

# Downtime for Run 2009-2

Fill #	Start	End	Length	Loss Reason	DIN #	Audit	Start	End	User Length	System Length	Cause	System	Group	Type	Description
1	05/27/09 08:00	05/29/09 03:53	43.88	RF1 HV problem [RF]	105521 105520 105519 105518 105517		05/29/09 03:53	05/29/09 12:11	8.30	8.30	RF	RF	RF	Store Lost	Subsequent fills <1 hour with same cause
6	05/29/09 12:11	05/30/09 19:00	30.82	RF1 Cathode Voltage [RF]	105522		05/30/09 19:00	05/30/09 19:29	0.48	0.48	RF	RF	RF	Store Lost	
7	05/30/09 19:29	06/02/09 08:00	60.52	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>135.22</b>						<b>8.78</b>	<b>8.78</b>					
8	06/03/09 08:00	06/03/09 15:23	7.38	RF Pwr Monitor trip [RF]	105524		06/03/09 15:23	06/03/09 15:45	0.37	0.37	RF	RF	RF	Store Lost	
9	06/03/09 15:45	06/03/09 23:01	7.27	Under investigation	105525		06/03/09 23:01	06/03/09 23:14	0.22	0.22	UNK	UNK	UNK	Store Lost	
10	06/03/09 23:14	06/04/09 21:00	21.77	S38A:S2:PS problem [PS]	105526		06/04/09 21:00	06/05/09 02:42	5.70	5.70	PS	PS	PS	Store Lost	
11	06/05/09 02:42	06/06/09 09:06	30.40	RF2 HVPS trip [RF]	105527		06/06/09 09:06	06/06/09 09:31	0.42	0.42	RF	RF	RF	Store Lost	
12	06/06/09 09:31	06/09/09 08:00	70.48	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>137.30</b>						<b>6.70</b>	<b>6.70</b>					
13	06/10/09 08:00	06/10/09 17:14	9.23	SR RF4 Mod Anode [RF]	105529		06/10/09 17:14	06/10/09 17:41	0.45	0.45	RF	RF	RF	Store Lost	
14	06/10/09 17:41	06/10/09 19:42	2.02	RF4 Mod Anode [RF]	105530		06/10/09 19:42	06/10/09 20:20	0.63	0.63	UNK	RF	RF	Store Lost	Kystron heater temp raised, reset and refilled
15	06/10/09 20:20	06/10/09 23:13	2.88	Human error [AOP]	105531		06/10/09 23:13	06/11/09 02:10	2.95						Switch to RF1 providing, AOP 1.95 hrs, RF 1 hour
							06/10/09 23:13	06/11/09 00:13		1.00	AOP	AOP	AOP	Intentional dump	
							06/11/09 00:13	06/11/09 02:10		1.95	RF	RF	RF	Inhibits beam to user	
16	06/11/09 02:10	06/13/09 23:18	69.13	RF2 Arcs, Crowbar [RF]	105532		06/13/09 23:18	06/13/09 23:42	0.40	0.40	RF	RF	RF	Store Lost	
17	06/13/09 23:42	06/14/09 09:13	9.52	S6A:P1 noise [DIAG]	1055334		06/14/09 09:13	06/14/09 09:43	0.50	0.50	DIA	DIA	DIA	Store Lost	
					105536										
18	06/14/09 09:43	06/14/09 23:38	13.92	RF2 Arcs, Crowbar [RF]	105535		06/14/09 23:38	06/15/09 01:59	2.35	2.35	RF	RF	RF	Store Lost	Second trip, waveguide switch
20	06/15/09 01:59	06/16/09 08:00	30.02	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>136.72</b>						<b>7.28</b>	<b>7.28</b>					
21	06/17/09 08:00	06/17/09 20:28	12.47	S40 RF Cav. Vacuum [RF]	105538 105537		06/17/09 20:28	06/18/09 03:09	6.68	6.68	RF	RF	RF	Store Lost	Subsequent fills <1 hour with same cause
23	06/18/09 03:09	06/22/09 08:00	100.85	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>113.32</b>						<b>6.68</b>	<b>6.68</b>					
24	06/24/09 08:00	06/26/09 08:02	48.03	19BM PSS trip [SI]	105539		06/26/09 08:02	06/26/09 08:42	0.67	0.67	SI	SI	SI	Store Lost	
24	06/26/09 08:42	06/29/09 11:56	75.23	RF3 Heater trip [RF]	105540		06/29/09 11:56	06/29/09 13:09	1.22	1.22	RF	RF	RF	Store Lost	Waveguide switch, refill
					105542										
26	06/29/09 13:09	06/30/09 01:18	12.15	S9 BPLD module failure [DIAG]	105541		06/30/09 01:18	06/30/09 07:39	6.35	6.35	DIA	DIA	DIA	Store Lost	2nd trip, LMPS module swap, validation
28	06/30/09 07:39	06/30/09 15:49	8.17	S9 BPLD module failure [DIAG]	105543		06/30/09 15:49	06/30/09 17:38	1.82	1.82	DIA	DIA	DIA	Store Lost	
29	06/30/09 17:38	07/02/09 08:00	38.37	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>181.95</b>						<b>10.05</b>	<b>10.05</b>					
30	07/06/09 08:00	07/14/09 08:00	192.00	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>192.00</b>						<b>0.00</b>	<b>0.00</b>					
31	07/15/09 08:00	07/15/09 10:42	2.70	Human error [UES]	105546		07/15/09 10:42	07/15/09 10:59	0.28	0.28	UES	UES	UES	Store Lost	
32	07/15/09 10:59	07/19/09 20:32	105.55	S37 Sextupole trip [PS]	105547		07/19/09 20:32	07/19/09 23:01	2.48	2.48	PS	PS	PS	Store Lost	
33	07/19/09 23:01	07/20/09 08:00	8.98	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>117.23</b>						<b>2.77</b>	<b>2.77</b>					
34	07/22/09 08:00	07/28/09 08:00	144.00	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>144.00</b>						<b>0.00</b>	<b>0.00</b>					
35	07/29/09 08:00	08/04/09 08:00	144.00	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>144.00</b>						<b>0.00</b>	<b>0.00</b>					
36	08/05/09 08:00	08/11/09 08:00	144.00	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>144.00</b>						<b>0.00</b>	<b>0.00</b>					
37	08/12/09 08:00	08/16/09 22:33	110.55	Failed GESPAC [PS]			08/16/09 22:33	08/17/09 02:09	3.60	3.60	PS	PS	PS	Store Lost	
38	08/17/09 02:09	08/17/09 21:24	19.25	33ID BPLD trip [UNKNOWN]			08/17/09 21:24	08/17/09 21:56	0.53	0.53	UNK	UNK	UNK	Store Lost	
39	08/17/09 21:56	08/20/09 00:00	50.07	Int Dump: End of Period					0.00	0.00				Scheduled	
			<b>179.87</b>						<b>4.13</b>	<b>4.13</b>					

Number of Lost Fills 21  
 Number of Intentional Dumps 11  
 Number of Fills 32

Downtime  
 User System  
 46.40 46.40

Total User Beam 1625.60 67.7 User Beam days  
 Total User Downtime 46.40 <-- This downtime includes Gaps Open  
 Total Schedule Run Length 1672

Fill #	Start	End	Length	Loss Reason	DIN #	Audit	Start	End	User Length	System Length	Cause	System	Group	Type	Description
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Mean Time Between Faults 77.41  
 Faults/Day of Delivered Beam 0.31  
 X-ray Availability 97.2%