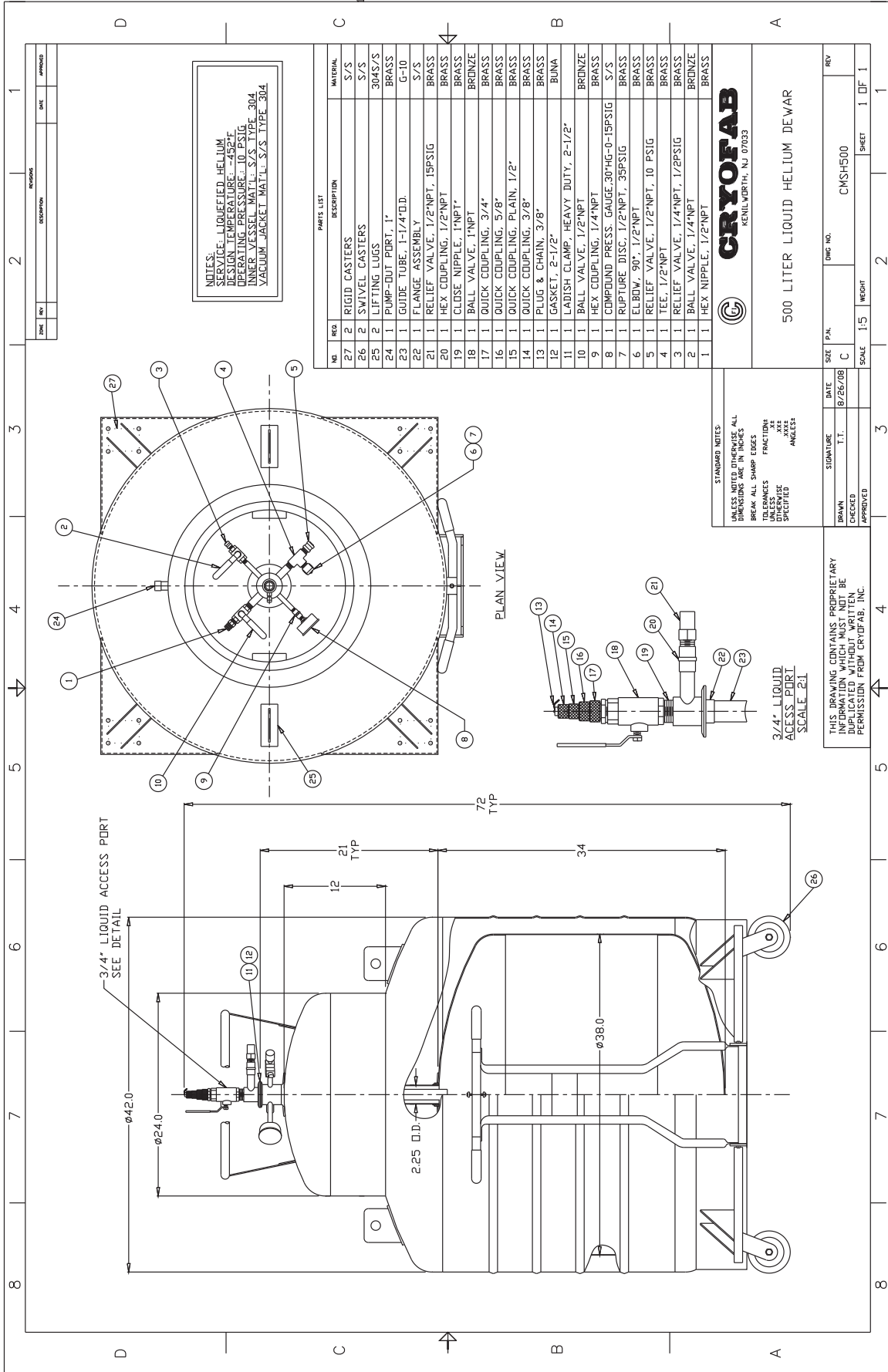




CMSH 500 Calibration

in.	liters
1	1.9
2	7.7
3	17.1
4	31.5
5	47.8
6	65.8
7	84.3
8	102.7
9	121.2
10	139.7
11	158.1
12	176.6
13	195.1
14	213.5
15	232.0
16	250.5
17	268.9
18	287.4
19	305.9
20	324.4
21	342.8
22	361.3
23	379.8
24	398.2
25	416.7
26	435.2
27	453.6
28	472.1
29	490.1
30	506.4
31	520.8
32	530.2
33	536.0
34	537.9

cm	liters	cm	liters
1	0.3	44	275.0
2	1.2	45	282.3
3	2.7	46	289.6
4	4.8	47	296.8
5	7.4	48	304.1
6	10.7	49	311.4
7	14.5	50	318.6
8	18.9	51	325.9
9	23.8	52	333.2
10	30.6	53	340.4
11	36.7	54	347.7
12	43.2	55	355.0
13	50.0	56	362.3
14	57.0	57	369.5
15	64.2	58	376.8
16	71.4	59	384.1
17	78.7	60	391.3
18	86.0	61	398.6
19	93.2	62	405.9
20	100.5	63	413.2
21	107.8	64	420.4
22	115.1	65	427.7
23	122.3	66	435.0
24	129.6	67	442.2
25	136.9	68	449.5
26	144.1	69	456.8
27	151.4	70	464.1
28	158.7	71	471.3
29	166.0	72	478.5
30	173.2	73	485.6
31	180.4	74	492.5
32	187.8	75	499.1
33	195.0	76	505.3
34	202.3	77	511.7
35	209.6	78	517.5
36	216.8	79	522.1
37	224.1	80	526.1
38	231.4	81	529.5
39	238.7	82	532.4
40	245.9	83	534.7
41	253.2	84	536.4
42	260.5	85	537.5
43	267.7	86	538.1



NOTES:
 SERVICE LIQUEFIED HELIUM
 DESIGN TEMPERATURE -452° F
 OPERATING PRESSURE 10 PSIG
 INNER VESSEL MTL: S/S TYPE 304
 VACUUM JACKET MTL: S/S TYPE 304

NO.	REQ.	DESCRIPTION	MATERIAL
27	2	RIGID CASTERS	S/S
26	2	SWIVEL CASTERS	S/S
25	2	LIFTING LUGS	304S/S
24	1	PUMP-OUT PORT, 1"	BRASS
23	1	GUIDE TUBE, 1-1/4" O.D.	G-10
22	1	FLANGE ASSEMBLY	S/S
21	1	RELIEF VALVE, 1/2"NPT, 15PSIG	BRASS
20	1	HEX COUPLING, 1/2"NPT	BRASS
19	1	CLOSE NIPPLE, 1"NPT	BRASS
18	1	BALL VALVE, 1"NPT	BRONZE
17	1	QUICK COUPLING, 3/4"	BRASS
16	1	QUICK COUPLING, 5/8"	BRASS
15	1	QUICK COUPLING, PLAIN, 1/2"	BRASS
14	1	QUICK COUPLING, 3/8"	BRASS
13	1	PLUG & CHAIN, 3/8"	BRASS
12	1	GASKET, 2-1/2"	BUNA
11	1	LADISH CLAMP, HEAVY DUTY, 2-1/2"	BRONZE
10	1	BALL VALVE, 1/2"NPT	BRONZE
9	1	HEX COUPLING, 1/4"NPT	BRASS
8	1	COMPOUND PRESS. GAUGE, 30"HG-0-15PSIG	S/S
7	1	RUPTURE DISC, 1/2"NPT, 3PSIG	BRASS
6	1	ELBOW, 90°, 1/2"NPT	BRASS
5	1	RELIEF VALVE, 1/2"NPT, 10 PSIG	BRASS
4	1	TEE, 1/2"NPT	BRASS
3	1	RELIEF VALVE, 1/4"NPT, 1/2PSIG	BRASS
2	1	BALL VALVE, 1/4"NPT	BRONZE
1	1	HEX NIPPLE, 1/2"NPT	BRASS



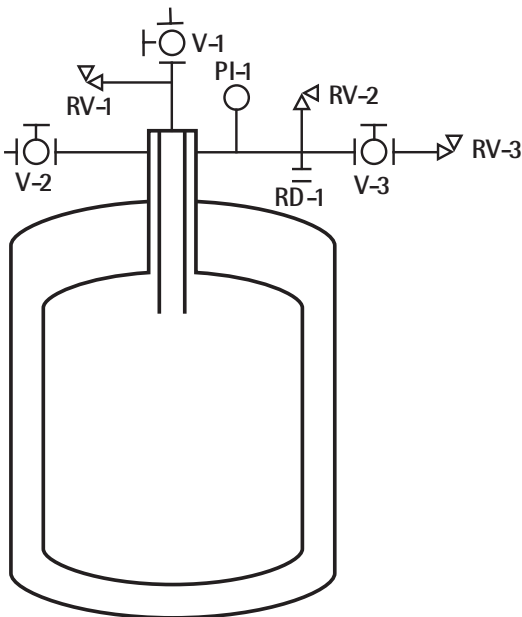
STANDARD NOTES:
 UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. ALL BREAK ALL SHARP EDGES. TOLERANCES UNLESS OTHERWISE SPECIFIED ANGLES 1

500 LITER LIQUID HELIUM DEWAR	
DATE: 8/26/08	SCALE: 1:5
SIGNATURE:	REV:
DRAWN: C	ENG. NO.:
CHECKED:	CM5H500
APPROVED:	SHEET 1 OF 1
	WEIGHT:

THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED WITHOUT WRITTEN PERMISSION FROM CRYOFAB, INC.

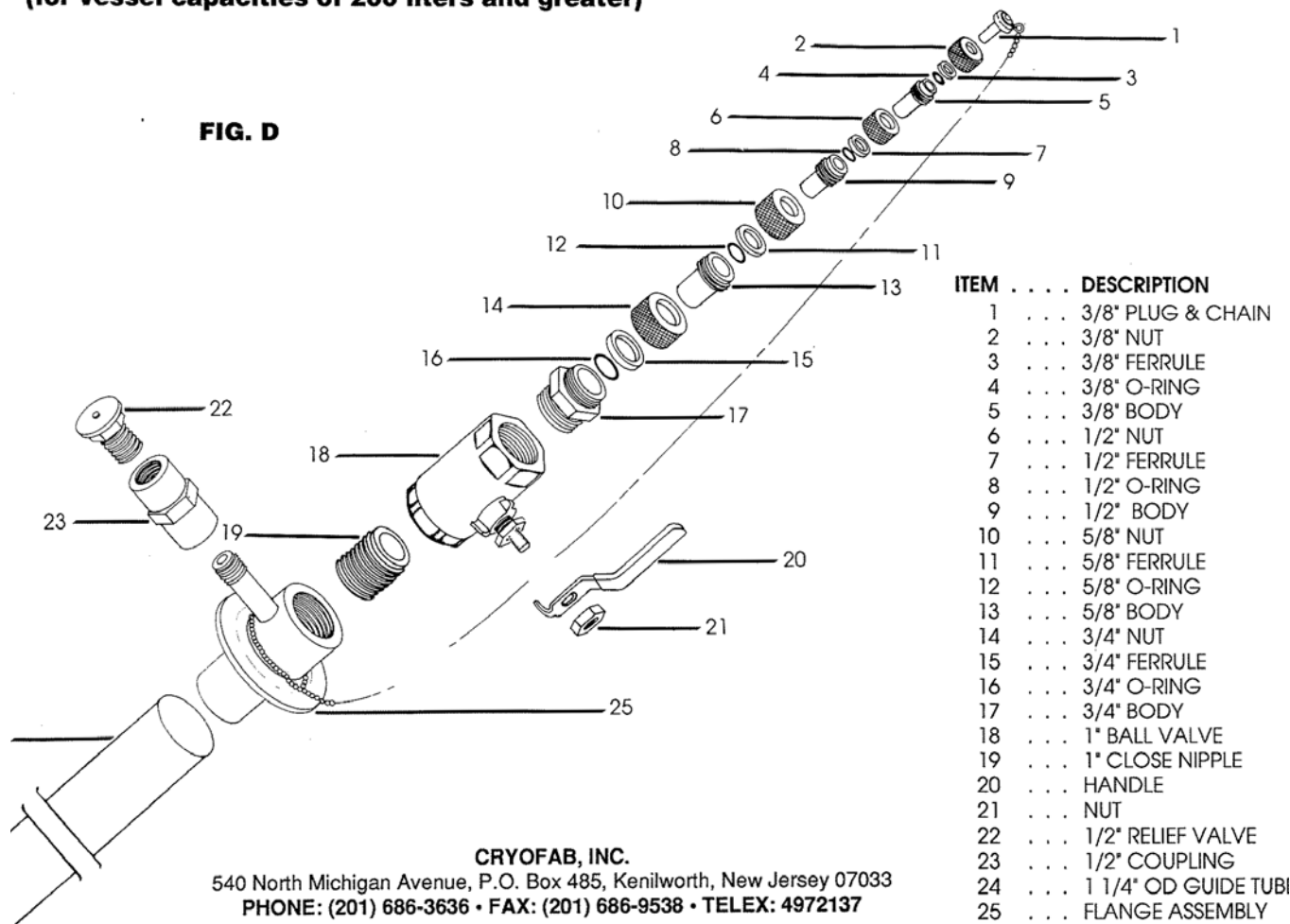
3/4" LIQUID ACCESS PORT
 SCALE: 2:1

Piping Schematic



3/4" Liquid Access Port Assembly (for vessel capacities of 200 liters and greater)

FIG. D



CRYOFAB, INC.

540 North Michigan Avenue, P.O. Box 485, Kenilworth, New Jersey 07033
 PHONE: (201) 686-3636 • FAX: (201) 686-9538 • TELEX: 4972137