3/26/14 JB AGM

- leak checked ALCOVE2 Cherenkov w/ snoop
- inserted Drexel "Bucket of Water" BoW detector
  - missing a SHV Barrel so only 1 PMT has HV

Cables:

HV #6	–	Tube 1
SIG #6	–	Tube 1
SIG #7	–	Tube 2
SIG #4	–	LED
HV #7	–	Tube 2

~~3/27~~

3/29/2014 Beam Scan

Pitch	41.4%
Yaw	57.2%
RTD1	71
RTD2	66

Around 1:11AM we got error messages about visa being unable to connect to the scope. Power cycling the oscilloscope fixed this.

1:14 AM Taking data at 200 kA

319 mTorr Pressure.
Run 3?

Run 4 175 kA

Run 5 125 kA, changed to 30 pulses
Run 7 = Junk

1:22AM 7.5 psia, ADC = 4%

Run 8 is at 200 kA
~~9~~ 6 150 kA
1:25 7 125 kA

~~1:30AM Changing # of triggers to 20~~

1:31 AM Pressure at 14.5 psia
950 ADC

Starting Run 10 @ 200kA

1:33 Changing to 20 triggers

Run 11 @ 175kA
12 @ 150kA

Grrr... Run numbers jumping
9 @ 100kA

Run 16 = Junk

1:38AM Changing to 1.5 atm

22 psia, 1440 ADC

Run 18 @ 200

But later wiped out at 150

1:46AM switching to 2 atm

29.3 psia, 1915 adm

Run 30 @ 200kA

Run 41

3/29/14 JG & GM

			(readback)	
Run 44	, P=29.0 (1890),		Pitch(%) 41.1	Yaw(%) 57.2
45	"		1.0	57.2
46	—"—		18.5	—"—
47	—"—		58.0	—"—
48	—"—		77.7	
49	—"—		—"—	—"—
50	—"—		87.8	—"—
51	—"—		97.6	—"—
52	—"—		41.2	97.6
53	—"—		—"—	87.7
54	—"—		—"—	77.8
55	—"—		—"—	48.0
56	—"—		—"—	38.2
57	—"—		—"—	28.3
58	—"—		—"—	18.5
59	—"—		—"—	8.5
60	—"—		—"—	1.0
61	—"—		97.6	1.0
→ 62	—"—		—"—	—"— (Higher
63	7.0		—"—	—"— Gain)
64	—"—		77.7	8.5
65	"		57.9	18.4
66	"		48.	28
67	"		57.9	38.2
68	"		38.2 ~~40~~ ~~40~~	~~30~~ 38.1
69	"		30 (28.2)	50 (47.2)
70	"		~~20~~ 20 (18.3)	~~60~~ 60 (58)
71	"		10 (8.4)	70 (67.9)
72	"		40 (38.3)	60 (57.9)
73	"	Moved in middle of run (50-60)	~~50 (49.2)~~	60 (57.9)
74	"		60 (58)	—"—
75	"		50 (48)	—"—
76	"		70 (67.9)	—"—
2000 ev. 77	14.5 (946)		41.0	57.9

4/30/14

V	Pitch	Yaw	Pressure
-112mV	48	58	7.2
-128	38.3	58	—"—
-112	28.2	—"—	—"—
-78	18.3	—"—	—"—
-39	8.4	—"—	
-76	68.1	—"—	
-38	68.0		
-132	38.1	48	—"—
-142	38.1	68.0	
-67	—"—	77.7	—"—
-14	—"—	87.7	—"—
-33.6	—"—	48.1	—"—
-11.2	—"—	38.2	—"—
-139	—"—	69.8	
-79	—"—	53.1	—"—
-141	—"—	60.8	—"—
-43.2	38.1	60.8	3.3
-48.8	—"—	67.9	—"—
-12.4	—"—	77.8	—"—
-29.2	—"—	72.8	—"—
-52.0	—"—	62.9	—"—
-33.0	—"—	58.0	—"—
-14.0	—"—	53.0	—"—
-48.80	—"—	67.9	—"—
-48.8 (-78.4) ↓	33.3	—"—	—"—
-64	28.3	—"—	—"—
-70	28.4	—"—	—"—
-54	23.2	—"—	—"—
-36.4	18.3		
-25.6	13.4		
-87	38.2		
-87	43.2		
-71	48.2		
-56	53.1		
-38	58.0		
-24	62.9		
-18	67.9		

(Higher Gain)

new proton intensity

58.1
(47.2)
60 (58)
(67.9)
(57.9)
(57.9)
—"—
—"—
—"—
57.9

3/26/2014 horn current scan test

	elog entry of begin scan
	Inform MCR
	Mask BPS E40 THA chan 1
	Mask BPS E40 THA chan 5
	Inform Neutrino control rm.
	X 4008

At end

	UnMask BPS E40 THA chan 1
	UnMask BPS E40 THA chan 5
	Inform MCR done
	Inform Neutrino control rm.
	elog entry of end scan

319 mTorr / 60 / 0.9 psia

Do pressure scan point 1

	current	voltage	35 spills each
1:14AM	200	740	3 ← Run#
1:16AM	175	647.5	4
	150	555	
	125	462.5	5
	100	370	

pressure 2 1490 / 7.5 psia

	current	voltage	35 spills each
1:24	200	740	8
	175	647.5	
1:26	150	555	6
1:27	125	462.5	7
1:29	100	370	9

pressure 3

	current	voltage	35 spills each
1:33	200	740	10
1:34	175	647.5	11
1:35	150	555	12
	125	462.5	
1:37	100	370	9

14.5 psia
950

	current	voltage	20 spills each
1	200	740	
2	195	721.5	
3	190	703	
4	185	684.5	
5	180	666	
6	175	647.5	
7	170	629	
8	165	610.5	
9	160	592	
10	155	573.5	

Do pressure scan point 2

11	150	555	
12	145	536.5	
13	140	518	
14	135	499.5	
15	130	481	
16	125	462.5	
17	120	444	
18	115	425.5	
19	110	407	
20	105	388.5	

Do pressure scan point 3

22 psia, 1440ADC

pressure 4

	current	voltage	35 spills each
1:41	200	740	18
1:42	175	647.5	19
	150	555	18
	125	462.5	
1:45AM	100	370	19

	current	voltage	20 spills ea
21	100	370	
22	95	351.5	
23	90	333	
24	85	314.5	
25	80	296	
26	75	277.5	
27	70	259	
28	65	240.5	
29	60	222	
30	55	203.5	

Do pressure scan point 4

31	50	185	
32	45	166.5	
33	40	148	
34	35	129.5	
35	30	111	
36	25	92.5	
37	20	74	
38	15	55.5	
39	10	37	
40	5	18.5	
41	0	0	

Do pressure scan point 5

29.3 psia, 1915

pressure 5

	current	voltage	35 spills each
	200	740	30
	175	647.5	31
	150	555	
1:54AM	125	462.5	41
1:50	100	370	42