

Stacking

- Stacked 429mA in 22.2 hours of stacking
 - <stacking rate> = 25.3mA/hr
 - <production> = 22.4 e-6/proton
 - <beam on target> = 7.88e12 protons
- Started the day shift recovering from the D:ISEPV ground fault trip from the owl shift.
 - We were able to turn on with D:ISEPV at reduced output and tune around it at reduced beam intensity.
 - We slowly raised the D:ISEPV output and were able to get within 15V of the original setting (671V instead of 686V).
 - Tuning around this we were able to get back to 25mA/hr at 10 turns.
 - It was found that as long as the vacuum at D:ISEPV was 2.5e-9 torr or better, we can run the supply at this output.
 - As a result, DVM built ACL script running on CNS1 that is monitoring the Debuncher injection septum (D:ISEPV). If the supply trips the script will monitor the vacuum and turn the supply back on when the vacuum is at a reasonable level (usually ~ 5 minutes).
 - During the time that the supply is off, we will run beam to the APO dump, so no crew intervention with the timeline should be needed.
 - Spare D:ISEPV magnet
 - spare is currently in Industrial Building 2 (IB2) and will be for the next few days. The serial number of the spare is DSMB002.

Transfers

- We unstacked 416e10 in 40 transfers over 20 sets
 - Accumulator to Recycler efficiency was 96%

Studies

- No studies were completed in the last 24 hours.

Requests

- None at this time.

The Numbers (7am to 7am)

- Paul's Numbers
 - Most in a half hour: 13.41 mA at Tue May 12 19:44:30 CDT 2009
 - Best Hour: 28.56 mA on 20-Dec-08
 - Average Production 19.61 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
 - Average Protons on Target 6.36 e12 Best: 8.77 e12 on 07/24/2007
- Al's Numbers
 - Stacking
 - Pbars stacked: 428.89 E10
 - Time stacking: 22.19 Hr
 - Average stacking rate: 19.33 E10/Hr

- Uptime
 - Number of pulses while in stacking mode: 32032
 - Number of pulses with beam: 26719
 - Fraction of up pulses was: 83.41%

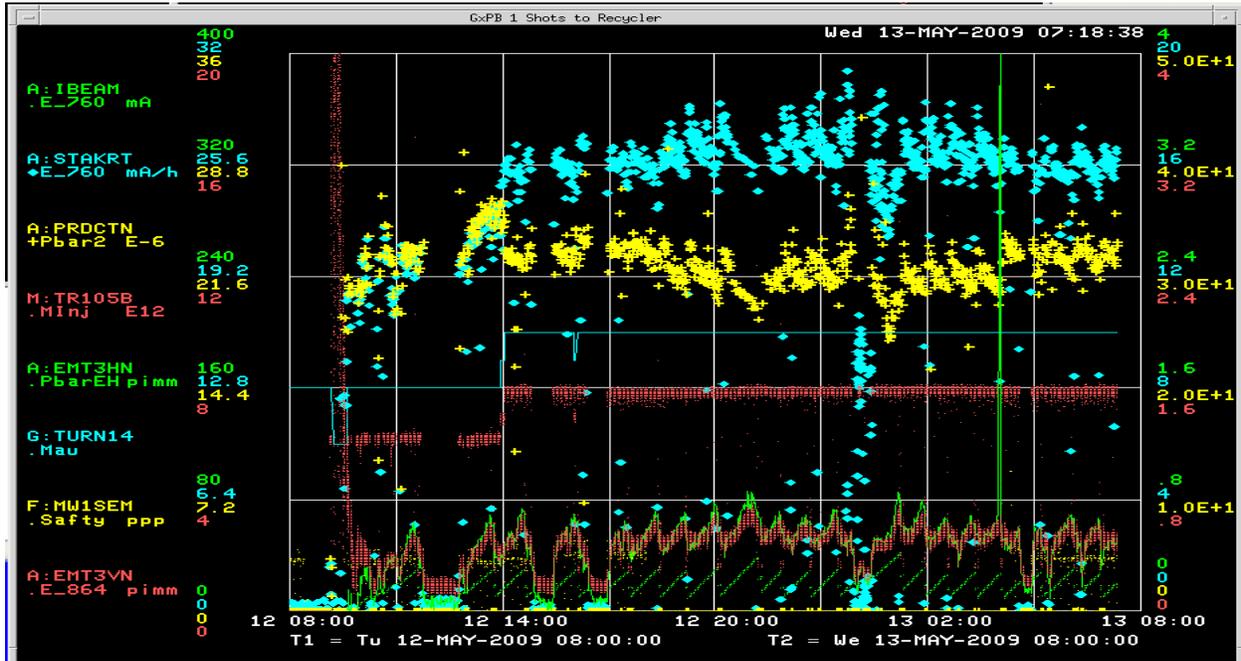
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 18.51 Hr
 - Possible average stacking rate: 23.18 E10/Hr
 - Could have stacked: 514.18 E10/Hr

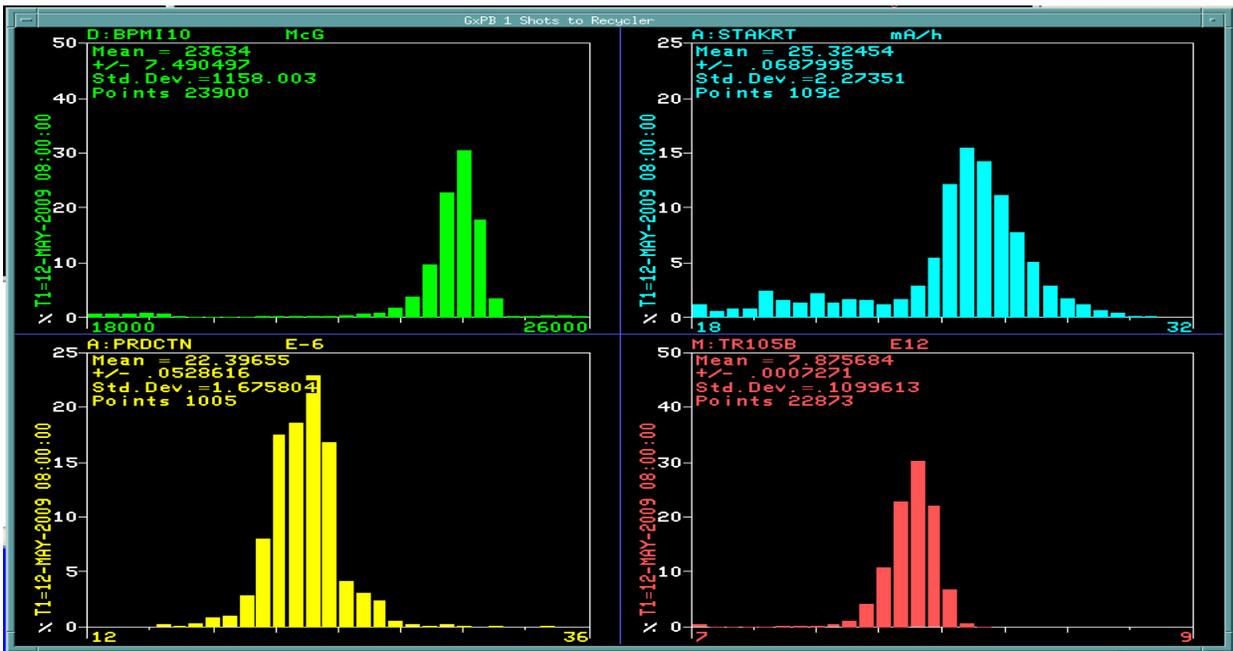
- Recycler Transfers
 - Pbars sent to the Recycler: 416.53 E10
 - Number of transfers : 40
 - Number of transfer sets: 20
 - Average Number of transfer per set: 2.00
 - Time taken to shoot including reverse proton tuneup: 00.23 Hr
 - Transfer efficiency: 95.07%

- Other Info
 - Average POT : 7.60 E12
 - Average production: 21.13 pbars/E6 protons

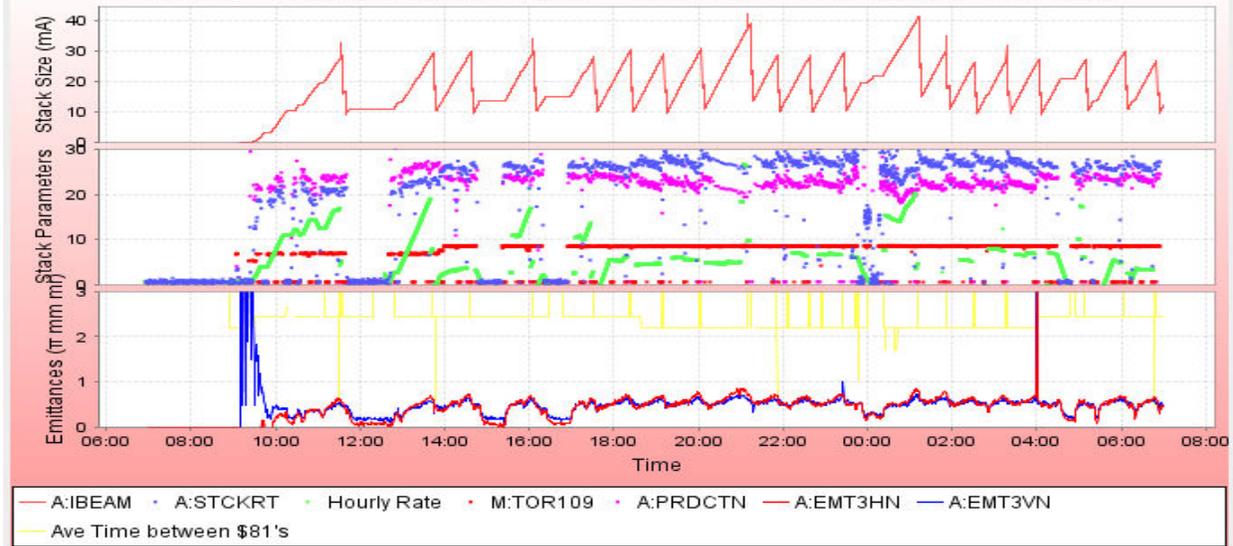
- * Missed one or more A:IBEAM7 events somewhere in the middle of the user selected time span. Calculated time shot using 13 secs per transfer.

Plots & Misc

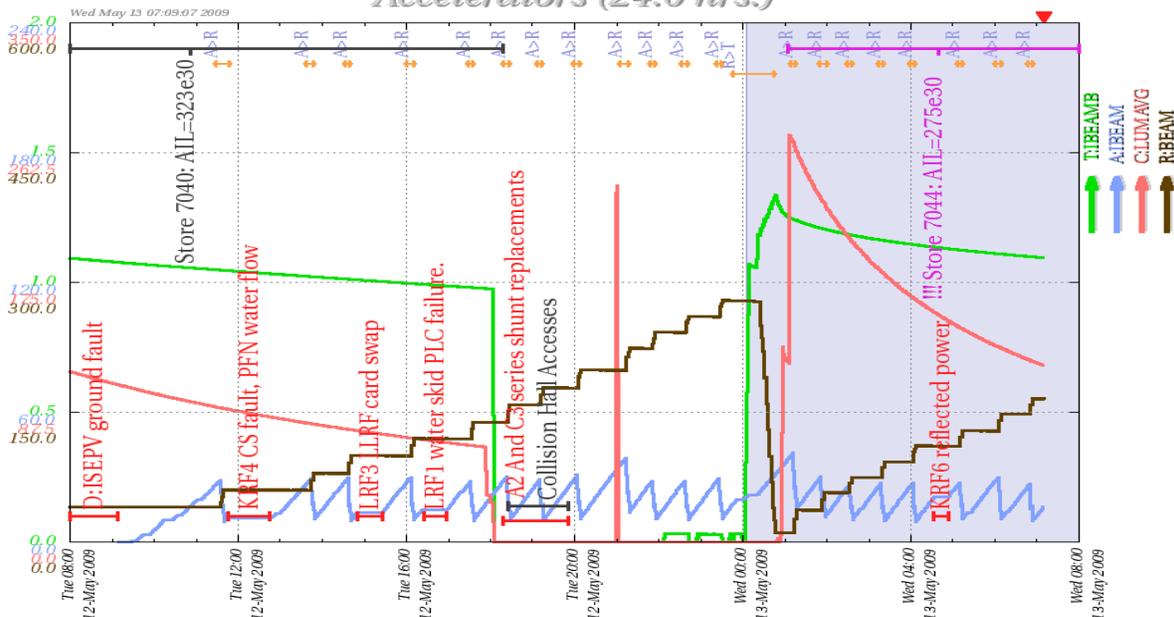




Tue May 12 07:00:00 CDT 2009 -- Wed May 13 07:00:00 CDT 2009



Accelerators (24.0 hrs.)



Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number_20_A:1 BEAMB sampled on \$91 (A:BEA M7), E10	Column 22 Number_21_A:1 BEAMB sampled on \$94 (A:BEA M9), E10	Unstacked (mA)	Column 23 Number_22_R: BEAMS (R:BEA ME0(0)) pre xfer E10	Column 24 Number_23_R: BEAM (R:BEA ME0(1)) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Transfers	Set s	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance	
Totals =>				416.53			399.77	95.98%	97.53%	97.17%	40	20	5.3471	4.8752	1.8846	
13153	Wednesday, May 13, 2009	6:50	26.81	9.56	18.55	147.70	165.53	17.88	96.40%	97.26%	97.29%	2	1	4.761	4.759	1.911
13152	Wednesday, May 13, 2009	5:09	30.10	10.70	20.69	128.18	148.00	19.91	96.24%	98.17%	97.20%	2	1	5.451	4.905	1.903
13151	Wednesday, May 13, 2009	4:02	27.43	10.58	18.13	110.97	128.47	17.49	96.46%	98.63%	98.77%	2	1	4.804	4.788	1.942
13150	Wednesday, May 13, 2009	3:18	27.11	9.28	19.11	92.81	111.14	18.37	96.10%	96.89%	95.25%	2	1	5.264	4.926	1.88
13149	Wednesday, May 13, 2009	2:32	27.44	9.42	19.29	74.44	92.85	18.45	95.67%	98.00%	95.46%	2	1	5.217	4.733	1.892
13148	Wednesday, May 13, 2009	1:52	26.46	9.48	18.24	56.97	74.55	17.61	96.52%	97.84%	97.78%	2	1	5.069	4.772	1.891
13147	Wednesday, May 13, 2009	1:13	30.62	10.68	21.17	36.74	57.03	20.35	96.14%	96.66%	96.12%	2	1	5.976	5.273	1.88
13146	Wednesday, May 13, 2009	23:26	41.41	14.82	27.86	10.50	36.82	26.37	94.65%	96.83%	96.80%	2	1	6.729	5.687	1.875
13145	Tuesday, May 12, 2009	22:38	29.73	10.40	20.64	260.11	279.51	19.42	94.08%	97.08%	96.61%	2	1	5.579	5.041	1.898
13144	Tuesday, May 12, 2009	21:51	28.46	10.05	19.73	242.02	260.71	18.78	95.17%	97.05%	96.86%	2	1	5.698	4.993	1.918
13143	Tuesday, May 12, 2009	21:13	28.45	9.95	19.78	223.61	242.46	18.96	95.83%	96.35%	95.72%	2	1	5.633	4.852	1.901
13142	Tuesday, May 12, 2009	20:04	38.89	13.51	26.93	198.31	224.03	25.84	95.93%	97.30%	97.86%	2	1	5.808	5.359	1.883
13141	Tuesday, May 12, 2009	19:11	31.03	10.68	21.65	178.08	198.77	20.69	95.57%	98.11%	96.72%	2	1	5.432	4.797	1.877
13140	Tuesday, May 12, 2009	18:24	29.02	9.26	20.66	158.47	178.33	19.93	96.46%	97.53%	97.23%	2	1	4.976	4.813	1.872
13139	Tuesday, May 12, 2009	17:32	30.27	10.12	21.41	138.04	158.67	20.69	96.63%	97.88%	98.11%	2	1	5.106	4.767	1.87
13138	Tuesday, May 12, 2009	16:06	28.13	9.92	19.51	119.47	138.25	18.87	96.72%	98.01%	98.69%	2	1	4.992	4.757	1.903
13137	Tuesday, May 12, 2009	14:37	30.05	10.26	21.05	99.47	119.71	20.27	96.27%	97.50%	98.67%	2	1	5.333	4.893	1.862
13136	Tuesday, May 12, 2009	13:44	29.84	9.73	21.33	79.32	99.69	20.42	95.70%	97.06%	97.87%	2	1	5.738	4.773	1.885
13135	Tuesday, May 12, 2009	11:35	29.39	10.44	20.05	59.99	79.34	19.32	96.35%	98.32%	97.60%	2	1	4.824	4.331	1.847
13134	Tuesday, May 12, 2009	3:30	28.81	9.12	20.74	40.03	60.15	20.17	97.26%	98.52%	96.72%	2	1	4.551	4.285	1.802

