

2011-04-01 Friday Morning Notes

Friday, April 01, 2011

7:24 AM

On-call

- Thursday : Vladimir
- Friday: Keith
- Saturday: Steve
- Sunday: Jim
- Monday/Tuesday: Keith

Stacking and Transfers

- We stacked 26.2mA/hr with a production of 23.8 pbars/Mp with 7.76 tp on target.
 - \$29-only: 27.4mA/hr with a production of 23.4 pbars/Mp with 7.8 tp on target.
 - With SY120: 25.4mA/hr with a production of 24.2 pbars/Mp with 7.73 tp on target.
- We unstacked 598E10 in 73 transfers over 24 sets with an average efficiency of 96.1%
 - Unlike yesterday, there was only one transfer over 35mA. Take it out and we are 96.2%
- Week in stacking we had 25.5mA/hr with a production of 22.9 pbars/Mp with 7.77 Tp on target
- Week in unstacking 1441E10 (205/day) in 157 transfers (22/day) in 49 sets (7/day) with an overall efficiency of 94.7%

Interesting Happenings

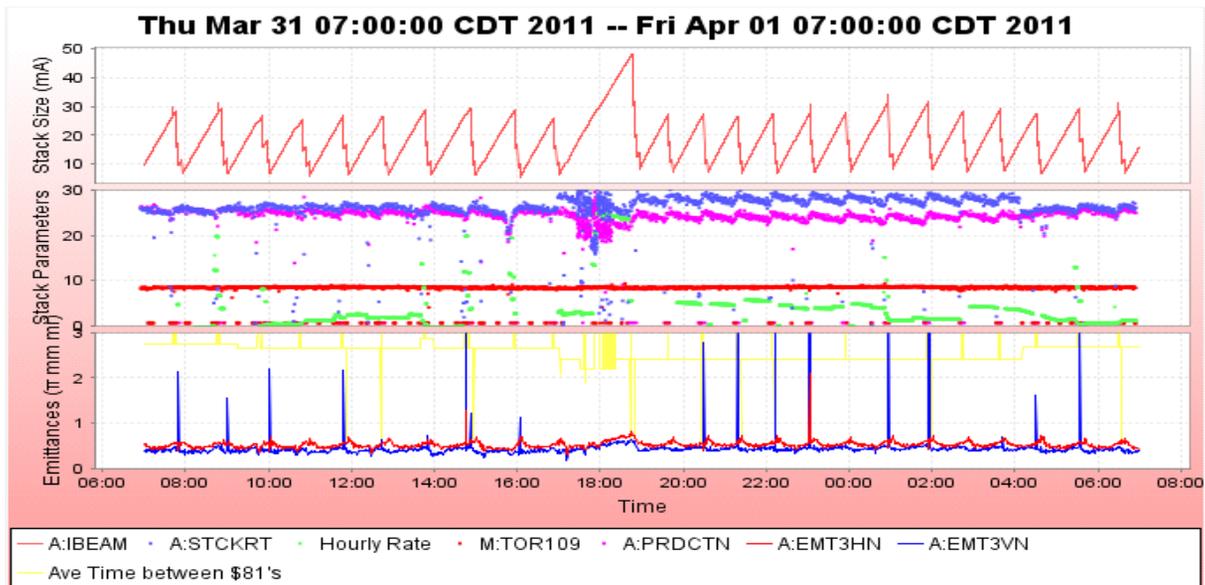
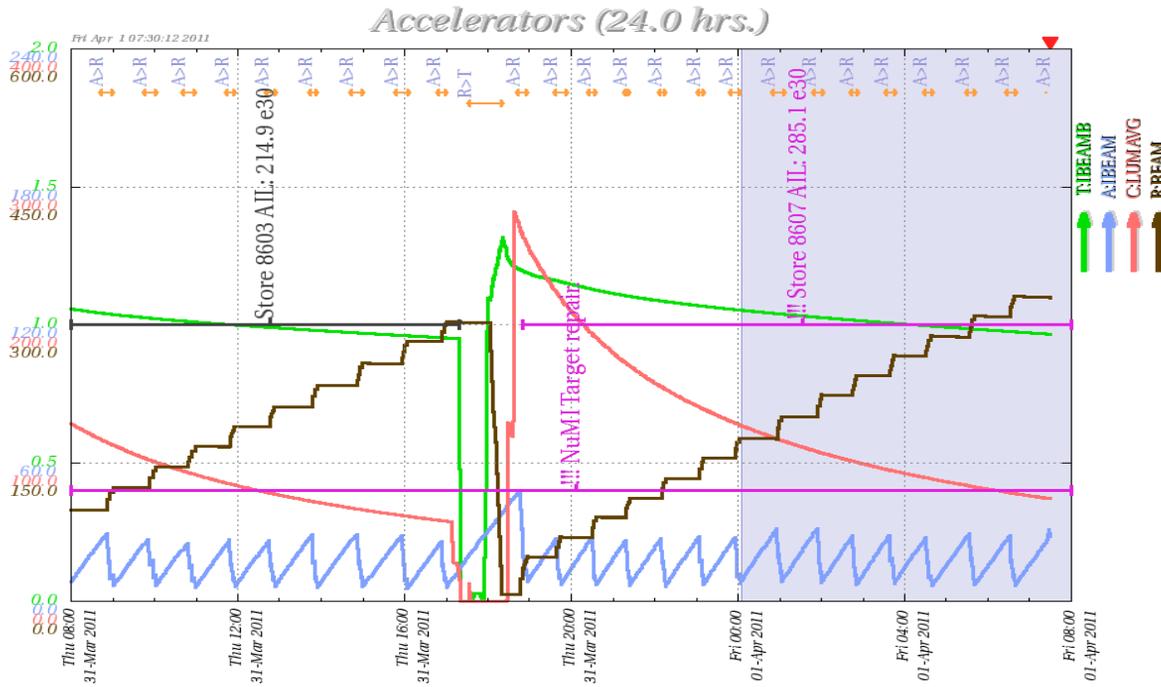
- Found a workaround for our sequencer controls issues
 - G:SCTIME which is the supercycle time. The setting is the SC length and the reading is the current time in that supercycle.
 - Don't get data for the first second or second and a half after the SC reset.
 - When we sample inside that window, the ACL would hang.
 - Added a three second delay so that we sample outside of that window.

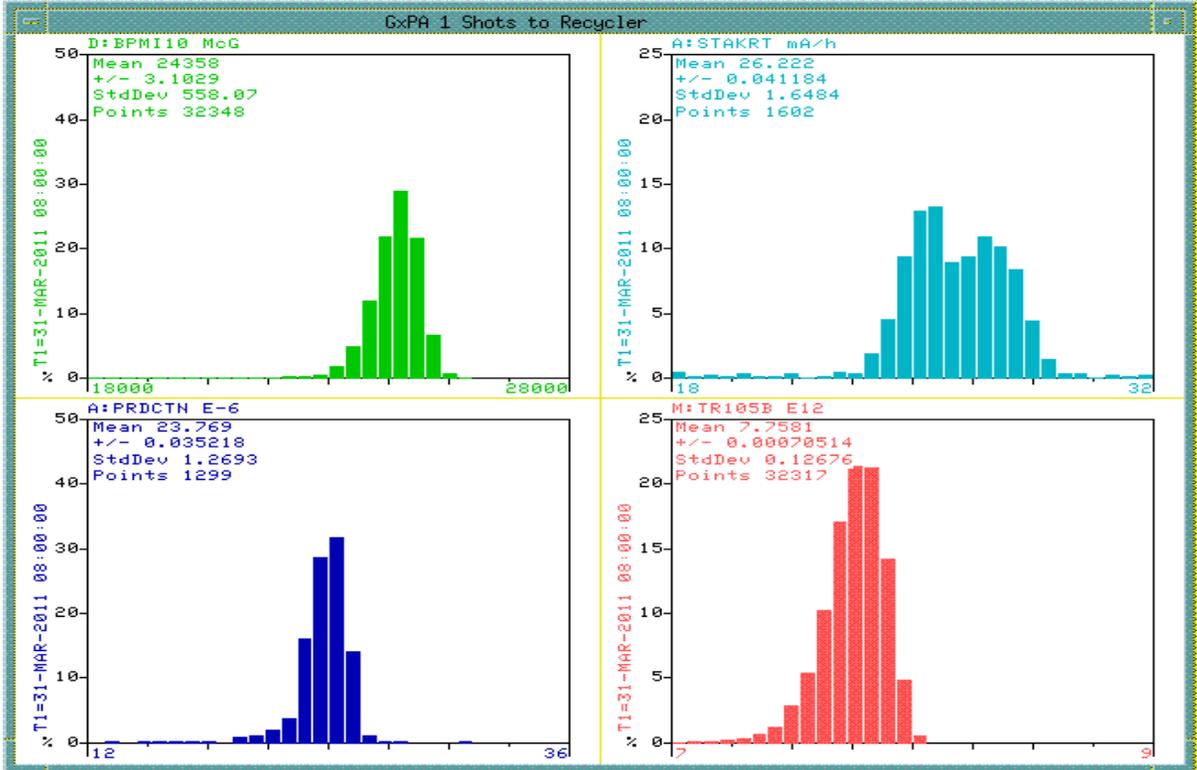
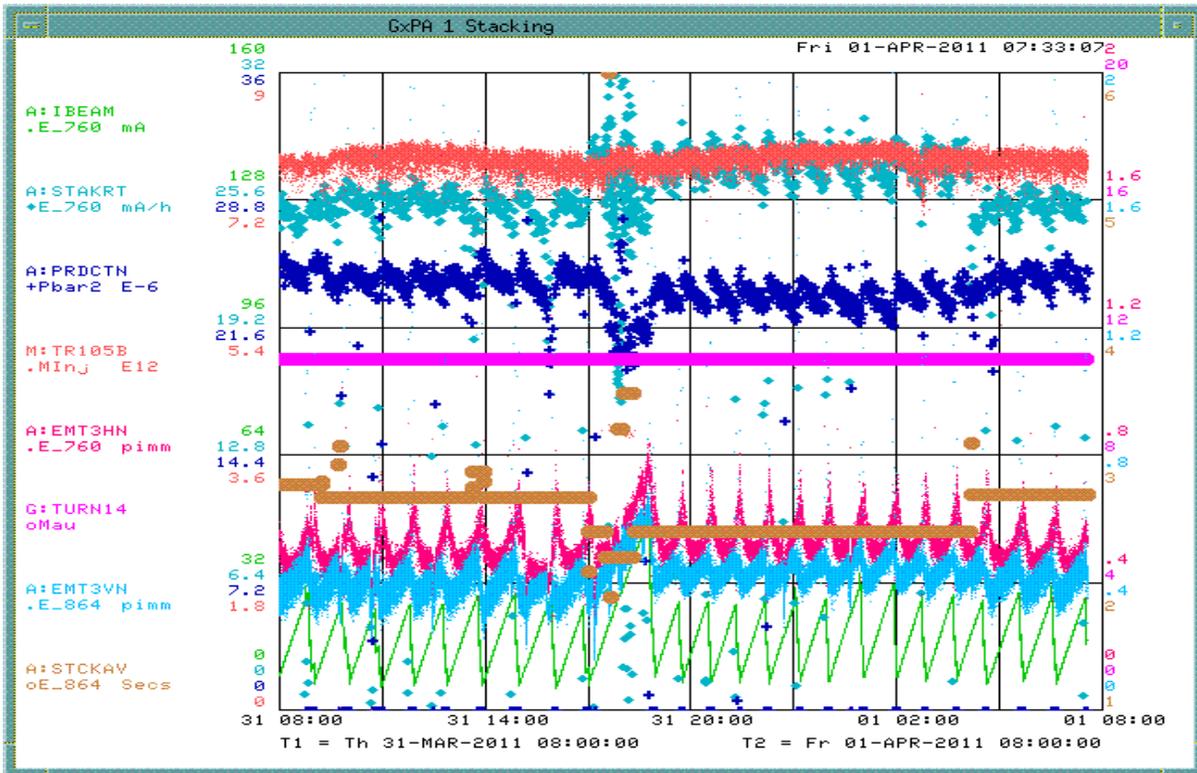
Numbers

- Stacking
 - Pbars stacked: 610.68 E10
 - Time stacking: 23.75 Hr
 - Average stacking rate: 25.71 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 33287
 - Number of pulses with beam: 32812
 - Fraction of up pulses was: 98.57%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 23.41 Hr
 - Possible average stacking rate: 26.09 E10/Hr
 - Could have stacked: 619.52 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 589.67 E10
 - Number of transfers : 72
 - Number of transfer sets: 25
 - Average Number of transfer per set: 2.88
 - Time taken to shoot including reverse proton tuneup: 00.25 Hr

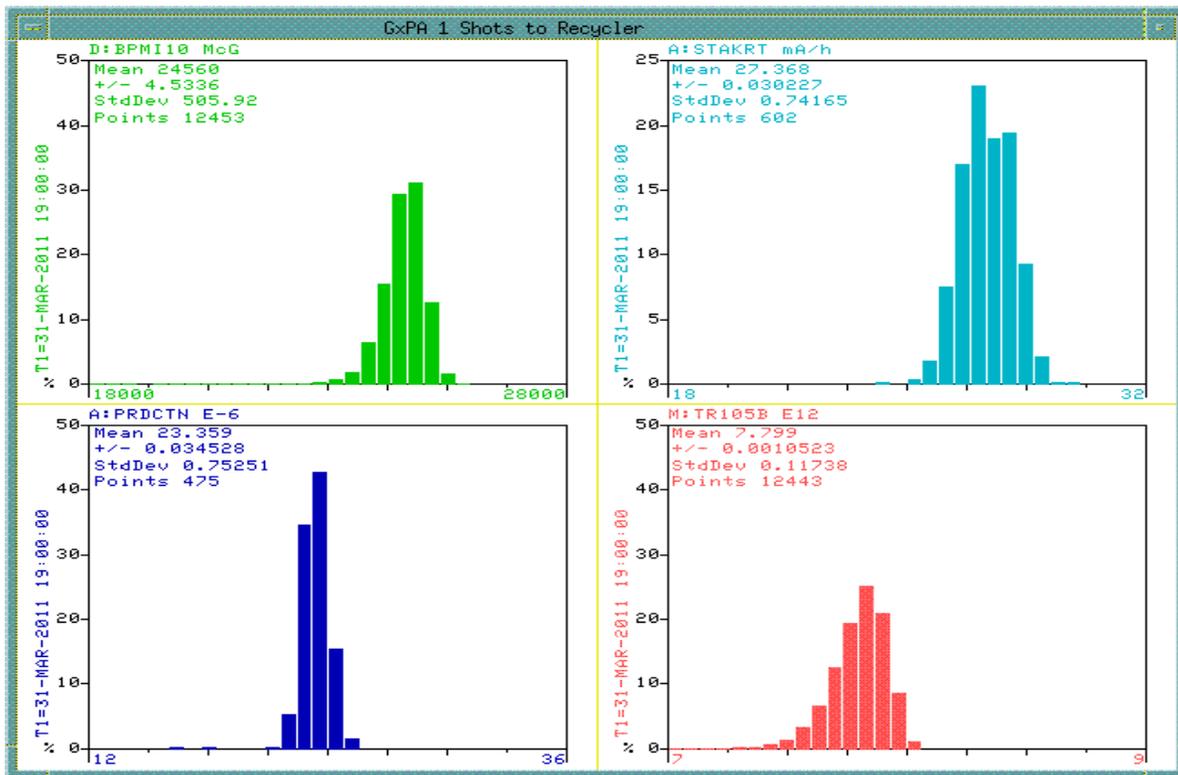
- Transfer efficiency: 95.61%
- Other Info
 - Average POT : 7.75 E12
 - Average production: 24.00 pbars/E6 protons

Plots

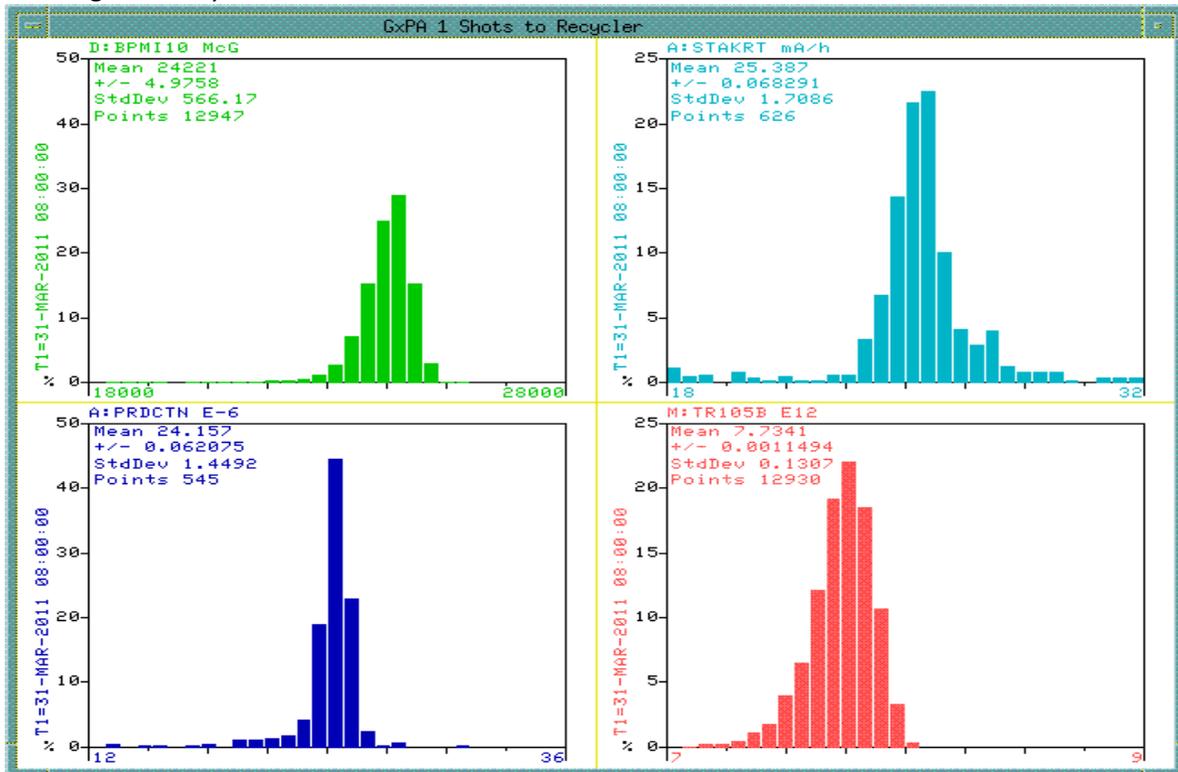




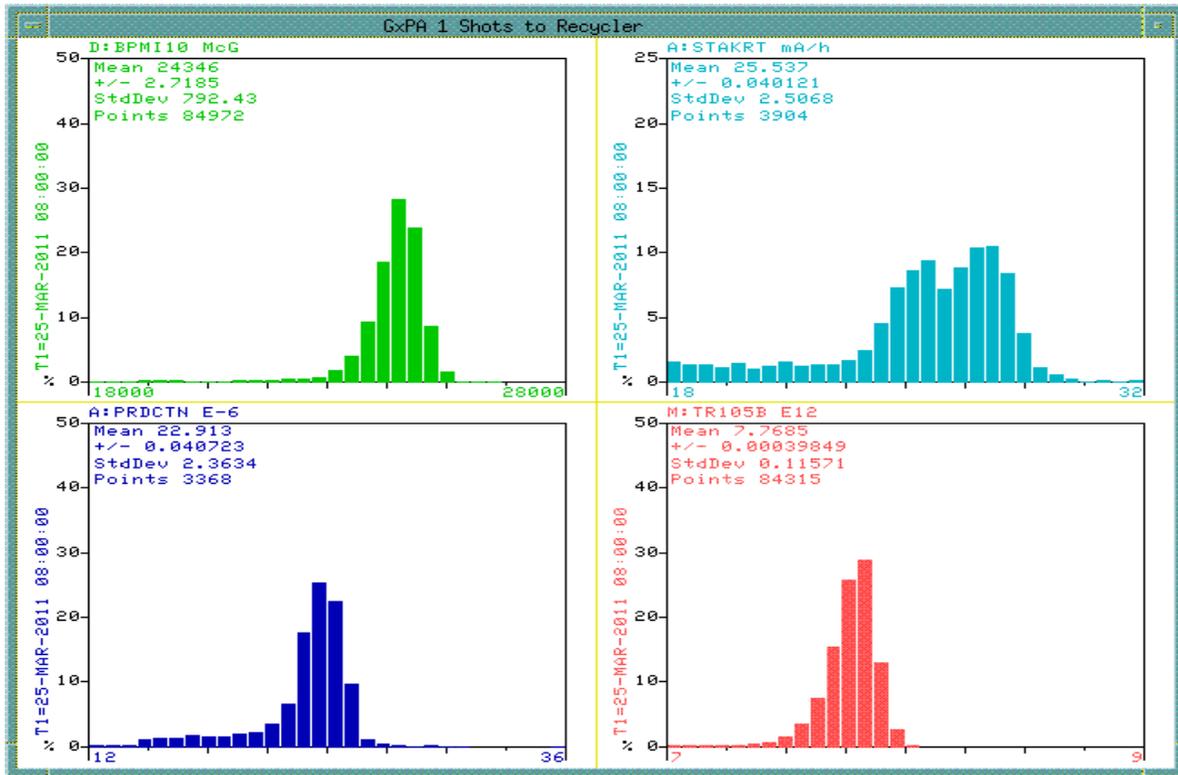
24 hours



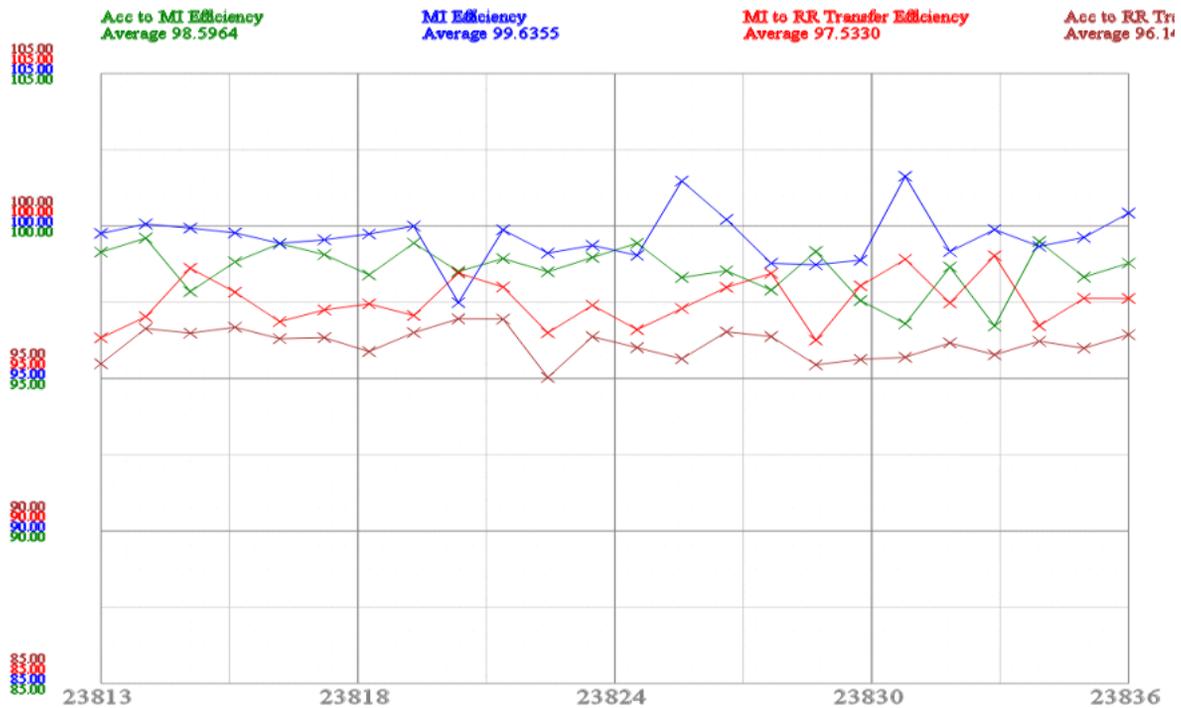
Stacking \$29s only



SY120 running



1 Week



Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_ Transfer Time	Column 21 Number _20_A-I BEAMB sampled on \$91 (A:BEA M7). E10	Column 22 Number _21_A-I BEAMB sampled on \$94 (A:BEA M9). E10	Unstacked (mA)	Column 23 Number _22_R: BEAMS (R:BEA ME0[0]) pre fer E10	Column 24 Number _23_R: BEAM (R:BEA ME0[1]) post fer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number_4 _Acc Horizontal Emittanc e	Column 6 Number_5 _Acc Vertical Emittanc e	Column 8 Number_7 _Acc Longitu dinal Emittanc e	
Totals =>				598.34			574.79	96.06%	98.58%	98.31%	96.91%	73	24	5.2424	4.033	1.9468	
Daily Average =>				598.34			574.79					73	24				
23836	Friday, April 01, 2011	6:31	28.42	6.57	24.45	308.70	331.63	23.60	96.51%	98.73%	99.20%	97.94%	3	1	5.106	3.961	1.961
23835	Friday, April 01, 2011	5:33	29.53	7.10	25.08	286.81	310.31	24.07	95.99%	98.48%	97.95%	96.47%	3	1	5.367	4.224	1.94
23834	Friday, April 01, 2011	4:30	27.64	6.43	23.82	265.95	288.35	22.90	96.15%	99.16%	99.02%	98.19%	3	1	5.127	4.142	1.954
23833	Friday, April 01, 2011	3:39	29.08	7.48	23.83	244.69	267.07	22.86	95.92%	96.76%	97.12%	93.97%	3	1	5.43	4.114	1.946
23832	Friday, April 01, 2011	2:45	28.40	7.28	23.34	223.63	245.64	22.40	95.96%	98.55%	98.21%	96.79%	3	1	5.49	4.202	1.968
23831	Friday, April 01, 2011	1:54	31.72	8.05	25.89	199.97	224.38	24.80	95.76%	97.54%	98.27%	95.85%	3	1	5.655	4.273	1.973
23830	Friday, April 01, 2011	0:56	31.63	8.11	25.72	176.38	200.62	24.62	95.72%	97.92%	97.12%	95.10%	3	1	5.629	4.298	1.936
23829	Thursday, March 31, 2011	23:55	27.91	7.17	22.92	155.28	176.89	21.90	95.54%	98.99%	98.36%	97.36%	3	1	5.48	4.049	1.933
23828	Thursday, March 31, 2011	23:04	28.20	7.07	23.36	133.36	155.59	22.51	96.38%	98.01%	97.29%	95.35%	3	1	5.498	4.067	1.972
23827	Thursday, March 31, 2011	22:10	27.47	6.47	22.94	111.72	133.63	22.14	96.53%	98.88%	98.80%	97.69%	3	1	4.951	4.052	1.965
23826	Thursday, March 31, 2011	21:18	26.61	6.75	22.09	91.03	111.95	21.14	95.71%	98.23%	99.19%	97.43%	3	1	5.219	4.002	1.995
23825	Thursday, March 31, 2011	20:29	27.44	6.88	22.79	69.56	91.26	21.89	96.07%	98.72%	98.16%	96.91%	3	1	5.225	4.043	1.957
23824	Thursday, March 31, 2011	19:38	27.32	6.99	22.56	48.31	69.80	21.75	96.41%	99.54%	98.87%	98.41%	3	1	5.461	4.128	1.96
23823	Thursday, March 31, 2011	18:46	48.36	8.10	44.10	7.47	48.54	41.76	94.70%	98.09%	97.86%	95.99%	4	1	6.304	4.822	1.941
23822	Thursday, March 31, 2011	16:53	26.18	6.06	22.64	282.07	303.67	21.94	96.87%	99.01%	99.54%	98.55%	3	1	4.878	3.616	1.935
23821	Thursday, March 31, 2011	15:56	28.78	5.42	25.92	257.99	282.78	25.13	96.94%	98.28%	96.28%	94.62%	3	1	4.66	3.376	1.905
23820	Thursday, March 31, 2011	14:52	29.53	6.15	26.01	234.07	258.73	25.07	96.42%	99.45%	98.94%	98.39%	3	1	5.341	3.96	1.901
23819	Thursday, March 31, 2011	13:47	28.83	5.98	25.41	210.96	234.74	24.34	95.78%	98.48%	98.17%	96.68%	3	1	5.128	4.031	1.914
23818	Thursday, March 31, 2011	12:45	26.62	6.02	23.23	189.50	211.45	22.38	96.36%	99.22%	98.67%	97.90%	3	1	4.878	3.729	1.956
23817	Thursday, March 31, 2011	11:48	26.68	6.07	23.26	167.88	189.85	22.39	96.23%	99.35%	99.08%	98.43%	3	1	5.056	3.898	1.942
23816	Thursday, March 31, 2011	10:48	25.43	5.82	23.31	146.12	168.25	22.48	96.44%	98.77%	98.89%	97.68%	3	1	5.013	3.645	1.945
23815	Thursday, March 31, 2011	9:51	27.02	6.62	24.37	123.25	146.39	23.53	96.55%	98.13%	97.61%	95.79%	3	1	4.913	3.912	1.961
23814	Thursday, March 31, 2011	8:51	29.23	6.56	26.07	98.83	123.55	25.14	96.43%	99.53%	99.52%	99.05%	3	1	4.976	4.187	1.954
23813	Thursday, March 31, 2011	7:46	28.32	6.45	25.25	75.39	99.09	24.07	95.33%	98.52%	98.06%	96.61%	3	1	5.033	4.062	1.909