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FAX COVER PAGE

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REFER TO:	LIGO-1980047-00-B
SUBJECT:	Rai's analysis of LAX global accumulation data
NUMBER OF PAGES FAXED INCLUDING THIS COVER SHEET: 6	

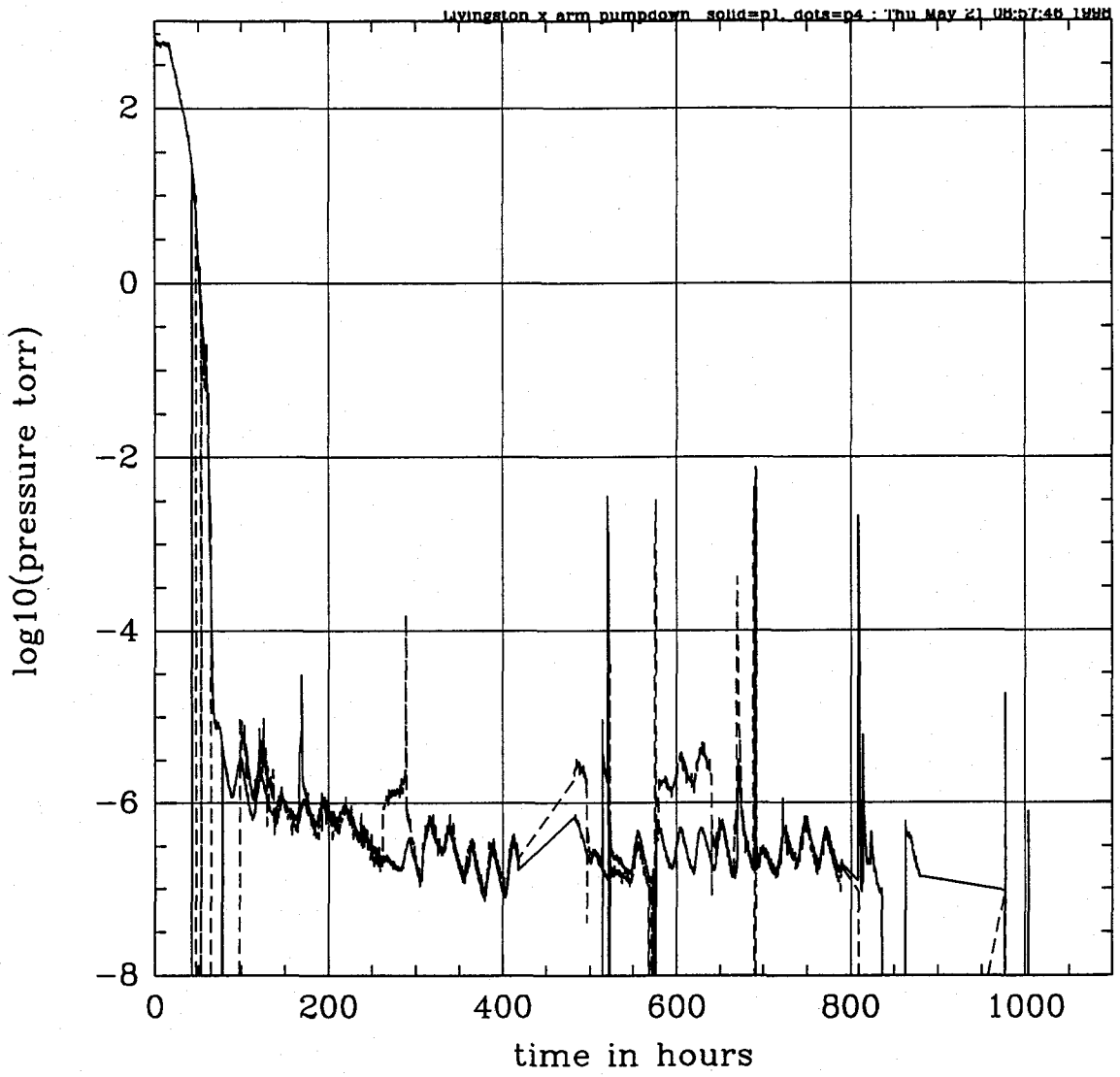


Figure 1 Livingston x arm pumpdown pressure vs pumping time. Gaps at 850 and 980 hours are the beam tube accumulation measurements.

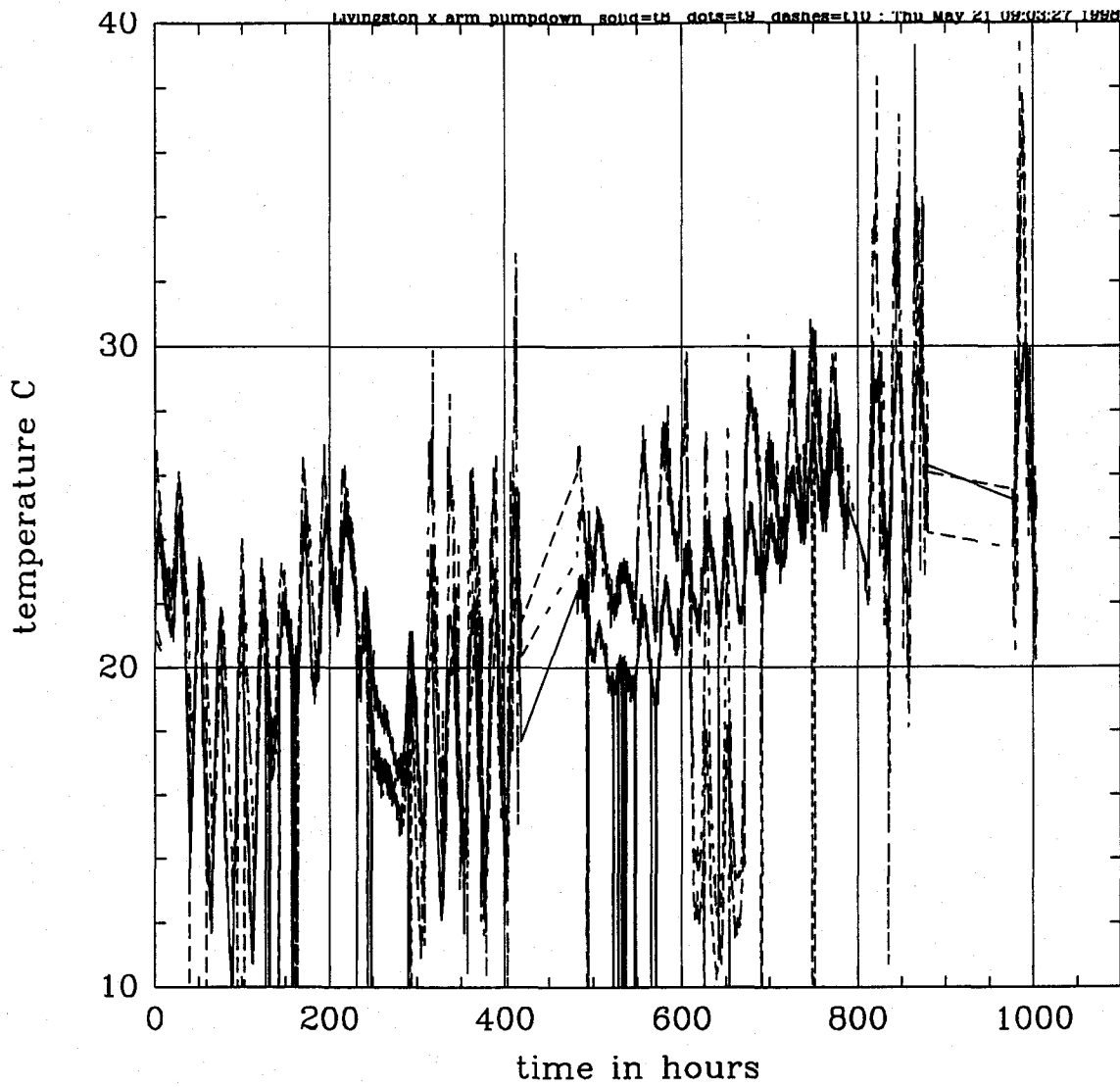


Figure 2 Temperature vs pumping time. T8 and T9 are measured on the tube T10 is measured on the body of the gate valve in the mid building.

sample 3 - 28

amu	torr liters/sec	sigma
1	7.084975E-07	1.049729E-08
2	5.990227E-06	4.548674E-08
12	1.989162E-06	8.587482E-08
13	4.753882E-08	1.702204E-09
14	3.283941E-06	1.774247E-08
15	6.172720E-07	4.468286E-09
16	4.412258E-06	1.466060E-07
17	2.738953E-09	3.794844E-09
18	3.321177E-09	9.410762E-09
20	2.509164E-08	9.388254E-10
24	2.458506E-09	3.458564E-10
25	6.289119E-09	8.388925E-10
26	2.792777E-08	3.344652E-09
27	8.881989E-08	3.710494E-09
28	2.737359E-05	1.305028E-07
29	1.896913E-07	2.965151E-09
30	1.083041E-05	3.939730E-08
32	2.474651E-06	1.848650E-08
34	8.248095E-09	7.010672E-10
37	1.145117E-10	2.771367E-10
38	4.746601E-11	3.067768E-10
39	-4.717444E-10	5.551906E-10
40	6.906100E-08	2.034187E-09
41	-1.756325E-09	1.096354E-09
42	7.550176E-09	7.784546E-10
43	6.047652E-08	2.509022E-09
44	1.728443E-05	5.736184E-07
45	1.435729E-07	4.708348E-09
48	-7.536022E-11	2.001690E-10
49	7.976419E-11	1.471567E-10
50	-3.180843E-11	2.894159E-10
51	-6.802330E-11	2.935163E-10
52	-3.376660E-11	1.990159E-10
53	-4.213267E-10	3.355942E-10
54	-2.251038E-10	2.769768E-10
55	-1.417674E-09	5.653424E-10
56	-1.835111E-10	3.697548E-10
57	-5.407146E-10	5.030145E-10
58	-1.003171E-10	1.494542E-10
64	-1.771463E-10	2.480961E-10
65	-1.321259E-10	2.413172E-10
66	5.872322E-12	2.379764E-10

filein = 518dif1.dat

fileout = 518res1.dat

avg temp (C) = 28.8+ 0.9C accum time (sec) = 2.527000E+04

H2 cal (torr/cps) = 8.047000E-14 N2 cal = 1.533000E-13

H2 binding T = 8.000000E+03 H2O binding T = 1.000000E+04

H2 temp cor = 1.000000E+00 H2O temp cor = 1.000000E+00

global H2 cal = 1.000000E+00 global N2 cal = 1.000000E+00

from LOCAL  
JOB

LOCAL CRUB IS DIFF BY 2x  
CALIB LK CAUSED ~ 2x

INCONSISTANT BY 10

CRACKING PATTERN

SAME AS BEFORE, WITHIN ~ 20%

sample 3 - 45

	amu	torr	liters/sec	sigma
1	5.266264E-07	1.939441E-08		
2	6.096836E-06	3.131746E-08		
12	1.164759E-06	1.067217E-07		
13	4.059239E-08	1.438372E-09		
14	3.388310E-06	1.214672E-08		
15	5.402545E-07	2.831447E-09		
16	2.976130E-06	2.045484E-07		
17	2.640442E-10	9.243790E-10		
18	-4.639357E-09	2.140423E-09		
20	3.073251E-08	5.800163E-10		
24	2.185099E-09	2.053734E-10		
25	6.030970E-09	3.450195E-10		
26	2.902446E-08	9.462072E-10		
27	1.341118E-07	1.783679E-09		
28	3.151441E-05	1.155172E-07		
29	2.252525E-07	2.395041E-09		
30	1.093856E-05	5.263007E-08		
32	3.484107E-06	1.885857E-08		
34	1.121608E-08	3.334319E-10		
37	-3.528444E-11	9.348488E-11		
38	-9.883983E-11	1.011215E-10		
39	-3.015296E-10	2.833940E-10		
40	8.620641E-08	1.054586E-09		
41	-2.935880E-09	4.419095E-10		
42	5.673560E-09	6.993698E-10		
43	8.286737E-08	7.821407E-09		
44	1.329864E-05	1.224487E-06		
45	1.039873E-07	9.239470E-09		
48	-7.297624E-11	8.525235E-11		
49	-2.846897E-11	4.381227E-11		
50	-1.643978E-10	1.192178E-10		
51	-2.494053E-10	7.670677E-11		
52	-2.987243E-11	6.715459E-11		
53	-4.352533E-10	1.105963E-10		
54	-2.455951E-10	8.982495E-11		
55	-1.452920E-09	2.288425E-10		
56	-3.017332E-10	1.344771E-10		
57	-8.640869E-10	1.804664E-10		
58	-3.909462E-11	8.731536E-11		
64	-2.189303E-10	8.137344E-11		
65	-2.696529E-10	9.861677E-11		
66	-6.375523E-11	6.921756E-11		

filein = 518dif3.dat

fileout = 518res3.dat

avg temp (C) = 28.1+-1.4 C accum time (sec) = 6.168000E+04

H2 cal (torr/cps) = 8.047000E-14 N2 cal = 1.533000E-13

H2 binding T = 8.000000E+03 H2O binding T = 1.000000E+04

H2 temp cor = 1.000000E+00 H2O temp cor = 1.000000E+00

global H2 cal = 1.000000E+00 global N2 cal = 1.000000E+00

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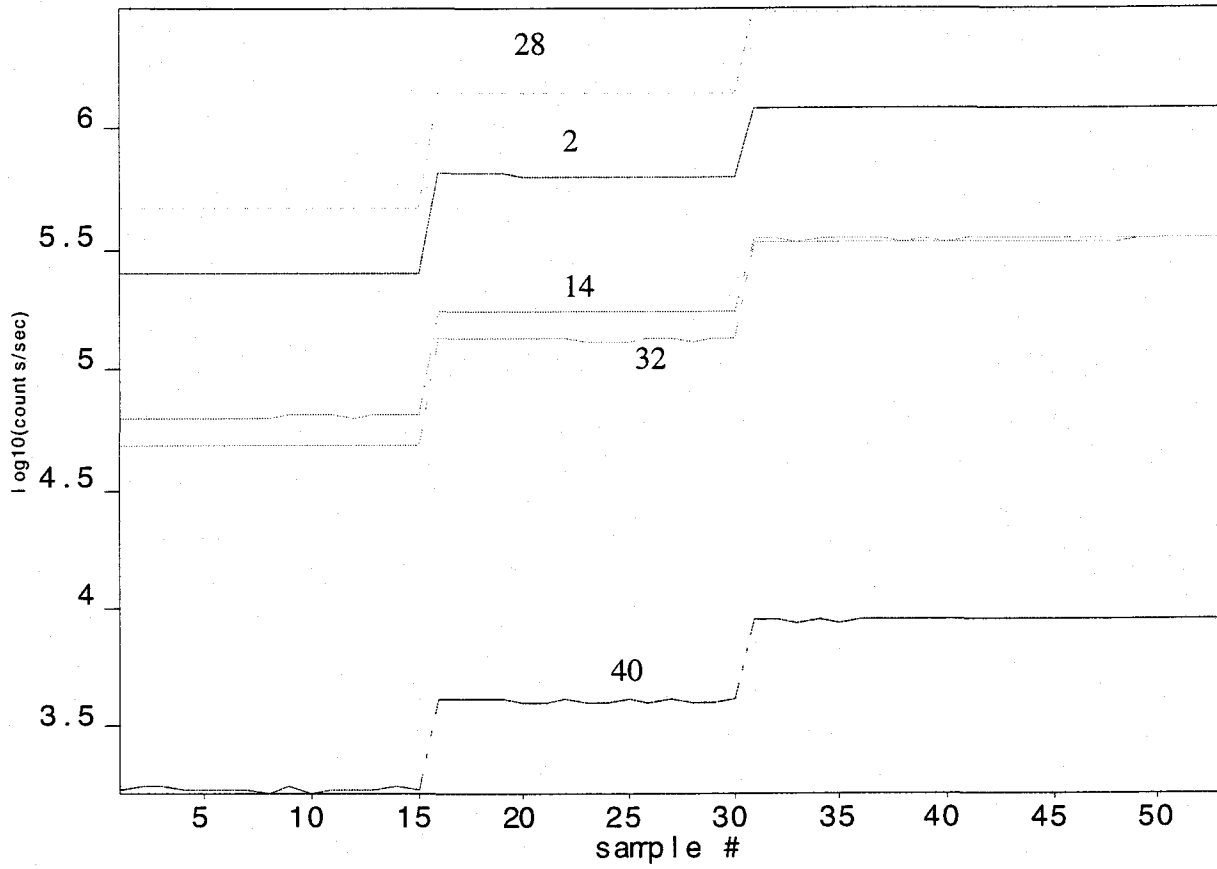


Figure 3 Accumulation of 5/18/98 with global calibration leak of  $2.7 \times 10^{-6}$  torr liters/sec. The data is inconsistent with the local calibrations used in the next two tables.