

E06-014 LEFT HRS Run Sheet

Date: <u>2/21</u>	Author: <u>Huan</u>
Beam Energy: _____ GeV	Using Pol ^3He cell: Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): <u>1.27</u> angle: <u>45°</u>	polarity: "+" or "-" ? Sieve slit: IN or OUT ? BigBite current (A): <u>15</u> angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20306	4:20	4:36	^3He	15	91k	1	NMR	
20307	4:37	6:12	^3He	15	500k	3		✓
20308	6:13	7:53	^3He	15	500k	2		✓
20309	7:55	9:18	^3He	15	400k	3	NMR at the end of run	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
 More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/21/09	Author: GOLGE/DAY
Beam Energy: _____ GeV	Using Pol ^3He cell: Y/N, Longitudinal or Transverse ?
Left HRS momentum (GeV/c): _____ angle: _____	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): _____ angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20310	9:34	11:10	^3He	15	500K	3		✓
20311	11:11	13:05	"	"	500K	3		✓
20312	13:06	14:40	"	"	491K	3	NMR!	✓
20313	14:55	15:30	N_2	5	293K	4	NMR, 5 μA 22/250	✓
20314	15:36	16:56	^3He	15	500K	2	production - ^3He , 15 μA	✓
20315	17:01	18:17	^3He	15	500K	2	84/25 1/1	✓
20316	18:18	19:33	^3He	15	500K	2	89/34 1/1	✓
20317	19:34	20:17	^3He	15	263K	2	87/27 1/1	✓
20318	20:24	21:45	^3He	15	500K	2	81/20 1/1	✓
20319	21:45	23:00	^3He	15	500K	2	61/28 1/1	✓
20320	23:00	0:13	^3He	15	485K	2	82/31 1/1	✓
20321	0:15	1:31	^3He	15	500K	3	NMR	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.

More comments:

20317 → Beam is off for 15mts. So I stopped the run.

E06-014 LEFT HRS Run Sheet

Date: <u>2/22</u>	Author: <u>Huan</u>
Beam Energy: <u>5.8</u> GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal or <input checked="" type="checkbox"/> Transverse?
Left HRS momentum (GeV/c): <u>1.13</u> angle: <u>45</u>	polarity: "+" or "-" ? Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?
	BigBite current (A): angle: never moved. Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20322	1:32	2:45	^3He	15	500k	2		✓
20323	2:46	3:59	^3He	15	500k	2		✓
20324	4:00	4:48	^3He	15	324k	3		✓
20325	4:51	6:12	^3He	15	500k	3		✓
20326	6:13	7:29	^3He	15	500k	3		✓
20327	7:30	8:45	^3He	15	450k	3		✓
20328	8:50	10:04	^3He	15	500k	3		✓
20329	10:05	—	^3He	15	—	—	Ink coder died	
20330	10:20	10:40	^3He	15	160k	3		✓
20331	10:57	11:27	N_2	5	200k	1	N_2 Ref $P = 0.9 \text{ GeV}/c$	✓
20332	11:32	11:15	^3He	15	500k	5		✓
20333	12:15	12:49	^3He	15	300k	5		✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

starting at run 20331 LHRS

$P = 0.9 \frac{\text{GeV}}{c}$

E06-014 LEFT HRS Run Sheet

Date: <u>2/22</u>	Author: <u>Rosik</u>
Beam Energy: <u>5.8</u> GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal or <input checked="" type="checkbox"/> Transverse ?
Left HRS momentum (GeV/c): <u>0.9</u> angle: <u>45°</u>	polarity: "+" or "-" ? Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?
	BigBite current (A): angle: never moved. Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20335							spot ++	
20336	16:49	16:51	Dptics				spot ++	
20337	16:53	16:58	0 patics				spot ++	
20338	17:01		3He				spot ++	
20339	17:15	17:19	1He				spot ++	
20340	17:25	18:00	3He	15	0.4M	5%	production	✓
20341	18:30	19:30	3He	15	0.6M	5%	production polarization longitudinal +	
20342	19:34	20:28	3He	15	0.6M	6%	production	
20343	20:29	21:20	3He	15	0.6M	5%	"	
20344	21:21	22:11	3He	15	0.6M	5%	"	
20345	22:12	23:01	3He	15	0.6M	5%	"	✓
20346	23:02	23:54	"	"	0.6M	5%	"	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 2/23/2009	Author: N. Muangma.
Beam Energy: 5.8 GeV	Using Pol ³ He cell: Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 0.9 angle: 45°	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20347	2:20 28:56	0:50	³ He	15	0.6 M	5%	production.	✓
20348	0:50	1:42	"	"	"	5%	"	✓
20349	1:42	1:47	"	"	45482.	5%	"	✓
20350	1:54	2:42	"	"	0.6 M.	5%	production (1/2 out)	✓
20351	2:42	3:34	"	"	0.6 M.	5%	- " -	✓
20352	3:34	4:30	"	"	0.6 M	5%	- " -	✓
20353	4:30	5:21	"	"	0.6 M	5%.	- " -	✓
20354	5:21	6:07	"	"	0.4 M	5%	- " -	✓
20355	6:19	6:25	BeO	2.	5.1 K	5%	Optic checker, spot++ 2.7x3.	
20356	6:33	7:29	³ He	15	0.6 M.	4%	production. T3/T4 = 191/26.	✓
20357	7:29	8:23	"	"		5%	production.	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/23/09	Author: GOLGE
Beam Energy: _____ GeV	Using Pol ³ He cell: Y/N, Longitudinal or Transverse ?
Left HRS momentum (GeV/c): _____ angle: _____	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): _____ angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μ A)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20358	8:32	9:03	³ He	15	355K	4	stopped run due to pusher pass error	✓
20363							COSMOS	
20365	17:31	17:39	ref N2	2	20K		spot ++ 2x2.5	
20370	18:12	18:17	N2	2		1	spot ++ 4x4	
20371	18:19		N2	2			spot ++ 6x6	
20372	18:31	19:18	N2	5	143K	1	calibration	
20373	19:18	20:50	He3	15	400K	2	production	✓
20374	20:51	22:22	He3	15	400K	2	production	✓
20375	22:22	23:54	He3	15	400K	2	production	✓
20376	23:56	01:29	He3	15	400K	3	production	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: <u>02/24/09</u>	Author: <u>CUSANNO</u>
Beam Energy: <u>4.73</u> GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> /N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c) : <u>1.6</u> angle : <u>45</u>	polarity: "+" or <u>-</u> ? Sieve slit: IN or <u>OUT</u> ?
	BigBite current (A) : <u>710</u> angle : never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20377 20377	01:29	03:05	He3	15	400k	1	production	✓
20378	03:06	04:39	He3	15	400k	2	production	✓
20379	04:39	06:09	He3	15	400k	2	production	✓
20380	06:09	07:43	He3	15	400k	2	production	✓
20381	07:44	09:19	He3	15	312K	2	6800 /25/36 PS3=L/PS4=±	✓
20382	09:45	11:19	He3	15	371K	2		✓
20383	12:20	13:54	^3He	15	400k	2		✓
20384	13:54	15:38	^3He	15	400k	2		✓
20385	15:39	16:03	^3He	15	59K	2		✓
20386	16:49	18:34	^3He	15	400k	2	production	✓
20387	18:35	20:13	^3He	15	400k	2		✓
20388	20:13	21:50	^3He	15	400k	3		✓

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More comments:

E06-014 LEFT HRS Run Sheet

Date: <u>02/23/2009</u>	Author: <u>At M. Moffit</u>
Beam Energy: <u>4.730</u> GeV	Using Pol ³ He cell: <u>Y</u> /N, Longitudinal or Transverse?
Left HRS momentum (GeV/c): <u>1.6</u> angle: <u>45</u>	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): <u>706</u> angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μ A)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
<u>20389</u>	<u>21:50</u>	<u>22:02</u>	<u>3He</u>	<u>15</u>	<u>43k</u>	<u>2</u>		
<u>20390</u>	<u>22:07</u>	<u>22:09</u>	<u>3He</u>	<u>15</u>			<u>LHRS p=1.51 X forgot to do reference cell</u>	
<u>20391</u>	<u>22:14</u>	<u>22:45</u>	<u>N2</u>	<u>5</u>	<u>117k</u>	<u>1</u>	<u>N2 dilution</u>	
<u>20392</u>	<u>22:50</u>	<u>2/25 0:23</u>	<u>3He</u>	<u>15</u>		<u>2</u>	<u>LHRS p=1.51 production</u>	<u>✓</u>

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/25/2009	Author: N Muangma
Beam Energy: 4.730 GeV	Using Pol ^3He cell: <u>Y</u> /N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 1.0 angle: 45°	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): 706 angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20393	0:27	1:38	^3He	15	286 K	2%	T3/T4 PS3/PS4 37/38 1/1 production.	✓
20394	1:40	3:29	"	"	0.4 M	1%	production	✓
20395	3:29	4:57	"	"	0.4 M	1%	- " -	✓
20396	4:57	5:28 6:37	"	"	0.4 M	1%	- " -	✓
20397	6:57	8:17 8:21	"	"	0.4 M	1%	—————	✓
20398	8:17	9:01	"	15	170K	1%	PS3,4,8=1,1,100 others MAX.	✓
20399	11:21	13:09	^3He	15	400K	1-2%	T3/T4 = 27/37 Hz	✓
20400	13:09	14:48	^3He	15	400K	1-2%		✓
20401							Junk 100% DT	
20402	14:56	16:35 16:35	^3He	15	600K	1-2%		✓
20403	16:35	18:12	^3He	15	600 600K	1%		✓
20404	18:13	19:54	^3He	15	400K	2%	replayed for less statistics (15000)	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/25/09	Author: MCAAAA
Beam Energy: 4.730 GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal or <input checked="" type="checkbox"/> Transverse ?
Left HRS momentum (GeV/c): 6.6 angle: 65°	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
BigBite current (A): angle: never moved.	Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20405	19:55	21:34	^3He	15	400k	2%		<input checked="" type="checkbox"/>
20406	21:35	22:41	^3He	15	265k	1-2%	Beam is lost	<input checked="" type="checkbox"/>
20407	22:59	00:40	^3He	15	400k	2%		

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/26/2009	Author: DALTON
Beam Energy: 4733.64 GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal or Transverse ?
Left HRS momentum (GeV/c): 1.51 angle: 45°	polarity: "+" or "-" ? BigBite current (A): angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20408	00:40	01:10	He^3	15	120k	2.3%		✓
20409	01:18	01:46	N^2	5	102k	2.4%		✓
[momentum changed to 0.8 GeV]								
20410	01:58	02:17	N^2	5	400k	2.8%		✓
20411	02:17	02:29	N^2	5	233k	9.0%		✓
20412	02:34	03:02	^3He	15	600k	6.7%		✓
20413	03:04	03:30	^3He	15	400k	6.6%		✓
20414	03:32	04:05	^3He	15	400k	6.3%		✓
20415	04:06	04:35	^3He	15	400k	6.5%		✓
20416	04:38	04:24	^3He	15	400k	6.3%		✓
20417	05:04	05:33	^3He	15	400k	6.6%		✓
20418	05:34	06:00	^3He	15	360k	6.3%		

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/26/2009	Author: DALTON
Beam Energy: 4733.64 GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 0, 8 & angle: 45°	BigBite current (A): Sieve slit: IN or <u>OUT</u> ?
polarity: "+" or "-" ?	angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20419	06:15	06:58	^3He	15	400k	6.0%		✓
20420	06:59	07:26	^3He	15	400k	6.5%		✓
20421	07:26	08:07	^3He	15	600k	5		✓
20422	08:08	08:21	^3He	15	190k	7	STOPPED BECAUSE BEAM OFF	✓
20423	09:04	10:40			CRASHED		COSMICS	
20425	16:58	17:30	BeO	2	Junk	4	COSMICS test	
20426	17:31	17:39	BeO	2	75k 18k		spot# check. JUNK	
20427	17:45	17:51	BeO	2	14k	low	Another spot# check after raster adjustment	
20428	17:52	?	BeO	2		1	Another spot# check. JUNK	
20429	18:41	?	Ref N ₂ 114psi	5	25k+	2	spot++ check (Almost ready to take real data!!!)	
20430	18:58	19:34	Ref	5	112k	1	Production on Ref cell. (1.70 GeV)	✓
20431	19:49	20:28	Ref	5	142k	2	nom setting = 1.51 GeV	✓

Start
 $E_b = 5.892$

End test
STAR PRE.

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 2009 Feb 26	Author: D. McNulty
Beam Energy: 5.892 GeV	Using Pol ^3He cell: Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 1.51 angle: 45	polarity: "+" or "⊖"? Sieve slit: IN or <u>OUT</u> ? BigBite current (A): 710 angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20432	20:33	22:20	^3He	15	several hundred thousand	1	Production (Ended early due to beam prob)	✓
20433	22:46		^3He	15	308K	1		✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
 More comments:

E06-014 LEFT HRS Run Sheet

Date: 02/27/2009	Author: OAKTON
Beam Energy: 5.90064 GeV	Using Pol ³ He cell: <input checked="" type="checkbox"/> /N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): angle:	polarity: "+" or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time (%)	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20434	00:29	02:51	³ He	15	500k	19%		✓
20435	02:51	04:44	³ He	15	437k	2%		✓
20436	04:46	07:02	³ He	15	500k	2%		✓
20437	7:02	8:29	³ He	15	333k	2	30/26 1/1	✓ *
20438	8:30	10:45	³ He	15	500k	2	30/26 1/1	✓
20439	10:46	12:27	³ He	15	339k	2	29/25 1/1	✓ *
20440	12:28	14:58	³ He	15	500k	2	18/62 1/1	✓
20441	14:59	16:32	³ He	15	331k	2	B3/B29 1/1	✓
20442	17:00	18:34	³ He	15	322k	1	_____	
20443	18:54	21:31	³ He	15	470k	1		✓
20444	21:40	22:50	³ He	15	436k	2	BB HV trip	✓
20445	00:00	2:31	³ He	15	500k	2		✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

* Stopped for NMR

E06-014 LEFT HRS Run Sheet

Date: 2/28/2009	Author: Youan Wang
Beam Energy: 5.592 GeV	Using Pol ^3He cell: Y/N, Longitudinal or Transverse ? ^3He Trans - in plan
Left HRS momentum (GeV/c): 1.34 GeV angle: 45°	BigBite current (A): 710 A angle: never moved.
polarity: "+" or "-" ? Sieve slit: IN or OUT?	Sieve slit: IN or OUT?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20446	12:32	12:47	^3He	15	50K	2	stop for NMR Sweep	✓
20447	2:48	3:39	^3He	15	170K	2		✓
20448	3:59	6:22	^3He	15	500K	2		✓
20449	6:23	6:32	^3He	15	30K	2	change target to Na	✓
20450	6:40	7:14	Na	5	139K	2		✓
20451	7:20	9:24	^3He	15	436K	2	beam off. So stopped run	✓
20452	13:58	14:02					Test run.	✓
20453	14:15	16:15	^3He	15	400K	1	there is no beam in the middle.	✓
20454	16:17	17:57	^3He	15	377K	3	stopped for NMR Frequency Sweep	✓
20455	17:59	18:55	^3He	15	163K	3	run stopped because of no beam for a while	✓
20456-20457							Jump	
20458							spot at 2.5 x 3.2 2MM	

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 2/28/2009	Author: youcai edang
Beam Energy: 5.892 GeV	Using Pol ³ He cell: <u>Y</u> /N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 1.344 eV angle: 45°	polarity: "+" or "-" ? <u>(-)</u> Sieve slit: IN or <u>OUT</u> ?
	BigBite current (A): 710 A angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μ A)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
	check rates						Kicker 2.5 x 3.2 T3 = 23.7 T4 = 10.2	
	check rates						Kicker 5.2 x 6.5 T3 = 16.4 T4 = 12.7	
20459	20:38	21:59	¹ He	15	290K	2	42/28 1/1	✓
20460	22:00	23:40	³ He	15	400K	2	43/24 1/1	✓
20461	23:48	00:13	³ He	15	191K	3	lost beam, RF cavities problem	✓
20462	4:08	4:10	BcD	2	35.8K	1	spoltt+ Ruv set PS8=4	no replay
20463	4:29	4:38	³ He	15	216K	2	Beam pipe problem according to MCC	
20464	4:50	6:26	³ He	15	—	0	4/22, 1/1 production	✓
20465	5:22	5:45	³ He	15	90.6K	1	4/22, 1/1 production	✓
20466	6:18		³ He	15	304K	2	48/28, 1/1 production	
20467	7:44	8:21	³ He	15	121K	2		
20468	8:27	8:51	³ He	15	52K	2		✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: <u>2/1/2009</u>	Author: <u>Zi Te</u>
Beam Energy: <u>5.92</u> GeV	Using Pol ³ He cell: <u>Y/N</u> , Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): <u>1.34</u> polarity: "+" or "0"?	BigBite current (A): <u>710A</u>
angle: <u>45</u> Sieve slit: IN or <u>OUT</u> ?	angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μ A)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK?
20469	09:03	09:50	³ He	15	132K	2		/
20470	10:38		³ He	15	600K	2		/
20471	12:17	12:30	³ He	15	135K	2		/
20472	13:00	13:38	³ He	15	132K	3		
20473	14:04	14:49	³ He	15	149K	1		
20474							Junk	
20475	15:20	15:53	Ret _{1/2}	15	229K	3		
20476	16:20		³ He	5		2	68/26 1/1	
20477	17:19	17:58	³ He	15	120K	3	62/23 1/1	✓
20478	18:02	19:39	³ He	15	400K	3	66/20 1/1	✓
20479	19:40	20:18	³ He	15	180K	3	92/26 1/1	✓
20480	20:27	20:58	³ He	15	77K	3	3 MIC target spin direction to 90°	

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 03/02/09	Author: M. MIHOVILOVIC (Run 20482 cm)
Beam Energy: 5.892 GeV	Using Pol ³He cell: Y/N, Longitudinal or Transverse ?
Left HRS polarity: "+" or "-" ? momentum (GeV/c): 1.2 angle: 45° Sieve slit: IN or OUT ?	BigBite set read current (A): 710/706.5 A angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20481	20:25 ⁹	21:23	³ He	15	164K	3	T3/T4 (V1)	
20482	22:36	01:56	³ He	0	400K	0	Cosmos 13/11 (1/1)	
20483	01:58	05:19	³ He	0	400K	1	Cosmos 13/8.2 (1/1)	
20488	21:55	01:17	³ He	0	400K	1	Cosmos 14.2/8.99 (1/1)	
20489	01:23	04:44	³ He	0	400K	1	Cosmos	
20490	04:45	18:08	³ He	0		1	Cosmos	
20491	8:09	11:30	³ He				Cosmic	
20492	8:30	12:06	"		70K		Cosmic	
20493	12:27	12:32	BeO	2			SPOT + OPTICS	
20494	12:47	12:59	N2	5	40K		Reference All N2, 2x3 m.	
20495	13:03	13:16	N2	5	380K		"	

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 03/02/2009	Author: Bo Zhao
Beam Energy: 5.9 GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal or <input checked="" type="checkbox"/> Transverse ?
Left HRS momentum (GeV/c): 1.13 angle: 45	polarity: <input checked="" type="checkbox"/> or "-" ? BigBite current (A): 710 Sieve slit: IN or OUT ? angle: never moved. Sieve slit: IN or <input checked="" type="checkbox"/> OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20500	16:22	16:33	^3He	15	262K	10%	T3=460, T4=26	✓
20501	16:42	17:05	^3He	15	270K	10%	T3=436, T4=25 (end fail)	✓
20502	17:22	17:55	^3He	15	720K	5%	T3=366, T4=27	✓
20505	22:22	22:34	N ₂	5	480K	17%	T3=1K, T4=21 (calibration)	✓
20506	22:22						(pressure: 121 (beam off); 122 (beam on))	
20506	22:44	23:00	^3He	15	800K	19%	T3=1K, T4=21	✓
20507	23:00	23:17	^3He	15	800K	19%	T3=1.1K, T4=32	✓
20508	23:17	23:36	^3He	15	800K	18%	T3=1.1K, T4=29	✓
20509	23:37	23:44	^3He	15	330K	19%	T3=1.1K, T4=32	✓
20510	23:52	23:56	N ₂	5	.	33%	T3=2.4K, T4=28 (Junk DT=30%)	
20511	23:56	0:07	N ₂	5	625K	9%	T3=2.5K, T4=27	✓
20512	00:16		N _L	5		5%	wrong pressure	

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 3/4/09	Author: V. Nelyukhin
Beam Energy: 5.9 GeV	Using Pol ³ He cell: Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): 0.6 angle: 45	polarity: <u>+</u> or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): 710 angle: never moved. Sieve slit: IN or <u>OUT</u> ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20513	0:17	0:25	N ₂	5	800K	12	5.95K/5.4 3/1	✓
20514	0:25	0:30	N ₂	5	422K	12	5.95K/5.4 3/1	✓
20515			³ He	15			T ₃ = T ₄ = 0 wrong prescale	
20516			3/4	15			wrong prescale	
20517	0:37	0:48	³ He	15	800K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20518	0:49	0:55	³ He	15	800K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20519	0:55	1:12	³ He	15	800K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20520	1:12	1:23	³ He	15	800K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20521	1:23	1:34	³ He	15	800K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20522	1:34	1:40	³ He	15	400K	12	T ₃ = 3K T ₄ = 48 2/1	✓
20523	2:05	3:00	³ He	15	480K	1	T ₃ = 148 T ₄ = 2 2/1	✓
20524	3:02	3:54	³ He	15	760K	2	T ₃ = 258 T ₄ = 2 2/1	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: <u>3/4/09</u>	Author: <u>MIHA MIHOVILOVIC</u> <u>Nelyubin / Glamazdin</u>
Beam Energy: <u>5.9</u> GeV	Using Pol ³ He cell: Y/N, Longitudinal or <u>Transverse</u> ?
Left HRS momentum (GeV/c): <u>1.13</u> angle: _____	polarity: <u>(+)</u> or "-" ? Sieve slit: IN or OUT ?
	BigBite current (A): <u>710</u> angle: never moved. Sieve slit: IN or OUT ?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20525	4:00	5:14	³ He	15	800k	1	T ₃ =450 T ₄ =26 2/1	✓
20526	5:16	9:31	³ He	15	210k	2	T ₃ =450 T ₄ =28	✓
20527	5:51	6:19	³ He	15	800k	3	T ₃ =1.1k T ₄ =31	✓
20528	6:20	6:50	³ He	15	800k	4	T ₃ =1.1k T ₄ =34	✓
20529	8:23	8:26	³ He	2			spot++ 2μA	
20530	8:32	9:14	³ He	15	200k	2	Arc dipole problem	✓
20534							no events	
20535	15:53	16:43	³ He	15	214k	2	T ₃ =47/T ₄ =24.7 (1/1)	✓ (bit diff than gen. run.)
20536	16:45	17:42	³ He	15.1	216k	2	42/26.2 (1/1)	✓
20537	18:23	18:37	BeO	2μA	12k	0	Raster Check run BeO	
20538	20:41	20:44	BeO	2.2μA	8k	1	Raster Check run BeO	
20539	20:44	21:01	³ He	30μA	14k	0	Trolley rates check	

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

Date: 3/4/09	Author: MIHA MIHOVILOVIC
Beam Energy: 5.843 GeV	Using Pol ^3He cell: <input checked="" type="radio"/> Y/N, Longitudinal or <input checked="" type="radio"/> <u>Transverse</u> ?
Left HRS momentum (GeV/c): 1.34 angle: 45	polarity: "+" or "-"? <input checked="" type="radio"/> - Sieve slit: IN or OUT?
	BigBite current (A): 706.6 angle: never moved. Sieve slit: IN or OUT?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK?
20540	21:02	22:19	^3He	15 μA	309k	1	45/22.5 (1/1)	✓
20541	22:20	00:37	^3He	15 μA	573k	2	45/21.2 (1/1)	✓
20542	00:38	3:40	^3He	15 μA	800k	1	45/23 (1/1)	✓
20543	3:41	6:48	^3He	15 μA	800k	2	45/26 (1/1)	✓
20544	6:49	7:44	^3He	15 μA	161k	2	44/23 (1/1)	✓
20545	7:45	9:30	^3He	15 μA	521k	2	44/23 (1/1)	✓
20546	9:37	10:58	^3He	15 μA	447k	2	start kin 6	✓
20547	11:03	11:39	N_2 ref cell	5 μA	281k	4	102/15 (1/1) ref cell RUN	✓
20548	11:43	11:57	^3He	15 μA	83.7k	3	67/26 (1/1) back to pol ^3He	✓
20549	11:59	12:37	^3He	15 μA	208k	3	1/2 plate out now.	✓
20550	13:27	13:35	BeO	2 μA	28k	2	checking spot size/position	Junk
20551			^3He	2 μA	16k	2	small raster check	Junk.
20552			^3He	2 μA	10k	2	large raster check.	Junk.

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments:

E06-014 LEFT HRS Run Sheet

H. MIHOVILOVIC

Date: 2009 March 5	Author: D. McNulty
Beam Energy: 5.893 GeV	Using Pol ^3He cell: <input checked="" type="checkbox"/> N, Longitudinal of <input checked="" type="checkbox"/> Transverse?
Left HRS momentum (GeV/c): 1.20 angle: 45	BigBite current (A): 710 angle: never moved.
polarity: "+" or "-" ? <input checked="" type="radio"/>	Sieve slit: IN or <input checked="" type="radio"/> OUT?

Run Number	start time	stop time	target	beam (μA)	# of events	dead time	comments (T3/T4 rate, PS3/PS4... etc)	replay OK ?
20553	13:48	13:51	^3He	15 μA	6.3k		Beam Gone!	
20054	17 ⁵⁷	17 ⁵⁴	BeO	2 μA	8.3k		Test on raster	
20555	00:11	02:34	BeO	0	282k	1%	Comms	
20556	02:45	02:50	BeO	25 μA	15k	2%	Raster size check! 2x2	
20557	03:00	03:03	^3He	2.0 μA	5.4k	3%	Raster size check! 4x4	
20558	03:05	03:07	^3He	2.0 μA	4k	1%	Raster size check! 6x6	
20559	03:09	05:41	^3He	15 μA	200k	3%	T ₃ = 71 / T ₄ = 23 (1/1)	✓
20560	05:41	06:44	^3He	15 μA	311k	1%	70.9 / 21.2 (1/1)	✓
20561	07:01	08:12	^3He	15 μA	389k	3%	63.9 / 26.9 (1/1)	✓
20562	08:32	11:06	^3He	15	300k	3%	64 / 24 (1/1)	✓
20563	11:06	11:25	^3He	15	86k	3	64 / 23 (1/1)	✓
20564	11:36	11:54	^3He	15	57k	3	69 / 24 (1/1)	✓

Please change to a new run sheet for a new setting or a new type of run on the run plan.
More comments: