Mean Fill Duration in Period 246.05 Hours
Faulta per Day of Delivered Beam 0.08
Total Number of Faults
Valid fills Beginning in this Time Interval

	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 end of a fill. The first fill of a period will have any downtime before the fill on the line above.
#1	1/31/2012 8:00 To	2/7/2012 7:59	168.00	Int Dump: End of Period	0	
					0	
# 2	2/8/2012 8:00 To	2/13/2012 5:25	5 117.42	RF2 crowbar trip[RF]	0.31	Reset, refilled ring
#3	2/13/2012 5:44 To	2/14/2012 7:59	26.26	Int Dump: End of Period	0	
				•	0	
# 4	2/15/2012 8:00 To	2/21/2012 7:59	144.00	Int Dump: End of Period	0	
					0	
# 5	2/22/2012 8:00 To	2/27/2012 7:59	119.99	Int Dump: End of Period	0	
#6	2/29/2012 8:00 To	3/6/2012 7:59	143.99	Int Dump: End of Period	0.01	
						Troubleshoot PAR bunch cleaning[AOP]
# 7	3/7/2012 8:02 To	3/13/2012 7:59	142.95	Int Dump: End of Period	0	
#8	3/14/2012 8:00 To	3/20/2012 8:00	144.00	Int Dump: End of Period	0	
					0	
						compressed air restored, reset tripped
#9	3/21/2012 8:00 To	3/23/2012 7:19		Human error [FMS]		systems
# 10	3/23/2012 9:03 To	3/26/2012 7:59		Int Dump: End of Period	0	
	3/28/2012 8:00 To 4/1/2012 9:30 To	4/1/2012 9:01		RF2 Crowbar trip [RF]		Reset trip, refilled.
# 12 # 13		4/2/2012 9:25		S12B:V2 P.S. trip[PS] Int Dump: End of Period	1.38	Investigation, swapped supply
# 13	4/2/2012 10:47 To	4/3/2012 7:59	9 21.20	int bump. End of Period	- 0	
# 14	4/4/2012 8:00 To	4/10/2012 7:59		Int Dump: End of Period	0	
# 15	4/11/2012 8:00 To	4/16/2012 9:32		Com-Ed Voltage sag[OTH]	0.31	Reset RF system, refilled
# 16	4/16/2012 9:50 To	4/17/2012 7:59		Int Dump: End of Period	0	
# 17	4/18/2012 8:00 To	4/20/2012 7:46		Beam instability[?]		Reset RF system and refilled the ring
# 18	4/20/2012 8:07 To	4/25/2012 7:59	119.87	Int Dump: End of Period	0	

# 14	4/4/2012 8:00 To	4/10/2012 7:59	144.00 Int
# 15	4/11/2012 8:00 To	4/16/2012 9:32	121.54 Cd
# 16	4/16/2012 9:50 To	4/17/2012 7:59	22.15 Int
# 17 # 18	4/18/2012 8:00 To 4/20/2012 8:07 To	4/20/2012 7:46	47.77 Be
# 18	4/20/2012 8:07 10	4/25/2012 7:59	119.87 Int
Top-Up Mode Statistics			
Target Current Range +/- 2.0, Mil Current in Range during Scheduled	nimum Injector Downtime = 8.0	0 minutes Total	
Topup Time	97.71%		
Current in Range during Delivered			
Beam Time	97.91%		
Injector Availability	97.79%		
Period Beginning 01/31/2012 08:00			
Current in Range	97.75%		
Injector Availability Out of Range at:	97.67% 2/2/2012 11:48 to	2/2/2012 13:18	90.13 minutes
Injector downtime:	2/2/2012 11:46 to	2/2/2012 13:18	
Out of Range at:	2/3/2012 4:04 to		136.40 minutes
Injector downtime:	2/3/2012 3:59 to		140.27 minutes
Period Beginning 02/08/2012 08:00			
Current in Range	100.00%		
Injector Availability	100.00%		
Period Beginning 02/15/2012 08:00			
Current in Range	100.00%		
Injector Availability	100.00%		
Period Beginning 02/22/2012 08:00 Current in Range	99.17%		
Injector Availability	99.00%		
Out of Range at:	2/26/2012 19:58 to	2/26/2012 19:59	0.67 minutes
Injector downtime:	2/26/2012 19:50 to	2/26/2012 19:58	~ 8.00 minutes
Out of Range at:	2/26/2012 20:06 to	2/26/2012 21:05	59.07 minutes
Injector downtime:	2/26/2012 20:01 to	2/26/2012 21:05	63.93 minutes
Period Beginning 02/29/2012 08:00			
Current in Range	99.33%		
Injector Availability	99.30%		
Out of Range at: Injector downtime:	3/6/2012 6:35 to 3/6/2012 6:30 to	3/6/2012 7:33 3/6/2012 7:30	57.87 minutes 60.53 minutes
Period Beginning 03/07/2012 08:00		3/6/2012 7:30	60.53 minutes
Current in Range	99.49%		
Injector Availability	99.45%		
Out of Range at:	3/8/2012 6:16 to	3/8/2012 7:00	43.60 minutes
Injector downtime:	3/8/2012 6:11 to	3/8/2012 6:58	
Period Beginning 03/28/2012 08:00			
Current in Range	98.53%		
Injector Availability	98.36%		
Out of Range at:	3/30/2012 8:47 to	3/30/2012 8:57	9.33 minutes
Injector downtime:	3/30/2012 8:42 to	3/30/2012 8:57	14.20 minutes
Out of Range at: Injector downtime:	3/30/2012 12:07 to 3/30/2012 12:02 to	3/30/2012 13:19 3/30/2012 13:19	
Out of Range at:	3/30/2012 12:02 to 3/30/2012 21:56 to	3/30/2012 13:19	
Injector downtime:	3/30/2012 21:50 to	3/30/2012 22:39	
Period Beginning 04/04/2012 08:00		0002012 22.00	40.00 1181000
Current in Range	94.17%		
Injector Availability	93.76%		
Out of Range at:	4/5/2012 4:46 to	4/5/2012 5:00	
Injector downtime:	4/5/2012 4:42 to	4/5/2012 4:58	
Out of Range at:	4/5/2012 10:21 to	4/5/2012 10:38	
Injector downtime:	4/5/2012 10:16 to	4/5/2012 10:38	
Out of Range at:	4/8/2012 4:41 to	4/8/2012 4:42	
Injector downtime:	4/8/2012 4:33 to 4/8/2012 4:48 to	4/8/2012 4:41 4/8/2012 4:48	
Out of Range at: Injector downtime:	4/8/2012 4:48 to 4/8/2012 4:40 to		~ 8.00 minutes
Out of Range at:	4/8/2012 5:11 to		340.40 minutes
Injector downtime:	4/8/2012 5:06 to		345.27 minutes
Out of Range at:	4/8/2012 12:06 to	4/8/2012 10:31	
Injector downtime:	4/8/2012 12:01 to	4/8/2012 12:21	
Out of Range at:	4/9/2012 12:17 to	4/9/2012 14:14	117.07 minutes
Injector downtime:	4/9/2012 12:12 to		119.73 minutes
Period Beginning 04/11/2012 08:00			
Current in Range	92.98%		
Injector Availability	92.84%		
Out of Range at:	4/11/2012 8:00 to	4/11/2012 8:02	2.00 minutes
Injector downtime:	4/11/2012 7:52 to		~ 8.00 minutes
Out of Range at:	4/15/2012 16:20 to	4/15/2012 22:01 4/15/2012 21:50	
Injector downtime:			

| Period Beainining 04/11/2012 08:00
| Current in Range 92.84% |
Injector Availability 92.84% |
Out of Range at: 4/11/2012 8:00 6/11/2012 8:00 8:00 minutes |
Injector downtime: 4/11/2012 7:52 to 4/11/2012 8:00 8:00 minutes |
Out of Range at: 4/15/2012 7:52 to 4/11/2012 8:00 8:00 minutes |
Out of Range at: 4/15/2012 7:52 to 4/15/2012 2:20 04/04 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 2:21 04/04 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 2:21 04/04 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-22 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-22 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:54 to 4/15/2012 1:55 02-25 minutes |
Out of Range at: 4/15/2012 1:54 to 4/15/2012 1:54 to