

Listing of Statistics for Run2-2022 (Created Tue Nov 01 10:11:17 CDT 2022)

Total Amount of User Time in this interval 1647.95 Hours

User periods in this interval

05/31/2022 08:00	To	06/06/2022 08:00	144.00	Hours,	Delivered Beam:	126.21	Hours,	8	Fault(s),	15.78	MTBF,	87.65%	of Sched. Time
06/07/2022 08:00	To	06/13/2022 08:00	144.00	Hours,	Delivered Beam:	140.61	Hours,	4	Fault(s),	35.15	MTBF,	97.65%	of Sched. Time
06/14/2022 08:00	To	06/20/2022 08:00	144.00	Hours,	Delivered Beam:	128.73	Hours,	3	Fault(s),	42.91	MTBF,	89.39%	of Sched. Time
06/21/2022 08:00	To	06/27/2022 08:00	144.00	Hours,	Delivered Beam:	135.05	Hours,	3	Fault(s),	45.02	MTBF,	93.79%	of Sched. Time
06/29/2022 08:00	To	07/04/2022 08:00	120.00	Hours,	Delivered Beam:	117.47	Hours,	2	Fault(s),	58.73	MTBF,	97.89%	of Sched. Time
07/05/2022 08:00	To	07/11/2022 08:00	144.00	Hours,	Delivered Beam:	136.74	Hours,	3	Fault(s),	45.58	MTBF,	94.96%	of Sched. Time
07/13/2022 08:00	To	07/18/2022 08:00	120.00	Hours,	Delivered Beam:	110.56	Hours,	1	Fault(s),	110.56	MTBF,	92.14%	of Sched. Time
07/19/2022 08:00	To	07/25/2022 08:00	144.00	Hours,	Delivered Beam:	143.39	Hours,	1	Fault(s),	143.39	MTBF,	99.58%	of Sched. Time
07/26/2022 08:00	To	08/01/2022 24:00	160.00	Hours,	Delivered Beam:	152.26	Hours,	6	Fault(s),	25.38	MTBF,	95.16%	of Sched. Time
09/13/2022 08:00	To	09/19/2022 08:00	144.00	Hours,	Delivered Beam:	134.62	Hours,	4	Fault(s),	33.65	MTBF,	93.48%	of Sched. Time
09/20/2022 08:00	To	09/30/2022 08:00	240.00	Hours,	Delivered Beam:	231.98	Hours,	2	Fault(s),	115.99	MTBF,	96.66%	of Sched. Time

Delivered Beam 1557.63 Hours
 Percentage of Scheduled Time 94.52 %
 Downtime During Period 90.32 Hours
 Percentage of scheduled time SR current > 10 ma 95.41 %
 Average Delivered Current During This Period 99.33 mA
 Total integrated Current During This Period 154.72 A-hr

Mean Fill Duration in Period 40.99 Hours
 Mean Fill Duration from Poisson Fit 57.19 Hours
 Mean Time Between Faults (MTBF) 42.10 Hours
 Faults per Day of Delivered Beam 0.57
 Total Number of Faults 37
 Scheduled Topup Time 1224.00 Hours

Valid fills Beginning in this Time Interval	Reason for Fill Termination	Length of Downtime	Downtime is associated with the end of a fill. The first fill of a period will have any downtime before the fill on the line above.
Fill# Start End Duration (min: 1.0)			
# 1 05/31 08:01 To 05/31 16:50 8.82	RF-4 arc trip [RF]	0.02	
# 2 05/31 17:22 To 06/01 10:54 17.53	Unknown beam motion [AOP]	0.53	
# 3 06/01 11:08 To 06/02 13:15 26.13	29ID BPLD [AOP]	0.23	
# 4 06/02 14:19 To 06/03 13:39 23.33	S26-29 water flow[MOM]	1.07	
# 5 06/03 15:00 To 06/03 18:02 3.02	S26-29 water flow[MOM]	1.35	
# 6 06/03 21:24 To 06/03 23:10 1.76	S27A:S3 tripped 2.2 hours AES-MOM 1.18 ASD-PS	3.38	
# 7 06/03 23:44 To 06/04 08:01 8.28	RF-4 instability [RF]	0.57	
# 10 06/04 18:05 To 06/04 20:15 2.18	RF-4 instability [RF]	10.06	8.49 hours RF 1.6 MOM
# 11 06/04 20:50 To 06/06 07:59 35.16	RF-1 cathode OI [RF]	0.58	
	Int Dump: End of Period	0.00	
# 12 06/07 09:16 To 06/10 00:16 63.00	Int Dump: End of Period	1.28	MOM pump switch [AES-MOM]
# 13 06/10 01:01 To 06/10 17:32 16.51	S26 & 27iD water [AES-MO]	0.75	
# 14 06/10 18:01 To 06/10 22:29 4.47	29ID BPLD [DIA]	0.48	
# 15 06/10 22:55 To 06/12 09:15 34.34	29ID BPLD [DIA]	0.43	
# 16 06/12 09:42 To 06/13 07:59 22.29	29ID BPLD [DIA]	0.45	
	Int Dump: End of Period	0.00	
# 17 06/14 08:00 To 06/16 22:18 62.30	Int Dump: End of Period	0.00	
# 18 06/17 09:28 To 06/17 11:41 2.22	13.2kV line failure[FAC]	11.17	
# 19 06/17 12:57 To 06/17 14:17 1.34	1ID BPLD error [DIA]	1.26	
# 20 06/17 17:07 To 06/20 07:59 62.87	BLDG 420 breaker [FAC]	2.84	
	Int Dump: End of Period	0.00	
# 21 06/21 08:00 To 06/22 13:12 29.20	Int Dump: End of Period	0.00	
# 22 06/22 14:47 To 06/23 16:03 25.26	RF-1 kalmus trip [RF]	1.59	
# 23 06/23 22:25 To 06/26 21:45 71.34	S36/37 raw PS [PS]	6.38	
	RF-1 kalmus trip [RF]	0.98	

# 24	06/26 22:44	To	06/27 07:59	9.25	Int Dump: End of Period	0.00
# 25	06/29 08:00	To	06/30 11:43	27.72	RF-1 amp trip [RF]	1.88 RF-1 kalmus [0.5 hr RF] Tunnel search [1.4 hr DIA]
# 26	06/30 13:36	To	07/02 01:52	36.27	RF-1 cathode OI [RF]	0.65
# 27	07/02 02:31	To	07/04 07:59	53.47	Int Dump: End of Period	0.00
# 28	07/05 08:00	To	07/06 17:49	33.82	RF-1 trip [RF]	2.31 RF-1 trip [1.31 hr RF] Orbit errors [1 hr AOP]
# 29	07/06 20:07	To	07/07 07:44	11.62	34ID BPLD trip [DIA]	0.57
# 30	07/07 08:19	To	07/09 15:28	55.16	BPM ioc card [CTL]	4.38
# 31	07/09 19:51	To	07/11 07:59	36.14	Int Dump: End of Period	0.00
# 32	07/13 08:00	To	07/16 19:59	84.00	S17 water leak [MOM]	9.43 S17 H2O leak 7.09 hrs MOM 2.25 hrs PS S22A:S
# 33	07/17 05:25	To	07/18 07:59	26.57	Int Dump: End of Period	0.00
# 34	07/19 08:00	To	07/22 09:47	73.79	RF1 LLRF trip [RF]	0.60
# 35	07/22 10:23	To	07/25 07:59	69.60	Int Dump: End of Period	0.00
# 36	07/26 08:00	To	07/27 07:45	23.76	S27ID BPLD trip [DIA]	0.60
# 37	07/27 08:21	To	07/27 19:44	11.38	11ID BPLD trip [DIA]	0.62 11ID BPLD [0.62 DIA] Operator error [0.75 MCR]
# 38	07/27 20:22	To	07/28 07:45	11.39	11ID BPLD trip [DIA]	0.54
# 39	07/28 08:17	To	07/30 03:43	43.43	RF1 collector [RF]	0.76
# 40	07/30 04:29	To	07/30 21:38	17.16	S40 cavity blower [MOM]	4.69
# 41	07/31 02:20	To	07/31 07:45	5.42	28ID BPLD [DIA]	0.52
# 42	07/31 08:16	To	08/01 23:59	39.72	Int Dump: End of Period	0.00
# 43	09/13 08:00	To	09/13 12:33	4.56	S29ID BPLD [DIA]	0.57
# 44	09/13 13:08	To	09/13 21:39	8.53	ACIS IO fault [SI]	6.59
# 45	09/14 04:15	To	09/14 11:53	7.63	S29B:Q4 trip [PS]	1.05
# 46	09/14 12:55	To	09/14 16:15	3.32	DIA rack lost power [DIA]	1.17
# 47	09/14 17:25	To	09/19 07:59	110.58	Int Dump: End of Period	0.00
# 48	09/20 08:00	To	09/27 15:51	175.85	Unknown beam motion [UNK]	1.16
# 49	09/27 17:00	To	09/29 02:05	33.08	ComEd power sag [OTH]	6.86
# 51	09/29 08:56	To	09/30 07:59	23.05	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 92.21 %
 Current in Range during Delivered Beam Time 98.05 %
 Injector Availability 97.86 %

Period Beginning 05/31/2022 08:00

Current in Range 99.68 %
 Injector Availability 99.52 %
 Out of Range at: 05/31/2022 08:01:20 to 05/31/2022 08:06:48 : 5.47 minutes
 Injector downtime: 05/31/2022 07:53:20 to 05/31/2022 08:01:20 : 8.00 minutes (est)
 Out of Range at: 06/01/2022 11:08:16 to 06/01/2022 11:08:56 : 0.67 minutes
 Injector downtime: 06/01/2022 11:00:16 to 06/01/2022 11:08:16 : 8.00 minutes (est)
 Out of Range at: 06/06/2022 01:02:24 to 06/06/2022 01:20:08 : 17.73 minutes
 Injector downtime: 06/06/2022 00:57:28 to 06/06/2022 01:17:52 : 20.40 minutes

Period Beginning 06/07/2022 08:00

Current in Range 100.00 %
 Injector Availability 100.00 %

Period Beginning 06/14/2022 08:00
Current in Range 98.14 %
Injector Availability 97.95 %
Out of Range at: 06/14/2022 08:59:44 to 06/14/2022 09:30:56 : 31.20 minutes
Injector downtime: 06/14/2022 08:54:48 to 06/14/2022 09:30:52 : 36.07 minutes
Out of Range at: 06/14/2022 11:20:08 to 06/14/2022 13:00:08 : 100.00 minutes
Injector downtime: 06/14/2022 11:15:12 to 06/14/2022 13:00:04 : 104.87 minutes
Out of Range at: 06/19/2022 19:58:32 to 06/19/2022 20:11:04 : 12.53 minutes
Injector downtime: 06/19/2022 19:53:36 to 06/19/2022 20:11:00 : 17.40 minutes

Period Beginning 06/21/2022 08:00
Current in Range 98.13 %
Injector Availability 97.91 %
Out of Range at: 06/22/2022 12:18:40 to 06/22/2022 13:12:24 : 53.73 minutes
Injector downtime: 06/22/2022 12:13:44 to 06/22/2022 13:12:20 : 58.60 minutes
Out of Range at: 06/24/2022 08:33:36 to 06/24/2022 08:51:20 : 17.73 minutes
Injector downtime: 06/24/2022 08:28:40 to 06/24/2022 08:51:16 : 22.60 minutes
Out of Range at: 06/27/2022 00:16:48 to 06/27/2022 01:01:12 : 44.40 minutes
Injector downtime: 06/27/2022 00:11:52 to 06/27/2022 00:58:56 : 47.07 minutes
Out of Range at: 06/27/2022 01:32:16 to 06/27/2022 02:08:16 : 36.00 minutes
Injector downtime: 06/27/2022 01:27:20 to 06/27/2022 02:08:12 : 40.87 minutes

Period Beginning 07/13/2022 08:00
Current in Range 99.29 %
Injector Availability 99.14 %
Out of Range at: 07/14/2022 20:16:24 to 07/14/2022 20:39:36 : 23.20 minutes
Injector downtime: 07/14/2022 20:11:28 to 07/14/2022 20:39:32 : 28.07 minutes
Out of Range at: 07/15/2022 04:46:56 to 07/15/2022 05:11:04 : 24.13 minutes
Injector downtime: 07/15/2022 04:42:00 to 07/15/2022 05:11:00 : 29.00 minutes

Period Beginning 07/19/2022 08:00
Current in Range 100.00 %
Injector Availability 100.00 %

Period Beginning 09/13/2022 08:00
Current in Range 94.10 %
Injector Availability 93.81 %
Out of Range at: 09/14/2022 13:23:52 to 09/14/2022 13:31:20 : 7.47 minutes
Injector downtime: 09/14/2022 13:15:52 to 09/14/2022 13:23:52 : 8.00 minutes (est)
Out of Range at: 09/14/2022 13:38:32 to 09/14/2022 15:27:20 : 108.80 minutes
Injector downtime: 09/14/2022 13:33:36 to 09/14/2022 15:25:04 : 111.47 minutes
Out of Range at: 09/14/2022 17:37:12 to 09/14/2022 20:02:16 : 145.07 minutes
Injector downtime: 09/14/2022 17:32:16 to 09/14/2022 20:02:12 : 149.93 minutes
Out of Range at: 09/15/2022 07:57:36 to 09/15/2022 09:31:44 : 94.13 minutes
Injector downtime: 09/15/2022 07:52:40 to 09/15/2022 09:31:40 : 99.00 minutes
Out of Range at: 09/17/2022 21:24:56 to 09/17/2022 21:40:32 : 15.60 minutes
Injector downtime: 09/17/2022 21:20:00 to 09/17/2022 21:40:28 : 20.47 minutes
Out of Range at: 09/18/2022 03:34:24 to 09/18/2022 03:40:40 : 6.27 minutes
Injector downtime: 09/18/2022 03:26:24 to 09/18/2022 03:34:24 : 8.00 minutes (est)
Out of Range at: 09/18/2022 11:21:12 to 09/18/2022 13:00:40 : 99.47 minutes
Injector downtime: 09/18/2022 11:16:16 to 09/18/2022 12:59:20 : 103.07 minutes

Period Beginning 09/20/2022 08:00
Current in Range 96.36 %
Injector Availability 96.01 %
Out of Range at: 09/20/2022 13:30:24 to 09/20/2022 15:36:08 : 125.73 minutes
Injector downtime: 09/20/2022 13:25:28 to 09/20/2022 15:33:52 : 128.40 minutes
Out of Range at: 09/20/2022 23:03:28 to 09/21/2022 00:14:08 : 70.67 minutes
Injector downtime: 09/20/2022 22:58:32 to 09/21/2022 00:14:04 : 75.53 minutes
Out of Range at: 09/21/2022 06:44:32 to 09/21/2022 06:59:36 : 15.07 minutes
Injector downtime: 09/21/2022 06:39:36 to 09/21/2022 06:59:32 : 19.93 minutes
Out of Range at: 09/23/2022 06:56:32 to 09/23/2022 07:17:20 : 20.80 minutes
Injector downtime: 09/23/2022 06:51:36 to 09/23/2022 07:17:16 : 25.67 minutes

Out of Range at: 09/23/2022 08:56:00 to 09/23/2022 09:23:36 : 27.60 minutes
Injector downtime: 09/23/2022 08:51:04 to 09/23/2022 09:23:32 : 32.47 minutes
Out of Range at: 09/25/2022 06:34:56 to 09/25/2022 06:55:44 : 20.80 minutes
Injector downtime: 09/25/2022 06:30:00 to 09/25/2022 06:53:36 : 23.60 minutes
Out of Range at: 09/25/2022 16:46:00 to 09/25/2022 17:30:00 : 44.00 minutes
Injector downtime: 09/25/2022 16:41:04 to 09/25/2022 17:29:56 : 48.87 minutes
Out of Range at: 09/25/2022 19:44:48 to 09/25/2022 20:05:36 : 20.80 minutes
Injector downtime: 09/25/2022 19:39:52 to 09/25/2022 20:05:32 : 25.67 minutes
Out of Range at: 09/26/2022 06:26:40 to 09/26/2022 06:42:24 : 15.73 minutes
Injector downtime: 09/26/2022 06:21:44 to 09/26/2022 06:42:20 : 20.60 minutes
Out of Range at: 09/27/2022 02:48:08 to 09/27/2022 04:23:04 : 94.93 minutes
Injector downtime: 09/27/2022 02:43:12 to 09/27/2022 04:23:00 : 99.80 minutes
Out of Range at: 09/28/2022 14:52:32 to 09/28/2022 15:42:32 : 50.00 minutes
Injector downtime: 09/28/2022 14:47:36 to 09/28/2022 15:42:28 : 54.87 minutes