



- 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 (LV-H)
 - 6 BEAM MANIFOLD FLANGE ANNULUS ION PUMP DETAILS LATER
 - 7 ON 12" OD OF BLIND, PROVIDE 3" LONG 2 3/4" OD CF 1/2" ID NOZZLE AND 2 3/4" OF BLIND FOR RGA CONNECTION WITH 25 OF SEAL-OFF FITTING. VACUUM PUMP-OUT OPERATOR IS SUPPLIED ONE PER BUILDING - REF PSI PART #V049N655
 - 8 PROVIDE A CF BLANK WITH A 25 OF SEAL-OFF FITTING

ELECTRONIC COPY

PROPRIETARY AND CONFIDENTIAL	DWG NO	DESCRIPTION	DWG NO	DESCRIPTION	EQUIP. THIS DWG	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES FRACTIONAL ± ANGULAR 30° ± 30° BEHIND ± 0.1 TWO PLACE DECIMAL ± 0.05 FINISHED SURFACE AND BREAK CORNERS IN REMOVE ALL BURRS	DO NOT SCALE THIS DRAWING	USED ON	REV	DESCRIPTION	CHKD	DRWN	DATE	ISSUE DESCRIPTION	LD	DATE	REV	
	V049-0-041	P & ID TURBO PUMP CART			WGV12 WTC3				6	AS-BUILT			08/25/98		0628			
	V049-0-012	P & ID LEFT BEAM MANIFOLD							5	REISSUED FOR FDR UPDATE	SM	DMC	6/11/97		0499			
	V049-0-010	P & ID LEFT END STATION							4	REVISED	SM	DMC	02/14/97		0435			
	V049-0-006	P & ID BOK CRYOPUMP							3	REVISED	SM	DMC	01/03/97		0394			
	V049-0-002	P & ID BEAM SPLITTER CHAMBER							2	ISSUED FOR FDR UPDATE	TS	RT	SM	DMC	10/25/96		0309	
	V049-0-001	P & ID LEGEND							1	ISSUED FOR FDR	REB	TS	RT	SM	DMC	RJV	04/26/96	0134
									0	ISSUE FOR DESIGN	REB	TS	RT	SM	DMC	RJV	01/03/96	0031

LIGO-D961076-06-V

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

CAD FILE: V0490011
SIZE: D
DWG NO: V049-0-011
REV: 6

SCALE: NONE
SHEET: 1 OF 1

EDUCATION OR COMMERCIAL USE