



- NOTES:**
1. EACH PUMP/OUT PORT LOCATION HAS BOTH POWER & CONTROL PLUG-IN CONNECTIONS.
 2. ALL VACUUM GAUGES TO BE BAKED OUT AT 250 C DURING PUMPDOWN, USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPDOWN USING A REMOVABLE BLANKET TYPE HEATER. SEE DWG V049-0-043 FOR BAKEDOUT SYSTEM.
 3. DIMENSIONS IN () ARE IN MILLIMETERS.
 4. BEAM MANIFOLD DIMENSIONS INDICATE INSIDE DIAMETERS.
 5. ATMOSPHERIC AIR INTAKE SHALL BE LOCATED IN WALL TO LVEA (OVHD).
 6. BEAM MANIFOLD FLANGE ANNULUS IDN PUMP DETAILS LATER.
 7. ON 12" O.D. CF BLIND, PROVIDE 3" LONG 2 3/4" O.D. CF x 1 1/2" O.D. NOZZLE AND 2 3/4" CF BLIND FOR RGA CONNECTION WITH 25 OF SEAL-OFF FITTING. VACUUM PUMP-OUT OPERATOR IS SUPPLIED ONE PER BUILDING - REF PSI PART #V049H655.
 8. PROVIDE A CF BLANK WITH A 25 OF SEAL-OFF FITTING.

PROPRIETARY AND CONFIDENTIAL	DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	EQIP. THIS DWG.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	5	REISSUED FOR FDR UPDATE	PI	PRELIMINARY DESIGN UPDATE	REV	DESCRIPTION	CHKD	BRWN	DATE	DESN	
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION BELONGING TO PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS AFFILIATED COMPANIES AND SHALL BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS SUPPLIED. IT SHALL NOT BE COPIED, REPRODUCED OR OTHERWISE USED, NOR SHALL SUCH INFORMATION BE FURNISHED IN WHOLE OR IN PART TO OTHERS EXCEPT IN ACCORDANCE WITH THE TERMS OF ANY AGREEMENT UNDER WHICH IT WAS SUPPLIED OR WITH THE PRIOR WRITTEN CONSENT OF PROCESS SYSTEMS INTERNATIONAL, INC. AND SHALL BE RETURNED UPON REQUEST.	V049-0-041	P & ID TURBO PUMP CART					5	REISSUED FOR FDR UPDATE							6/11/97	0499	
	V049-0-012	P & ID LEFT BEAM MANIFOLD					4	REVISED	SM	DMC	RJV	02.14.97			0435		
	V049-0-010	P & ID LEFT END STATION					3	REVISED	SM	DMC	RJV	01.03.97			0394		
	V049-0-006	P & ID 80K CRYOPUMP					2	ISSUED FOR FDR UPDATE			TS	RT	SM	DMC	RJV	10.25.96	0309
	V049-0-002	P & ID BEAM SPLITTER CHAMBER					1	ISSUED FOR FDR	RED	TS	RT	SM	DMC	RJV	04.26.96	0134	
	V049-0-001	P & ID LEGEND					0	ISSUE FOR DESIGN	RED	TS	RT	SM	DMC	RJV	01.03.96	0031	
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION				PI	PRELIMINARY DESIGN UPDATE	RED				AFG	09.26.95	0003		
							REV						CHKD	BRWN	DATE	DESN	

PROCESS SYSTEMS INTERNATIONAL, INC.
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PIPING & INSTRUMENTATION DIAGRAM
LIGO VACUUM EQUIPMENT
WASHINGTON SITE
LEFT MID STATION

CAD FILE: V0490011
 DWG. NO.: V049-0-011
 REV: 5

SCALE: NONE
 SHEET: 1 OF 1

JUN 13, 1997 - 11:01:56

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