

Date	Begin time	End time	Crew	Comments
24 Jul 2019	3:00		SIMONA ROMAN	

Energy	Linac	Injector	Pass	Wien Angle	HWP	Slit	Attenuat	Raster
0.951	0.45	0.058	1	$\theta = -15.5^\circ$	IN	20	175	

	Q1	Q2	Q3	Q4	Dipole
Amps	127.823	-30.732	0	24.809	45

N	Time	I _{beam} Curr	Run Number	Targ et	H _{coil} Field	Polarization %	FADC	Comments
1								Helicity = 120 Hz 8 wind, delay
2	3:25	—	16871	—	—			Pulser Pedestals moller-puls
3	4:10							
4								Cycling Setup Q ₁ , Q ₂ , Q ₃ , Q ₄ - Acc settings to transport Beam
5								
6	6:18							Setup Q ₁ , Q ₂ , Q ₃ , Q ₄
7	6:30							Q ₁ set wrong with "127.823"
8								Cycling Q ₁ , Q ₂ , Q ₃ , Q ₄  127.
9								
10	6:58							Cycling Dipole to 45A  45A
11	7:20							Tune beam
12								
13	7:46							Ramping Solenoid (Target) → +60A (3.216T)
14	8:26							Ramping Solenoid → 75A 4.02T
15	8:39							Tune beam
16	9:14							Set Target #3 4μm (4.93V encoder)
17								
18	9:16	0.3	16872			HV OFF		Trunk
19		0.3	16873			HV OFF (Scint ON)		Trunk
20	9:18	0.3	16874	3	4	HV ON		T=200 Left
21	9:20	0.3	16875	3	4			Left T=180
22	9:23	0.3	16876	3	4			Left T=190
23	9:25	0.3	16877	3	4			Left T=210
24	9:26	0.3	16878	3	4			Left T=220
25	9:28	0.3	16879	3	4			Left T=250
26	9:31	0.3	16880	3	4			Left T=300

24 July 2019

(2)

~moller/doc/runtemplate_2019_2.pdf

N	Time	I _{beam} curr	Run Number	Targ et	H _{coil} Field	Polarization %	FADC	Comments
1	9:33	0,3	16881	3	4			Left T=350
2								
3		—	16882		Bleed through		B,C-ON	T=350
4	9:36	0,3	16883	3	4	B=160 nA	C=15 μA	T=200
5	9:44	—	16884			B=160 nA	C=15 μA	T=200
6					Production		T=200 Att=170 Slit=20,1	
7	9:51	0,3	16885	3	Short (no beam)			Left T=200
8	9:53	0,3	16886	3	4			Left T=200
9	10:02	0,3	16887	3	4			Left T=200
10	10:08	0,3	16888	3	4	with errors (14)		Left T=200
11	10:08	0,3	16889	3	4			Left T=200
12	10:12	0,3	16890	3	4			Left T=200
13	10:23	0,3	16891	3	4			Left T=200
14	10:28	0,3	16892	3	4			Left T=200
15	10:32	0,3	16893	3	4			Left T=200
16	10:36	0,3	16894	3	4	Short		T=200
17						P = 86.79 ± 0.36		
18					Spin Dance			WA = Wien Angle
19	10:23	0,1	16895		BPM H01 not stable ~0.5 mm Y			WA = 7°
20	11:29	0,3	16896	LOCK OFF	Att = 191 Slit = 20.1		T=200	WA = 7°
21	11:39	0,3	16897				T=200	WA = 7°
22	11:44	0,3	16898				T=200	WA = 7°
23	11:48	0,3	16899				T=200	WA = 7°
24	11:52	0,3	16900		Att = 191 Slit = 20.1		T=200	WA = 7°
25	11:56	0,3	16901				T=200	WA = 7°
26	12:00	0,3	16902		P = 82.37 ± 0.43			WA = 7°
27	12:06				Set Spin Wien Angle = 30°			
28	12:16	0,3	16903		Att = 191 Slit = 20.1			WA = 30°
29	12:20	0,3	16904					WA = 30°
30	12:25	0,3	16905					WA = 30°
	12:30	0,3	16906					WA = 30°
	12:33	0,3	16907					

12:37 0,3 16908

12:42 0,3 16909

12:46 0,3 16910

P = 62.95 ± 0.37

WA = 30°

WA = 30°

WA = 30°

Coil = 129

deg
chk

chk

24 July 2019

③

~moller/doc/runtemplate_2019_2.pdf

N	Time	I _{beam} curr	Run Number	Targ et	H _{coil} Field	Polarization %	FADC	Comments
1				Set Wien Angle = -35°				
2				Att = 158 Slit = 20.1				
3	13:11	0.3	16911					T=200 WA=35° chk
4	13:15	0.3	16912					WA=-35°
5	13:19	0.3	16913					WA=-35°
6	13:23	0.3	16914					WA=-35°
7	13:31	0.3	16915					WA=-35°
8	13:35	0.3	16916			P = 80.73 ± 0.38		
9								
10				Set Wien Angle = -60°				
11				Att = 140 Slit = 20.1				1
12	13:45	0.3	16917					T=200 WA=-60°
13		0.3	16918	Short				WA=-60°
14	13:51	0.3	16919					WA=-60°
15	13:55	0.3	16920					WA=-60°
16	13:59	0.3	16921					WA=-60°
17	14:04	0.3	16922					WA=-60°
18	14:08	0.3	16923			P = 56.24 ± 0.43		WA=-60°
19								
20				P ₀ = 86.51 ± 0.2				
21				P ₁ = -12.18 ± 0.24 →				WA = -12.2
22	14:12	0.3	16924		Slit = 20.1 Att = 174		T=200	WA=-12.2 chk
23	14:27	0.3	16925				T=200	WA=-12.2
24	14:13	0.3	16926					WA=-12.2
25	14:35	0.3	16927					WA=-12.2
26	14:41	0.3	16928			P = 86.88 ± 0.49		WA=-12.2
27				Set Wien Angle = -5°				
28				Att = 180 Slit = 20.1				
29	14:52	0.3	16929	3	4			WA=-5° chk
30	14:56	0.3	16930	3	4	Errors!! (14)		WA=-5°
	15:03	0.3	16931	3	4			WA=-5°
	15:07	0.3	16932					WA=-5°

24 July 2019

④

~moller/doc/runtemplate_2019_2.pdf

N	Time	I _{beam} curr	Run Number	Targ et	H _{coil} Field	Polarization %	FADC	Comments
1	15:11	0.3	16933	3	4	$P = 86.73 \pm 0.54$		WA = -5°
2								
3						Set Wren Angle to -13.0		
4						Att=180	slit=20.1	WA = -13.
5	15:30	0.3	16934					T=200 WA = -13.
6	15:35	0.3	16935					WA = -13.
7	15:42	0.3	16936					WA = -13.
8	15:46	0.3	16937					WA = -13.
9	15:50	0.3	16938					WA = -13.
10	15:54	0.3	16939			$P = 86.55 \pm 0.51$		
11						Set Target #1 CU		
12	16:01	0.3	16940			slit 20.1	Att=180	T=200 WA = -13.
13	16:04	0.3	16941					T=200 WA = -13.
14	16:08	0.3	16942					T=200 WA = -13.
15						Target Out of Beam		Parked
16						HV OFF		
17						Target Solenoid Ramping Down		
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								