

Downtime for Run 2004-2

Default Storage Ring Refill Time

0.25

Downtime for Run 2004-2

Fill #	Start	End	Length	Loss Reason	DIN #	Audit	Start	End	User Length	System Length	Cause	System	Group	Type	Description
1	05/25/04 08:00	05/25/04 20:59	12.98	SR Dipole ACIS [PS]	104764		05/25/04 20:59	05/25/04 21:02	0.05	0.05	PS	PS	PS	Inhibits beam to user	Shutter permit removed to fill due to SR dipole.
2	05/25/04 21:02	05/25/04 23:26	2.40	SR-RF4 HVPS Trip [RF]	104765		05/25/04 23:26	05/25/04 23:49	0.38	0.38	RF	RF	RF	Store Lost	RF trip reset, refill.
3	05/25/04 23:49	05/26/04 07:45	7.93	SR Dipole ACIS [PS]	104766		05/26/04 07:45	05/26/04 07:47	0.03	0.03	PS	PS	PS	Inhibits beam to user	Dipole readback inhibits fill w/shutters open.
4	05/26/04 07:47	05/27/04 03:34	19.78	SR-RF4 arc det. Trip [RF]	104767		05/27/04 03:34	05/27/04 03:54	0.33	0.33	RF	RF	RF	Store Lost	Trip was reset, SR refilled.
5	05/27/04 03:54	05/27/04 14:25	10.52	PEM testing [OAG]			05/27/04 14:25	05/27/04 14:55	0.50	0.50	OAG	OAG	OAG	Inhibits beam to user	Shutter permit removed because beam taken to ring without top up permit
	05/27/04 14:55	05/29/04 18:07	51.20	S12A:H2 failure [PS]	104768		05/29/04 18:07	05/29/04 18:45	0.63	0.63	PS	PS	PS	Store Lost	Refill, correct beam orbit
6	05/29/04 18:45	05/30/04 15:28	20.72	2BM MPS Fault [SI]	104769		05/30/04 15:28	05/30/04 17:47	2.32	2.32	SI	SI	SI	Store Lost	2BM failed PSS Love Controller, replaced, refill.
7	05/30/04 17:47	05/31/04 08:00	14.22	Int Dump: End of Period					0.00	0.00	Scheduled				
			139.75						4.25	4.25					
8	06/01/04 08:00	06/01/04 09:05	1.08	RTFB Trip					2.80						
					104771		06/01/04 09:05	06/01/04 10:05		1.00	Other	Other	Other	Store Lost	Unknown beam motion
					104772		06/01/04 10:05	06/01/04 11:03		0.97	UES	UES	UES	Inhibits beam to user	33-ID radiation monitor trip [UES]
					104773		06/01/04 11:00	06/01/04 11:12		0.20	OAG	OAG	OAG	Inhibits beam to user	Beam instability [OAG]
					104774		06/01/04 11:12	06/01/04 11:50		0.63	RF	RF	RF	Inhibits beam to user	SR-RF3 Trip [RF]
11	06/01/04 11:50	06/01/04 23:07	11.28	SR-RF3 Trip [RF]	104775		06/01/04 23:07	06/01/04 23:58	0.85	0.85	RF	RF	RF	Store Lost	Cathode O.I. trip, reset, refill, resume top-up.
13	06/01/04 23:58	06/03/04 21:10	45.20	Gate Valve Closure [CTL]	104777		06/03/04 21:10	06/03/04 21:29	0.32	0.32	CTL	CTL	CTL	Store Lost	Valve re-opened, fill performed, resume top-up.
14	06/03/04 21:29	06/06/04 15:44	66.25	SR-RF3 [RF]	104782		06/06/04 15:44	06/06/04 16:00	0.27	0.27	RF	RF	RF	Store Lost	MPS trip on SR-RF3 LLRF Detector, refill, top-up
15	06/06/04 16:00	06/07/04 08:00	16.00	Int Dump: End of Period					0.00	0.00	Scheduled				
			139.82						4.23	4.23					
17	06/09/04 08:00	06/10/04 20:16	36.27	Tornado warning [OTHER]	104783		06/10/04 20:16	06/10/04 20:43	0.45	0.45	Other	Other	Other	Inhibits beam to user	Fill not lost, re-enable shutter permit
18	06/10/04 20:43	06/12/04 01:10	28.45	S4DPBLD DS Trip [ComEd]	104784		06/12/04 01:10	06/12/04 01:39	0.48	0.48	Other	Other	Other	Store Lost	Power sag to 91% at loss, refill, resume top-up.
19	06/12/04 01:39	06/15/04 08:00	78.35	Int Dump: End of Period					0.00	0.00	Scheduled				
			143.07						0.93	0.93					
20	06/15/04 16:00	06/18/04 15:59	71.98	9ID rad.Mon.trip [UES]	104787		06/18/04 15:59	06/18/04 16:30	0.52	0.52	UES	UES	UES	Store Lost	9ID rad.Mon.trip [UES]
21	06/18/04 16:30	06/21/04 08:00	63.50	Int Dump: End of Period					0.00	0.00	Scheduled				
			135.48						0.52	0.52					
22	06/23/04 08:00	06/23/04 13:19	5.32		104790				0.93						
				Power bump [ComEd]			06/23/04 13:19	06/23/04 13:49		0.50	Other	Other	Other	Store Lost	Power sag to 91% at loss,
				EPICS problem [CTL]			06/23/04 13:49	06/23/04 14:15		0.43	CTL	CTL	CTL	Inhibits beam to user	EPICS support application problem
23	06/23/04 14:15	06/26/04 05:16	63.02	Valve ctl failure [CTL]	104791				3.60						
							06/26/04 05:16	06/26/04 07:36		2.33	CTL	CTL	CTL	Store Lost	Valve ctl PS replaced
							06/26/04 07:36	06/26/04 08:52		1.27	ME	ME	ME	Inhibits beam to user	S2 absorber flow
	06/26/04 08:52	06/28/04 16:00	55.13	Int Dump: End of Period					0.00	0.00	Scheduled				
			123.47						4.53	4.53					
26	06/29/04 08:00	06/29/04 23:41	15.68	SR-RF4 Trip [RF]	104795		06/29/04 23:41	06/29/04 23:56	0.25	0.25	RF	RF	RF	Store Lost	SR-RF4 S40 Vacuum Trip, refill, resume top-up.
27	06/29/04 23:56	07/04/04 08:00	104.07	Int Dump: End of Period					0.00	0.00	Scheduled				
			119.75						0.25	0.25					
28	07/05/04 08:00	07/07/04 19:44	59.73	Intentional Dump [?]	104796		07/07/04 19:44	07/07/04 20:06	0.37	0.37	Human Error	UNK	UNK	Intentional Dump	Corrupted 0+324 fill pattern, dumped, refill.
	07/07/04 20:06	07/09/04 17:29	45.38	Users shutters closed [OPS]	104797		07/09/04 17:29	07/09/04 17:35	0.10	0.10	OPS	OPS	OPS	Inhibits beam to user	Fill not lost, re-enable shutter permit
29	07/09/04 17:35	07/11/04 10:25	40.83	Power Sag [ComEd]	104798		07/11/04 10:25	07/11/04 10:55	0.50	0.50	Other	Other	Other	Store Lost	Power sag to 84%, restored systems, refilled SR.
30	07/11/04 10:55	07/13/04 08:00	45.08	Int Dump: End of Period					0.00	0.00	Scheduled				
			191.03						0.97	0.97					
31	07/13/04 16:00	07/14/04 12:37	20.62	DP-IOC DSP Event [CTL]	104802		07/14/04 12:37	07/14/04 13:22	0.75	0.75	CTL	CTL	CTL	Store Lost	Beam lost due to Data Pool IOC problem, refill.
32	07/14/04 13:22	07/16/04 10:56	45.57	EPS trip [SI]	104805		07/16/04 10:56	07/16/04 11:25	0.48	0.48	SI	SI	SI	Store Lost	Human error, trip reset, refill, resume top-up.
33	07/16/04 11:25	07/16/04 15:39	4.23	2-ID Rad Trip [UES]	104806		07/16/04 15:39	07/16/04 16:02	0.38	0.38	UES	UES	UES	Store Lost	Spurious Radiation Monitor Trip, refill, top-up.
34	07/16/04 16:02	07/19/04 08:00	63.97	Int Dump: End of Period					0.00	0.00	Scheduled				
			134.38						1.62	1.62					
38	07/21/04 08:00	07/21/04 18:28	10.47	20ID BPLD Trip [DIA]	104808		07/21/04 18:28	07/21/04 19:00	0.53	0.53	DIA	DIA	DIA	Store Lost	RTFB DSP Glitch, refill, resume top-up.
39	07/21/04 19:00	07/24/04 04:48	57.80	34ID Rad.mon. trip [UES]	104810				1.18						
							07/24/04 04:48	07/24/04 05:18		0.50	UES	UES	UES	Store Lost	Spurious Radiation Monitor Trip
							07/24/04 04:53	07/24/04 05:05		0.20	CTL	CTL	CTL	Inhibits beam to user	3ID gap in wrong mode
							07/24/04 05:18	07/24/04 05:59		0.68	OPS	OPS	OPS	Inhibits beam to user	

Downtime for Run 2004-2

Fill #	Start	End	Length	Loss Reason	DIN #	Audit	Start	End	User Length	System Length	Cause	System	Group	Type	Description
40	07/24/04 05:59	07/25/04 20:01	38.03	7-BM EPS Trip [SI]	104812		07/25/04 20:01	07/25/04 22:51	2.83	2.83	SI	SI	SI	Store Lost	7BM Love Controller failed, refill, resume top-up.
41	07/25/04 22:51	07/26/04 16:00	17.15	Int Dump: End of Period					0.00	0.00	Scheduled				
			123.45						4.55	4.75					
42	07/27/04 08:00	07/27/04 16:41	8.68	12-ID EPS Trip [SI]	104813				0.88						
							07/27/04 16:41	07/27/04 17:11		0.50	SI	SI	SI	Store Lost	
							07/27/04 17:11	07/27/04 17:34		0.38	CTL	CTL	CTL	Inhibits beam to user	4ID gap in wrong mode
43	07/27/04 17:34	07/27/04 22:52	5.30	12-ID EPS Trip [SI]	104814		07/27/04 22:52	07/28/04 00:32	1.67	1.67	SI	SI	SI	Store Lost	Love controller failed, refill, resume top-up.
44	07/28/04 00:32	08/02/04 08:00	127.47	Int Dump: End of Period					0.00	0.00	Scheduled				
			141.45						2.55	2.55					
46	08/04/04 08:00	08/10/04 07:59	143.98	Int Dump: End of Period					0.00	0.00	Scheduled				
			143.98						0.00	0.00					
47	08/10/04 16:00	08/13/04 22:56	78.93	S10B:V2:PS Trip [PS]	104817		08/13/04 22:56	08/14/04 00:04	1.13	1.13	PS	PS	PS	Store Lost	Supply swapped, refill, resume top-up.
	08/14/04 00:04	08/17/04 16:00	87.93	Int Dump: End of Period					0.00	0.00	Scheduled				
			166.87						1.13	1.13					
49	08/18/04 08:01	08/19/04 04:07	20.10	Power Sag [ComEd]	104820		08/19/04 04:07	08/19/04 07:59	3.87					Store Lost	
							08/19/04 04:07	08/19/04 04:37		0.50	Other	Other	Other	Store Lost	87% power sag
							08/19/04 04:37	08/19/04 07:59		3.37	AOD-IT	AOD-IT	AOD-IT	Inhibits beam to user	UPS failure
50	08/19/04 07:59	08/19/04 13:44	5.75	S4 MPS Trip [ME]	104821		08/19/04 13:44	08/19/04 14:31	0.78	0.78	ME	ME	ME	Store Lost	H2O pump SRVC-04A component failure, switched pump.
51	08/19/04 14:31	08/23/04 18:27	99.93	Zone F rad mon trip [UES]	104824		08/23/04 18:27	08/23/04 18:58	0.52	0.52	UES	UES	UES	Store Lost	Reset, refill
52	08/23/04 18:58	08/23/04 22:40	3.70	Zone F rad mon trip [UES]	104825		08/23/04 22:40	08/23/04 23:46	1.10	1.10	UES	UES	UES	Store Lost	Install rad monitor puppet, refill
53	08/23/04 23:46	08/26/04 00:00	48.23	Int Dump: End of Period					0.00	0.00	Scheduled				
			177.72						6.27	6.27					

Number of Lost Fills 28
 Number of Intentional Dumps 14
 Number of Fills 56

Downtime
 User System
 31.81 32.01

Total User Beam 1880.22 78.3 User Beam days
 Total User Downtime 31.36 <-- This downtime includes Gaps Open This also includes a 0.45 adjustment for the tornado warning
 Total Schedule Run Length 1911.58

Mean Time Between Faults 56.98
 Faults/Day of Delivered Beam 0.42
 X-ray Availability 98.36%