

**Listing of Statistics for Run1-2019 (Created Tue Apr 23 12:05:13 CDT 2019)**

User periods in this interval

01/29/2019 08:00 To 02/04/2019 08:00 144.00 Hours, Delivered Beam: 138.11 Hours, 2 Fault(s), 69.05 MTBF, 95.91% of Sched. Time  
 02/05/2019 08:00 To 02/11/2019 08:00 144.00 Hours, Delivered Beam: 142.73 Hours, 3 Fault(s), 47.58 MTBF, 99.12% of Sched. Time  
 02/12/2019 08:00 To 02/18/2019 08:00 144.00 Hours, Delivered Beam: 139.49 Hours, 3 Fault(s), 46.50 MTBF, 96.87% of Sched. Time  
 02/19/2019 08:00 To 02/25/2019 08:00 144.00 Hours, Delivered Beam: 143.99 Hours, 0 Fault(s), 143.99 MTBF, 100.00% of Sched. Time  
 02/26/2019 08:00 To 03/04/2019 08:00 144.00 Hours, Delivered Beam: 142.33 Hours, 2 Fault(s), 71.17 MTBF, 98.84% of Sched. Time  
 03/05/2019 08:00 To 03/11/2019 08:00 143.00 Hours, Delivered Beam: 143.00 Hours, 0 Fault(s), 143.00 MTBF, 100.00% of Sched. Time  
 03/13/2019 08:00 To 03/18/2019 08:00 120.00 Hours, Delivered Beam: 120.00 Hours, 0 Fault(s), 120.00 MTBF, 100.00% of Sched. Time  
 03/19/2019 08:00 To 03/25/2019 08:00 144.00 Hours, Delivered Beam: 141.39 Hours, 3 Fault(s), 47.13 MTBF, 98.19% of Sched. Time  
 03/26/2019 08:00 To 04/01/2019 08:00 144.00 Hours, Delivered Beam: 142.23 Hours, 2 Fault(s), 71.11 MTBF, 98.77% of Sched. Time  
 04/02/2019 08:00 To 04/08/2019 08:00 144.00 Hours, Delivered Beam: 136.50 Hours, 2 Fault(s), 68.25 MTBF, 94.79% of Sched. Time  
 04/09/2019 08:00 To 04/15/2019 08:00 144.00 Hours, Delivered Beam: 143.57 Hours, 1 Fault(s), 143.57 MTBF, 99.70% of Sched. Time  
 04/16/2019 08:00 To 04/22/2019 24:00 160.00 Hours, Delivered Beam: 157.60 Hours, 1 Fault(s), 157.60 MTBF, 98.50% of Sched. Time

**Total Amount of User Time in this interval      1718.95 Hours    Delivered Beam    1690.92 Hours**

**Percentage of Scheduled Time (\*)                      98.37 %**

**Mean Time Between Faults (MTBF)                      89.00 Hours**

Downtime During Period                                      28.03 Hours

Total integrated Current During This Period              169.49 A-hr

Mean Fill Duration in Period                                      84.55 Hours

Faults per Day of Delivered Beam                              0.27

Total Number of Faults    19

Valid fills Beginning in this Time Interval

Fill #	Start	End	Duration (min: 1.0)	Reason for Fill Termination	Length of Downtime	Downtime is associated with the The first fill of a period will have on the line above.
					0.00	
# 1	01/29 08:00	To 02/03 03:56	115.94	S11 PSCU fit [PS]	2.64	Call-in P.S. group, repair, condi
# 2	02/03 06:34	To 02/03 13:10	6.60	RF4 Crowbar [RF]	3.25	RF Group Call-in, waveguide s
# 3	02/03 16:25	To 02/04 07:59	15.57	Int Dump: End of Period	0.00	
					0.00	
# 4	02/05 08:00	To 02/05 14:45	6.75	Human error [MOM]	0.41	Reset interlocks, refilled ring
# 5	02/05 15:09	To 02/05 17:18	2.14	RF2 crowbarred [RF]	0.50	
# 6	02/05 17:47	To 02/08 02:45	56.96	S5B:V2 P.S. glitch [PS]	0.36	Investigation, refill
# 7	02/08 03:07	To 02/11 07:59	76.88	Int Dump: End of Period	0.00	

						0.00	
# 8	02/12 08:00	To	02/15 03:02	67.03	S5B:V2 P.S. glitch{PS}	0.45	Investigation, refill
# 9	02/15 03:29	To	02/15 06:24	2.93	S19A:Q2 P.S. trip [PS]	2.78	Conditioned, 2nd trip, recondition
# 10	02/15 09:11	To	02/17 08:14	47.05	S27/28 Pump switch[MOM]	1.28	investigation, leared faults, con
# 11	02/17 09:31	To	02/18 07:59	22.47	Int Dump: End of Period	0.00	
						0.00	
# 12	02/19 08:00	To	02/25 07:59	143.99	Int Dump: End of Period	0.00	
						0.00	
# 13	02/26 08:00	To	02/28 11:38	51.63	S19B:S3 p.s. failed[PS]	1.20	Conditioned, refilled
# 14	02/28 12:49	To	03/02 13:22	48.55	RF2 crowbar [RF]	0.47	Investigation and refill
# 15	03/02 13:50	To	03/04 07:59	42.15	Int Dump: End of Period	0.00	
						0.00	
# 16	03/05 08:00	To	03/11 07:59	143.00	Int Dump: End of Period	0.00	
						0.00	
# 17	03/13 08:00	To	03/18 07:59	120.00	Int Dump: End of Period	0.00	
						0.00	
# 18	03/19 08:00	To	03/22 08:18	72.31	SR BM glitch [PS]	1.36	Conditioned and refilled
# 19	03/22 09:40	To	03/23 05:39	20.00	19ID PSS trip [SI]	0.77	Recovered systems, refilled.
# 20	03/23 06:25	To	03/23 22:01	15.59	RF2 H2O fault [RF]	0.48	
# 21	03/23 22:30	To	03/25 08:00	33.50	Int Dump: End of Period	0.00	
						0.00	
# 22	03/26 08:00	To	03/26 15:05	7.09	11ID rad mon failed[OTH]	0.71	Replaced w/temp monitor, reco
# 23	03/26 15:48	To	03/26 18:32	2.73	15ID rad mon failed[OTH]	1.06	Replaced w/temp monitor, reco
# 24	03/26 19:35	To	04/01 07:59	132.41	Int Dump: End of Period	0.00	

						0.00	
# 25	04/02 08:00	To	04/07 01:12	113.21	Unknown reason [UNK]	0.63	Investigation, refill
# 26	04/07 01:50	To	04/07 15:05	13.26	RF3&5 VESDA trip [RF]	6.87	WG switch, Linac pump trip 5.1
# 27	04/07 21:57	To	04/08 07:59	10.03	Int Dump: End of Period	0.00	

						0.00	
# 28	04/09 08:00	To	04/10 21:14	37.24	RF2 crowbar trip[RF]	0.42	Recovery, refill
# 29	04/10 21:39	To	04/15 07:59	106.33	Int Dump: End of Period	0.00	

						0.00	
# 30	04/16 08:00	To	04/16 16:25	8.42		2.40	
# 32	04/16 18:49	To	04/22 23:59	149.17	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	96.40 %
Current in Range during Delivered Beam Time	98.21 %
Injector Availability	98.05 %

Period Beginning 01/29/2019 08:00

Current in Range		96.28 %	
Injector Availability		95.84 %	
Out of Range at:	01/29/2019 09:40:24	to 01/29/2019 10:14:40 :	34.27 minutes
Injector downtime:	01/29/2019 09:35:28	to 01/29/2019 10:12:24 :	36.93 minutes
Out of Range at:	01/30/2019 09:30:56	to 01/30/2019 11:50:24 :	139.47 minutes
Injector downtime:	01/30/2019 09:26:00	to 01/30/2019 11:49:44 :	143.73 minutes
Out of Range at:	01/30/2019 15:32:48	to 01/30/2019 17:10:32 :	97.73 minutes
Injector downtime:	01/30/2019 15:27:52	to 01/30/2019 17:10:00 :	102.13 minutes
Out of Range at:	01/31/2019 12:45:28	to 01/31/2019 13:10:16 :	24.80 minutes
Injector downtime:	01/31/2019 12:40:32	to 01/31/2019 13:10:12 :	29.67 minutes
Out of Range at:	02/01/2019 23:08:16	to 02/01/2019 23:19:52 :	11.60 minutes

Injector downtime:	02/01/2019 23:03:20	to 02/01/2019 23:19:48 :	16.47 minutes
Out of Range at:	02/03/2019 03:56:40	to 02/03/2019 03:56:40 :	0.00 minutes
Injector downtime:	02/03/2019 03:48:40	to 02/03/2019 03:56:40 :	~ 8.00 minutes
Out of Range at:	02/03/2019 09:10:56	to 02/03/2019 09:11:20 :	0.40 minutes
Injector downtime:	02/03/2019 09:02:56	to 02/03/2019 09:10:56 :	~ 8.00 minutes

Period Beginning 02/05/2019 08:00

Current in Range		99.45 %	
Injector Availability		99.38 %	
Out of Range at:	02/08/2019 11:07:52	to 02/08/2019 11:12:56 :	5.07 minutes
Injector downtime:	02/08/2019 10:59:52	to 02/08/2019 11:07:52 :	~ 8.00 minutes
Out of Range at:	02/09/2019 10:06:40	to 02/09/2019 10:48:48 :	42.13 minutes
Injector downtime:	02/09/2019 10:01:44	to 02/09/2019 10:46:24 :	44.67 minutes

Period Beginning 02/12/2019 08:00

Current in Range		99.55 %	
Injector Availability		99.52 %	
Out of Range at:	02/12/2019 17:31:36	to 02/12/2019 18:09:28 :	37.87 minutes
Injector downtime:	02/12/2019 17:26:40	to 02/12/2019 18:07:12 :	40.53 minutes

Period Beginning 02/19/2019 08:00

Current in Range		100.00 %	
Injector Availability		100.00 %	

Period Beginning 03/13/2019 08:00

Current in Range		97.95 %	
Injector Availability		97.52 %	
Out of Range at:	03/15/2019 09:43:52	to 03/15/2019 10:14:00 :	30.13 minutes
Injector downtime:	03/15/2019 09:38:56	to 03/15/2019 10:11:52 :	32.93 minutes
Out of Range at:	03/15/2019 20:23:28	to 03/15/2019 20:32:24 :	8.93 minutes
Injector downtime:	03/15/2019 20:18:32	to 03/15/2019 20:32:20 :	13.80 minutes
Out of Range at:	03/16/2019 07:08:00	to 03/16/2019 07:26:32 :	18.53 minutes
Injector downtime:	03/16/2019 07:03:04	to 03/16/2019 07:25:20 :	22.27 minutes
Out of Range at:	03/16/2019 17:43:12	to 03/16/2019 18:00:16 :	17.07 minutes
Injector downtime:	03/16/2019 17:38:16	to 03/16/2019 17:57:04 :	18.80 minutes

Out of Range at:	03/16/2019 18:51:20	to 03/16/2019 19:38:24 :	47.07 minutes
Injector downtime:	03/16/2019 18:46:24	to 03/16/2019 19:37:12 :	50.80 minutes
Out of Range at:	03/16/2019 23:12:40	to 03/16/2019 23:33:20 :	20.67 minutes
Injector downtime:	03/16/2019 23:07:44	to 03/16/2019 23:32:00 :	24.27 minutes
Out of Range at:	03/17/2019 05:09:36	to 03/17/2019 05:10:16 :	0.67 minutes
Injector downtime:	03/17/2019 05:01:36	to 03/17/2019 05:09:36 :	~ 8.00 minutes
Out of Range at:	03/18/2019 07:04:08	to 03/18/2019 07:08:48 :	4.67 minutes
Injector downtime:	03/18/2019 06:56:08	to 03/18/2019 07:04:08 :	~ 8.00 minutes

Period Beginning 03/19/2019 08:00

Current in Range			99.36 %
Injector Availability			99.20 %
Out of Range at:	03/20/2019 15:28:24	to 03/20/2019 15:44:48 :	16.40 minutes
Injector downtime:	03/20/2019 15:23:28	to 03/20/2019 15:42:32 :	19.07 minutes
Out of Range at:	03/22/2019 09:52:08	to 03/22/2019 10:04:40 :	12.53 minutes
Injector downtime:	03/22/2019 09:47:12	to 03/22/2019 10:03:36 :	16.40 minutes
Out of Range at:	03/23/2019 15:24:00	to 03/23/2019 15:43:20 :	19.33 minutes
Injector downtime:	03/23/2019 15:19:04	to 03/23/2019 15:43:16 :	24.20 minutes
Out of Range at:	03/24/2019 23:51:28	to 03/24/2019 23:57:36 :	6.13 minutes
Injector downtime:	03/24/2019 23:43:28	to 03/24/2019 23:51:28 :	~ 8.00 minutes

Period Beginning 03/26/2019 08:00

Current in Range			99.68 %
Injector Availability			99.50 %
Out of Range at:	03/26/2019 15:50:40	to 03/26/2019 15:52:40 :	2.00 minutes
Injector downtime:	03/26/2019 15:42:40	to 03/26/2019 15:50:40 :	~ 8.00 minutes
Out of Range at:	03/26/2019 18:00:48	to 03/26/2019 18:14:32 :	13.73 minutes
Injector downtime:	03/26/2019 17:55:52	to 03/26/2019 18:14:28 :	18.60 minutes
Out of Range at:	03/27/2019 14:21:28	to 03/27/2019 14:32:56 :	11.47 minutes
Injector downtime:	03/27/2019 14:16:32	to 03/27/2019 14:32:52 :	16.33 minutes

Period Beginning 04/02/2019 08:00

Current in Range			96.95 %
Injector Availability			96.85 %

Out of Range at:	04/02/2019 11:44:16	to 04/02/2019 11:52:08 :	7.87 minutes
Injector downtime:	04/02/2019 11:36:16	to 04/02/2019 11:44:16 :	~ 8.00 minutes
Out of Range at:	04/06/2019 00:49:20	to 04/06/2019 03:10:56 :	141.60 minutes
Injector downtime:	04/06/2019 00:44:24	to 04/06/2019 03:09:36 :	145.20 minutes
Out of Range at:	04/06/2019 08:20:56	to 04/06/2019 10:01:28 :	100.53 minutes
Injector downtime:	04/06/2019 08:16:00	to 04/06/2019 10:00:48 :	104.80 minutes

Period Beginning 04/09/2019 08:00

Current in Range	95.65 %		
Injector Availability	95.51 %		
Out of Range at:	04/10/2019 11:22:40	to 04/10/2019 12:21:28 :	58.80 minutes
Injector downtime:	04/10/2019 11:17:44	to 04/10/2019 12:21:24 :	63.67 minutes
Out of Range at:	04/11/2019 17:10:08	to 04/11/2019 22:11:44 :	301.60 minutes
Injector downtime:	04/11/2019 17:05:12	to 04/11/2019 22:10:48 :	305.60 minutes
Out of Range at:	04/13/2019 04:05:28	to 04/13/2019 04:20:00 :	14.53 minutes
Injector downtime:	04/13/2019 04:00:32	to 04/13/2019 04:17:44 :	17.20 minutes

Period Beginning 04/16/2019 08:00

Current in Range	97.25 %		
Injector Availability	97.14 %		
Out of Range at:	04/19/2019 13:50:32	to 04/19/2019 14:42:24 :	51.87 minutes
Injector downtime:	04/19/2019 13:45:36	to 04/19/2019 14:41:20 :	55.73 minutes
Out of Range at:	04/20/2019 14:42:16	to 04/20/2019 15:07:28 :	25.20 minutes
Injector downtime:	04/20/2019 14:37:20	to 04/20/2019 15:05:12 :	27.87 minutes
Out of Range at:	04/22/2019 15:37:44	to 04/22/2019 18:40:40 :	182.93 minutes
Injector downtime:	04/22/2019 15:32:48	to 04/22/2019 18:39:52 :	187.07 minutes

The information on this page is automatically generated and may contain errors.  
An official operations statistics page will be posted at the end of each user period.