

RIGHT-ARM ONLY on this page: A_x , A_z Production Run Sheet

Date: 6/8/09	Author: F. GARIBALDI
Beam Energy: 2.272 GeV	Using Pol ^3He Cell: <input checked="" type="checkbox"/> N, Long <input checked="" type="checkbox"/> Tran, or Vertical
RHRS	BigBite
Momentum (GeV/c): 2.175 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 (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22233	13:31	14:17	^3He	9	2.87	11		
22234	14:32	15:07	^3He	9	2.85	11		
22235	15:08	15:50	^3He	9	2.87	10		
22235	15:54	16:15	^3He	9	0.817	11	Coda crashed, junk	
22236	junk, complete LEFT-HRS coda restart							
22237	16:18	16:54	^3He	9	2.70	10%		✓
22238	16:55	17:30	^3He	9	2.86	11		✓
22239	17:31	18:07	^3He	9	2.9	11	} ←	✓
22240	18:08	18:38	^3He	9	2.8	11	one laser tripped during this run	✓
(1) 22241	18:44	18:46	Optics	5	/	/	set prescales only	u/a
(1) 22242	18:48	19:03	Optics	5	2.4M	16%		u/a
(2) 22243	19:06	19:25	Optics	5	2.7M	16%		u/a

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

More Comments:

- (1) = Raster ON
- (2) = Raster OFF

LEFT-ARM ONLY on this page: A_x , A_z Production Run Sheet

Date: June 8, 2009	Author: S. Circa
Beam Energy: 2.425 GeV	Using Pol ^3He Cell: <input checked="" type="radio"/> Y/N, Long, <input checked="" type="radio"/> Tran or Vertical
LHRS	BigBite
Momentum (GeV/c): 2.320	Polarity: "-" Current (A): 518
Angle: 12.5°	Sieve Plate: <input checked="" type="radio"/> IN or OUT? Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3372	19:37	19:38	ref. H_2	5	7k	0	raster on, set prescales	n/a
3373	19:40	19:51	ref. H_2	9	1.1M	7%	ps1=ps2=200, others 65535	n/a
3374	19:53	20:16	ref. H_2	9	2.8M	15%	ps5=1, others 65535	n/a
3375	20:17	20:27	ref. H_2	9	0.6M	0%	ps1=200, others 65535	n/a
3376	20:33	20:49	ref. H_2	9	1.1M	7%	ps6=1, others 65535	n/a
3377	21:12	21:23	ref. N_2	9	1.8M	12%	ps1=ps2=200, others 65535	n/a
3378	21:24	21:42	ref. N_2	9	1.0M	1%	ps5=ps6=1, others 65535	n/a
★ 3379	21:51	22:27	^3He	9	4.0M	8%	ps1=29000, ps2=25000 ps3=200, ps4=40, ps5=ps6=1, ps7=65535, ps8=100 et seq.	✓
3380	22:23	22:54	^3He	9	4.0M	8%		✓
3381	22:55	23:25	^3He	9	4.0M	8%		✓
3382	23:26	23:56	^3He	9	4M	8%		✓
3383	23:57	00:26	^3He	9	4M	7	Production run w/ ^3He	✓

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

More Comments:

★ Back to production w/ standard prescales

RIGHT-ARM ONLY on this page: A_x, A_z Production Run Sheet

Date: June 8, 2009	Author: S. Sirca
Beam Energy: 2.425 GeV	Using Pol ³ He Cell: <input checked="" type="radio"/> N, Long, <input checked="" type="radio"/> Tran, or Vertical
RHRS	BigBite
Momentum (GeV/c): 2.475	Polarity: "-"
Angle: 12.5°	Sieve Plate: <input checked="" type="radio"/> IN or OUT?
	Current (A): 518
	Polarity: Positive
	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22244	19:36	19:38	ref. H ₂	5	52k	0	rasteron	n/a
22245	19:40	19:51	ref. H ₂	9	0.8M	9%		n/a
22246	19:53	20:16	ref. H ₂	9	1.8M	8%		n/a
22247	20:17	20:27	ref. H ₂	9	0.8M	9%		n/a
22248	20:33	20:49	ref. H ₂	9	1.1M	8%		n/a
22249	21:11	21:23	ref. N ₂	9	1.0M	11%		n/a
22250	21:23	21:42	ref. N ₂	9	1.7M	8%		n/a
22251	21:51	22:22	³ He	9	2.9M	11%		✓
22252	22:23	22:54	³ He	9	2.8M	10%		
22253	22:55	23:25	³ He	9	2.8M	11%		✓
22254	23:26	23:56	³ He	9	2.84M	10%		✓
22255	23:57	00:26	³ He	9	2.84	11%	Production run w/ ³ He	✓

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

More Comments:

LEFT-ARM ONLY on this page: A_x , A_z Production Run Sheet

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

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3384	00:27	00:58	^3He	9	40	7	^3He Prod. run	✓
3385	00:59	01:30	^3He	9	40	8	" "	✓
3386	01:31	01:59	^3He	9	40	9%	" "	✓
3387	02:02	02:31	^3He	9	40	8%	New NNR gave 58.1% New Happex run, 31501 ↳ Compton 5 17268	✓
3388	02:32	03:09	^3He	9	40	8%	^3He Prod. run	✓
3389	03:09	03:41	"	"	40	8%	" "	✓
3390	03:42	04:12	"	"	40	8%	" "	✓
3391	04:13	04:43	^3He	9	40	8%	" "	✓
3392	04:43	05:20	"	"	40	8%	" "	✓
3393	05:20	05:53	^3He	9	40	8%	" "	✓
3394	05:56	06:26	^3He	9	40	8%	New NNR gave 58.05% ^3He Prod. run	✓
3395	06:27	07:00	^3He	9	3.490	7/8%	^3He Prod. run	✓

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

More Comments:

RIGHT-ARM ONLY on this page: A_x, A_z Production Run Sheet

Date:	06/09/09		Author:	lamiaa	
Beam Energy:	2.425	GeV	Using Pol ³ He Cell:	<input checked="" type="radio"/> N, Long, <input checked="" type="radio"/> Tran, or Vertical	
RHRS			BigBite		
Momentum (GeV/c):	2.175	Polarity: "-"	Current (A):	518	Polarity: Positive
Angle:	18°	Sieve Plate: <input checked="" type="radio"/> IN or OUT ?	Angle:	75°	

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22256	00:27	00:58	³ He	9	2.85n	11%	³ He Prod. run	✓
22257	00:59	01:30	³ He	9	2.86n	10%	✓ ✓	✓
22258	01:31	01:59	³ He	9	2.84n	11%	✓ ✓	✓
22259	02:02	02:32	³ He	9	2.86n	11%	New NNR gave: 58.5% New Happex run: 31501 Compton: 17268	✓
22260	02:32	03:09	³ He	9	2.86n	11%	³ He Prod. run	✓
22261	03:09	03:41	✓	9	2.86n	10%	✓ ✓	✓
22262	03:41	04:12	✓	✓	2.86n	11%	✓ ✓	✓
22263	04:13	04:43	³ He	9	2.85n	11%	✓ ✓	✓
22264	04:43	05:20	✓	✓	2.86n	11%	✓ ✓	✓
22265	05:20	05:56	³ He	9	2.855n	11%	✓ ✓	✓
22266	05:56	06:27	³ He	9	2.85n	11%	New NNR freq. sweep → 58.5% New Happex/compton: 31502/17269	✓
22267	06:27	07:00	³ He	9	2.49n	11%	³ He Prod. run	✓

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

More Comments:

LEFT-ARM ONLY on this page: A_x , A_z Production Run Sheet

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

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3396			optics	5			status of this run unknown	
3397	15:29	17:21	JUNK				was cosmic run w/ht beam came back	
3398	17:22	17:38	Optics	5	2.3M	11%	ps1=ps2=150, ps3=400 ps5=ps6=1, raster OFF ✓	
3399	17:39	17:55	Optics	5	2.3M	11%	same ps, but raster ON	
3400	17:09		optics	2	1	1%	check out	
3401-3406	see shift summary							
* 3408	21:49	22:09	^3He	9	1.5M	7	Back to production	✓
3409	22:10	22:42	^3He	9	4.0M	8	production	✓
3406			<u>ref. D₂ (135 psi)</u>					

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

More Comments:

* Two minute run - L arm, ^{coda} crashed

RIGHT-ARM ONLY on this page: A_x, A_z Production Run Sheet

Date:	06/09/09		Author:		
Beam Energy:	2.425	GeV	Using Pol ³ He Cell:	<input checked="" type="checkbox"/> N, Long, <input checked="" type="checkbox"/> Tran, or Vertical	
RHRS			BigBite		
Momentum (GeV/c):	2.175	Polarity: "-"	Current (A):	518	Polarity: Positive
Angle:	18°	Sieve Plate: <input checked="" type="checkbox"/> IN or OUT ?	Angle:	75°	

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22268			Optics	5			status of this run unknown	
22269	15:29	17:21	DUNK				was cosmic run until beam came back	
22270	17:22	17:38	Optics	5	2.1M	17%	raster OFF	
22271	17:39	17:55	Optics	5	2.1M	16%	raster ON	
22272			Optics					
22273-22278: see shift summary								
*22279	21:48	22:09	³ He	9	1.1M	11	Back to production	✓
22280	22:09	22:42	³ He	9	2.86M	11	production	✓
(22278)		ref. D ₂ (135 psi)					

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

More Comments:

Coda
 * 2 Minute run. Left arm crashed

NITROGEN¹⁴ PRESSURE CURVES¹¹ RUNS

LEFT-ARM ONLY on this page: A_x, A_z Production Run Sheet

Date: June 9, 2009	Author: S. Sirca
Beam Energy: 2.425 GeV	Using Pol ³ He Cell: Y/N, Long, Tran, or Vertical
LHRS	BigBite
Momentum (GeV/c): 2.320	Polarity: "-" Current (A): 518 A
Angle: 12.5°	Sieve Plate: <u>IN</u> or OUT? Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3410	23:08	23:14	ref. empty	9	0.16M	-10%	-15 psig (*) / 30 ev./sec / 0 torr	
3411	23:17	23:21	ref. N ₂	9	0.12M	-10%	-12 psig (*) / 130 torr	
3412	23:22	23:27	ref. N ₂	9	0.21M	-8%	-9 psig (*) / 300 torr	
3413	23:29	23:34	ref. N ₂	9	0.22M	-6%	-6 psig (*) / 480 torr	
3414	23:40	23:45	ref. N ₂	9	0.30M	-5%	-3 psig (*) / 630 torr	
3415	23:46	23:52	ref. N ₂	9	0.31M	0%	0 psig (*) / 764 torr	
3418	00:00	00:05	ref. N ₂	9	0.30M	0%	3 psig (*) / 909 torr	
3419	00:07	00:11	ref. N ₂	9	0.31M	0%	6 psig (*) (⚡)	
3420	00:13	00:17	ref. N ₂	9	0.30M	0%	9 psig (*)	
3421	00:18	00:22	ref. N ₂	9	0.34M	0%	12 psig (*)	
3422	00:23	00:26	ref. N ₂	9	0.31M	0%	15 psig (*)	
3423	00:27	00:31	ref. N ₂	9	0.39M	1%	18 psig (*)	

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

More Comments:

(*) -15 psig ≡ Vacuum

runs #3416, #3417 are junk (coda crashed)

(⚡) start of run #22290 or HRSR samp 3 psig, is 6 psig

NITROGEN "PRESSURE CURVES" RUNS

RIGHT-ARM ONLY on this page: A_x , A_z Production Run Sheet

Date: <u>June 09, 2009</u>	Author: <u>S. Sirca</u>
Beam Energy: _____ GeV	Using Pol ^3He Cell: Y/N, Long, Tran, or Vertical
RHRS	BigBite
Momentum (GeV/c): <u>2.175</u>	Polarity: <u>"-"</u> Current (A): <u>518</u> Polarity: <u>Positive</u>
Angle: <u>18.0°</u> Sieve Plate: <u>IN</u> or OUT?	Angle: <u>75°</u>

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
22282	23:08	23:14	ref. empty	9	0.16M	4%	-15 prtg (*) / 0 torr	
22283	23:16	23:21	ref. N ₂	9	0.11M	5%	-12 prtg (*) / 130 torr	
22284	23:22	23:27	ref. N ₂	9	0.20M	6%	-9 prtg (*) / 300 torr	
22285	23:28	23:34	ref. N ₂	9	0.21M	7%	-6 prtg (*) / 480 torr	
22286	23:40	23:45	ref. N ₂	9	0.29M	7%	-3 prtg (*) / 630 torr	
22287	23:46	23:52	ref. N ₂	9	0.29M	8%	0 prtg (*) / 764 torr	
22289	00:00	00:05	ref. N ₂	9	0.27M	9%	3 prtg (*) / 909 torr	
22290	00:07	00:11	ref. N ₂	9	0.28M	9%	6 prtg (*) (g)	
22291	00:12	00:17	ref. N ₂	9	0.27M	9%	9 prtg (*)	
22292	00:17	00:22	ref. N ₂	9	0.30M	9%	12 prtg (*)	
22293	00:23	00:26	ref. N ₂	9	0.27M	10%	15 prtg (*)	
22294	00:27	00:31	ref. N ₂	9	0.34M	11%	18 prtg (*)	

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

More Comments:

(*) - 15 prtg \equiv vacuum

nu # 22288 is junk (code crashed)

(g) start of nu says 3 prtg, is 6 prtg

LEFT-ARM ONLY on this page: A_x , A_z Production Run Sheet

Date: June 10, 2009	Author: S. Circa / Lamiaa
Beam Energy: 2.425 GeV	Using Pol ^3He Cell: <input checked="" type="radio"/> N, Long, <input checked="" type="radio"/> Tran or Vertical
LHRS	BigBite
Momentum (GeV/c): 2.320 Polarity: "-"	Current (A): 518 A Polarity: <input checked="" type="radio"/> Positive
Angle: 12.5° Sieve Plate: IN or <input checked="" type="radio"/> OUT	Angle: 75°

Run Number	Start Time	Stop Time	Target	Beam (μA)	Number of Events	Dead Time	Comments	Replay Ok?
3424	00:39	01:08	^3He	9	4n	8	^3He Prod. run	✓
3425	01:09	01:40	^3He	9	4n	8	" "	✓
3426	01:41	02:11	^3He	9	4n	8	" "	✓
3427	02:14	02:43	^3He	9	4n	8	^3He Prod. run (New Happen & Comp. runs)	✓
3428	02:54	03:23	^3He	9	4n	8	^3He Prod. run	✓
3429	03:25	04:01	^3He	9	4n	8	Beam was gone for 6 min in the end of this run	✓
3430	04:08	04:37	^3He	9	4n	8	Restarted new prod. run after a beam is back (~10 min)	✓
3431	04:38	04:42	^3He	9	474k	8%	Ended earlier to do NN R meas. suggested by TO	✓
3432	04:46	05:01	^3He	9	1.76n	8%	After new NN R (56.7%) we went back to prod.	✓
3433	06:09	06:38	^3He	9	4n	8%	Beam is back, do spot++ check and continue w/ prod.	✓
3434	06:40	07:12	^3He	9	4n	8	New Happen/comp. runs # 315-05/192-91	✓
3435	07:13	07:44	^3He	9	4n	8	^3He Prod. run	✓

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

More Comments: