

# 2010-09-30 Thursday Morning Notes

Thursday, September 30, 2010

7:24 AM

## Stacking

- Stacktail Work
  - Separated notches a bit more
  - Mysterious change in stacktail power
- Stacking Numbers
  - Pbars stacked = 540.67 mA
  - <Stacking Rate> = 25.3 mA/hr
  - <Production>=19.8 pbar/Mp
  - <Beam on Target> 8.36 Tp

## Transfers

- Unstacked 524E10 in 62 transfers over 20 sets.
- Overall efficiency = 96.2%

## Know Issues:

- Stacktail fanouts
  - Need 25 to 50mA
  - 1 hour no stacking.

## Know Issues:

- AP1 fan
  - Box in upstream PreTarget down the stairs.
  - Can see the box from the gate, but not good enough to get the numbers.
  - Need to access to get the numbers
  - Gary Lauten needs to be involved
- Debuncher Vertical Band 4 TWT #3 is off and needs a tunnel access to fix
- Sump pump excavation (FESS)
- Dump water skid pressure changing, tiny leak
- D:LKESUM still reads 239 (wet at EQ14) after LCW leak repair.

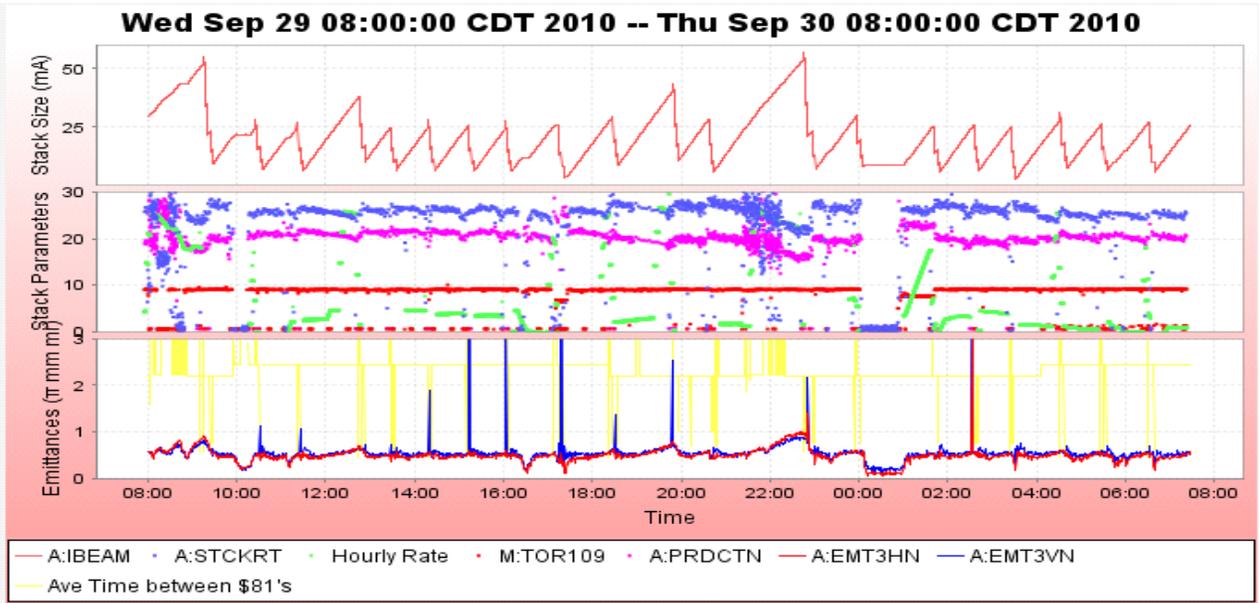
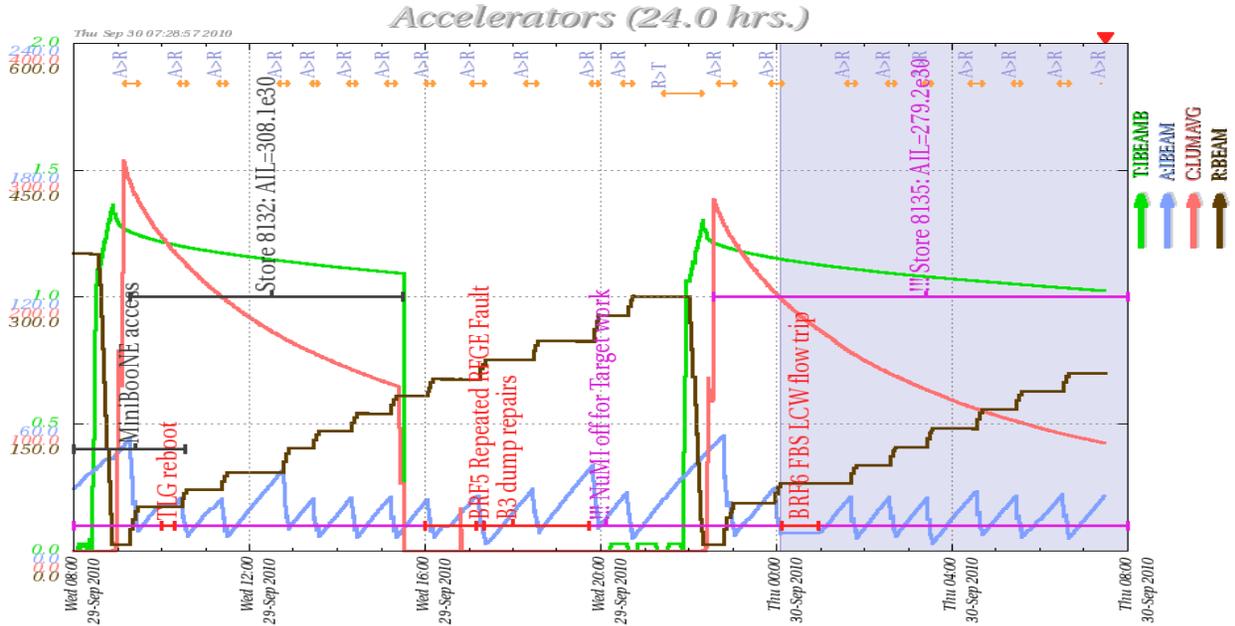
## The Numbers

- Stacking
  - Pbars stacked: 540.67 E10
  - Time stacking: 23.15 Hr
  - Average stacking rate: 23.36 E10/Hr
- Uptime
  - Number of pulses while in stacking mode: 35001
  - Number of pulses with beam: 32494
  - Fraction of up pulses was: 92.84%
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 21.49 Hr
  - Possible average stacking rate: 25.16 E10/Hr
  - Could have stacked: 582.38 E10/Hr
- Recycler Transfers
  - Pbars sent to the Recycler: 515.36 E10
  - Number of transfers : 61
  - Number of transfer sets: 20
  - Average Number of transfer per set: 3.05
  - Time taken to shoot including reverse proton tuneup: 00.21 Hr
  - Transfer efficiency: 96.51%
- Other Info
  - Average POT : 8.31 E12

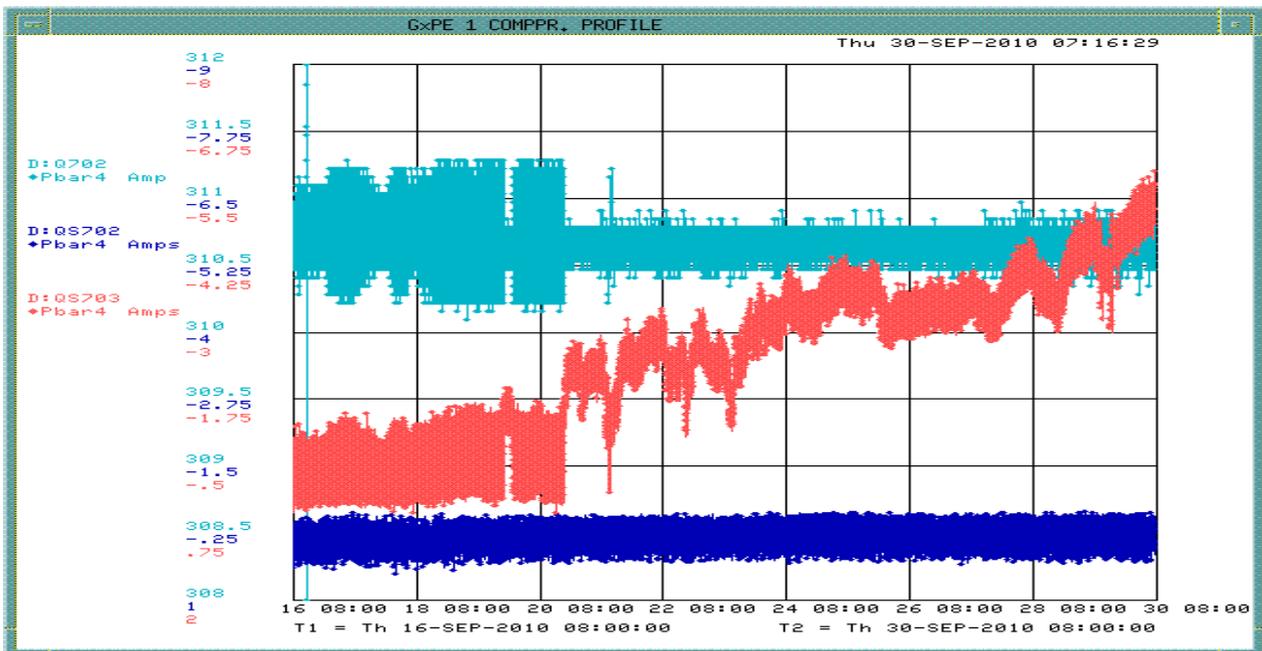
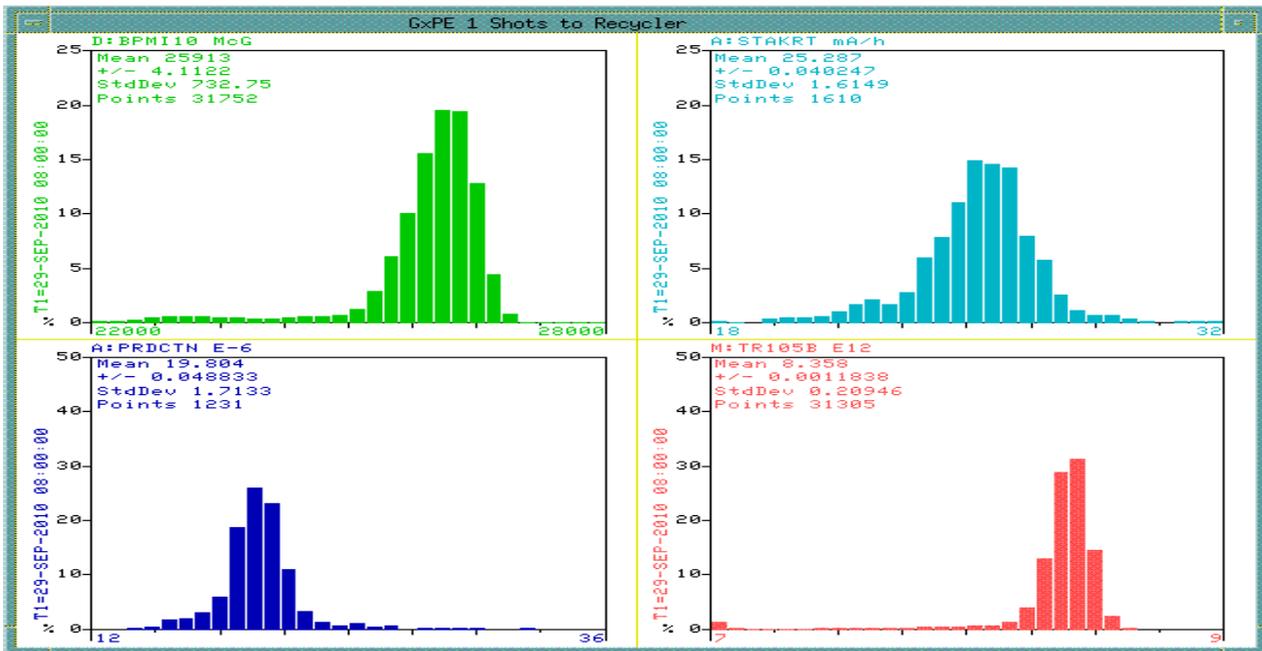
- Average production: 20.03 pbars/E6 protons

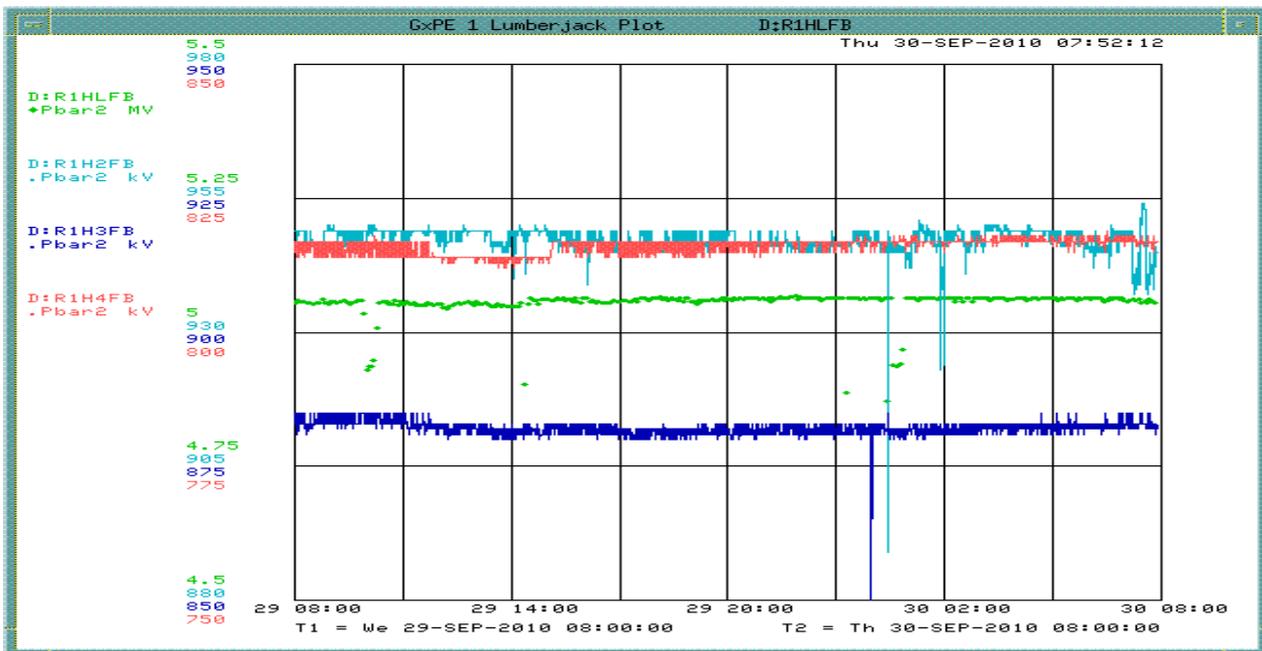
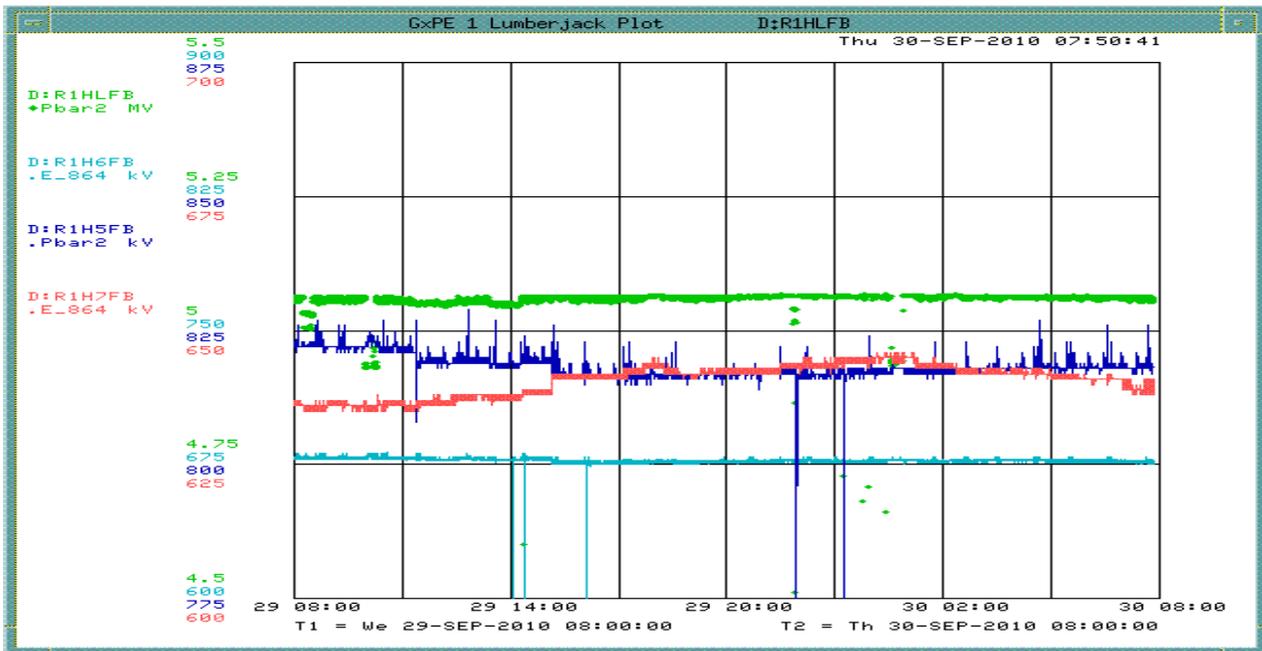
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### The Plots









Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number_20_A1 BEAMB sampled on \$91 (A-BEAM7), E10	Column 22 Number_21_A1 BEAMB sampled on \$94 (A-BEAM9), E10	Unstacked (mA)	Column 23 Number_22_R: BEAMS (R-BEAM0[0]) pre fer, E10	Column 24 Number_23_R: BEAM (R-BEAM0[1]) post fer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Transfers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance	
Totals =>				523.80			503.84	96.19%	97.34%	97.37%	94.77%	62	20	4.8196	5.0291	1.9323	
Daily Average =>				523.80			503.84					62	20				
20965	Thursday, September 30, 2010	6:32	27.18	5.98	22.61	188.55	210.31	21.87	96.74%	97.51%	99.59%	97.11%	3	1	4.237	4.519	1.804
20964	Thursday, September 30, 2010	5:27	26.21	6.28	22.41	167.09	188.81	21.83	97.40%	96.88%	97.65%	94.60%	3	1	4.958	5.202	1.985
20963	Thursday, September 30, 2010	4:33	28.60	7.29	23.87	144.50	167.33	23.01	96.38%	97.10%	96.62%	93.81%	3	1	5.234	5.34	1.971
20962	Thursday, September 30, 2010	3:25	24.96	2.97	22.87	122.51	144.64	22.23	97.19%	97.32%	95.97%	93.40%	3	1	3.554	4.244	1.876
20961	Thursday, September 30, 2010	2:35	25.86	6.49	21.86	101.53	122.65	21.21	97.01%	97.76%	98.31%	96.11%	3	1	4.871	5.221	2.001
20960	Thursday, September 30, 2010	1:42	25.44	5.73	22.30	80.02	101.64	21.66	97.15%	97.73%	97.57%	95.35%	3	1	4.233	4.457	1.99
20959	Wednesday, September 29, 2010	23:58	30.17	7.84	24.90	56.24	80.23	24.08	96.70%	97.80%	98.00%	95.85%	3	1	4.918	5.417	1.978
20958	Wednesday, September 29, 2010	22:47	54.65	6.85	52.35	7.03	56.40	49.68	94.90%	97.64%	97.44%	95.14%	4	1	6.398	6.019	1.876
20957	Wednesday, September 29, 2010	20:37	28.41	5.85	24.04	278.16	301.06	23.14	96.28%	96.56%	98.12%	94.74%	3	1	4.519	4.502	1.936
20956	Wednesday, September 29, 2010	19:50	41.00	10.68	32.68	247.71	278.66	31.24	95.59%	96.09%	97.58%	93.76%	3	1	6.128	5.713	1.917
20955	Wednesday, September 29, 2010	18:27	29.48	8.45	23.73	225.57	248.25	22.81	96.15%	96.59%	96.62%	93.32%	3	1	5.111	5.171	1.989
20954	Wednesday, September 29, 2010	17:14	25.90	3.09	23.84	202.82	225.96	23.25	97.53%	99.06%	98.44%	97.52%	3	1	3.009	3.393	1.755
20953	Wednesday, September 29, 2010	16:04	24.68	6.19	21.05	183.31	203.21	20.05	95.27%	96.00%	94.60%	90.81%	3	1	4.356	4.991	1.977
20952	Wednesday, September 29, 2010	15:13	25.63	6.03	22.12	162.32	183.52	21.31	96.33%	96.79%	96.62%	93.53%	3	1	4.708	4.875	1.947
20951	Wednesday, September 29, 2010	14:19	25.44	6.21	21.66	141.64	162.53	21.00	96.92%	97.40%	98.09%	95.54%	3	1	4.33	4.914	1.929
20950	Wednesday, September 29, 2010	13:28	24.92	6.66	20.87	121.71	141.81	20.25	97.00%	97.60%	95.87%	93.57%	3	1	4.354	4.788	1.981
20949	Wednesday, September 29, 2010	12:46	38.26	10.25	30.56	92.75	121.85	29.29	95.83%	97.24%	97.31%	94.63%	3	1	5.6	5.616	1.88
20948	Wednesday, September 29, 2010	11:22	24.93	6.38	21.11	72.72	92.95	20.32	96.25%	98.10%	98.21%	96.35%	3	1	4.599	5.044	1.992
20947	Wednesday, September 29, 2010	10:27	25.58	6.78	21.39	52.28	72.81	20.60	96.30%	98.41%	98.32%	96.76%	3	1	4.803	4.937	1.968
20946	Wednesday, September 29, 2010	9:17	52.81	9.10	47.60	7.63	52.44	45.04	94.62%	97.36%	96.70%	94.14%	4	1	6.471	6.219	1.893

