID	N/A	
MV-3040-H	Solenoid Valve Box At Refer He Retur	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-3045-H	Sol Assembly Hall Feedcan Helium S	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3046-H	Sol Assembly Hall Feedcan Helium R	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3050-V	Solenoid Valve Box At Refer Vacuum	V-1046-31	CVI	Manual Valve	He FRIDGE	N/A	
MV-3052-V	Sol Assembly Hall Feedcan Vacuum	V-1046-31	CVI	Manual Valve	SOLENOID	N/A	
MV-3055-N	Solenoid Valve Box At Refer N2 to Ve	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-3060-N	Solenoid Valve Box At Refer LN2 Sup	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	

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MV-3063-H	solenoid, assy hall feed can	CV2288	Cryolab	Manual Valve	SOLENOID	Equal %	Cv=2.0
MV-3065-H	Solenoid Valve Box At Refer He Supp	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-3080-H	Sol Valve Box At Refer,Cooldown Su	S-595-Y-66	Nibco	Manual Valve	He FRIDGE	600 psi	
MV-3105-H	Solenoid feed can LN2 supply to"U"tu	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3115-H	Solenoid feed can LN2 return to"U" tu	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3135-H	Cooldown/quench He return at soleno	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3140-H	Solenoid feed can, He return to"U" tu	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3145-H	Solenoid feed can, He supply to"U"tu	S-595-Y-66	Nibco	Manual Valve	SOLENOID	600 psi	
MV-3146-H	Solenoid coll hall fd can helium sup./ r	CV2288	Cryolab	Manual Valve	SOLENOID	Equal %	Cv=2.0
MV-3205-N	Solenoid LN2 return to "U" tube isolati	T-560-R-66	Nibco	Manual Valve	SOLENOID		
MV-3215-N	Solenoid LN2 return to "U" tube isolat	T-560-R-66	Nibco	Manual Valve	SOLENOID		
MV-3217-H	PT-3218-H isolation		Whitey	Manual Valve	SOLENOID		
MV-3221-N	PT-3222-N isolation		Whitey	Manual Valve	SOLENOID		
MV-3228-H	PI-3259-V and PI-3229-V Isolation	L6591307	Varian	Manual Valve	SOLENOID		
MV-3235-H	Control dewar He cldn./quench "U"tub	T-560-R-66	Nibco	Manual Valve	SOLENOID		
MV-3240-H	Control dewar helium return to "U" tub	T-560-R-66	Nibco	Manual Valve	SOLENOID		
MV-3241-H	PT-3242-H isolation		Whitey	Manual Valve	SOLENOID		
MV-3245-H	Control dewar helium return to "U" tub	T-560-R-66	Nibco	Manual Valve	SOLENOID		
MV-3254-H	Solenoid flow venturi block and bleed	MM1RDB2 028172	Anderson Greenwo	Manual Valve	SOLENOID	3000 psi	
MV-3257-H	Control dewar Pt-3258-H isolation		Whitey	Manual Valve	SOLENOID		
MV-3263-H	Control dewar PT-3264-H isolation		Whitey	Manual Valve	SOLENOID		
MV-3400-H	Solenoid Lead Flow Isolation	SS-65TSW16P	Whitey	Manual Valve	SOLENOID	min 1500 psig	Cv = 42
MV-3405-H	Solenoid Lead Flow Controller Bypas	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-3406-H	Solenoid Lead Flow Controller Bypas	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-3408-H	Sol Lead Flow Controller Isolation	SS-65TSW12P	Whitey	Manual Valve	SOLENOID	min 1500 psig	Cv = 36
MV-3409-H	Sol Lead Flow Controller Isolation	SS-65TSW12P	Whitey	Manual Valve	SOLENOID	min 1500 psig	Cv = 36
MV-3411-H	Solenoid Lead Flow Controller Isolatio	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-3412-H	Solenoid Lead Flow Controller Isolatio	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-3416-H	Solenoid Lead Flow Controller Isolatio	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-3417-H	Solenoid Lead Flow Controller Isolatio	K-595-S6-R-66	Nibco	Manual Valve	SOLENOID	800 WOG	Cv = 5.8
MV-4001-H	VLPC Valve Box AT Refer PT4057-H	B 4HK2	Nupro	Manual Valve	VLPC	1000 psi	Cv = .28
MV-4003-H	VLPC Valve Box AT Refer PT4058-H	B 4HK2	Nupro	Manual Valve	VLPC	1000 psi	Cv = .28
MV-4005-H	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4010-H	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4011-H	VLPC Valve Box AT Refer He Return	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4012-H	VLPC Valve Box AT Refer He Return	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4013-H	VLPC Valve Box AT Refer He Return	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8

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MV-4014-H	VLPC Valve Box AT Refer He Return	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	
MV-4015-N	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4018-V	VLPC Assembly Hall Feed Can Vacu	V-1046-31	CVI	Manual Valve	VLPC	N/A	
MV-4019-H	Helium Return Line (Transfer Line Val	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4020-H	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4021-H	VLPC Valve Box AT Refer He Supply	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4022-H	VLPC Valve Box AT Refer He Supply	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4023-H	VLPC Valve Box AT Refer He Supply	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4024-H	VLPC Valve Box AT Refer He Supply	CV1997B-084	Cryolab	Manual Valve	VLPC	300 psig	Cv = 8
MV-4030-N	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4035-H	VLPC Assembly Hall Feed Can (Bayo	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4040-H	VLPC Valve Box AT Refer (Bayonet)	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4042-N	Pump port at VLPC valve box, LN2 su	V-1046-31	CVI	Manual Valve		N/A	
MV-4045-H	VLPC Valve Box AT Refer (Bayonet)	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4049-N	VLPC LN2 supply valve	CV0-88	Cryolab	Manual Valve	VLPC	150 psi	
MV-4050-N	LN2 Supply Line (Bayonet) VLPC Val	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4059-H	VLPC turnaround u-tube valve	CV3 84 5WPG2	Cryolab	Manual Valve	VLPC	275 psig	Cv = 5.9
MV-4062-H	FT-4052-H Block & Bleed	8211F4Y	Hoke	Manual Valve	VLPC	6000 psig	
MV-4063-H	FT-4053-H Block & Bleed	8211F4Y	Hoke	Manual Valve	VLPC	6000 psig	
MV-4065-N	VLPC Valve Box AT Refer (Bayonet)	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4070-H	VLPC Valve Box AT Refer (Bayonet)	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4075-H	VLPC Valve Box AT Refer (Bayonet)	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4080-V	VLPC Valve Box AT Refer Vacuum S	V-1046-31	CVI	Manual Valve	VLPC	N/A	
MV-4105-H	VLPC collision hall feed can west He	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4110-H	VLPC collision hall feed can east He r	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4115-N	VLPC collision hall feed can LN2 sup	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4120-H	VLPC collision hall feed can west heli	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4130-N	VLPC collision hall feed can LN2 retur	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4135-H	VLPC collision hall feed can east heli	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4205-H	VLPC west He return to "U" tube isola	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4210-H	VLPC east He return to "U" tube isolati	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4215-N	VLPC LN2 supply to "U" tubu isolatio	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4220-H	VLPC west He supply to "U" tube isol	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4230-N	VLPC LN2 return to "U" tube isolatio	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4235-H	VLPC east He supply to "U" tube isol	S-595-Y-66	Nibco	Manual Valve	VLPC	600 psi	
MV-4254-V	PI-4251-V and PI-4252-V isolate	L6591307	Varian	Manual Valve	VLPC	30 psi	
MV-4255-V	Unused vacuum port on VLPC	V-1046-31	CVI	Manual Valve	VLPC	N/A	

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
MV-4265-V	Auxiliary VLPC vacuum jacket tap iso	V-1046-31	CVI	Manual Valve	VLPC	N/A	
MV-4271-H	East stagnant helium volumn shutoff			Manual Valve	VLPC		
MV-4273-H	East stagnant He volumnto U V head			Manual Valve	VLPC		
MV-4274-H	West stagnant He volumn to U V hea			Manual Valve	VLPC		
MV-4276-H	West stagnant helium volummn shuto			Manual Valve	VLPC		
MV-4280-H	Stagnant volumn helium supply shuto			Manual Valve	VLPC		
MV-4324-H				Manual Valve			
MV-4424-H				Manual Valve			
MV-CAL1-H	Arc Cell Calibration Isolation Gas Val	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
MV-CAL2-H	Arc Cell Calibration Isolation Gas Val	SS-4BK-VCO	Nupro	Manual Valve	He FRIDGE	1000 psi	
PI-2014-H	Suction Header pressure, trapped vol	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 15 psi	0-15 psig
PI-2027-H	High pressure helium line after FO-20	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 400 psi	0-400 psig
PI-2042-H	High pressure helium to Ln2 subcoole	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 400 psi	0-400 psig
PI-2051-H	GHe Storage Vessel pressure	N/A	Marshalltown	Pressure Indicator	He FRIDGE	0-400 psig	0-400 psig
PI-2072-H	GHe storage fill pressure from tube tr	N/A	Ashcroft	Pressure Indicator	He FRIDGE	0-600 psig	0-600 psig
PI-2073-H	Tube trailer pressure	N/A	Acco	Pressure Indicator	He FRIDGE		0-3000 psi
PI-2080-H	Tube trailer pressure indicator	N/A	Acco	Pressure Indicator	He FRIDGE		0-3000 psi
PI-2083-H	Tube Trailer line #2 pressure indicator	N/A	Acco	Pressure Indicator	He FRIDGE		0-3000 psi
PI-2086-H	Ghe tube trailer line #2 pressure indic	N/A	Acco	Pressure Indicator	He FRIDGE		0-3000 psi
PI-2088-H	Ghe tube trailer line #1 presssure indi	N/A	Ashcroft	Pressure Indicator	He FRIDGE		0-3000 psi
PI-2158-H	Refrig valve box inlet pressure	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 400 psi	0-400 psig
PI-2256-H	Refrig valve box return pressure	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 30 psi	30-0-30 psig
PI-2260-V	Heat Exchanger VJ vacuum gage	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	N/A	
PI-2280-V	Refer Valve Box Local Thermocouple	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-2300-V	Dry Engine VJ vacuum gage	DV6-R (#270006)	Granville Phillips	Pressure Indicator	He FRIDGE	30 psi	
PI-2301-V	Wet Engine Vacuum Shell Local Ther	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-2337-H	Dry Engine buffer tank pressure	Dial No. 33008	U.S. Gauge	Pressure Indicator	He FRIDGE	min 400 psi	0-400 psig
PI-2346-H	Dry Engine exit pressure	Dial No. 33020	U.S. Gauge	Pressure Indicator	He FRIDGE	min 30 psi	30-0-30 psig
PI-2352-H	Wet Engine Buffer Tank Pressure	Dial No. 33008	U.S. Gauge	Pressure Indicator	He FRIDGE	min 400 psi	0-400 psig
PI-2365-H	Wet Engine Outlet Pressure	Dial No. 33020	U.S. Gauge	Pressure Indicator	He FRIDGE	min 30 psi	30-0-30 psig
PI-2512-V	Helium Dewar Vessel Thermocouple	DV6R	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-2550-V	Helium Dewar Vacuum Shell Thermo	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-2551-H	Helium Dewar Pressure Gage	Duralife	Ashcroft	Pressure Indicator	He FRIDGE	min 100 psi	30-0-100 psig
PI-2603-H	Helium inlet pressure to he purifier	1900 series 4.5"	Solfrunt	Pressure Indicator	He FRIDGE	400 psig min	0-400 psig
PI-2605-H	Helium outlet pressure from he purifie	1900 series 4.5"	Solfrunt	Pressure Indicator	He FRIDGE	400 psig min	0-400 psig
PI-2607-H	Adsorber outlet pressure in he purifier	1900 series 4.5"	Solfrunt	Pressure Indicator	He FRIDGE	400 psig min	0-400 psig
PI-2624-V	He purifier vacuum jacket	DV6R	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
PI-2625-N	LN2 jacket pressure in he purifier	1900 series 4.5"	Solfrunt	Pressure Indicator	He FRIDGE	400 psig min	0-100 psig
PI-2627-H	He adsorber bed outlet pressure, he p	1900 series 4.5"	Solfrunt	Pressure Indicator	He FRIDGE	400 psig min	0-400 psig
PI-2638-V	He Purifier Outer Vacuum Vessel The	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-2717-N	LN2 SUBCOOLER PRESSURE	PHC	Marsh Inst. Co.	Pressure Indicator	He FRIDGE	min 60 psi	30-0-60 psig
PI-2755-N	LN2 Dewar Pressure For He System	Test gage	Ashcroft	Pressure Indicator	He FRIDGE	min 100 psi	0-100 psig
PI-2801-H	Arc Cell Calibration Cylinder Pressure	Custom	U.S. Gauge	Pressure Indicator	He FRIDGE	min 4000 psi	0-4000 psig
PI-2802-H	Arc Cell Calibration Cylinder Pressure	Custom	U.S. Gauge	Pressure Indicator	He FRIDGE	min 4000 psi	0-4000 psig
PI-2808-H	Arc cell pressure	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 60 psi	0-60 psig
PI-2945-V	UV header pressure at Refrigerator	Helicoid	ACCO	Pressure Indicator	He FRIDGE	min 15 psi	30-0-15 psig
PI-3050-H	Solenoid Valve Box At Refer Vacuum	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PI-3052-V	Sol Assembly Hall Feedcan Vacuum	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	SOLENOID	30 psi	
PI-4018-V	VLPC Assembly Hall Feed Can Vacu			Vacuum Thermocou	VLPC		
PI-4080-V	VLPC Valve Box AT Refer Vacuum S	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	VLPC	30 psi	
PI-4255-V	VLPC vacuum jacket			Vacuum Thermocou	VLPC		
PI-4265-V	VLPC vacuum jacket			Vacuum Cold Catho	VLPC		
PI-4270-H	Supply to stagnant helium volumns			Pressure Indicator	VLPC		
PI-4275-H	Supply to stagnant helium volumns			Pressure Indicator	VLPC		
PI-4316-H	East VLPC Stagnant He Volume			Pressure Indicator	VLPC		
PI-4416-H	West VLPC Stagnant He Volume			Pressure Indicator	VLPC		
PI-CAL1-H	Arc Cell Calibration Regulator outlet p	Custom	U.S. Gauge	Pressure Indicator	He FRIDGE	min 60 psi	0-60 psig
PI-CAL2-H	Arc Cell Calibration Regulator outlet p	Custom	U.S. Gauge	Pressure Indicator	He FRIDGE	min 60 psi	0-60 psig
PRV-2062-H	GHe storage regulator, from tube trail	302G	Grove	Pressure Regulator	He FRIDGE	2500psi in 350max	46,000scfh He @ 100 p
PRV-2091-H	Ghe Fill Station			Pressure Regulator		120 psig	
PRV-2765-N	Ln2 Vaporizer outlet to atmos regulat	S/N 13784 MF	Cash Acme	Pressure Regulator	He FRIDGE	set 50 psi	10-70 psi
PRV-2770-N	Ln2 Vaporizer supply regulator	B(# 2300 ND)	Cash Acme	Pressure Regulator	He FRIDGE	set 30 pssi	20-70 psi
PRV-2805-H	Sample at arc cell	VTS450D	Victor	Pressure Regulator	He FRIDGE	3000 psi	
PRV-4270-H	Helium supply to stagnant volume			Pressure Regulator	VLPC	100psi in = 1psi out	Two stage ?
PRV-4275-H	Helium supply to stagnant volume			Pressure Regulator	VLPC		
PRV-CAL1-H	Arc Cell Calibration Gas Suply Regul	VTS450D	Victor	Pressure Regulator	He FRIDGE	3000 psi	
PRV-CAL2-H	Arc Cell Calibration Gas Suply Regul	VTS450D	Victor	Pressure Regulator	He FRIDGE	3000 psi	
PS-2737-N	Overpressure shut-off switch	H100-270	United Electric Cont	Pressure Transmitt	He FRIDGE	set 55 psi	24-200 psi
PT-2043-H	High pressure helium to subcooler pr	PX725-100GI	Omega	Pressure Transmitt	He FRIDGE	1500 psi	0-500 PSIG
PT-2058H	Helium Tube Trailer Pressure	PX725-3KGI	Omega	Pressure Transmitt	He FRIDGE	4500 psi	0-3000 PSIG
PT-2059H	Helium Tube Trailer Pressure	PX725-3KGI	Omega	Pressure Transmitt	He FRIDGE	4500 psi	0-3000 PSIG
PT-2071-H	GHe storage fill pressure from tube tr	PX725-500GI	Omega	Pressure Transmitt	He FRIDGE	1500 psi	0-500 PSIG
PT-2337-H	Dry Engine cylinder #1 press. trace	102A11	PCB	Pressure Transmitt	He FRIDGE	1000 psi MW	0-1000 psig
PT-2338-H	Dry Engine cylinder #2 press. trace	102A11	PCB	Pressure Transmitt	He FRIDGE	1000 psi MW	0-1000 psig

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
PT-2354-H	Wet Engine Cylinder #1 Press. trace	102A11	PCB	Pressure Transmitter	He FRIDGE	1000 psi MW	0-1000 psig
PT-2355-H	Wet Engine Cylinder #2 Press. trace	102A11	PCB	Pressure Transmitter	He FRIDGE	1000 psi MW	0-1000 psig
PT-2700-N	LN2 Subcooler exit pressure	PX725-100Gi	Omega	Pressure Transmitter	He FRIDGE	300 psi	0-100 PSIG
PT-2708-N	Heat Exchanger LN2 supply pressure	C-207	Setra Systems, Inc.	Pressure Transmitter	He FRIDGE	3000 psig	0-50 PSIG
PT-2756-N	LN2 Dewar For He System Pressure	1151GP6E22B1	Rosemount	Pressure Transmitter	He FRIDGE	2000 psi	0-75 PSIG
PT-2790-V	LN2 Dewar For He System Vacuum T	DV6-R (#270006)	Granville Phillips	Vacuum Thermocou	He FRIDGE	30 psi	
PT-2921-V	VLPC turbo to D0 vacuum headers	275 Mini Convectro	Granville Phillips	Vacuum Thermocou	VLPC		Part # 20275-374-01
PT-2925-V	VLPC turbo pump	PKR250	Balzers	Vacuum Cold Catho	VLPC	130 psi	Cat#BGG20002
PT-2934-V	VLPC turbo pump	PKR250	Balzers	Vacuum Cold Catho	VLPC	130 psi	Cat#BGG20002
PT-2946-V	Vacuum Transmitter 4-20 mA	20275-374	Granville Phillips	Vacuum Transmitter	He FRIDGE	0-1000 Torr	
PT-2970-V	Sol & VLPC Turbo Common Header	PKR250	Balzers	Vacuum Thermocou	SOLENOID	130 psi	Cat#BGG20002 10E-9
PT-2973-V	Solenoid turbo vacuum Exhaust to Me	275 Mini Convectro	Granville Phillips	Vacuum Thermocou	SOLENOID		Part # 20275-374-01
PT-2975-V	Solenoid turbo Inlet vacuum	PKR250	Balzers	Vacuum Thermocou	SOLENOID	130 psi	Cat#BGG20002
PT-3006-H	Solenoid Valve Box At Refer He Return	1151GP5E22B1	Rosemount	Pressure Transmitter	He FRIDGE	750 *H2O	0-7.5 PSIG
PT-3218-H	Solenoid, helium supply	1151GP6E22B515	Rosemount	Pressure Transmitter	SOLENOID	100 psi	0-20 psig
PT-3222-N	LN2 supply to solenoid	1151GP7E22B515	Rosemount	Pressure Transmitter	SOLENOID	300 psi	0-110 psig
PT-3229-V	Control dewar vacuum	PKR250	Balzers	Vacuum Cold Catho	SOLENOID	130 psi	Cat#BGG20002
PT-3242-H	Supply helium pressure at control de	1151GP6E22B515	Rosemount	Pressure Transmitter	SOLENOID	100 psi	0-20 psig
PT-3258-H	cooldown/quench He return pressure	1151GP7E22B515	Rosemount	Pressure Transmitter	SOLENOID	300 psi	0-150 psig
PT-3259-V	Control dewar vacuum	343-005	Granville Phillips	Vacuum Ionization	SOLENOID	30 psi	
PT-3264-H	Control dewar pressure	1151GP6E22B515	Rosemount	Pressure Transmitter	SOLENOID	100 psi	0-20 psig
PT-4084-H	VLPC Valve Box AT Refer He return	1151GP5E22B1	Rosemount	Pressure Transmitter	VLPC	2000 psi	0-7.5 PSIG
PT-4086-H	VLPC Valve Box AT Refer He return	1151GP5E22B1	Rosemount	Pressure Transmitter	VLPC	2000 psi	0-7.5 PSIG
PT-4251-V	VLPC vacuum jacket /turbo pump	343-005	Granville Phillips	Vacuum Ionization	VLPC	30	
PT-4252-V	VLPC vacuum jacket /turbo pump	PKR250	Balzers	Vacuum Thermocou	VLPC	130 psi	
PT-4317-H	East VLPC Stagnant He Volume			Pressure Transmitter	VLPC		
PT-4323-N				Pressure Transmitter			
PT-4417-H	West VLPC Stagnant He Volume			Pressure Transmitter	VLPC		
PT-4423-N				Pressure Transmitter			
PV-2013-H	GHe Cooldown Supply flow control va	#1002GCS365VOP	Badger Meter	Control Valve	He FRIDGE	5000 psi	Cv = .32 Trim size=F
PV-2019-H	GHe cooldown return isolation from s	ES2-84-2TPG1	Cryolab	Control Valve	He FRIDGE	400 WOG	Cv = 3.1
PV-2713-N	LN2 Subcooler supply	1650-MD-167453	FNAL	Control Valve	He FRIDGE	min. 350 psi	Cv = 2.0
PV-2736-N	LN2 Dewar Fill Valve	C4466-PM-SW	Worchester	Control Valve	He FRIDGE	1500 psi	Actuator 20395N
PV-2739-N	He purifier LN2 supply control valve	1650-MD-167453	FNAL	Control Valve	He FRIDGE	min 350 psi	
PV-2750-N	Ln2 dewar to system	V-1070	CVI	Control Valve	He FRIDGE	600 psig	Cv = 14
PV-2915-V	Isolates UV header from VLPC,solen	1243-L6282-333	Varian	Control Valve	SOLENOID	30 psi	NW 40 Right Angle
PV-2920-V	Isolates IV header from VLPC, Solen	1243-L6282-333	Varian	Control Valve	SOLENOID	30 psi	NW 40

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
PV-2925-V	VLPC turbo pump isolation from vacu	951-5250	Varian	Control Valve	VLPC	15 psid	6x4 conflat
PV-2930-V	Vacuum selector between VLPC and s	951-5250	Varian	Control Valve	VLPC	15 psid	6x4 conflat
PV-2972-V	Isolate solenoid turbo from cntrl dwr,	951-5250	Varian	Control Valve	SOLENOID	15 psid	6x4 conflat
PV-3035-N	Solenoid Valve Box At Refer LN2 Sup	1017	Badger Meter	Control Valve	SOLENOID	5000 psi	Cv = .32
PV-3062-H	Solenoid Valve Box At Refer He Retur	CV2288	Cryolab	Control Valve	SOLENOID	Equal %	Cv = 2.0
PV-3201-H	Solenoid Cooldown Return Control Va	CV1997B-084-PNJ	Cryolab	Control Valve	SOLENOID	300 PSIG	Cv = 8.0
PV-3209-H	He Return To Control Dewar Subcool	CV1997B-084-PNJ	Cryolab	Control Valve	SOLENOID	300 PSIG	Cv = 8.0
PV-3231-V	Isolates control dewar from vacuums	951-5250	Varian	Control Valve	SOLENOID	15 psid	6x4 conflat
PV-4250-V	VLPC vacuum isolation	951-5250	Varian	Control Valve	VLPC	15 psid	6x4 conflat
PV-4300-H	Isolate east VLPC helium return	1650-MD-167453	FNAL	Control Valve	VLPC	min. 350 psi	Cv = 2.0,=%
PV-4305-N	Isolate east LN2 supply	1650-MD-167453	FNAL	Control Valve	VLPC	min. 350 psi	Cv = .32,=%
PV-4400-H	Isolate west VLPC helium return	1650-MD-167453	FNAL	Control Valve	VLPC	min. 350 psi	Cv = 2.0,=%
PV-4405-N	Isolate VLPC west LN2 supply		FNAL	Control Valve	VLPC	min. 350 psi	Cv = .32,=%
RD-2054-H	Ghe storage tank main relief	Poly SD	Fike	Rupture Disk	He FRIDGE	275 psig	
RD-2503-H	Helium Dewar Main Rupture Disc	CPV	Fike	Rupture Disk	He FRIDGE	75 psig	
RD-2609-H	He purifier adsorber vessel rupture di	CPV BT	Fike	Rupture Disc	He FRIDGE	500 psig	Burst=477 psig
RD-2612-N	He purifier LN2 jacket rupture disc	CPV BT	Fike	Rupture Disc	He FRIDGE	100 psig	Burst=93 psig
RD-2780-N	LN2 Dewar Rupture Disk For He Syst	SN 9625673	Fike	Rupture Disk	He FRIDGE	85 psig	
RD-2781-N	LN2 Dewar Rupture Disk For He Syst	SN 9625673	Fike	Rupture Disk	He FRIDGE	85 psig	
RD-3219-H	Control dewar rupture disk	FBS, 1B	KISHIKAWA	Rupture Disk	SOLENOID	135 psi	
ST-2762-N	Ln2 Vaporizer supply strainer	N/A	United Brass	Strainer	He FRIDGE	N/A	
SV-2009-H	Compressor suction relief	930203FA	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	S.P. = 6 psig	
SV-2031-H	High pressure gas helium to subcool	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press = 350	
SV-2050-H	GHe Storage Vessel relief	83S1216-F	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	S.P.=250 psig	
SV-2056-H	Ghe tank fill line from tube trailer relie	5159B-4MP-350	Circle Seal	Safety/Relief Valve		Crack Press = 350	
SV-2104-H	HP manifold relief, trapped volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-2112-H	HTX-2 relief, trapped volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2113-H	HTX-1 relief, trapped volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2114-H	LP manifold relief, trapped volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2115-H	HTX-3 HP inlet to manifolds, trapped	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2116-H	HTX-4 HP inlet to manifolds, trapped	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	Crack Press = 350 psig
SV-2117-H	HX outlet to manifolds, trapped volum	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	Crack Press = 350 psig
SV-2150-H	Refer Valve Box He Supply Relief Val	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2200-H	HTX-2 inlet to suction manifold, trapp	5159B-4MP-45	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =45 psi	
SV-2205-H	HTX-3 LP inlet to suction manifold, tra	5159B-4MP-45	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =45 psi	
SV-2210-H	HTX-4 LP inlet to suction manifold, tra	5159B-4MP-45	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =45 psi	
SV-2215-V	HX vacuum relief	2" Parallel Plate	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press = 1 psi	2400 SCFM

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
SV-2257-H	Refer Valve Box He Return Relief Valv	5159B-4MP-65	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press = 65 ps	
SV-2266-H	Refer Valve Box He Return Relief Val	5159B-4MP-65	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press = 65 ps	
SV-2282-V	Refer Valve Box He Vacuum Shell Re	2" Parallel Plate	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press = 1 psi	2400 SCFM
SV-2300-V	Dry Engine vacuum relief	2" Parallel Plate	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press = 1 psi	2400 SCFM
SV-2301-V	Wet Engine Vacuum Shell Relief Valv	2" Parallel Plate	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press = 1 psi	2400 SCFM
SV-2336-H	Dry Engine inlet piping relief, trapped	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2337-H	Dry Engine Buffer Tank relief, trapped	5159B-4MP-300	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =350 p	
SV-2346-H	Dry Engine outlet piping relief, trappe	5159B-4MP-65	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =65 psi	
SV-2351-H	Wet Engine Inlot Line Relief Valve	5159B-4MP-375	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =375 p	
SV-2352-H	Wet Engine Buffer Tank Relief Valve	5159B-4MP-65	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =65 psi	
SV-2365-H	Wet Engine Outlet Line Check Valve t	K5120T-4MP-65	Circle Seal	Check Valve	He FRIDGE		Teflon seat
SV-2502-H	Helium Dewar Main Relief Valve	81S1216-G	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	75 psig	Crack press = 75psi
SV-2550-V	Helium Dewar Vacuum Shell Relief V	SV7-88-5W1	Cryolab	Safety/Relief Valve	He FRIDGE	Crack Press = 2 psi	
SV-2552-V	LHe storage dewar vacuum vessel rel	V-1046-31	CVI	Safety/Relief Valve	He FRIDGE	Crack Press = 2 psi	Special
SV-2608-H	He purifier adsorber primary relief	81SF88-6	Anderson Greenwo	Solenoid Valve	He FRIDGE	Crack Press= 350 p	
SV-2611-N	He purifier LN2 jacket relief	81SF88-6	Anderson Greenwo	Solenoid Valve	He FRIDGE	Crack Press= 60 psi	
SV-2628-V	He Purifier Vacuum Vessel Relief	DRG.1670-MB-1063	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press < 1psi	2 5/8" I.D.
SV-2636-V	He Purifier Vacuum Vessel Relief	DRG.1670-MB-1063	FNAL	Safety/Relief Valve	He FRIDGE	Crack Press < 1psi	2 5/8" I.D.
SV-2637-V	He Purifier Vacuum Vessel Relief	V-1046-31	CVI	Safety/Relief Valve	He FRIDGE	Crack Press=2 psi	
SV-2706-N	Heat Exchanger LN2 supply, trapped	5159B-4MP-65	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =65 psi	
SV-2707-N	N2 vent relief, after Heat Exchanger	5159B-4MP-35	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press =35 psi	
SV-2711-N	LN2 Subcooler/Ghe cldn HX	81MS 44-4	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	50 psi	
SV-2712-N	LN2 Subcooler/Ghe cldn HX	81MS 44-4	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	50 psi	
SV-2718-N	Trapped volum relief subcooler supp	B-4CPA2-150	Nupro	Safety/Relief Valve	He FRIDGE	150 psi	
SV-2735-N	Nitrogen relief valve	5180T1-2MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press set at3	
SV-2738-N	LN2 supply trapped vol. relief	K5120T-2MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Set at 100 psi	
SV-2743-N	LN2 supply trapped volume relief	K5120T-2MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-2745-N	LN2 header trapped volume Relief	5133B-2MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-2752-N	Ln2 dewar line to system relief	5180T1-2MP-275	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-2754-N	LN2 supply trapped volume relief	K5120B-2MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-2757-N	Ln2 dewar fill line relief	B-9432NG	Rego	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-2763-N	Vaporizer supply relief	5159B-4MP-100	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=100 ps	
SV-2764-N	Vaporizer supply relief	B-9432NG	Rego	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-2782-N	LN2 Dewar main Relief	86/039 54	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	60 psig	
SV-2783-N	LN2 Dewar main Relief	86/039 53	Anderson Greenwo	Safety/Relief Valve	He FRIDGE	60 psig	
SV-2792-V	Ln2 dewar vacuum jacket relief	6" Parallel Plate	MVE	Safety/Relief Valve	He FRIDGE	Crack Press=1 ps i	
SV-3029-H	Solenoid Valve Box At Refer Trapped	5159B-4MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
SV-3036-N	Solenoid Valve Box At Refer Trapped	5159B-4MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-3041-H	Solenoid Valve Box At Refer Trapped	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-3050-V	Solenoid Valve Box At Refer Vacuum	V-1046-31	CVI	Safety/Relief Valve	He FRIDGE	Crack Press=2 psi	
SV-3052-V	Sol Assembly Hall Feedcan Vacuum	V-1046-31	CVI	Safety/Relief Valve	SOLENOID	Crack Press=2 psi	
SV-3056-N	Solenoid Valve Box Trapped Volume	5159B-4MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-3061-N	Solenoid Valve Box Trapped Volume	5159B-4MP-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=150 ps	
SV-3064-H	Solenoid Valve Box Trapped Volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-3066-H	Solenoid Valve Box Trapped Volume	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-3081-H	Solenoid Valve Box Cooldown Line R	5159B-4MP-350	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 ps	
SV-3106-V	Solenoid feedcan relief	V-1046-31	CVI	Safety/Relief Valve	SOLENOID	Crack Press=2 psi	
SV-3211-H	Solenoid helium return quench relief	81SF68-8	Anderson Greenwo	Safety/Relief Valve	SOLENOID	60 psi	237 SCFM Air
SV-3216-H	Control dewar relief	81SF68-4	Anderson Greenwo	Safety/Relief Valve	SOLENOID	100 psi	91 SCFM Air
SV-3223-N	Control dewar/solenoid LN2 supply rel	81SF68-8	Anderson Greenwo	Safety/Relief Valve	SOLENOID	80 psi	301 SCFM Air
SV-3230-V	Control dewar to Vaac. Vessel relief	SV7-816-5W1	Cryolab	Safety/Relief Valve	SOLENOID	2 psi	
SV-3234-H	Trapped volumn relief solenoid cool/q	B-4CPA2-150	Nupro	Safety/Relief Valve	SOLENOID	100 psi	
SV-3256-H	Control dewar helium supply relief	B-4CPA2-150	Nupro	Safety/Relief Valve	SOLENOID	150 psi	
SV-3262-H	Solenoid he supply relief	815F68-8	Anderson Greenwo	Safety/Relief Valve	SOLENOID	60 psi	237 SCFM Air
SV-4004-H	Helium Cooldown Return Line Relief	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 ps	
SV-4018-V	VLPC Assembly Hall Feed Can Vacc	V-1046-31	CVI	Safety/Relief Valve	VLPC	Crack Press=2 psi	
SV-4025-H	VLPC Valve Box AT Refer He Return	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 ps	
SV-4026-H	VLPC Valve Box AT Refer He Return	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 ps	
SV-4043-N	trapped volume relief, VLPC LN2 sup			Safety/Relief Valve	VLPC		
SV-4046-H	VLPC at TR-4047-H	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 ps	
SV-4051-N	VLPC Valve Box AT Refer LN2 Suppl	5159B-4MP-150	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=150 ps	
SV-4060-H	VLPC assy hall feed can at TR-4057-	5159B-4MP-150	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=150 ps	
SV-4061-H	VLPC assy hall feed can at TR-4058-	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 ps	
SV-4066-N	VLPC Valve Box AT Refer N2 Return	B-4CPA2-150	Nupro	Safety/Relief Valve	VLPC	Crack Press=150 ps	
SV-4071-H	VLPC Valve Box AT Refer He Supply	B-4CPA2-150	Nupro	Safety/Relief Valve	VLPC	Crack Press=350 p	
SV-4076-H	VLPC Valve Box AT Refer He Supply	B-4CPA2-150	Circle Seal	Safety/Relief Valve	He FRIDGE	Crack Press=350 p	
SV-4080-V	VLPC Valve Box AT Refer Vacuum S	V-1046-31	CVI	Safety/Relief Valve	VLPC	Crack Press=2 psi	
SV-4106-V	VLPC West end feed can pumpout &	V-1046-31	CVI	Safety/Relief Valve	VLPC	Crack Press=2 psi	
SV-4205-H	VLPC west helium return	5159B-4MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 p	
SV-4210-H	VLPC east helium return	5159B-2MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 p	
SV-4215-N	VLPC LN2 supply relief	5159B-4MP-150	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=150 ps	
SV-4220-H	VLPC east He supply relief	5159B-2MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 p	
SV-4230-N	VLPC LN2 return relief	5159B-4MP-150	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=150 ps	
SV-4235-H	VLPC west He supply relief	5159B-2MP-350	Circle Seal	Safety/Relief Valve	VLPC	Crack Press=350 p	

Device Tag	Description	Model/Type	Manufacturer	Device Type	System	Rating	Memo
SV-4255-V	VLPC vacuum jacket relief	V-1046-31	CVI	Safety/Relief Valve	VLPC	Crack Press=2 psi	
SV-4265-V	VLPC vacuum jacket relief	V-1046-31	CVI	Safety/Relief Valve	VLPC	Crack Press=2 psi	
SV-4277-H	Relief PRV 4270 H / PRV 4275 H			Safety/Relief Valve	VLPC	Crack Press=30 psi	
SV-4315-H	East VLPC stagnant volumn relief			Safety/Relief Valve	VLPC	Crack Press=6 psi	
SV-4415-H	West VLPC stagnant volumn relief			Safety/Relief Valve	VLPC	Crack Press=6 psi	
TI-2338-H	Dry Engine buffer tank temp - reads N	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 100 psig	30-0-100 psig
TI-2345-H	Dry Engine exit temp - reads H2 VPT	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 100 psig	30-0-100 psig
TI-2353-H	Wet Engine Buffer Tank VPT Temper	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 100 psig	0-100 psig
TI-2364-H	Wet Engine Outlet Temperature Gage	N/A	U.S. Gauge	Pressure Indicator	He FRIDGE	min 100 psig	0-100 psig
TI-2704-N	LN2 Subcooler exit temperature(N2 V	K1	Ashcroft	Pressure Transmitter	He FRIDGE	min 100 psig	0-100 PSIG
TP-2041-H	High pressure helium Temperature aft	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-2610-H	He purifier, He inlet to adsorber bed	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-2620-N	He purifier, N2 outlet from adsorber li	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-2621-H	He purifier, He outlet from adsorber b	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-2622-H	He purifier, He outlet from adsorber b	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-2709-N	GN2 Vent temperature	PTA-102	Lakeshore	Pt RTD	He FRIDGE	CLASS A ACCURA	100 OHM
TP-3004-N	Sol Ass Hall Can LN2 Jumper Line se	PTA-102	Lakeshore	Pt RTD	SOLENOID	CLASS A ACCURA	100 OHM
TP-3206-N	Sol, LN2 supply	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3207-H	Sol subcooler helium return	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3208-H	Sol, subcooler JT Inlet	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3225-N	Sol, LN2 return	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3269-H	Control dewar, East Vapor Cooled Le	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3270-H	Sol Lead Flow #1 (East) Tem Sensor	PT-102	Lakeshore	Pt RTD	SOLENOID	N/A	100 OHM
TP-3279-H	Control dewar, West Vapor Cooled Le	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3280-H	Sol Lead Flow #2 (West) Tem Sensor	PT-102	Lakeshore	Pt RTD	SOLENOID	N/A	100 OHM
TP-3301	Sol, South axial support #1	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3302	Sol, South axial support #2	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3303	Sol, South axial support #3	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3304	Sol, North axial support #4	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3305	Sol, North axial support #5	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3306	Sol, North axial support #6	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3311	Sol, support cylinder (North 30 degree	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3312	Sol, support cylinder (North 150 degre	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3313	Sol, outer support cylinder (North 270	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3314	Sol, support cylinder (South 30 degre	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3315	Sol, support cylinder (South 150 degr	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3316	Sol, outer support cylinder (South 270	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
TP-3317	Sol, North radial support #7	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3318	Sol, North radial support #8	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3319	Sol, North radial support #9	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3320	Sol, North radial support #10	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3321	Sol, North radial support #11	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3322	Sol, North radial support #12	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3346	Sol, outer vacuum vessel (90 degrees	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3347	Sol, inner vacuum vessel, 270 degree	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3348	Vacuum vessel bulkhead, North, 270	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3350-N	Sol, outer LN2 shield	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3351-N	Sol, outer shield, Center, 270 degrees	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3352-N	Sol, inner LN2 shield, Center, 90 degr	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3353-N	Sol, inner LN2 shield, Center, 270 de	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3354-N	Sol, inner LN2 shield, South, 90 degr	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-3355-N	Sol, North end LN2 shield	PT-102-77L ***	Lakeshore	Pt RTD	SOLENOID	N/A	4 Wire
TP-4304-N	East VLPC nitrogen temp	PTA-102	Lakeshore	Pt RTD	VLPC	CLASS A ACCURA	100 OHM
TP-4306-N	East VLPC nitrogen intercept temp	PTA-102	Lakeshore	Pt RTD		CLASS A ACCURA	100 OHM
TP-4307-N	East VLPC nitrogen intercept temp	PTA-102	Lakeshore	Pt RTD		CLASS A ACCURA	100 OHM
TP-4311	VLPC East Cryostat Lid - NE temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4312	VLPC East Cryostat Lid - NW temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4313	VLPC East Cryostat Lid - SE temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4314	VLPC East Cryostat Lid - SW temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4404-N	West VLPC nitrogen temp	PTA-102	Lakeshore	Pt RTD	VLPC	CLASS A ACCURA	100 OHM
TP-4406-N	West VLPC nitrogen intercept temp	PTA-102	Lakeshore	Pt RTD	VLPC	CLASS A ACCURA	100 OHM
TP-4407-N	West VLPC nitrogen intercept temp	PTA-102	Lakeshore	Pt RTD	VLPC	CLASS A ACCURA	100 OHM
TP-4411	VLPC West Cryostat Lid - NW temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4412	VLPC West Cryostat Lid - NE temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4413	VLPC West Cryostat Lid - SW temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TP-4414	VLPC West Cryostat Lid - SE temp	RTD-809	Omega	Pt RTD	VLPC	Class B Accuracy	100 OHMS
TR-2240-H	He return to shell of HX, redundant to	CX-1030-AA-4L	Lakeshore	Cernox RTD		N/A	Ser# X07786
TR-3007-H	Solenoid Valve Box At Refrigerator H	CX-1030-LR-4L	Lakeshore	Cernox RTD	He FRIDGE	N/A	Ser# X02953
TR-3027-H	Solenoid Valve Box At Refer He Cool	CX-1030-LR-4L	Lakeshore	Cernox RTD	SOLENOID	N/A	Ser# X03536
TR-3061-H	Solenoid, Assy hall feed can	CX-1030-LR-4L	Lakeshore	Cernox RTD	SOLENOID	N/A	Ser# X03606
TR-3103-H	Solenoid GHe return	CX-1030-LR-4L	Lakeshore	Cernox RTD	SOLENOID	N/A	Ser# X03618
TR-3104-H	Solenoid, collision hall feed can LHe	CX-1030-LR-4L	Lakeshore	Cernox RTD	SOLENOID	N/A	Ser# X03097
TR-3212-H	Cooldown/quench Helium return	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C17105
TR-3268-H	Control dewar, East Vapor Cooled Le	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16478

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
TR-3278-H	Control dewar, West Vapor Cooled Le	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16553
TR-3301	Sol, South axial support #1	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16795
TR-3302	Sol, South axial support #2	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16796
TR-3303	Sol, South axial support #3	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16797
TR-3304	Sol, North axial support #4	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16810
TR-3305	Sol, North axial support #5	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16811
TR-3306	Sol, North axial support #6	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16812
TR-3317	Sol, North radial support #7	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16813
TR-3318	Sol, North radial support #8	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16814
TR-3319	Sol, North radial support #9	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16815
TR-3320	Sol, North radial support #10	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16816
TR-3321	Sol, North radial support #11	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16817
TR-3322	Sol, North radial support #12	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16818
TR-3330	Sol, outer support cylinder (South 90	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16819
TR-3331	Sol, outer support cylinder (Center 90	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16820
TR-3332	Sol, outer support cylinder (North 90	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16821
TR-3333	Sol, outer support cylinder (South 270	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16830
TR-3334	Sol, outer support cylinder (Center 27	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16823
TR-3335	Sol, outer support cylinder (North 270	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16824
TR-3343-H	Sol, magnet coil (South 270 Degrees)	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16825
TR-3344-H	Sol, magnet coil(Center 270 Degrees)	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16826
TR-3345-H	Sol,outer support cylinder (North 270	CGR-1-500-4L **	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16827
TR-3360-H	Sol, outer support cylinder, helium sup	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16828
TR-3370-H	Sol, outer support cylinder, helium ret	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16829
TR-4047-H	VLPC Valve Box At Refer He Return	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03579
TR-4054-H	VLPC Valve Box East He Return Tem	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03537
TR-4056-H	VLPC Valve Box West He Return Te	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03539
TR-4057-H.	VLPC Assembly Hall West Helium Su	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03530
TR-4058-H	VLPC Assembly Hall East Helium Su	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X02853
TR-4101-H	VLPC, coll hall feed can east He supp	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03591
TR-4102-H	VLPC, coll hall feed can west He sup	CX-1030-LR-4L	Lakeshore	Cernox RTD	VLPC	N/A	Ser# X03594
TR-4301-H-1	East VLPC cryostat helium outlet tem	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07787
TR-4301-H-2	East VLPC cryostat helium outlet tem	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07788
TR-4308-H	East VLPC cryostat helium inlet temp	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07789
TR-4310	East VLPC heat sink	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	
TR-4310-1	East VLPC heat sink #1	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X06576
TR-4310-2	East VLPC heat sink #2	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07577

<i>Device Tag</i>	<i>Description</i>	<i>Model/Type</i>	<i>Manufacturer</i>	<i>Device Type</i>	<i>System</i>	<i>Rating</i>	<i>Memo</i>
TR-4310-3	East VLPC heat sink #3	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07578
TR-4310-4	East VLPC heat sink #4	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07579
TR-4310-5	East VLPC heat sink #5	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07580
TR-4310-6	East VLPC heat sink #6	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07581
TR-4310-7	East VLPC heat sink #7	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07582
TR-4310-8	East VLPC heat sink #8	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07583
TR-4401-H-1	West VLPC cryostat helium outlet te	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07790
TR-4401-H-2	West VLPC cryostat helium outlet te	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07791
TR-4408-H	West VLPC cryostat helium inlet tem	CX-1030-AA-4L	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07792
TR-4410	West VLPC heat sink	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	
TR-4410-1	West VLPC heat sink #1	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07584
TR-4410-2	West VLPC heat sink #2	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07585
TR-4410-3	West VLPC heat sink #3	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07586
TR-4410-4	West VLPC heat sink #4	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07587
TR-4410-5	West VLPC heat sink #5	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07588
TR-4410-6	West VLPC heat sink #6	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07589
TR-4410-7	West VLPC heat sink #7	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07590
TR-4410-8	West VLPC heat sink #8	CX-1030-AA-4B	Lakeshore	Cernox RTD	VLPC	N/A	SER#X07591
TR-SCOUT-H	Solenoid Subcooler Helium Out	CGR-1-500-4B *	Lakeshore	Carbon Glass RTD	SOLENOID	N/A	SER#C16822
TSHLF1	East Lead Flow Heater: Overtemp	Type J	Watlow	Thermocouple	SOLENOID	500 degrees F	
TSHLF2	West Lead Flow Heater: Overtemp	Type J	Watlow	Thermocouple	SOLENOID	500 degrees F	

Tag No.	Description	Size	Mfr./Model No.	Location
BU 01	Vent Sight Bubbler	1/2"		Room 511
BU 02	Vent Sight Bubbler	1/2"		Room 511
BU 03	Vent Sight Bubbler	1/2"		Room 511
BU 04	Vent Sight Bubbler	1/2"		Room 511
BU 05	Vent Sight Bubbler	1/2"		Room 511
BU 06	Vent Sight Bubbler	1/2"		Room 511
BU 07	Vent Sight Bubbler	1/2"		Room 511
BU 08	Vent and Supply Sight Bubbler	1/2"		Room 511
BU 09	Vent and Supply Sight Bubbler	1/2"		Room 511
BU 10	Vent and Supply Sight Bubbler	1/2"		Room 511
BU 11	Vent and Supply Sight Bubbler	1/2"		Room 511
BU 12	Vent Sight Bubbler	1/2"		Room 511
BU 13	Vent Sight Bubbler	1/2"		Room 511
BU 14	Vent Sight Bubbler	1/2"		Room 511
BU 15	Vent Sight Bubbler	1/2"		Room 511
BU 16	Vent Sight Bubbler; PDT'S	3"	Fermi DWG#3740-MD-194188	Room 510
BU 17	Vent Sight Bubbler; SAMUS	1"	Fermi DWG#3740-MD-194208	Room 510
BU 18	Vent Sight Bubbler; CDC	1/4"		Room 511
BU 19	Vent Sight Bubbler; VTX	1/4"		Room 511
BU 20	Supply Sight Bubbler; CDC (H2O)	1/4"		Room 511
BU 21	Supply Sight Bubbler; VTX (H2O)	1/4"		Room 511
BU 22	Vent Sight Bubbler; FDC Canary Supply	1/4"		Room 511
BU 23	Vent Sught Bubbler; FDC Canary Return	1/4"		Room 511
BU 24	WAMUS Exhaust Canary	1/4"		Room 510
BU 25	WAMUS Exhaust Canary	1/4"		Room 510
BU 26	WAMUS Input Canary	1/4"		Room 510
BU 27	WAMUS Input Canary	1/4"		Room 510
BU 28	SAMUS Input Canary	1/4"		Room 510
BU 29	SAMUS Input Canary	1/4"		Room 510
BU 30	SAMUS Exhaust Canary	1/4"		Room 510
BU 31	SAMUS Exhaust Canary	1/4"		Room 510
BU 32	Analysis Gas Rack	1/4"		Room 510

Tag No.	Description	Size	Mfr./Model No.	Location
BU 33	Analysis Gas Rack	1/4"		Room 510
BU 34	SAMUS exhaust bleed off	1/4"		Room 510
BU 35	SAMUS exhaust bleed off	1/4"		Room 510

DØ Gas System

Check Valves List

10/7/93

	Tag No.	Description	Size	Mfr./Model No.	Location	
CV	01	AR/CO2	Bank #1, Tank Truck	1/4"	Scott Manifold	Gas House
CV	02	AR/CO2	Bank #2, Tank Truck	1/4"	Scott Manifold	Gas House
CV	03	AR/CO2	Bank #1	1/4"	Scott Manifold	Gas House
CV	04	AR/CO2	Bank #2	1/4"	Scott Manifold	Gas House
CV	05	AR	Bank #1	1/4"	Scott Manifold	Gas House
CV	06	AR	Bank #2	1/4"	Scott Manifold	Gas House
CV	07	ACC	Bank #1	1/4"	Scott Manifold	Gas House
CV	08	ACC	Bank #2	1/4"	Scott Manifold	Gas House
CV	09	CO2	Bank #1	1/4"	Scott Manifold	Gas House
CV	10	CO2	Bank #2	1/4"	Scott Manifold	Gas House
CV	11	CF4	Bank #1	1/4"	Scott Manifold	Gas House
CV	12	CF4	Bank #2	1/4"	Scott Manifold	Gas House
CV	13	MG	Analyzer's Vent Line	1/4"	Nupro, Lift type, SS-53S4	Room 510
CV	14	CF4/CH4	Line 33	1/2"	Parker	Room 510
CV	15	CO2	Line 32	1/2"	Parker	Room 510
CV	16	ACC	Line 31	1/2"	Parker	Room 510
CV	17	AR/CO2	Line 28	1/2"	Parker	Room 510
CV	18	AR	Bank #1	1/4"	Scott Manifold	Gas House
CV	19	AR	Bank #2	1/4"	Scott Manifold	Gas House
CV	20	C2H6	Bank #1	1/4"	Scott Manifold	Gas House
CV	21	C2H6	Bank #2	1/4"	Scott Manifold	Gas House
CV	22	CO2	Bank #1	1/4"	Scott Manifold	Gas House
CV	23	CO2	Bank #2	1/4"	Scott Manifold	Gas House
CV	24	CH4	Bank #1	1/4"	Scott Manifold	Gas House
CV	25	CH4	Bank #2	1/4"	Scott Manifold	Gas House
CV	26	XE/CH	Bank #1	1/4"	Scott Manifold	Gas House
CV	27	XE/CH	Bank #2	1/4"	Scott Manifold	Gas House
CV	28	N2	Bank #1	1/4"	Scott Manifold	Gas House
CV	29	N2	Bank #2	1/4"	Scott Manifold	Gas House
CV	30	AR	Purge Line	3/8"		Room 511
CV	31	AR	Purge Manifold	3/8"		Room 511
CV	32	AR	FDC/CDC Mixer	1/4"		Room 511

DØ Gas System

Check Valves List

10/7/93

	Tag No.		Description	Size	Mfr./Model No.	Location
CV	33	CO2	FDC/CDC Mixer	1/4"		Room 511
CV	34	CO2	FDC/CDC Mixer	1/4"		Room 511
CV	35	CH4	Purge Manifold	3/8"		Room 511
CV	36	CH4	FDC/CDC Mixer	1/4"		Room 511
CV	37	C2H6	Purge Manifold	3/8"		Room 511
CV	38	C2H6	VTX Mixer	1/4"	Nupro, #SS-4CP2-1	Room 511
CV	39	CO2	Purge Line	3/8"	Nupro, #SS-4CP2-1	Room 511
CV	40	CO2	Purge Manifold	3/8"	Nupro, #SS-4CP2-1	Room 511
CV	41	CO2	VTX Mixer	1/4"	Nupro, #SS-4CP2-1	Room 511
CV	42	MG	FDC/CDC Mixer	1/4"		Room 511
CV	43	MG	VTX Mixer	1/4"	Nupro, #SS-4CP2-1	Room 511
CV	44					
CV	45					
CV	46					
CV	47	AR/CO2/CF4	Line 28	1/2"	Parker	Room 510
CV	48	AR	Line 30	1/2"	Parker	Room 510
CV	49	AR/CO2/CF4	Line 28	1/2"	Nupro, #SS-5858	Room 510
CV	50	MG	From Humification BU 20	1/4"		Room 511
CV	51	MG	CDC/FDC/Premix Bypass	1/4"		Room 511
CV	52	CO2/C2H6				
CV	53	CO2/C2H6				
CV	54	AR/CO2/CH4				
CV	55	AR/CO2/CH4				
CV	56	MG	SAMUS Exhaust bubbler	1/4"	Circle seal# 119B-2PP, 4" H2O lift	Room 510
CV	57	MG	WAMUS Pump Outlet	1/2"	Nupro, #SS-5858	Room 510
CV	58					
CV	59	MG	SAMUS Pump discharge	1/2"	Parker. C8L-3SS	Room 510

Tag No.		Description	Size	Mfr./Model No.	Location
F 01	AR/CO2/CF4	Gas From Trailers	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 02	AR/CO2/CF4	Gas From Bottles	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 03	AC	Gas From Bottles	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 04	ACC	Gas From Bottles	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 05	CO2	Gas From Bottles	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 06	CF4/CH4	Gas From Bottles	1/2"	Finite Filter, S2M-6C10-025	Room 510
F 07	AR	Mixer, FDC/CDC	1/4"		Room 511
F 08	CO2	Mixer, FDC/CDC	1/4"		Room 511
F 09	CH4	Mixer, FDC/CDC	1/4"		Room 511
F 10	MG	Mixer, FDC/CDC	1/4"		Room 511
F 11	MG	Mixer, FDC/CDC	1/4"		Room 511
F 12	C2H6	Mixer, VTX	1/4"	Nupro, #SS-4TF-60	Room 511
F 13	CO2	Mixer, VTX	1/4"	Nupro, #SS-4TF-60	Room 511
F 14	MG	Mixer, VTX	1/4"	Nupro, #SS-4TF-60	Room 511
F 15	MG	Mixer, VTX	1/4"	Nupro, #SS-4TF-60	Room 511
F 16	MG	Purge Line	3/8"		Room 511
F 17	MG	Bubbler Rack	1/4"	NUPRO, 0.5 micron	Room 511
F 18	MG	Bubbler Rack	1/4"	NUPRO, 0.5 micron	Room 511
F 19	MG	Bubbler Rack	1/4"	NUPRO, 0.5 micron	Room 511
F 20	MG	Bubbler Rack	1/4"	NUPRO, 0.5 micron	Room 511
F 21	MG	SAMUS	1/4"	BALSTON	Room 510
F 22	MG	SAMUS O2 and H2O trap	1/2"		Room 510
F 23					
F 24					
F 25	MG				
F 26	MG	Particulate, SAMUS			Hall; Collision
F 27	MG	Particulate, SAMUS			Hall; Collision
F 28	MG	Particulate, PDT			Hall; Collision
F 29	MG				
F 30	MG				
F 31	MG				
F 32	MG				

Tag No.		Description	Size	Mfr./Model No.	Location
F 33	MG				
F 34	MG				
F 35	MG				
F 36	MG				
F 37	MG				
F 38	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 39	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 40	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 41	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 42	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 43	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 44	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 45	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 46	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 47	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 48	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 49	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 50	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 51	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 52	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 53	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 54	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 55	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 56	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 57	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 58	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 59	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 60	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 61	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 62	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 63	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 64	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End

Tag No.		Description	Size	Mfr./Model No.	Location
F 65	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 66	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 67	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 68	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 69	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 70	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 71	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 72	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 73	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 74	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 75	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 76	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 77	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 78	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 79	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 80	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 81	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 82	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 83	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 84	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 85	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 86	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 87	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 88	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 89	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 90	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 91	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 92	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 93	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 94	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 95	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 96	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End

Tag No.		Description	Size	Mfr./Model No.	Location
F 97	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 98	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/South End
F 99	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 100	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 101	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 102	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 103	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 104	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 105	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 106	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 107	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 108	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 109	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 110	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 111	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 112	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 113	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 114	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 115	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 116	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 117	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 118	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 119	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 120	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 121	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 122	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 123	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 124	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 125	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 126	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 127	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 128	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End

Tag No.		Description	Size	Mfr./Model No.	Location
F 129	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 130	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 131	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 132	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 133	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/West End
F 134	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 135	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 136	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 137	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 138	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 139	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 140	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 141	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 142	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 143	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 144	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 145	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 146	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 147	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 148	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 149	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 150	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 151	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 152	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 153	MG	PDT Chamber; "8" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 154	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 155	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 156	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 157	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 158	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 159	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 160	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End

Tag No.		Description	Size	Mfr./Model No.	Location
F 161	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 162	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 163	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 164	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 165	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 166	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 167	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 168	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 169	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 170	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 171	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 172	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 173	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 174	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 175	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 176	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 177	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 178	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 179	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 180	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 181	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 182	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 183	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 184	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 185	MG	PDT Chamber; "8" Manifold'	1/4"	Balston #A944-BY	Magnet/North End
F 186	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 187	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 188	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 189	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 190	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 191	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 192	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End

Tag No.		Description	Size	Mfr./Model No.	Location
F 193	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 194	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 195	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 196	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 197	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 198	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 199	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 200	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 201	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 202	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 203	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 204	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 205	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 206	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 206	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 208	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 209	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 210	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 211	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 212	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 213	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 214	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 215	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 216	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 217	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 218	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 219	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 220	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 221	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/East End
F 222	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 223	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 224	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End

Tag No.		Description	Size	Mfr./Model No.	Location
F 225	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 226	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 227	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 228	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 229	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 230	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 231	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 232	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 233	MG	PDT Chamber; "12" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 234	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 235	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 236	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 237	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 238	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 239	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 240	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 241	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 242	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 243	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 244	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 245	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 246	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 247	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 248	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 249	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 250	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 251	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 252	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 253	MG	PDT Chamber; "20" Manifold	1/4"	Balston #A944-BY	Magnet/North End
F 254		Mixer, VTX	1/4"	Nupro #SS-4TF-60	Room 511
F 255					
F 256	MG	CDC - I.R. Detector	1/4"	Nupro, 2 micron, In-Line	Room 511

Tag No.		Description	Size	Mfr./Model No.	Location
F 257	MG	CDC - Premix Bypass			Room 511
F 258	MG	VTX - I. R. Detector	1/4"	Nupro, 2 micron, In-Line	Room 511
F 259	MG	VTX Humidifier Bypass	1/4"	Nupro, In-Line	
F 260	MG	VTX Humidifier Bubbler	1/4"	Nupro, In-Line	
F 261	MG	WAMUS Pump - Intake	1"	Dollinger #GP-3106-05	Room 510

Tag No.		Description	Size	MFR/Model No.	Location
FTC	01	Mass Flow Controller; WAMUS	1/2"	Teledyne Hastings, C203C	Room 510
FTC	02	Mass Flow Controller; AR/CO2	1/2"	Teledyne Hastings, HFC-203	Room 510
FTC	03	Mass Flow Controller; AR	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	04	Mass Flow Controller; AR	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	05	Mass Flow Controller; CO2	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	06	Mass Flow Controller; CO2	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	07	Mass Flow Controller; CF4	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	08	Mass Flow Controller; CF4	1/4"	Teledyne Hastings, HFC-202	Room 510
FTC	09	Mass Flow Controller; AR	1/4"		Room 511, Mixer; FDC
FTC	10	Mass Flow Controller; CO2	1/4"		Room 511, Mixer; FDC
FTC	11	Mass Flow Controller; CH4	1/4"		Room 511, Mixer; FDC
FTC	12	Mass Flow Controller; MG	1/4"		Room 511, Mixer; FDC
FTC	13	Mass Flow Controller; C2H6	1/4"		Room 511, Mixer; VTX
FTC	14	Mass Flow Controller; CO2	1/4"		Room 511, Mixer; VTX
FTC	15	Mass Flow Controller; MG	1/4"		Room 511, Mixer; VTX
FTC	16	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	17	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	18	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	19	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	20	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	21	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	22	Flow Transducer		Hastings	Room 511, Bubbler Rack
FTC	23	Flow Transducer		Hastings	Room 511, Bubbler Rack
FE	24	Flow Element; SAMUS			Hall, Collision
FE	25	Flow Element; SAMUS			Hall, Collision
FE	26	Flow Element; SAMUS			Hall, Collision
FE	27	Flow Element; SAMUS			Hall, Collision
FE	28	Flow Element; SAMUS			Hall, Collision
FE	29	Flow Element; SAMUS			Hall, Collision
FE	30	Flow Element; SAMUS			Hall, Collision
FE	31	Flow Element; SAMUS			Hall, Collision
FE	32	Flow Element; SAMUS			Hall, Collision

Tag No.		Description	Size	MFR/Model No.	Location
FE	33	Flow Element; SAMUS			Hall, Collision
FE	34	Flow Element; SAMUS			Hall, Collision
FE	35	Flow Element; SAMUS			Hall, Collision
FTC	36	Mass Flow Controller	1/4"		Room 511, Mixer; VTX
FT	37	Flowmeter, SAMUS	1/2"	Teledyne Hastings, HFM201	Room 510
FTC	38	Mass Flow Controller; WAMUS	1/2"	Teledyne Hastings, C203D	Room 510
FTC	39	Mass Flow Controller; SAMUS			Room 510
FTC	40 MG	CDC/FDC Humidifier			Room 511
FTC	41 MG	VTX Humidifier			Room 511
FT	42 MG	Flowmeter; WAMUS supply	3/8"	Matheson, 8173-0415	Room 510
TE	43	Temp. Element; WAMUS pump	100 ohm	Omega #RTD-809	Room 510
TE	44	Temp. Element; WAMUS pump	100 ohm	Omega #RTD-809	Room 510
FT	45	Flowmeter; WAMUS	3/8"	Matheson, 8173-0415	Room 510
TE	46	Temp. Element; SAMUS pump	100 ohm	Omega 100 ohm platinum	Room 510

	Tag No.	Description	Size	Mfr./Model No.	Location
FCV	01 MG	FDC/CDC Mixer; Needle Valve	1/4"		Room 511
FCV	02 MG	VTX Mixer; Needle Valve	1/4"	Nupro, #SS-M-4MG	Room 511
FCV	03 MG	Bubbler Rack; Needle Valve	1/4"		Room 511
FCV	04 MG	Bubbler Rack; Needle Valve	1/4"		Room 511
FCV	05 MG	Bubbler Rack; Needle Valve	1/4"		Room 511
FCV	06 MG	Bubbler Rack; Needle Valve	1/4"		Room 511
FCV	07				
FCV	08				
FCV	09				
FCV	10				
FCV	11				
FCV	12				
FCV	13				
FCV	14				
FCV	15				
FCV	16				
FCV	17				
FCV	18				
FCV	19				
FCV	20				
FCV	21				
FCV	22 MG	CDC/FDC Humidifier			
FCV	23 MG	CDC/FDC Humidifier			
FCV	24 MG	CDC/FDC Humidifier Bypass			
FCV	25 MG	SAMUS exhaust purge by Canary	1/4"	Dwyer, 0 -5 slpm air	Room 510
FCV	26 MG				
FCV	28 MG				
FCV	29 MG				
FCV	30	FDC Canary			Room 511
FCV	31	WAMUS Exhaust Canary			Room 510
FCV	32	WAMUS Input Canary	1/4"	Dwyer 0-2 scfh air	Room 510
FCV	33	SAMUS Input Canary	1/4"	Dwyer 0-2 scfh air	Room 510

	Tag No.	Description	Size	Mfr./Model No.	Location
FCV	34	SAMUS Exhaust Canary			Room 510
FCV	35	Analyzer Gas Rack			Room 510
FCV	36	Analyzer Gas Rack			Room 510
FCV	37				
FCV	38				
FCV	39				
FCV	40				
FCV	41				
FCV	42	CDC/FDC Canary Dry Gas Supply	1/4"	Swagelok	Room 511

Tag No.	Description	Size	Mfr./Model No.	Location
FI 01	Panel Readout, FTC-01		Hastings Power Supply & Readout	Room 510
FI 02	Panel Readout, FTC-02		Hastings Power Supply & Readout	Room 510
FI 03	Panel Readout, FTC-03		Hastings Power Supply & Readout	Room 510
FI 04	Panel Readout, FTC-04		Hastings Power Supply & Readout	Room 510
FI 05	Panel Readout, FTC-05		Hastings Power Supply & Readout	Room 510
FI 06	Panel Readout, FTC-06		Hastings Power Supply & Readout	Room 510
FI 07	Panel Readout, FTC-07		Hastings Power Supply & Readout	Room 510
FI 08	Panel Readout, FTC-08		Hastings Power Supply & Readout	Room 510
FI 09	Panel Readout, FTC-09		Hastings Power Supply & Readout	Room 511, Mixer FDC
FI 10	Panel Readout, FTC-10		Hastings Power Supply & Readout	Room 511, Mixer FDC
FI 11	Panel Readout, FTC-11		Hastings Power Supply & Readout	Room 511, Mixer FDC
FI 12	Panel Readout, FTC-12		Hastings Power Supply & Readout	Room 511, Mixer FDC
FI 13	Panel Readout, FTC-13			Room 511, Mixer VTX
FI 14	Panel Readout, FTC-14			Room 511, Mixer VTX
FI 15	Panel Readout, FTC-15			Room 511, Mixer VTX
FI 16	Panel Readout, FTC-16		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 17	Panel Readout, FTC-17		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 18	Panel Readout, FTC-18		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 19	Panel Readout, FTC-19		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 20	Panel Readout, FTC-20		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 21	Panel Readout, FTC-21		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 22	Panel Readout, FTC-22		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 23	Panel Readout, FTC-23		Hastings Power Supply & Readout	Room 511; Bubbler Rack
FI 36	Panel Readout, FTC-36			Room 511, Mixer VTX
FI 37	Local, EV-51-CO2			Room 512
FI 38	Local, EV-50-N2			Room 512
FI 39	Local, EV-53-MG			Room 512
FI 40	Local, EV-67-MG			Room 512
FI 41	WAMUS		Hastings Power Supply & Readout	Room 510
FI 42	SAMUS		Hastings Power Supply & Readout	Room 510

Tag No.	Description	Size	Mfr./Model No.	Location
PIC 14A	EV-14-MG, not used		Dwyer Photohelic, 3030	Room 510
PIC 14B	EV-14-MG, not used		Dwyer Photohelic, 3030	Room 510
PIC 15A	Mixing Tank #2, EV-15-MG		Dwyer Photohelic, 3025	Room 510
PIC 15B	Mixing Tank #2, EV-15-MG		Dwyer Photohelic, 3025	Room 510
PT 16	FDC/CDC Mixer, AR	1/4"		Room 511
PT 17	FDC/CDC Mixer, CO2	1/4"		Room 511
PT 18	FDC/CDC Mixer, CH4	1/4"		Room 511
PT 19	FDC/CDC Mixer, MG	1/4"		Room 511
PT 20	VTX Mixer, C2H6 @ 150-3000 PSI	1/4"	ASCO, SA12B & TN10A32	Room 511
PT 21	VTX Mixer, C2H6 @ 150-3000 PSI	1/4"	ASCO, SA12B & TN10A32	Room 511
PT 22	VTX Mixer, MG @ 1-25 PSIG	1/4"	Sentra System 204	Room 511
PT 23				
PT 24				
PT 25				
PT 26				
PT 56				
PT 57				
PT 58				
PT 64				
PT 27	Press. Transmitter; SFDC, Return			Platform
PT 28	Press. Transmitter; CDC, Return			Platform
PT 29	Press. Transmitter; VTX, Return	0-7.5" WC	Sentra System 239	Platform
PT 30	Press. Transmitter; NFDC, Return			Platform
PDT 67				
PDT 68				
PDT 69				
PDT 70				
PDT 71				
PDT 72				
PDT 73				
PDT 74				
PDT 75				

Tag No.	Description	Size	Mfr./Model No.	Location
PT 76	VTX Mixer, @ 150-3000 PSI	1/4"	ASCO, SA12B & TN10A32	Room 511
PT 77	VTX Mixer, @ 1.6-36 PSI	1/4"	ASCO, SA12B & TE20A32	Room 511
PT 78	VTX Mixer, @ 0-25 PSI	1/4"	Sentra System 204	Room 511
PT 79	Press. Transmitter; VTX, Supply	0-7.5" WC	Sentra System 239	Platform
PT 80	Press. Transmitter; VTX, Volume 1	0-7.5" WC	Sentra System 239	Platform
PT 81	Press. Transmitter; VTX, Volume 2	0-7.5" WC	Sentra System 239	Platform
PT 82	Press. Transmitter; VTX, Volume 3	0-7.5" WC	Sentra System 239	Platform
PT 83	Press. Transmitter; VTX, Chambers	800-1100 MB	Sentra System 270	Platform
PT 84				
PT 85	Press. Trans; CDC/FDC Mixing Volume			
PT 86	VTX Humidifier			
PT 87	VTX Humidifier to Bu 11			
PT 88	Analyzer Rack			G-510-3/Room 510
PT 89	WAMUS Supply after PRV 25 MG	0-25"H2O	Omega, PX154-025DI	Room 510
PT 90	Suction Press. Trans.; WAMUS Pump	0-10"H2O	Omega, PX154-010DI	Room 510
PT 91	Press. Trans.; WAMUS Pump Outlet	0-60 psig	Omega, PX6155-060GI	Room 510
PT 92	Press. Trans.; WAMUS Exhaust	0-10"H2O	Omega, PX154-010DI	Room 510
PT 93	Press. Trans.; WAMUS Supply Panel	0 - 3000 psig	Omega, PX725-3KGI	Trailer Panel Outside
PT 94	Press. Trans.; SAMUS Supply Tank	0 - 50 #	Omega, PX410-050 GI	Room 510
PT 95	Press. Trans.; SAMUS Supply Chambers	0 - 100" H2O	Ashcroft	Room 510
PT 96	Press. Trans.; SAMUS Exhaust	0-10"H2O	Ashcroft	Room 510

Tag	No.	Description	Size	Mfr./Model No.	Location
PI	01	Press. Gage; Bank #1, AR/CO2-TT	1/4"	Scott Manifold	Gas House
PI	02	Press. Gage; Bank #2, AR/CO2-TT	1/4"	Scott Manifold	Gas House
PI	03	Press. Gage; AR/CO2	1/4"	Scott Manifold	Gas House
PI	04	Press. Gage; Bank #1, AR/CO2	1/4"	Scott Manifold	Gas House
PI	05	Press. Gage; Bank #2, AR/CO2	1/4"	Scott Manifold	Gas House
PI	06	Press. Gage; AR/CO2	1/4"	Scott Manifold	Gas House
PI	07	Press. Gage; Bank #1, AR	1/4"	Scott Manifold	Gas House
PI	08	Press. Gage; Bank #2, AR	1/4"	Scott Manifold	Gas House
PI	09	Press. Gage; AR	1/4"	Scott Manifold	Gas House
PI	10	Press. Gage; Bank #1, AR/CO2/CF4	1/4"	Scott Manifold	Gas House
PI	11	Press. Gage; Bank #2, AR/CO2/CF4	1/4"	Scott Manifold	Gas House
PI	12	Press. Gage; AR/CO2/CF4	1/4"	Scott Manifold	Gas House
PI	13	Press. Gage; Bank #1, CO2	1/4"	Scott Manifold	Gas House
PI	14	Press. Gage; Bank #2, CO2	1/4"	Scott Manifold	Gas House
PI	15	Press. Gage; CO2	1/4"	Scott Manifold	Gas House
PI	16	Press. Gage; Bank #1, CF4	1/4"	Scott Manifold	Gas House
PI	17	Press. Gage; Bank #2, CF4	1/4"	Scott Manifold	Gas House
PI	18	Press. Gage; CF4	1/4"	Scott Manifold	Gas House
PI	19	Press. Gage; Bank #1, AR	1/4"	Scott Manifold	Gas House
PI	20	Press. Gage; Bank #2, AR	1/4"	Scott Manifold	Gas House
PI	21	Press. Gage; AR	1/4"	Scott Manifold	Gas House
PI	22	Press. Gage; Bank #1, C2H6	1/4"	Scott Manifold	Gas House
PI	23	Press. Gage; Bank #2, C2H6	1/4"	Scott Manifold	Gas House
PI	24	Press. Gage; C2H6	1/4"	Scott Manifold	Gas House
PI	25	Press. Gage; Bank #1, CO2	1/4"	Scott Manifold	Gas House
PI	26	Press. Gage; Bank #2, CO2	1/4"	Scott Manifold	Gas House
PI	27	Press. Gage; CO2	1/4"	Scott Manifold	Gas House
PI	28	Press. Gage; Bank #1, CH4	1/4"	Scott Manifold	Gas House
PI	29	Press. Gage; Bank #2, CH4	1/4"	Scott Manifold	Gas House
PI	30	Press. Gage; CH4	1/4"	Scott Manifold	Gas House
PI	31	Press. Gage; XE, Recop'd	1/4"	Scott Manifold	Gas House
PI	32	Press. Gage; Bank #1, Xe/CH	1/4"	Scott Manifold	Gas House

Tag	No.	Description	Size	Mfr./Model No.	Location
PI	33	Press. Gage; Bank #2, Xe/CH	1/4"	Scott Manifold	Gas House
PI	34	Press. Gage; Xe/CH	1/4"	Scott Manifold	Gas House
PI	35	Press. Gage; Bank #1, N2	1/4"	Scott Manifold	Gas House
PI	36	Press. Gage; Bank #2, N2	1/4"	Scott Manifold	Gas House
PI	37	Press. Gage; N2	1/4"	Scott Manifold	Gas House
PI	38	Mixer, FDC/CDC, AR	1/4"	0 - 30 PSI	Room 511
PI	39	Mixer, FDC/CDC, AR	1/4"	0 - 30 PSI	Room 511
PI	40	Mixer, FDC/CDC, AR	1/4"	0 - 30 PSI	Room 511
PI	41	Mixer, FDC/CDC, AR	1/4"	0 - 30 PSI	Room 511
PI	42	Mixer, FDC/CDC, CO2	1/4"	0 - 30 PSI	Room 511
PI	43	Mixer, FDC/CDC, CO2	1/4"	0 - 30 PSI	Room 511
PI	44	Mixer, FDC/CDC, CO2	1/4"	0 - 30 PSI	Room 511
PI	45	Mixer, FDC/CDC, CO2	1/4"	0 - 30 PSI	Room 511
PI	46	Mixer, FDC/CDC, CH4	1/4"	0 - 30 PSI	Room 511
PI	47	Mixer, FDC/CDC, CH4	1/4"	0 - 30 PSI	Room 511
PI	48	Mixer, FDC/CDC, CH4	1/4"	0 - 30 PSI	Room 511
PI	49	Mixer, FDC/CDC, CH4	1/4"	0 - 30 PSI	Room 511
PI	50	Mixer, FDC/CDC, MG	1/4"	0 - 30 PSI	Room 511
PI	51	Mixer, FDC/CDC, MG	1/4"	0 - 30 PSI	Room 511
PI	52	Mixer, VTX, C2H6	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	53	Mixer, VTX, C2H6	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	54	Mixer, VTX, C2H6	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	55	Mixer, VTX, C2H6	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	56	Mixer, VTX, CO2	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	57	Mixer, VTX, CO2	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	58	Mixer, VTX, CO2	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	59	Mixer, VTX, CO2	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	60	Mixer, VTX, MG	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	61	Mixer, VTX, MG	1/4"	0 - 30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	62				
PI	63				
PI	64				

Tag	No.	Description	Size	Mfr./Model No.	Location
PI	65				
PI	66				
PI	67				
PI	68				
PI	69				
PI	70				
PI	71				
PI	72				
PI	73				
PI	74				
PI	75				
PI	76				
PI	77				
PI	78	PRV-25-MG; Valve Gage	1/8"	Moore,7342-1,3 1/2"Ø,0-50" H2O	Room 510
PI	79	PRV-26-MG; Valve Gage	1/8"	Moore,7342-1,0-50" H2O	Room 510
PI	80	Tube Trailer #1, AR/CO2	1/4" NPT	0-3000 PSI, 4 1/2" Dial	Tube Trailer Manifold
PI	81	Tube Trailer #2, AR/CO2	1/4" NPT	0-3000 PSI, 4 1/2" Dial	Tube Trailer Manifold
PI	82	Mixer, VTX	1/4"	0-30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	83	Mixer, VTX	1/4"	0-30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	84	Mixer, VTX	1/4"	0-60 PSI, 3 1/2" Dial	Room 511
PI	85	Mixer, VTX	1/4"	0-30 PSI, 3 1/2" Dial, LBL 6685-2008	Room 511
PI	86	MG, PCV-65-MG			Room 215
PI	87	CF4, Line 33	1/4"	0-100 psig	Room 510
PI	88	CO2, Line 32	1/4"	0-100 psig	Room 510
PI	89	ACC, Line 31	1/4"	0-100 psig	Room 510
PI	90	Trailer Line 28	1/4"	0-100 psig	Room 510
PI	91	8 Pack Line 29	1/4"	0-100 psig	Room 510
PI	92	AR, Line 30	1/4"	0-100 psig	Room 510
PI	93	WAMUS Mixer Tank	1/2"	Solfrunt, 0-60 psig	Room 510
PI	94	SAMUS Mixer Tank	1/4"	0-60 psig	Room 510
PI	95	WAMUS Return	1/4"	Moore, 0-50"H2O	Room 510
PI	96	Analyzer Supply			

Tag	No.	Description	Size	Mfr./Model No.	Location
PI	97	Analyzer Reducer			
PI	98	Analyzer Regulator Pressure			
PI	99	Mixer, CDC/FDC Premix			
PI	100	Mixer, CDC/FDC Premix			
PI	101	VTX Reservoir			
PI	102	VTX Bubbler			
PI	103	VTX Humidifier to Bull			
PI	104	N2 Ballast Pressure for Room 511 EV's			
PI	105	VTX - Premix			
PI	106	SAMUS Exhaust	1/4"	Ashcroft, 0-10 "H2O	Room 510
PI	107				
PI	108	(TRD)			Gas Shed
PI	109				Gas Shed
PI	110				Gas Shed
PI	111				Gas Shed
PI	112				Gas Shed
PI	113				Gas Shed
PI	114				Gas Shed
PI	115	N2; Room 511			Gas Shed
PI	116	N2; Room 511			Gas Shed
PI	117	N2; Room 511			Gas Shed
PI	118	N2; Room 511			Gas Shed
PI	119	AR; Room 215			Gas Shed
PI	120	AR; Room 215			Gas Shed
PI	121	AR; Room 215			Gas Shed
PI	122	AR; Room 215			Gas Shed
PI	123				
PI	124	MG; SAMUS Supply to chambers		Moore, 0-50"H2O	Room 510
PI	125				
PI	126				
PI	127	Analysis Gas Rack			Room 510
PI	128	Analysis Gas Rack			Room 510

Tag	No.	Description	Size	Mfr./Model No.	Location
PI	129	Analysis Gas Rack			Room 510
PI	130	Analysis Gas Rack			Room 510
PI	131	Analysis Gas Rack			Room 510
PI	132	Analysis Gas Rack			Room 510
PI	133	Analysis Gas Rack			Room 510
PI	134	Analysis Gas Rack			Room 510
PI	135	WAMUS Supply after PRV 25 MG	1/4"	Moore, 0-50"H2O	Room 510
PI	136	Analyzer Rack - in/wc - Pump Output		Magnehelic, 5-0-5"H2O	Room 510
PI	137	WAMUS Pump Suction	1/4"	Magnehelic, 0-10"H2O	Room 510
PI	138	at PRV 106 MG Calibration Tank Output			
PI	139	at PRV 106 MG Calibration Tank Output			

Tag No.		Description	Size	Mfr./Model No.	Location
PRV	01 AR/CO2	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	02 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	03 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	04 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	05 AR/CO2	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	06 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	07 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	08 AR/CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	09 AR	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	10 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	11 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	12 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	13 ACC	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	14 ACC	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	15 ACC	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	16 ACC	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	17 CO2	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	18 CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	19 CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	20 CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	21 CF4	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	22 CF4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	23 CF4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	24 CF4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	25 MG	Pressure Regulator; Mixing Tank #1	3/8"	Jordan Valve Mark 50, Cv = .42	Room 510
PRV	26 CF4/CH4	Pressure Regulator; SAMUS pump suction	1/2"	Moore, 40-E-2, 0-50" H2O	Room 510
PRV	27 AR	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	28 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	29 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	30 AR	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	31 C2H6	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	32 C2H6	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House

Tag No.		Description	Size	Mfr./Model No.	Location	
PRV	33	C2H6	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	34	C2H6	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	35	CO2	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	36	CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	37	CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	38	CO2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	39	CH4	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	40	CH4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	41	CH4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	42	CH4	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	43	XE/CH	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	44	XE/CH	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	45	XE/CH	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	46	XE/CH	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	47	N2	4-Way Valve, Bank Switch	1/4"	Scott Manifold	Gas House
PRV	48	N2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	49	N2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	50	N2	Pressure Reducing Valve	1/2"	Scott Manifold	Gas House
PRV	51	AR	Mixer, FDC/CDC, 200#-0#	1/4"		Room 511
PRV	52	CO2	Mixer, FDC/CDC, 200#-0#	1/4"		Room 511
PRV	53	CH4	Mixer, FDC/CDC, 200#-0#	1/4"		Room 511
PRV	54	C2H6	Mixer, VTX, 200#-0#	1/4"	LBL #6680-61856	Room 511
PRV	55	CO2	Mixer, VTX, 200#-0#	1/4"	LBL #6680-61856	Room 511
PRV	56					
PRV	57					
PRV	58					
PRV	59					
PRV	60					
PRV	61					
PRV	62					
PRV	63					
PRV	64					

Tag No.		Description	Size	Mfr./Model No.	Location
PRV	65				
PRV	66				
PRV	67				
PRV	68				
PRV	69				
PRV	70				
PRV	71				
PRV	72				
PRV	73				
PRV	74				
PRV	75				
PRV	76	MG Mixer, VTX, 200#-0"	1/4"	LBL #6680-61856	Room 511
PRV	77	MG Mixer, VTX, 200#-0"	1/4"	GO Inc. #BP-3	Room 511
PRV	78	MG Mixer, VTX, 200#-0"	1/4"	GO Inc. #BP-3	Room 511
PRV	79	MG Mixer, VTX	1/4"		
PRV	80	MG Humidifier, VTX	1/4"		
PRV	81	MG Analyzer, CDC/FDC/VTX	1/2"	Victor	
PRV	82	MG Analyzer, CDC/FDC/VTX	1/2"	Moore 40-E2	
PRV	83	MG			
PRV	84	CO2/C2H6 VTX, Scott			Gas Shed
PRV	85	CO2/C2H6 VTX, Scott			Gas Shed
PRV	86	CO2/C2H6 VTX, Scott			Gas Shed
PRV	87	CO2/C2H6 VTX, Scott			Gas Shed
PRV	88	AR/CO2/CH4 CDC/FDC, Scott			Gas Shed
PRV	89	AR/CO2/CH4 CDC/FDC, Scott			Gas Shed
PRV	90	AR/CO2/CH4 CDC/FDC, Scott			Gas Shed
PRV	91	AR/CO2/CH4 CDC/FDC, Scott			Gas Shed
PRV	92	N2 To Room 511 Solenoid Supply			Gas Shed
PRV	93	N2 To Room 511 Solenoid Supply			Gas Shed
PRV	94	AR TRD Room 215			Gas Shed
PRV	95	AR TRD Room 215			Gas Shed
PRV	96				

Tag No.		Description	Size	Mfr./Model No.	Location
PRV	97				
PRV	98				
PRV	99				
PRV	100	Analysis Rack			Room 510
PRV	101	Analysis Rack			Room 510
PRV	102	Analysis Rack			Room 510
PRV	103	Analysis Rack			Room 510
PRV	104	AR/CO2/CF4 Regulator; WAMUS Pump Intake	3/4"	Jordan Valve Mark 608, 2-5.5"H2O	Room 510
PRV	105	Tank - Calibrated Gas (at MV 106)			

Tag No.	Description	Size	Mfr./Model No.	Location
PS 01	Press. Switch; AR/CO2		Scott Manifold	Gas House
PS 02	Press. Switch; EV-02-AR/CO2		Mercoid, #DAH-31-153-5	Gas House
PS 04	Press. Switch; AR/CO2		Scott Manifold	Gas House
PS 05	Press. Switch; EV-05-AR/CO2		Mercoid, #DAH-31-153-5	Gas House
PS 06	Press. Switch; AR		Scott Manifold	Gas House
PS 07	Press. Switch; EV-07-AR		Mercoid, #DAH-31-153-5	Gas House
PS 08	Press. Switch; ACC		Scott Manifold	Gas House
PS 09	Press. Switch; EV-09-ACC		Mercoid, #DAH-31-153-5	Gas House
PS 10	Press. Switch; CO2		Scott Manifold	Gas House
PS 11	Press. Switch; EV-11-CO2		Mercoid, #DAH-31-153-5	Gas House
PS 12	Press. Switch; CF4		Scott Manifold	Gas House
PS 13	Press. Switch; EV-13-CF4		Mercoid, #DAH-31-153-5	Gas House
PS 16	Press. Switch; AR		Scott Manifold	Gas House
PS 17	Press. Switch; C2H6		Scott Manifold	Gas House
PS 20	Press. Switch; CO2		Scott Manifold	Gas House
PS 21	Press. Switch; CH4		Scott Manifold	Gas House
PS 23	Press. Switch; Xe/CH		Scott Manifold	Gas House
PS 24	Press. Switch; N2		Scott Manifold	Gas House
PS 25	Mixer, CDC/FDC			Room 511
PS 26	Mixer, VTX			Room 511
PS 27	Press. Flow Switch; AR/CO2/CF4		Scott Manifold - Trailer	Gas House
PS 28	VTX, Scott			Gas House
PS 29	CDC/FDC, Scott			Gas House

Tag No.	Description	Size	Mfr./Model No.	Location
RO 01	Restricting Orifice; AR/CO2	B-76	O'Keefe Controls	Gas House
RO 02	Restricting Orifice; AR/CO2	B-47	O'Keefe Controls	Gas House
RO 03	Restricting Orifice; AR	B-20	O'Keefe Controls	Gas House
RO 04	Restricting Orifice; AR/CO2/CF4	B-20	O'Keefe Controls	Gas House
RO 05	Restricting Orifice; CO2	B-18	O'Keefe Controls	Gas House
RO 06	Restricting Orifice; CF4	B-21	O'Keefe Controls	Gas House
RO 07	Restricting Orifice; AR	B-22	O'Keefe Controls	Gas House
RO 08	Restricting Orifice; C2H6	B-6	O'Keefe Controls	Gas House
RO 09	Restricting Orifice; CO2	B-15	O'Keefe Controls	Gas House
RO 10	Restricting Orifice; CH4	B-6	O'Keefe Controls	Gas House
RO 11	Restricting Orifice; Xe/CH	B-15	O'Keefe Controls	Gas House
RO 12	Restricting Orifice; N2	B-15	O'Keefe Controls	Gas House
RO 13	Restricting Orifice; MG	B-6	O'Keefe Controls	Room 511
RO 14	Restricting Orifice; Air		O'Keefe Controls	Platform - TRD
RO 15	Restricting Orifice; Air		O'Keefe Controls	Platform - FDC
RO 16	Restricting Orifice; Air		O'Keefe Controls	Platform - Signal Boxes
RO 21	Restricting Orifice; MG		Calibrated Leak	Mixer - CDC - 511
RO 22	Restricting Orifice; MG		Calibrated Leak	Mixer - VTX - 511

Tag No		Description	Size	MFR/Model No.	Location
PSV 01	MG	Mixing Tank #1 @ 30 psig	1/2" x 3/4"	Anderson-Greenwood, 83B-46-4	Room 510
PSV 02	MG	PRV-07-MG; Relief	1/2"	Fermi DWG #3740-MC-194275	Room 510
PSV 03	MG	Mixing Tank #2 @ 30 psig	1/2" x 3/4"	Anderson-Greenwood, 83B-46-4	Room 510
PSV 04	MG	PRV-08-MG; Relief	1/2"	Fermi DWG #3740-MC-194275	Room 510
SV 05	XE	XE Recuperative			Gas House
SV 06	XE	XE Recuperative			Gas House
SV 07	AR	Mixer, FDC/CDC @ 30 psi	1/4"	Nupro, SS-RL 3M4-F4-BU	Room 511
SV 08	CO2	Mixer, FDC/CDC @ 30 psi	1/4"	Nupro, SS-RL 3M4-F4-BU	Room 511
SV 09	CH4	Mixer, FDC/CDC @ 30 psi	1/4"	Nupro, SS-RL 3M4-F4-BU	Room 511
SV 10	MG	Mixer, FDC/CDC 3 psi	1/4"		Room 511
SV 11	C2H6	Mixer, VTX @ 50 psi	1/4"	Nupro, #SS-4CPA-3	Room 511
SV 12	CO2	Mixer, VTX @ 50 psi	1/4"	Nupro, #SS-4CPA-3	Room 511
SV 13	MG	Mixer, VTX @ 3 psi	1/4"	Nupro, #SS-4CPA-3	Room 511
SV 14					
SV 15					
SV 16					
PSV 17					
PSV 18	MG	SAMUS Detector			Hall; Collision
PSV 19	MG	SAMUS Detector			Hall; Collision
PSV 20	MG	SAMUS Detector			Hall; Collision
PSV 21	MG	SAMUS Detector			Hall; Collision
PSV 22	MG	SAMUS Detector			Hall; Collision
SV 23	MG	SAMUS Detector			Hall; Collision
SV 24					
SV 25					
SV 26					
SV 27					
SV 28					
SV 29					
SV 30					
SV 31					
SV 32					

Tag No		Description	Size	MFR/Model No.	Location
SV	33				
SV	34				
SV	35				
SV	36				
SV	37				
SV	38				
SV	39				
SV	40				
SV	41				
SV	42	Mixer, VTX @ 50 PSI	1/4"	Nupro, #SS-4CPA-3	Room 511
SV	43	MG To Analyzer			Room 511
SV	44	MG CDC/FDC Bypass			Room 511
SV	45	MG VTX Humidifier			Room 511
PSV	46	MG WAMUS Pump Outlet @ 40 psig	1/2"	Circle Seal 5159B-4MP-40	Room 510
SV	47				
PSV	48	MG SAMUS Pump outlet @ 30 psig	1/2"	Circle Seal 5133B-2MP-30	Room 510

	Tag No.	Description	Size	Mfr./Model No.	Location	
EV	02	AR/CO2	Block Valve; PS-02, N.C.	3/8"	ASCO, 8210	Room 510
EV	03	AR/CO2	Block Valve; N.O.	3/8"	ASCO, 8210	Room 510
EV	05	AR/CO2	Block Valve; PS-05, N.C.	3/8"	ASCO, 8210	Room 510
EV	07	AR	Block Valve; PS-07, N.C.	3/8"	ASCO, 8210	Room 510
EV	09	ACC	Block Valve; PS-09, N.C.	3/8"	ASCO, 8210	Room 510
EV	11	CO2	Block Valve; PS-11, N.C.	3/8"	ASCO, 8210	Room 510
EV	13	CF4/CH4	Block Valve; PS-13, N.C.	3/8"	ASCO, 8210	Room 510
EV	14	MG	Pump Loading Valve; N.C.	3/8"	ASCO, 8210G93	Room 510
EV	15	MG	3-Way diverter valve, Samus exhaust	1"	Worcester w/ 1075 act.	Room 510
EV	16	C2H6	Block Valve; N.C.	3/8"	ASCO, 8210	Gas House
EV	17	C2H6	Block Valve; N.C.	3/8"	ASCO, 8210	Gas House
EV	18	CH4	Block Valve; N.C.	3/8"	ASCO, 8210	Gas House
EV	19	AR	Block Valve; Mixer, FDC/CDC	1/4"		Room 511
EV	20	CO2	Block Valve; Mixer, FDC/CDC	1/4"		Room 511
EV	21	CH4	Block Valve; Mixer, FDC/CDC	1/4"		Room 511
EV	22	MG	Block Valve; Mixer, FDC/CDC	1/4"		Room 511
EV	23	C2H6	Block Valve; Mixer, VTX	1/4"	ASCO, #8210C94	Room 511
EV	24	CO2	Block Valve; Mixer, VTX	1/4"	ASCO, #8210C94	Room 511
EV	25	MG	Block Valve; Mixer, VTX	1/4"	ASCO, #8210C94	Room 511
EV	26	MG	Block Valve; Bubbler Rack			Room 511
EV	27	MG	Block Valve; Bubbler Rack			Room 511
EV	28	MG	Block Valve; Bubbler Rack			Room 511
EV	29	MG	Block Valve; Bubbler Rack			Room 511
EV	30	MG	Block Valve; Bubbler Rack			Room 511
EV	31	MG	Block Valve; Bubbler Rack			Room 511
EV	32	MG	Block Valve; Bubbler Rack			Room 511
EV	33	MG	Block Valve; Bubbler Rack			Room 511
EV	34	MG	Block Valve; Bubbler Rack			Room 511
EV	35	MG	Block Valve; Bubbler Rack			Room 511
EV	36	MG	Block Valve; Bubbler Rack			Room 511
EV	37	MG	Block Valve; Bubbler Rack			Room 511
EV	38	MG	Block Valve; Bubbler Rack			Room 511

	Tag No.	Description	Size	Mfr./Model No.	Location
EV	39	MG	Block Valve; Bubbler Rack		Room 511
EV	40				
EV	41				
EV	42				
EV	43				
EV	44				
EV	45				
EV	46				
EV	47				
EV	48				
EV	49				
EV	50				
EV	51				
EV	52				
EV	53				
EV	54				
EV	55				
EV	56				
EV	57				
EV	58				
EV	59				
EV	60				
EV	61				
EV	62				
EV	63				
EV	64				
EV	65				
EV	66				
EV	67				
EV	68				
EV	69				
EV	70				

	Tag No.	Description	Size	Mfr./Model No.	Location
EV	71				
EV	72				
EV	73				
EV	74				
EV	75				
EV	76				
EV	77				
EV	78				
EV	79				
EV	80				
EV	81				
EV	82				
EV	83				
EV	84				
EV	85				
EV	86				
EV	87				
EV	88				
EV	89				
EV	90				
EV	91				
EV	92				
EV	93				
EV	94				
EV	95				
EV	96				
EV	97	Block Valve; Mixer VTX	1/4"	ASCO #8210C94	Room 511
EV	98	AR Block Valve; Manifold	3/8"		Room 511
EV	99	CO2 Block Valve; Manifold	3/8"		Room 511
EV	100	CH4 Block Valve; Manifold	3/8"		Room 511
EV	101	C2H6 Block Valve; Manifold	3/8"		Room 511
EV	102	CO2 Block Valve; Manifold	3/8"		Room 511

	Tag No.	Description	Size	Mfr./Model No.	Location
EV	103				
EV	104				
EV	105				
EV	106				
EV	107	Xe/CH Block Valve; N.C.			Gas House
EV	108	AR/CO2			Room 510
EV	109	Premix			Room 510
EV	110	MG Isolation Valve; Line 7 Supply to Det.			Room 215
EV	111				Platform TRD Rack
EV	112				Platform TRD Rack
EV	113				Platform TRD Rack
EV	114				Platform TRD Rack
EV	115				Platform TRD Rack
EV	116				Platform TRD Rack
EV	117				Platform TRD Rack
EV	118				Platform TRD Rack
EV	119				Platform TRD Rack
EV	120	MG Power Bypass - N.O.	1/2"	ASCO	Room 510
EV	121	MG CDC/FDC Premix Bypass			
EV	122	MG VTX - Mixer			
EV	123	MG VTX - Humidifier			
EV	124	MG VTX - Mixer			
EV	125	MG Diverter Ball Valve	1"	Worcester, 1075 acf	Room 510

Tag No.			Description	Size	MFR/Model No.	Location
MV	01	AR/CO2	3-way, Vent Valve	1/2"	Scott Manifold	Gas House
MV	02	AR/CO2/CF4	3-way, Vent Valve	1/2"	Scott Manifold	Gas House
MV	03	AR/CO2/CF4	Block Valve	1/2"		Room 510
MV	04	AR/CO2/CF4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	05	AR/CO2/CF4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	06	AR/CO2/CF4	Bypass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	07	AR/CO2/CF4	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	08	AR/CO2/CF4	Block Valve; Analyzer	1/4"	Whitey, SS-62TSW4T	Room 510
MV	09	AR/CO2/CF4	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	10	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	11	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	12	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	13	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	14	AR/CO2	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	15	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	16	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	17	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	18	AR/CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	19	AR/CO2	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	20	AR/CO2/CF4	Block Valve	1/2"		Room 510
MV	21	AR/CO2/CF4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	22	AR/CO2/CF4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	23	AR/CO2/CF4	Bypass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	24	AR/CO2/CF4	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	25	AR/CO2/CF4	Block Valve, Analyzer	1/4"	Whitey, SS-62TSW4T	Room 510
MV	26	AR/CO2/CF4	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	27	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	28	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	29	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	30	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	31	AR	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	32	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House

Tag No.			Description	Size	MFR/Model No.	Location
MV	33	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	34	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	35	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	36	AR	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	37	AR	Block Valve	1/2"		Room 510
MV	38	AR	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	39	AR	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	40	AR	By-Pass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	41	AR	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	42	AR	Block Valve; Analyzer	1/4"	Whitey, SS-62TSW4T	Room 510
MV	43	AR	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	44	ACC	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	45	ACC	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	46	ACC	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	47	ACC	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	48	ACC	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	49	ACC	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	50	ACC	Block Valve	1/2"		Room 510
MV	51	ACC	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	52	ACC	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	53	ACC	By-Pass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	54	ACC	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	55	ACC	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	56	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	57	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	58	CO2	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	59	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	60	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	61	CO2	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	62	CO2	Block Valve	1/2"		Room 510
MV	63	CO2	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	64	CO2	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510

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Tag No.			Description	Size	MFR/Model No.	Location
MV	65	CO2	By-Pass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	66	CO2	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	67	CO2	Block Valve; Analyzer	1/4"	Whitey, SS-62TSW4T	Room 510
MV	68	CO2	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	69	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	70	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	71	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	72	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	73	CF4	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	74	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	75	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	76	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	77	CF4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	78	CF4	3-Way, Vent Valve	1/4"	Scott Manifold	Gas House
MV	79	CF4	Block Valve	1/2"		Room 510
MV	80	CF4/CH4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	81	CF4/CH4	Block Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	82	CF4/CH4	By-Pass Valve; Filter	1/2"	Whitey, SS-63TSW8T	Room 510
MV	83	CF4/CH4	Vent Valve; Filter	1/4"	Whitey, SS-62TSW4T	Room 510
MV	84	CF4/CH4	Block Valve; Analyzer	1/4"	Whitey, SS-62TSW4T	Room 510
MV	85	CF4/CH4	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	86	MG	Block Valve; Mixing Tank #1	1/4"	Whitey, SS-62TSW4T	Room 510
MV	87	MG	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	88	MG	Block Valve; Mixing Tank #2	1/4"	Whitey, SS-62TSW4T	Room 510
MV	89	MG	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	90	MG	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	91	OIL	Bubbler Drain Valve	1/2"	Whitey, SS-63TF8	Room 510
MV	92	MG	Manifold Valve	1/4"	Whitey, SS-42VCO4	Room 510
MV	93	OIL	Bubbler Drain Valve	1/2"	Whitey, SS-63TF8	Room 510
MV	94	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	95	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	96	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510

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Tag No.			Description	Size	MFR/Model No.	Location
MV	97	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	98	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	99	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	100	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	101	MG	Block Valve; Canary	1/2"	Whitey, SS-63TSW8T	Room 510
MV	102		Spare	1/2"		Room 510
MV	103		Spare	1/2"		Room 510
MV	104		Spare	1/2"		Room 510
MV	105		Spare	1/2"		Room 510
MV	106		Manifold Valve; Spare	1/4"	Whitey, SS-42VCO4	Room 510
MV	107		Manifold Valve; Spare	1/4"	Whitey, SS-42VCO4	Room 510
MV	108	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	109	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	110	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	111	AR	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	112	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	113	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	114	AR	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	115	AR	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	116	C2H6	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	117	C2H6	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	118	C2H6	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	119	C2H6	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	120	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	121	CO2	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	122	CO2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	123	CO2	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	124	CH4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	125	CH4	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	126	CH4	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV	127	CH4	3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV	128	Xe	Block Valve	3/8"		Gas House

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Tag No.	Description	Size	MFR/Model No.	Location
MV 129	Xe/CH Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV 130	Xe/CH 3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV 131	Xe/CH Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV 132	Xe/CH 3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV 133	N2 Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV 134	N2 3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV 135	N2 Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV 136	N2 3-Way Vent Valve	1/4"	Scott Manifold	Gas House
MV 137	AR Block Valve	3/8"		Room 511
MV 138	AR Block Valve; Purge	3/8"		Room 511
MV 139	ACC SAMUS Premix to Analyzer	1/4"		Room 510
MV 140	AR Block Valve; FDC/CDC Mixer	1/4"		Room 511
MV 141	AR Block Valve; FDC/CDC Mixer	1/4"		Room 511
MV 142	CO2 Block Valve	3/8"		Room 511
MV 143	MG WAMUS Return to Analyzer	1/4"	Whitey, SS-62ESW4T-NL	Room 510
MV 144	CO2 Block Valve; FDC Mixer	1/4"		Room 511
MV 145	CO2 Block Valve; FDC Mixer	1/4"		Room 511
MV 146	CH4 Block Valve	3/8"		Room 511
MV 147	MG SAMUS	1/4"		Room 510
MV 148	CH4 FDC Mixer Block Valve	1/4"		Room 511
MV 149	CH4 FDC Mixer Block Valve	1/4"		Room 511
MV 150	C2H6 Block Valve	3/8"		Room 511
MV 151	MG WAMUS Isolation 1" Valve/2" Line	1"	Worcester, 416NSE	Room 510
MV 152	C2H6 VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 153	C2H6 VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 154	CO2 Block Valve	3/8"		Room 511
MV 155	CO2 Purge Block Valve	3/8"		Room 511
MV 157	CO2 VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 158	CO2 VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 159	MG FDC Mixer Block Valve	1/4"		Room 511
MV 160	MG FDC Mixer Block Valve	1/4"		Room 511
MV 161	MG FDC Mixer Block Valve	1/4"		Room 511

Tag No.	Description	Size	MFR/Model No.	Location
MV 162	MG FDC Mixer Block Valve	1/4"		Room 511
MV 163	MG FDC Mixer Block Valve	1/4"		Room 511
MV 164	MG VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 165	MG VTX Mixer Block Valve	1/4"	Hoke #H-7115 FAS	Room 511
MV 166	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 167	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 168	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 169	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 170	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 171	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 172	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 173	MG Block Valve; Bubbler Rack	1/2"		Room 511
MV 174	Block Valve; N2 - Solenoids	3/8"		Room 511
MV 175	Block Valve; CDC/FDC Premix	3/8"		Room 511
MV 176	Block Valve; VTX Premix	3/8"		Room 511
MV 177	Block Valve, Spare	3/8"		Room 511
MV 178	Block Valve, Spare	3/8"		Room 511
MV 179				
MV 180				
MV 181				
MV 182				
MV 183				
MV 184				
MV 185				
MV 186				
MV 187				
MV 188	Analysis Sample			
MV 189	MG SAMUS O2 & H2O filter	1/4"	Worcester 1/4" 416NSE	Room 510
MV 190	MG SAMUS O2 & H2O filter	1/4"	Worcester 1/4" 416NSE	Room 510
MV 191	MG SAMUS O2 & H2O filter	1/4"	Worcester 1/4" 416NSE	Room 510
MV 192				
MV 193				

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Tag No.		Description	Size	MFR/Model No.	Location
MV	194				
MV	195	MG	Block Valve; SAMUS		Hall; Collision
MV	196	MG	Block Valve; SAMUS		Hall; Collision
MV	197	MG	Block Valve; SAMUS		Hall; Collision
MV	198	MG	Block Valve; SAMUS		Hall; Collision
MV	199	MG	Block Valve; SAMUS		Hall; Collision
MV	200	MG	Block Valve; SAMUS		Hall; Collision
MV	201	MG	Block Valve; SAMUS		Hall; Collision
MV	202	MG	Block Valve; SAMUS		Hall; Collision
MV	203	MG	Block Valve; SAMUS		Hall; Collision
MV	204	MG	Block Valve; SAMUS		Hall; Collision
MV	205	MG	Block Valve; SAMUS		Hall; Collision
MV	206	MG	Block Valve; SAMUS		Hall; Collision
MV	207		Block Valve; VTX Mixer	1/4" Hoke #H-7115 FAS	Room 511
MV	208		Block Valve; VTX Mixer	1/4" Hoke #H-7115 FAS	Room 511
MV	209	MG	Block Valve; VTX Mixer	1/4" Hoke #H-7115 FAS	Room 511
MV	210	MG	Block Valve; VTX Mixer	1/4" Hoke #H-7115 FAS	Room 511
MV	211	MG	CO2		Gas House
MV	212	MG	SAMUS O2 & H2O trap purge		Room 510
MV	213	MG	Block Valve; PT-96, SAMUS Exhaust	1/4"	Room 510
MV	214	MG	Block Valve; PT-95, SAMUS Supply	1/4"	Room 510
MV	215	MG	Block Valve; SFDC Return	5/8"	Assembly Hall
MV	216	MG	Block Valve; NFDC Return	5/8"	Assembly Hall
MV	217	MG	Block Valve, CDC Return	5/8"	Assembly Hall
MV	218	MG	Block Valve, VTX Return	5/8"	Assembly Hall
MV	219	MG	Block Valve, SFDC Supply	5/8"	Assembly Hall
MV	220	MG	Block Valve, NFDC Supply	5/8"	Assembly Hall
MV	221	MG	Block Valve, CDC Supply	5/8"	Assembly Hall
MV	222	MG	Block Valve, VTX Supply	5/8"	Assembly Hall
MV	223	MG	Block Valve, Spare	5/8"	Assembly Hall
MV	224	MG	Block Valve, Spare	5/8"	Assembly Hall
MV	225				

Tag No.	Description	Size	MFR/Model No.	Location
MV 226				
MV 227				
MV 228				
MV 229				
MV 230				
MV 231				
MV 232	MG Block Valve; SFDC Return	5/8"		Collision Hall
MV 233	MG Block Valve; NFDC Return	5/8"		Collision Hall
MV 234	MG Block Valve; CDC Return	5/8"		Collision Hall
MV 235	MG Block Valve; VTX Return	5/8"		Collision Hall
MV 236	MG Block Valve; SFDC Supply	5/8"		Collision Hall
MV 237	MG Block Valve; NFDC	5/8"		Collision Hall
MV 238	MG Block Valve; CDC Supply	5/8"		Collision Hall
MV 239	MG Block Valve; VTX Supply	5/8"		Collision Hall
MV 240	MG Block Valve; Spare	5/8"		Collision Hall
MV 241	MG Block Valve; Spare	5/8"		Collision Hall
MV 242				
MV 243				
MV 244				
MV 245				
MV 246				
MV 247				
MV 248				
MV 249	MG Block Valve; SFDC Return	5/8"		Detector Hall
MV 250	MG Block Valve; NFDC Return	5/8"		Detector Hall
MV 251	MG Block Valve; CDC Return	5/8"		Detector Hall
MV 252	MG Block Valve; VTX Return	5/8"		Detector Hall
MV 253	MG Block Valve; SFDC Supply	5/8"		Detector Hall
MV 254	MG Block Valve; NFDC Supply	5/8"		Detector Hall
MV 255	MG Block Valve; CDC Supply	5/8"		Detector Hall
MV 256	MG Block Valve; VTX Supply	5/8"		Detector Hall
MV 257	MG Block Valve; Spare	5/8"		Detector Hall

Tag No.			Description	Size	MFR/Model No.	Location
MV	258	MG	Block Valve; Spare	5/8"		Detector Hall
MV	259					
MV	260					
MV	261					
MV	262					
MV	263					
MV	264					
MV	265					
MV	266					
MV	267					
MV	268					
MV	269					
MV	270					
MV	271					
MV	272					
MV	273					
MV	274					
MV	275	AR/CO2	Block Valve; Tube Trailer #1	1/2"	Whitey, Ball, #SS-63TSW8P	Tube Trailer Manifold
MV	276	AR/CO2	Block Valve; Tube Trailer #2	1/2"	Whitey, Ball, #SS-63TSW8P	Tube Trailer Manifold
MV	277	AR/CO2	Vent Valve; Tube Trailer #1	1/2"	Whitey, Ball, #SS-63TSW8P	Tube Trailer Manifold
MV	278	AR/CO2	Vent Valve; Tube Trailer #2	1/2"	Whitey, Ball, #SS-63TSW8P	Tube Trailer Manifold
MV	279	AR/CO2	Block Valve; Tube Trailer #1	1/4"	Whitey, Ball, #SS-43VC04	Tube Trailer Manifold
MV	208	AR/CO2	Block Valve; Tube Trailer #2	1/4"	Whitey, Ball, #SS-43VC04	Tube Trailer Manifold
MV	281	MG	Block Valve; "20" MNFLD: Supply	2"		Magnet/South End
MV	282	MG	Block Valve; "20" MNFLD: Return	2"		Magnet/South End
MV	283	MG	Block Valve; "8" MNFLD: Supply	2"		Magnet/South End
MV	284	MG	Block Valve; "8" MNFLD: Return	2"		Magnet/South End
MV	285	MG	Block Valve; "12" MNFLD: Supply	2"		Magnet/South End
MV	286	MG	Block Valve; "12" MNFLD: Return	2"		Magnet/South End
MV	287	MG	Block Valve; "12" MNFLD: Supply	2"		Magnet/South End
MV	288	MG	Block Valve; "12" MNFLD: Return	2"		Magnet/South End
MV	289	MG	Block Valve; "8" MNFLD, Supply	2"		Magnet/South End

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Tag No.	Description	Size	MFR/Model No.	Location
MV 290	MG	Block Valve; "8" MNFLD, Return	2"	Magnet/South End
MV 291	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/West End
MV 292	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/West End
MV 293	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/West End
MV 294	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/West End
MV 295	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/West End
MV 296	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/West End
MV 297	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/North End
MV 298	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/North End
MV 299	MG	Block Valve; "8" MNFLD, Supply	2"	Magnet/North End
MV 300	MG	Block Valve; "8" MNFLD: Return	2"	Magnet/North End
MV 301	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/North End
MV 302	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/North End
MV 303	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/North End
MV 304	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/North End
MV 305	MG	Block Valve; "8" MNFLD, Supply	2"	Magnet/North End
MV 306	MG	Block Valve; "8" MNFLD: Return	2"	Magnet/North End
MV 307	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/East End
MV 308	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/East End
MV 309	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/East End
MV 310	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/East End
MV 311	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/East End
MV 312	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/East End
MV 313	MG	Block Valve; "12" MNFLD: Supply	2"	Magnet/North End
MV 314	MG	Block Valve; "12" MNFLD: Return	2"	Magnet/North End
MV 315	MG	Block Valve; "20" MNFLD: Supply	2"	Magnet/North End
MV 316	MG	Block Valve; "20" MNFLD: Return	2"	Magnet/North End
MV 317	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder Gas House
MV 318	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder Gas House
MV 319	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder Gas House
MV 320	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder Gas House
MV 321	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder Gas House

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Tag No.		Description	Size	MFR/Model No.	Location
MV 322	N2	Cylinder Block Valve	1/4"	Same as Gas Cylinder	Gas House
MV 323	AR/CO2/CF4	Block Valve	1/2"		Gas House
MV 324	MG		1/4"		VTX Humidifier
MV 325	MG		1/4"		VTX Humidifier
MV 326	MG		1/4"		VTX Humidifier
MV 327	MG		1/4"		VTX Humidifier
MV 328	MG		1/4"		VTX Humidifier
MV 329	MG		1/4"		VTX Humidifier
MV 330	MG		1/4"		VTX Humidifier
MV 331	MG		1/4"		VTX Humidifier
MV 332	MG				
MV 333	N2				NE Buffer Tank
MV 334	N2				NE Buffer Tank
MV 335	CO2,C2H6	VTX Scott			Gas Shed
MV 336					
MV 337					
MV 338					
MV 339	AR/CO2/CH4	CDC Scott			Gas Shed
MV 340					
MV 341					
MV 342					
MV 343	N2	Cylinder Block Valve			Gas Shed
MV 344	N2	Regulator Block Valve			Gas Shed
MV 345	N2	Cylinder Block Valve			Gas Shed
MV 346	N2	Regulator Block Valve			Gas Shed
MV 347	AR				Gas Shed
MV 348	AR				Gas Shed
MV 349	AR				Gas Shed
MV 350	AR				Gas Shed
MV 351	CF4/CO2				Gas House
MV 352	CF4/CO2				Gas House
MV 353					

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Tag No.	Description	Size	MFR/Model No.	Location
MV 354				
MV 355				
MV 356	Analysis Rack	3/8"	Same as Gas Cylinder	Room 510
MV 357	Analysis Rack		Nupro B-4HK2	Room 510
MV 358	Analysis Gas Rack	1/4"	Same as Gas Cylinder	Room 510
MV 359	Analysis Gas Rack			Room 510
MV 360	Analysis Gas Rack			Room 510
MV 361	Analysis Gas Rack			Room 510
MV 362	Analysis Gas Rack			Room 510
MV 363	Analysis Gas Rack		Same as Gas Cylinder	Room 510
MV 364	AR/CO2/CF4 Instrument Block Valve; WAMUS	1/4"	Nupro, #SS-4P4T4	Room 510
MV 365	MG Instrument Block Valve; WAMUS	1/4"	Nupro, #SS-4P4T4	Room 510
MV 366	MG Instrument Block Valve; WAMUS	1/4"	Nupro, #SS-4P4T4	Room 510
MV 367	MG Ball Valve; WAMUS	1/2"	Worcester, 416NSE	Room 510
MV 368	MG Ball Valve; WAMUS	1/2"	Worcester, 416NSE	Room 510
MV 369	MG Ball Valve; WAMUS	1/2"	Worcester, 416NSE	Room 510
MV 370	MG Instrument Block Valve; WAMUS	1/4"	Nupro, #SS-4P4T4	Room 510
MV 371	MG Instrument Block Valve; WAMUS	1/4"	Nupro, #SS-4P4T4	Room 510
MV 372	MG Before MV 106 Tank Output			
MV 373	MG Before MV 106 Tank Output			
MV 374				
MV 375				
MV 376				
MV 377				
MV 378				
MV 379				
MV 380				
MV 381				
MV 382				
MV 383				
MV 384				
MV 385				

Tag No.		Description	Size	MFR/Model No.	Location	
MV	386					
MV	387					
MV	388					
MV	389					
MV	390					
MV	391					
MV	392					
MV	393					
MV	394					
MV	395					
MV	396					
MV	397					
MV	398	MG	PT 93 Isolation Valve	1/4"	Whitey, SS 62 ESW4T-NL	Trailer Panel Outside
MV	399	MG	PT 94 Isolation Valve	1/4"	Nupro B-2-HK2	Room 510
MV	400	MG	PT 95 Isolation Valve	1/4"	Nupro B-2-HK2	Room 510
MV	401					
MV	402					
MV	403					
MV	404	MG	CDC/tdc Canary Dry Gas Isolation	1/4"		Room 511
MV	405	MG	CDC/tdc Canary Moist Gas Isolation	1/4"		Room 511
MV	406	MG	Purge Valve for Humidifier	1/4"		Room 511

Whitey Valves

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Tag Number			Description	Size	MFR/Model Number	Location
DV	26	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	27	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	28	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	29	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	30	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	31	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	32	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	33	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	34	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	35	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	36	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	37	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	38	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	39	MG	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	98	Ar	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	99	CO2	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	100	CH4	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	101	C2H6	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	102	CO2	Whitey Actuator, Normally Closed	1/2"		Room 511
DV	71-1					
DV	71-2					
DV	129-1					
DV	129-2					
DV	129-3					
DV	129-4					
DV	130	MG	1/2" Pipe Whitey	1/2"		Wamus Trailer Panel