

| 0.01
1 05/30 08:00 To 05/30 09:04 1.07 | Quad P.S. trip [PS]
| 1.37 Investigation, replaced quad. P.S.
2 05/30 10:26 To 05/30 17:03 6.61 | Pump 401 glitch [PFS]
| 2.56 Pump trip,.72[PFS];PS trip,.83[PS];EPS trip,1hr[SI
4 05/30 19:36 To 06/01 10:11 38.58 | BPM glitch [DIAG]
| 0.40 S15A:P0 glitch tripped RTFB loops, refill [DIAG]
5 06/01 10:35 To 06/01 11:59 1.41 | PS cab. water leak [PS]
| 0.70 Int. dump to fix water leak and replace quad PS[PS]
6 06/01 12:42 To 06/02 14:03 25.35 | RF4 HVPS trip [RF]
| 1.07 Tightened connection in rack, refilled [RF]
7 06/02 15:07 To 06/04 11:30 44.38 | RF2 LLRF trip [RF]
| 0.43 Investigation, refill [RF]
8 06/04 11:56 To 06/05 12:08 24.21 | 19ID BPLD trip [UNK]
| 0.29 Under investigation
9 06/05 12:26 To 06/06 07:59 19.56 | Int Dump: End of Period
| 0.00

| 0.00
10 06/07 08:00 To 06/08 10:08 26.14 | RF4 HVPS trip [RF]
| 0.43 Investigation, refill [RF]
11 06/08 10:34 To 06/08 19:16 8.70 | Water flow faults [PFS]
| 0.79 Investigation showed pump control problem [PFS]
12 06/08 20:03 To 06/09 02:54 6.85 | S40 RF Cav3&4 Vacuum[RF]
| 0.64 Investigation, refill
13 06/09 03:32 To 06/11 16:21 60.80 | RF2 LLRF trip [RF]
| 0.22 Investigation, refill [RF]
14 06/11 16:34 To 06/13 08:00 39.43 | Int Dump: End of Period
| 0.00

| 0.00
15 06/14 08:00 To 06/17 13:07 77.12 | S3A:V4 P.S. trip [PS]
| 5.49 Swapped P.S. and troubleshoot GESPAC problems [PS]
16 06/17 18:37 To 06/19 07:59 37.38 | Int Dump: End of Period
| 0.00

| 0.01
17 06/21 08:00 To 06/27 07:59 143.99 | Int Dump: End of Period
| 0.00

| 0.01
18 06/28 08:00 To 07/04 08:00 143.99 | Int Dump: End of Period
| -0.00

| 0.01

19 07/05 08:00 To 07/05 16:47 8.78 | RTFB BPM glitch [DIAG]
| 0.30 Investigation, refill
20 07/05 17:05 To 07/10 07:59 110.90 | Int Dump: End of Period
| 0.00

| -0.01
21 07/12 08:00 To 07/13 08:15 24.24 | Bldg450 pwr.glitch[OTHER
| 1.25 Pwr glitch caused pump disturbance, recover, refill
22 07/13 09:30 To 07/13 11:00 1.50 | APS pump trips [PFS]
| 2.20 Pump trip recovery,1.7hr[PFS],reconditionSR,.5[OA]
23 07/13 13:12 To 07/18 07:59 114.78 | Int Dump: End of Period
| 0.00

| 0.01
24 07/19 08:00 To 07/20 06:06 22.09 | Multiple P.S. trip[UNKN]
| 0.69 Recover from Booster & SR P.S. trips, refill [Other]
25 07/20 06:47 To 07/20 12:10 5.38 | RF2 HVPS trip [RF]
| 0.37 Investigation, refill
26 07/20 12:32 To 07/25 07:59 115.45 | Int Dump: End of Period
| 0.00

| -0.01
27 07/26 08:00 To 07/26 10:42 2.70 | BPM module failure[DIAG]
| 1.08 BPM module replaced, validated 17ID BPLD [DIAG]
28 07/26 11:47 To 07/28 23:58 60.20 | S38 Hybrid flow trip[RF]
| 0.60 Investigation, local reset of trip, refill
29 07/29 00:35 To 07/31 07:59 55.41 | Int Dump: End of Period
| 0.00

| 0.01
30 08/02 08:00 To 08/05 09:35 73.59 | RF4 cathode V drop [RF]
| 0.42 Investigation, refill [RF]
31 08/05 10:00 To 08/08 08:00 69.99 | Int Dump: End of Period
| -0.00

| 0.01
32 08/09 08:00 To 08/12 20:12 84.20 | Linac RF Window leak[RF]
| 24.80 Dropped below 50mA, replaced ion pump & RF window
33 08/13 21:00 To 08/15 07:59 34.99 | Int Dump: End of Period
| 0.00

| -0.01
34 08/16 08:00 To 08/18 18:35 58.58 | RF4 HVPS trip [RF]
| 0.69 Investigation, refill

35 08/18 19:16 To 08/19 02:03 6.78 | S38 Hybrid Flow Trip[RF]
| 0.85 Reset trip, refill ring
36 08/19 02:54 To 08/25 07:59 149.09 | Int Dump: End of Period
| 0.00

Top-Up Mode Statistics

Target Current Range 2.0, Minimum Injector Downtime = 8.0 minutes

Total

Current in Range during Scheduled Topup Time	95.33 %
Current in Range during Delivered Beam Time	98.35 %
Injector Availability	98.21 %

Period Beginning 05/30/2006 08:00

Current in Range	96.11 %
Injector Availability	95.87 %
Out of Range at: 05/30/2006 09:04:20 to 05/30/2006 09:04:20 :	
0.00 minutes	
Injector downtime: 05/30/2006 08:56:20 to 05/30/2006 09:04:20 :	
8.00 minutes (est)	
Out of Range at: 06/01/2006 02:16:50 to 06/01/2006 07:21:10 :	
304.33 minutes	
Injector downtime: 06/01/2006 02:11:55 to 06/01/2006 07:19:50 :	
307.92 minutes	
Out of Range at: 06/01/2006 08:20:50 to 06/01/2006 08:36:50 :	
16.00 minutes	
Injector downtime: 06/01/2006 08:15:55 to 06/01/2006 08:34:30 :	
18.58 minutes	
Out of Range at: 06/01/2006 15:22:50 to 06/01/2006 15:42:30 :	
19.67 minutes	
Injector downtime: 06/01/2006 15:17:55 to 06/01/2006 15:40:10 :	
22.25 minutes	
Out of Range at: 06/01/2006 15:51:40 to 06/01/2006 16:06:30 :	
14.83 minutes	
Injector downtime: 06/01/2006 15:46:45 to 06/01/2006 16:06:25 :	
19.67 minutes	
Out of Range at: 06/05/2006 08:48:50 to 06/05/2006 09:03:20 :	
14.50 minutes	
Injector downtime: 06/05/2006 08:43:55 to 06/05/2006 08:59:00 :	
15.08 minutes	
Out of Range at: 06/05/2006 09:09:00 to 06/05/2006 09:15:20 :	
6.33 minutes	
Injector downtime: 06/05/2006 09:01:00 to 06/05/2006 09:09:00 :	
8.00 minutes (est)	

Period Beginning 06/07/2006 08:00

Current in Range	97.63 %
Injector Availability	97.34 %
Out of Range at: 06/07/2006 10:23:10 to 06/07/2006 11:36:00 :	
72.83 minutes	
Injector downtime: 06/07/2006 10:18:15 to 06/07/2006 11:35:55 :	
77.67 minutes	
Out of Range at: 06/08/2006 05:53:13 to 06/08/2006 06:24:03 :	
30.83 minutes	
Injector downtime: 06/08/2006 05:48:18 to 06/08/2006 06:23:58 :	
35.67 minutes	

Out of Range at: 06/08/2006 06:33:13 to 06/08/2006 06:36:13 :
3.00 minutes
Injector downtime: 06/08/2006 06:25:13 to 06/08/2006 06:33:13 :
8.00 minutes (est)
Out of Range at: 06/08/2006 06:43:13 to 06/08/2006 08:00:53 :
77.67 minutes
Injector downtime: 06/08/2006 06:38:18 to 06/08/2006 07:59:43 :
81.42 minutes
Out of Range at: 06/10/2006 16:28:23 to 06/10/2006 16:29:13 :
0.83 minutes
Injector downtime: 06/10/2006 16:20:23 to 06/10/2006 16:28:23 :
8.00 minutes (est)
Out of Range at: 06/12/2006 01:44:23 to 06/12/2006 01:58:33 :
14.17 minutes
Injector downtime: 06/12/2006 01:36:23 to 06/12/2006 01:44:23 :
8.00 minutes (est)
Out of Range at: 06/12/2006 02:06:13 to 06/12/2006 02:08:33 :
2.33 minutes
Injector downtime: 06/12/2006 01:58:13 to 06/12/2006 02:06:13 :
8.00 minutes (est)

Period Beginning 06/14/2006 08:00

Current in Range 99.83 %
Injector Availability 99.76 %
Out of Range at: 06/17/2006 09:36:13 to 06/17/2006 09:47:43 :
11.50 minutes
Injector downtime: 06/17/2006 09:31:18 to 06/17/2006 09:47:38 :
16.33 minutes

Period Beginning 06/21/2006 08:00

Current in Range 99.40 %
Injector Availability 99.20 %
Out of Range at: 06/21/2006 08:53:43 to 06/21/2006 09:14:33 :
20.83 minutes
Injector downtime: 06/21/2006 08:48:48 to 06/21/2006 09:14:28 :
25.67 minutes
Out of Range at: 06/22/2006 14:03:33 to 06/22/2006 14:34:23 :
30.83 minutes
Injector downtime: 06/22/2006 13:58:38 to 06/22/2006 14:34:18 :
35.67 minutes
Out of Range at: 06/23/2006 11:42:33 to 06/23/2006 11:42:33 :
0.00 minutes
Injector downtime: 06/23/2006 11:34:33 to 06/23/2006 11:42:33 :
8.00 minutes (est)

Period Beginning 06/28/2006 08:00

Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 07/05/2006 08:00

Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 07/19/2006 08:00

Current in Range 96.67 %
Injector Availability 96.61 %

Out of Range at: 07/19/2006 14:16:44 to 07/19/2006 17:18:54 :
182.17 minutes
Injector downtime: 07/19/2006 14:11:49 to 07/19/2006 17:14:34 :
182.75 minutes
Out of Range at: 07/20/2006 02:21:24 to 07/20/2006 04:04:54 :
103.50 minutes
Injector downtime: 07/20/2006 02:16:29 to 07/20/2006 04:04:49 :
108.33 minutes

Period Beginning 07/26/2006 08:01

Current in Range 99.89 %
Injector Availability 99.66 %
Out of Range at: 07/27/2006 00:26:24 to 07/27/2006 00:26:24 :
0.00 minutes
Injector downtime: 07/27/2006 00:18:24 to 07/27/2006 00:26:24 :
8.00 minutes (est)
Out of Range at: 07/27/2006 00:57:34 to 07/27/2006 01:00:24 :
2.83 minutes
Injector downtime: 07/27/2006 00:49:34 to 07/27/2006 00:57:34 :
8.00 minutes (est)
Out of Range at: 07/30/2006 22:33:34 to 07/30/2006 22:38:44 :
5.17 minutes
Injector downtime: 07/30/2006 22:25:34 to 07/30/2006 22:33:34 :
8.00 minutes (est)

Period Beginning 08/02/2006 08:00

Current in Range 100.00 %
Injector Availability 99.91 %
Out of Range at: 08/05/2006 14:22:04 to 08/05/2006 14:22:04 :
0.00 minutes
Injector downtime: 08/05/2006 14:14:04 to 08/05/2006 14:22:04 :
8.00 minutes (est)

Period Beginning 08/09/2006 08:00

Current in Range 94.36 %
Injector Availability 94.18 %
Out of Range at: 08/12/2006 14:33:44 to 08/12/2006 20:12:34 :
338.83 minutes
Injector downtime: 08/12/2006 14:28:49 to 08/12/2006 20:12:29 :
343.67 minutes
Out of Range at: 08/13/2006 21:00:44 to 08/13/2006 21:01:34 :
0.83 minutes
Injector downtime: 08/13/2006 20:52:44 to 08/13/2006 21:00:44 :
8.00 minutes (est)
Out of Range at: 08/14/2006 16:01:34 to 08/14/2006 17:05:14 :
63.67 minutes
Injector downtime: 08/14/2006 15:56:39 to 08/14/2006 17:00:54 :
64.25 minutes