

# RIGHT-ARM ONLY on this page: A<sub>x</sub>, A<sub>z</sub> Production Run Sheet

Date:	6/11/09	Author:	X
Beam Energy:	2.425 GeV	Using Pol <sup>3</sup> He Cell:	Y/N, Long, Tran, or Vertical
RHRS		BigBite	
Momentum (GeV/c):	2.475	Polarity: "-"	Current (A):
Angle:	18	Sieve Plate: IN or OUT ?	Polarity: Positive

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22352	18:17	18:33	BeO	10		3	optics run	
22353	18:33	18:37	BeO	10	14K	4	optics run	
22354	18:55	19:32	H <sub>2</sub>	10	0.12M	4		
22355	20:10	20:16	H <sub>2</sub>		0.70K		junk	
22356	20:19	20:51	H <sub>2</sub>	5	0.16M		optics run.	✓
22357	20:54	20:57	BeO	3		0.		
22358	20:58	21:16	BeO	3	1.5M	13	Optics run	
22359	21:19	21:32	BeO	3	1.4M	13	raster off	
22360	21:35	21:54	BeO	3	1.5M	13	BigBite magnet current down	
22361	21:57	22:01	BeO	3	58K	12	BigBite off, raster on	
22362	22:16	22:29	BeO	3	1.5M	12	"	
22363	23:01		empty	3		6	empty target	

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More Comments:

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Date: 06/12/09	Author: Lammica
Beam Energy: 2.425 GeV	Using Pol $^3\text{He}$ Cell: <input checked="" type="checkbox"/> N, <input checked="" type="checkbox"/> Long Tran, or Vertical
LHRS	BigBite
Momentum (GeV/c): 2.32	Current (A): 518
Angle: 12.5°	Polarity: <input checked="" type="checkbox"/> Positive
Sieve Plate: <input checked="" type="checkbox"/> IN or OUT?	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
3497	23:19		$\text{N}_2$	3		1	$\text{N}_2$ 19 psis	
3498	23:45	00:24	$^3\text{He}$	3	4M	5	reference cell, $^3\text{He}$	✓
3499	00:31	01:01	$^3\text{He}$	9	4M	8%	back to prod. run after NNR freq. sweep $\rightarrow$ 66.8%	✓ ↓ Amount for golden run change APtets in flip
3500	01:02	01:36	$^3\text{He}$	9	4M	8%	$^3\text{He}$ Prod. run	✓
3501	01:37	02:05	$^3\text{He}$	9	4M	8%	" "	✓
3502	02:08	02:30	$^3\text{He}$	9	4M	8%	" "	✓
3503	02:38	03:08	$^3\text{He}$	9	4M	8%	" "	✓
3504	03:12	03:45	$^3\text{He}$	9	4M	8%	New Happen <sub>5</sub> run #3508	✓
3505	03:46	04:21	$^3\text{He}$	9	4M	8%	$^3\text{He}$ Prod. run	✓
3506	04:23	04:24	$^3\text{He}$	9	175k	8%	New NNR gave 65% ended earlier due to RHRs	✓ junk code crash
3507	04:29	05:02	$^3\text{He}$	9	4M	8%	$^3\text{He}$ Prod. run	✓
3508	05:03	05:33	$^3\text{He}$	9	4M	8%	" "	✓

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Date: 06/12/09	Author: lamiaa
Beam Energy: 2.425 GeV	Using Pol $^3\text{He}$ Cell: <input checked="" type="checkbox"/> N, <input checked="" type="checkbox"/> Long, <input type="checkbox"/> Tran, or Vertical
RHRS	BigBite <sup>+</sup>
Momentum (GeV/c): 2.025 Polarity: "-"	Current (A): 518 Polarity: Positive
Angle: 18 Sieve Plate: IN or <input checked="" type="checkbox"/> OUT?	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
22364	23:19		$\text{N}_2$	3		13		
22365	23:44	00:24	$^3\text{He}$	3	3.1M	10	reference cell, $^3\text{He}$	✓
22366	00:30	01:02	$^3\text{He}$	9	3.1M	12%	Back to Prod. run after new NBR → 668%	✓ waiting to setup new Eden run after dumping the RHRS into 2.4
22367	01:02	01:36	$^3\text{He}$	9	3.1M	12%	$^3\text{He}$ Prod. run	✓
22368	01:37	02:06	$^3\text{He}$	9	3.1M	12%	✓ ✓	✓
22369	02:07	02:37	$^3\text{He}$	9	3.1M	12%	✓ ✓	✓
22370	02:38	03:09	$^3\text{He}$	9	3.12M	12%	✓ ✓	✓
22371	03:12	03:45	$^3\text{He}$	9	3.13M	12%	New Happer run #318	✓
22372	03:46	04:21	$^3\text{He}$	9	3.12M	12%	$^3\text{He}$ Prod. run	✓
22373	04:23	-	$^3\text{He}$	9	-	100%	new NBR gave 65%. Ended Eden due to 100% dead time prob	JUNR PRHRS
22374	04:28	05:03	$^3\text{He}$	9	3.13M	12%	Reboot ROC 1, 2, 8 & TSO and Restart coda & new prod. run	✓
22375	05:03	05:33	$^3\text{He}$	9	3.12M	12%	$^3\text{He}$ Prod. run	✓

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Date:	06/12/09	Author:	Lamiaa
Beam Energy:	2.425 GeV	Using Pol <sup>3</sup> He Cell:	(Y/N, Long) Tran, or Vertical
LHRS		BigBite	
Momentum (GeV/c):	2.32	Current (A):	518 +
Angle:	12.5	Sieve Plate:	(IN) or OUT ?
		Angle:	75°

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3509	05:34	06:04	<sup>3</sup> He	9	4M	8%	<sup>3</sup> He Prod. run	✓
3510	06:04	06:37	<sup>3</sup> He	9	4M	8%	✓	✓
3511	06:37	07:11	<sup>3</sup> He	9	4M	8%	✓	✓
3512	07:13	07:35	<sup>3</sup> He	9	2.86M	8%	New Happex run # 3519	✓
3513	17:43	17:46	BeO	2	81K		raster test.	
3514	17:55	17:58	<sup>3</sup> He	2			test run, 2x2 <sup>mm</sup>	
3515	18:20	18:06	<sup>3</sup> He	2			test run, 6x6 mm	
3516	18:08	18:11	<sup>3</sup> He	2	17K		test run, 4x4 mm	
3517	18:24	19:22	<sup>3</sup> He	9	1.6M	-7	production.	✓
3518	19:24	19:30	<sup>3</sup> He	10		-9%	production	
3519	19:32		<sup>3</sup> He	10		3%	production	
3520	20:08	20:26	<sup>5</sup> Li	10	2M	3%	production	

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Date: 06/12/09.	Author: lamiaa
Beam Energy: 2.425 GeV	Using Pol $^3\text{He}$ Cell: <input checked="" type="radio"/> N, <input checked="" type="radio"/> Long, Tran, or Vertical
RHRS	BigBite
Momentum (GeV/c): 2.025	Polarity: "-" Current (A): 518
Angle: 18	Sieve Plate: IN or <input checked="" type="radio"/> OUT? Angle: 75°
	Polarity: <input checked="" type="radio"/> Positive

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
22376	05:34	06:04	$^3\text{He}$	9	3.1M	12%	$^3\text{He}$ Prod. run	✓
22377	06:04	06:37	$^3\text{He}$	9	3.12M	12%	" "	✓
22378	06:37	07:11	$^3\text{He}$	9	3.12M	12%	" "	✓
22379	07:13	07:35	$^3\text{He}$	9	?	12	$^3\text{He}$ Prod run / Happer run # 25.109	✓
22380	17:43	17:46	BeO	2	72k		raster test	
22381	17:55	17:58	$^3\text{He}$	2			test run. 2x2mm	
22382	18:00	18:06	$^3\text{He}$	2			test run, 6x6mm	
22383	18:08	18:11	$^3\text{He}$	2	25k		test run, 4x4mm	
22384	18:24	19:22	$^3\text{He}$	9	1.4M	4%	production.	✓
22385	19:24	19:30	$^3\text{He}$	10	71k	8%	production	
22386	19:32		$^3\text{He}$	10		6%	production.	
22387	20:08	20:26	$^3\text{He}$	10		6%	production (ODs cracked)	

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Date: 06/12/09	Author: Xiaoyan Deng
Beam Energy: 2.475 / 3.606 GeV	Using Pol $^3\text{He}$ Cell: <input checked="" type="checkbox"/> N, <input checked="" type="checkbox"/> Long, Tran, or Vertical
LHRS	BigBite
Momentum (GeV/c): 2.35	Polarity: "-" Current (A): 518 Polarity: Positive
Angle: 12.5	Sieve Plate: <input checked="" type="checkbox"/> IN or OUT? Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
3521								
3522	21:17	21:20	BeO		0.3M		spot ++ MCC 7x5 check	
<del>3523</del> 3523	21:22	21:27	$^3\text{He}$	2			spt ++ check MCC 7x5	✓
3524	21:28	21:56	$^3\text{He}$	<del>10.5</del>	3M	3	production	✓
3525	21:59	22:16	$^3\text{He}$	10	1.7M	3	production	✓
3526	22:28	23:01	$^3\text{He}$	10	4M	3	production	✓
3527	23:02	23:35	$^3\text{He}$	10	4M	2	production	✓
3528	23:36	23:49	$^3\text{He}$	10		3	production	✓
3529	01:22	01:27	BeO	2	418k	1	spot ++ check run w/ 4x4 raster	spot ++ seems ok.
3530	01:36	01:45	$^3\text{He}$	2/10	726k	0/3	check out run for rates check	Rates seem ok.
3531	01:46	02:21	$^3\text{He}$	10	4M	3%	Back to $^3\text{He}$ prod. w/ L-arm only (NBR=02.6%)	✓
3532	02:22	02:48	$^3\text{He}$	10	2.5M	3%	$^3\text{He}$ prod. run after restarting new happen run # 3523	✓

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Date:	06/12/09	Author:	Xiaoyan Deng
Beam Energy:	<del>2.425</del> 3.606 GeV	Using Pol <sup>3</sup> He Cell:	<del>0/N</del> (Long) Tran, or Vertical
RHRS		BigBite	
Momentum (GeV/c):	3.0855	Polarity:	( <sup>-</sup> )
Angle:	18	Sieve Plate:	IN or (OUT)?
		Current (A):	518
		Angle:	75°
		Polarity:	(Positive)

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
<del>22388</del>								
<del>22388</del>								
22389	21:17	21:20	BeO		72k		spot ++ check <sup>MC</sup> 7x5.	
<del>22390</del>	21:22	21:27	<sup>3</sup> He	2				
22391	21:28	21:56	<sup>3</sup> He	10.5	0.8M	6	production	✓
22392	21:59	22:16	<sup>3</sup> He	10	0.45M	6	production	✓
22393	22:28	23:01	<sup>3</sup> He	10	1M	6	production.	✓
22394	23:02	23:35	<sup>3</sup> He	10	1M	6	production.	✓
22395	23:36	23:49	<sup>3</sup> He	10		6	production.	✓
R arm is down because the magnet pb								

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Date: 06/13/09	Author: Lammiaa
Beam Energy: 3.506 GeV	Using Pol $^3\text{He}$ Cell: <input checked="" type="checkbox"/> N, <input checked="" type="checkbox"/> Long, Tran, or Vertical
LHRS	BigBite +
Momentum (GeV/c): 3.35	Polarity: "-" Current (A): 518 Polarity: Positive
Angle: 12.5° Sieve Plate: <input checked="" type="checkbox"/> IN or OUT?	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
3533	03:42	03:44	BeO	2	20k	0	spot++ check run w/ 6x6 raster	spot++ looks good
3534	03:47	03:53	$^3\text{He}$	2/10	269k	0/3	Rates check w/ 2 & 10 $\mu\text{A}$	Rates are good
3535	03:54	04:24	$^3\text{He}$	10	3.35M	3%	Back to prod. in L-arm only. Await for R-arm to come up	✓
							End this run earlier because the BBHV tripped. BBHV was turned off by the end of the run	
3536	04:32	05:07	$^3\text{He}$	10/12	4M	3% 14%	$^3\text{He}$ Prod. run w/ raster 6x4 Acc unit. Increase the current to 12	✓
3537	05:09	05:41	$^3\text{He}$	12	4M	4%	$^3\text{He}$ L-arm Prod. run w/ 12 $\mu\text{A}$	✓
3538	05:45	06:12	$^3\text{He}$	12	4M	4%	" "	✓
3539	06:14	06:50	$^3\text{He}$	12	4M	4%	$^3\text{He}$ L-arm Prod. run after New NDR $\rightarrow$ 63.3%	✓
3540	06:52	07:23	$^3\text{He}$	12	4M	4%	$^3\text{He}$ L-arm Prod. run w/ 5x4 raster in Acc units	✓ set new golden run
3541	07:22	07:55	$^3\text{He}$	12	4M	4%	$^3\text{He}$ prod. run in both arms	✓
3542	07:57	8:27	$^3\text{He}$	12	4M	4%	" "	✓
3543	08:29	9:02	$^3\text{He}$	12	4M	4%	" "	✓

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Date:	06/13/09	Author:	Lamiaa
Beam Energy:	3.606 GeV	Using Pol $^3\text{He}$ Cell:	<input checked="" type="checkbox"/> N, <input checked="" type="checkbox"/> Long, Tran, or Vertical
RHRS		BigBite	+
Momentum (GeV/c):	3.0855	Polarity:	"-"
Angle:	18	Sieve Plate: IN or OUT ?	
		Current (A):	518
		Angle:	75°
		Polarity:	Positive

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
22396	07:27	07:55	$^3\text{He}$	12	1.02M	8%	The dipole mt. is not really reached 3.0855 GeV/c	✓
22397	07:57	8:28	$^4\text{He}$	12	1.036M	6%		✓
22398	08:28	9:02	$^3\text{He}$	12	1.037M	6%		✓

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Date: 6/13/19	Author: Lindgren
Beam Energy: 3.606 GeV	Using Pol $^3\text{He}$ Cell: Y/N, Long, Tran, or Vertical
LHRS	BigBite
Momentum (GeV/c): 3.350      Polarity: "-"	Current (A): 518      Polarity: Positive
Angle: 12.5      Sieve Plate: IN or OUT ?	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam ( $\mu\text{A}$ )	Number of Events	Dead Time	Comments	Replay Ok?
3544	9:03	9:31	$^3\text{He}$	12	4.00M	4		✓
3545	9:38	10:07	$^5\text{He}$	12	4.00M	4		✓
3546	10:08	10:43	$^3\text{He}$	12	4.00M	4		✓
3547	10:44	11:19	$^3\text{He}$	12	4.00M	5		✓
3548	11:20	11:55	$^3\text{He}$	12	4.00M	40		✓
3549	12:02	12:33	$^3\text{He}$	14	4.00M	5		✓
3550	12:34	13:03	$^3\text{He}$	14	4.00M	5		✓
3551	13:05	13:32	$^3\text{He}$	14	4.01M	5	At end of this run, wait for components to be moved.	✓
3552	13:38	14:07	$^3\text{He}$	14	4.01M	5		✓
3553	14:12	14:56	$^3\text{He}$	14	0.401M	-	Something went wrong here ? was not started.	—
3554	14:58	15:26	$^3\text{He}$	14	4.00	5	OK	✓
3555	15:27		$^3\text{He}$	14	4.01	5	OK	✓

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