

Listing of Statistics for Run1-2003 (Created Tue May 27 09:12:04 CDT 2003)

Total Amount of User Time in this interval 1646.93 Hours

User periods in this interval

01/29/2003 08:00	To	02/03/2003 16:00	128.00	Hours, Delivered Beam:	121.59	Hours,	3	Fault(s),	40.53	MTBF,	9
02/04/2003 08:00	To	02/10/2003 08:00	144.00	Hours, Delivered Beam:	140.97	Hours,	3	Fault(s),	46.99	MTBF,	9
02/12/2003 08:00	To	02/18/2003 08:00	144.00	Hours, Delivered Beam:	139.42	Hours,	3	Fault(s),	46.47	MTBF,	9
02/18/2003 16:00	To	02/24/2003 08:00	136.00	Hours, Delivered Beam:	133.69	Hours,	4	Fault(s),	33.42	MTBF,	9
02/26/2003 08:00	To	03/03/2003 16:00	128.00	Hours, Delivered Beam:	123.55	Hours,	7	Fault(s),	17.65	MTBF,	9
03/04/2003 08:00	To	03/10/2003 08:00	144.00	Hours, Delivered Beam:	139.27	Hours,	3	Fault(s),	46.42	MTBF,	9
03/12/2003 08:00	To	03/18/2003 08:00	144.00	Hours, Delivered Beam:	141.48	Hours,	2	Fault(s),	70.74	MTBF,	9
03/18/2003 16:00	To	03/24/2003 08:00	136.00	Hours, Delivered Beam:	134.91	Hours,	3	Fault(s),	44.97	MTBF,	9
03/26/2003 08:00	To	04/01/2003 08:00	144.00	Hours, Delivered Beam:	142.15	Hours,	3	Fault(s),	47.38	MTBF,	9
04/01/2003 16:00	To	04/07/2003 08:00	135.00	Hours, Delivered Beam:	130.07	Hours,	4	Fault(s),	32.52	MTBF,	9
04/09/2003 08:00	To	04/14/2003 16:00	128.00	Hours, Delivered Beam:	126.58	Hours,	2	Fault(s),	63.29	MTBF,	9
04/15/2003 08:00	To	04/20/2003 24:00	136.00	Hours, Delivered Beam:	125.12	Hours,	8	Fault(s),	15.64	MTBF,	9

Delivered Beam	1598.80	Hours
Percentage of Scheduled Time (*)	97.08	%
Downtime During Period	48.14	Hours
Percentage of scheduled time SR current > 10 ma	98.14	%
Average Delivered Current During This Period	98.37	ma
Total integrated Current During This Period	157.31	A-hr

Mean Fill Duration in Period	34.76	Hours
Mean Fill Duration from Poisson Fit	34.13	Hours
Mean Time Between Faults (MTBF)	35.53	Hours
Faults per Day of Delivered Beam	0.68	

Valid fills Beginning in this Time Interval	Reason for	Length	Downtime is associated with
Fill# Start End Duration (min: 1.0)	Fill Termination	of Downtime	The first fill of a period downtime before the fill
# 1 01/29 08:00 To 01/30 07:44 23.74	Correct P0 Err. [CTL]	0.00	
# 3 01/30 08:36 To 01/30 13:59 5.38	line power bump [OTHER]	0.85	Recover, refill
# 4 01/30 16:03 To 02/02 02:28 58.40	18ID Rad. Mon. Trip [HP]	2.08	Investigation, Recovery of injection
# 11 02/02 05:56 To 02/03 15:59 34.06	Int Dump: End of Period	3.48	Repair, RF rad monitor problems
# 15 02/04 08:11 To 02/07 08:34 72.38	rf4 Vac trip [RF]	0.00	
# 16 02/07 09:18 To 02/07 16:19 7.02	rf4 llrf trip [RF]	0.19	Lost beam when engaging RTFB system
# 18 02/07 18:08 To 02/09 13:36 43.48	rf4 Vac trip [RF]	0.73	Pump down, refill
# 20 02/09 13:54 To 02/10 07:59 18.09	Int Dump: End of Period	1.81	Refill
# 23 02/12 08:00 To 02/15 11:09 75.16	1ID BPLD trip [DIAG]	0.29	Refill
# 26 02/15 11:51 To 02/15 14:26 2.58	1ID BPLD trip [DIAG]	0.00	
# 28 02/15 16:28 To 02/15 18:14 1.77	RF4 sideband [RF]	0.70	Lost beam again, refill
# 30 02/15 20:04 To 02/18 07:59 59.92	Int Dump: End of Period	2.04	refill
# 31 02/18 16:00 To 02/19 02:52 10.86	S9BQ2 failure [ES]	1.83	RF system swapping, refill
# 32 02/19 04:06 To 02/20 05:39 25.56	RF2 crowbar trip [RF]	0.00	
# 33 02/20 05:53 To 02/22 17:20 59.46	RF2 crowbar trip [RF]	1.23	Converter swapping, conditioning
# 35 02/22 17:57 To 02/24 00:21 30.40	S40 Cav.Vac. trip [RF]	0.22	Refill
# 36 02/24 00:35 To 02/24 07:59 7.41	Int Dump: End of Period	0.62	Lost beam again, Refill
# 38 02/26 08:00 To 02/26 09:50 1.83	RF3 loss due to RF2 [RF]	0.22	refill
# 40 02/26 11:06 To 02/26 16:48 5.71	IOCRFTIME problem [CTL]	0.01	
# 41 02/26 17:41 To 02/26 23:50 6.15	IOCRFTIME problem [CTL]	1.26	Refill
# 42 02/27 00:06 To 02/28 17:27 41.35	RF3 loss due to RF2 [RF]	0.88	Refill
# 43 02/28 17:52 To 03/01 12:17 18.42	Rad.mon.trip @inj. [OPS]	0.27	refill
# 45 03/01 12:38 To 03/01 18:54 6.27	22ID BPLD trip [UKN]	0.41	Refill
# 48 03/01 19:56 To 03/03 09:18 37.37	RF3 HVPS trip [RF]	0.35	Refill
# 49 03/03 09:32 To 03/03 16:00 6.45	Int Dump: End of Period	1.04	Loss beam again, refill
# 50 03/04 08:00 To 03/06 11:22 51.36	Power bump [OTHER]	0.23	Refill
# 55 03/06 12:22 To 03/07 07:44 19.38	Bunch purity [OPS]	-0.00	
# 57 03/07 07:55 To 03/10 01:28 65.56	S32B:Q5 converter [ES]	1.00	Injector tuning[OPS],BESCOM timing
# 63 03/10 05:02 To 03/10 07:59 2.96	Int Dump: End of Period	0.17	Refill
# 64 03/12 08:00 To 03/12 15:54 7.90	VacValve VM-39-VV02[CTL]	3.55	Replace converter then flush water
# 65 03/12 16:09 To 03/17 01:25 105.26	S33B:V1 problem [ES]	0.00	

# 67	03/17 03:40	To 03/18 07:59	28.32	Int Dump: End of Period	0.00
# 68	03/18 16:00	To 03/20 10:06	42.10	RF4 Power loss [RF]	0.01 Refill
# 69	03/20 10:23	To 03/21 12:26	26.04	2ID PSS trip [ES]	0.61 Magnet Standardize, refill
# 70	03/21 13:02	To 03/22 04:07	15.08	RF4 cav.Vac.Flt [RF]	0.18 Refill
# 71	03/22 04:18	To 03/24 07:59	51.69	Int Dump: End of Period	0.00
# 72	03/26 08:00	To 03/26 21:22	13.37	S15B:MT trip [ES]	0.00 Converter swap, refill
# 73	03/26 22:33	To 03/29 09:50	59.28	S39:VW01 Valve trip[CTL]	0.38 Refill
# 74	03/29 10:13	To 04/01 04:25	66.20	Spurious RadMon.trip[HP]	0.28 refill
# 76	04/01 04:42	To 04/01 07:59	3.30	Int Dump: End of Period	0.00
# 77	04/01 18:23	To 04/02 16:38	22.25	S40 cav.vac trip [RF]	2.39 RF3/RF2 problem[RF],Booster tuni
# 78	04/02 17:20	To 04/03 09:04	15.73	RF4 lost power [RF]	0.70 Refill, BPM problem[DIAG]
# 80	04/03 09:17	To 04/05 16:13	54.93	5ID Rad.Mon.failure [HP]	0.22 Refill
# 81	04/05 17:18	To 04/06 14:02	19.73	Rad.trip @ refill [OPS]	1.09 Rad. mon. replacement, refill
# 83	04/06 14:34	To 04/07 07:59	17.43	Int Dump: End of Period	0.53 Refill
# 86	04/09 08:00	To 04/09 11:33	3.55	15ID PSS fault [ES]	0.00 Investigation[OPS], refill
# 87	04/09 12:40	To 04/13 09:30	92.83	10ID Rad.Mon. Err. [HP]	0.29 Investigation, Refill
# 88	04/13 09:48	To 04/14 15:59	30.20	Int Dump: End of Period	0.00
# 89	04/15 08:01	To 04/15 15:40	7.65	iocs31bpm reboot [DIAG]	0.02 Refill
# 90	04/15 16:11	To 04/15 18:02	1.85	2ID BPLD fault [DIAG]	0.86 Lost again[OPS], refill
# 91	04/15 18:53	To 04/16 08:31	13.62	ACIS relay fault [ES]	1.20 Investigation, refill
# 93	04/16 09:43	To 04/16 17:57	8.24	2ID BPLD fault [DIAG]	0.68 Low inj. efficiency, refill
# 94	04/16 18:38	To 04/17 11:58	17.33	2ID BPLD fault [DIAG]	0.47 refill
# 96	04/17 12:26	To 04/17 21:23	8.96	2ID BPLD fault [DIAG]	4.14 BPLD repair, validation, refill
# 98	04/18 01:32	To 04/20 05:27	51.61	S36AQ5 failure [ES]	1.83 Repair, refill
* Interruption of delivered beam between 04/18 13:00 To 04/18 13:19 All gaps open to fix rms motion problem [1					
#103	04/20 06:58	To 04/20 21:46	14.80	2ID BPLD fault [DIAG]	1.16 Booster RF H2O meter fault, refi
#105	04/20 22:56	To 04/20 23:59	1.06	Int Dump: End of Period	0.00

Top-Up Mode Statistics

Target Current = 102.0, Range +/- 2.0, Minimum Injector Downtime = 8.0 minutes

Total

Scheduled Topup Time 1239.0 Hours
Injector Availability 94.9%