

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Use a separate sheet for each configuration.

Date: 19 / 06 / 26
yy mm dd

Initials: GH

HMS

SHMS

Q1	I-SET (from PSU) 195.3400 A B-HALL 0.190 kG	A	I-SET (from PSU) 495.3310 A B-HALL 3.132 kG	A	HB
Q2	I-SET (from PSU) 155.2226 A B-HALL -0.272 kG	A	I-SET (from PSU) 314.9550 A B-HALL -2.232 kG	A	Q1
Q3	I-SET (from PSU) 75.8158 A B-HALL 0.150 kG	A	I-SET (from PSU) 529.0220 A B-HALL 4.948 kG	A	Q2
D	I-READ 458.128 A B-NMR 0.4106504 T	A	I-SET (from PSU) 348.0920 A B-HALL 3.397 kG	A	Q3
If momentum increased:			I-SET (from PSU) 478.5910 A B-NMR -3.480 kG	A	D
<input checked="" type="checkbox"/> HMS cycled?					
<input checked="" type="checkbox"/> SHMS cycled?					

Configuration Name: Luminosity Scan

Purpose:

☐ Production

☐ Test

☐ Optics

☒ Other: Lumi

E_{beam}: 2775 GeV

I_{beam}: Various μ A

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
0.002 mm	0.216 mm	
Nomin:	Nomin:	
3H07C	X	Y
-0.834 mm	0.624 mm	
Nomin:	Nomin:	

HMS

p: +0 1.500
From GUI

θ (TV): 11.500
Nearest 0.005

SHMS

p: +0 1.500
From GUI

θ (TV): 9.500
Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Large ☒
Sieve ☐

Run Number:

8456

☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☒ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: -1
PS2: 10
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

20:13

Stop time (from RC):

20:18

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 244 k
pretrig:

$e-\pi n$ evts:

SHMS prescale 411 k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk

Comments:

40nA

Stop due to beam trip. # Good HMS = 126k
Good SHMS = 122k.

Run Number:

8457

☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☒ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: -1
PS2: 10
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

20:23

Stop time (from RC):

20:30

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 399 k
pretrig:

$e-\pi n$ evts:

SHMS prescale 673 k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk

Comments:

40nA

1.2M total events

Stop due to beam trip.
Good HMS = 206 k
Good SHMS = 199 k

Run Number:

8458

☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☒ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: -1
PS2: 10
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

20:36

Stop time (from RC):

20:46

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale ? k
pretrig:

$e-\pi n$ evts:

SHMS prescale ? k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk

Comments:

40nA

1.7M total events

Root plots did not come out

Run Number:

8460

☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☒ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: -1
PS2: 10
PS3: 8
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

20:49

Stop time (from RC):

20:53

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 325 k
pretrig:

$e-\pi n$ evts:

SHMS prescale 262 k
pretrig:

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk

Comments:

25nA

0.64 M total events

Good HMS 168 k
Good SHMS 85 k

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/20
yy mm dd

Initials: GH

Continuation of Configuration:

Carbon Lumin scan

This sheet is only to be used to continue a running configuration.

Run Number: 8461	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 10 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 20:55 Stop time (from RC): 20:58	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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25nA

530k total events

Short run. Beam tripped.

Run Number: 8462	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 10 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 20:58 Stop time (from RC): 21:08	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 756 k $e-\pi n$ evts:	SHMS prescale pretrig: 610 k $\Sigma e-\pi n$ evts:	COIN pretrig: / k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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25nA

1.5M total events

± good HMS 390k
± good SHMS 199k

Run Number: 8463	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 10 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 21:09 Stop time (from RC): 21:16	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 514 k $e-\pi n$ evts:	SHMS prescale pretrig: 395 k $\Sigma e-\pi n$ evts:	COIN pretrig: / k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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25nA

960k events

± good HMS 252k
± good SHMS 128k

Run Number: 8464	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 9 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 21:18 Stop time (from RC): 21:33	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 909 k $e-\pi n$ evts:	SHMS prescale pretrig: 1.3M k $\Sigma e-\pi n$ evts:	COIN pretrig: / k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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16nA

2.2M events

± good HMS 198k
± good SHMS 208k

Run Number: 8465	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 9 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 21:35 Stop time (from RC): 21:54	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 546 k $e-\pi n$ evts:	SHMS prescale pretrig: 770 k $\Sigma e-\pi n$ evts:	COIN pretrig: / k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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10nA

1.6 M events

± good HMS 169k
± good SHMS 181k

Run Number: 8466	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: -1 PS2: 9 PS3: 8 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 23:00 Stop time (from RC): 23:12	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 413 k $e-\pi n$ evts:	SHMS prescale pretrig: 583 k $\Sigma e-\pi n$ evts:	COIN pretrig: / k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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10nA

1.2M

$p(e, e'\pi)n$ Run Sheet

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Date: 19/06/26
yy mm dd

Initials: GH

Continuation of Configuration:

Conker Lumi

This sheet is only to be used to continue a running configuration.

Run Number: 8467	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: 8 PS3: 6 PS4: _____ PS5: _____ PS6: _____	Start time (from RC): 23:16 Stop time (from RC): 23:33	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 2007 k $e-\pi n$ evts:	SHMS prescale pretrig: 1443 k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 7.5 μA 3-3 M events							

Run Number: 8468	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: 7 PS3: 6 PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: 5.2 μA							

Run Number: 8469	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: 7 PS3: 6 PS4: _____ PS5: _____ PS6: _____	Start time (from RC): 23:36 Stop time (from RC): 23:49	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 1059 k $e-\pi n$ evts:	SHMS prescale pretrig: 1509 k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 5.2 μA 2.4 M events							

Run Number: 8470	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 7 PS2: 7 PS3: 5 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 23:53 Stop time (from RC): 00:09	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 567 k $e-\pi n$ evts:	SHMS prescale pretrig: 414 k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 3.05 μA							

Run Number: 8471	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: 7 PS3: 5 PS4: _____ PS5: _____ PS6: _____	Start time (from RC): 00:27 Stop time (from RC): 00:28	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments: Beam trip when data taking started							

Run Number: 8472	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 7 PS2: 7 PS3: 5 PS4: -1 PS5: -1 PS6: -1	Start time (from RC): 00:29 Stop time (from RC): 00:37	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 9608 k $e-\pi n$ evts:	SHMS prescale pretrig: 6658 k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments: 60 μA HV: DC's in SHMS off 2Y Hodo illegal val SHMS							

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 06 / 27
yy mm dd

Initials: Cam

Continuation of Configuration:

Carbon Lumi

This sheet is only to be used to
continue a running configuration.

Run Number: <u>8473</u>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input checked="" type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: <u>11</u> PS3: <u>9</u> PS4: _____ PS5: _____ PS6: _____	Start time (from RC): <u>00:44</u> Stop time (from RC): <u>00:45</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e-\pi n$ evts: _____	SHMS prescale pretrig: <u> </u> k $\Sigma e-\pi n$ evts: _____	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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Comments:

50 μ A

Run Number: <u>8476</u>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: <u>10</u> PS3: <u>9</u> PS4: _____ PS5: _____ PS6: _____	Start time (from RC): <u>01:22</u> Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): _____ Stop time (from RC): _____	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: cam

Use a separate sheet for each configuration.

Configuration Name: _____

Hydrogen Lumi

E_{beam}: 2.758 GeV
2.774

I_{beam}: Varies μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm²

Beam position and angle on target:

3H07A	X	Y
<u>0.024</u> mm		<u>0.210</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.75</u> mm		<u>0.62</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>195.3400</u> A B-HALL <u>0.192</u> kG	I-SET (from PSU) <u>495.3310</u> A B-HALL <u>3.132</u> kG	HB
Q2	I-SET (from PSU) <u>155.2226</u> A B-HALL <u>-0.274</u> kG	I-SET (from PSU) <u>314.9550</u> A B-HALL <u>-2.231</u> kG	Q1
Q3	I-SET (from PSU) <u>75.8158</u> A B-HALL <u>0.147</u> kG	I-SET (from PSU) <u>522.0220</u> A B-HALL <u>4.948</u> kG	Q2
D	I-READ <u>458.7175</u> A B-NMR <u>0.4106522</u> T	I-SET (from PSU) <u>348.0920</u> A B-HALL <u>3.399</u> kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>478.5910</u> A B-NMR <u>-3.480</u> kG	D

Run Number:

8474

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 11
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

01:08

Stop time (from RC):

01:11

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 335 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 233 k

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk ?

Comments:

SHMS HODO 2Y11 + Illegal

Run Number:

8475

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 11
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

01:12

Stop time (from RC):

01:12

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 387 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1074 k

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk ?

Comments:

25 μ A SHMS HODO 2Y11 + Illegal

Run Number:

8476

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 10
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

01:22

Stop time (from RC):

01:38

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 1150 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1621 k

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☐ Data ok

☐ Junk

Comments:

20 μ A

Run Number:

8477

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 10
PS3: 8
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

01:39

Stop time (from RC):

01:53

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 1577 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 1126 k

$\Sigma e-\pi n$ evts:

COIN pretrig: / k

☒ Data ok

☐ Junk

Comments:

15 μ A

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: Cam

Continuation of Configuration:

Hydrogen Lumi

This sheet is only to be used to continue a running configuration.

Run Number: <u>8478</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>01:55</u> Stop time (from RC): <u>02:10</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>709</u> k $e-\pi n$ evts:	SHMS prescale pretrig: <u>1018</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <input checked="" type="checkbox"/> k Data ok <input checked="" type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

10 μ A

Run Number: <u>8479</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>-1</u> PS2: <u>8</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>02:11</u> Stop time (from RC): <u>02:24</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>948</u> k $e-\pi n$ evts:	SHMS prescale pretrig: <u>1373</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <input checked="" type="checkbox"/> k Data ok <input type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

5 μ A

Run Number: <u>8480</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>-1</u> PS2: <u>7</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>2:31</u> Stop time (from RC): <u>2:44</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>1085</u> k $e-\pi n$ evts:	SHMS prescale pretrig: <u>1585</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <input checked="" type="checkbox"/> k Data ok <input checked="" type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

3 μ A

Run Number: <u>8481</u>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>-1</u> PS2: <u>9</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>02:56</u> Stop time (from RC): <u>03:11</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>1432</u> k $e-\pi n$ evts:	SHMS prescale pretrig: <u>1059</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <input type="checkbox"/> k Data ok <input type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

20 μ A

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k Data ok <input type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts:	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts:	COIN pretrig: _____ k Data ok <input type="checkbox"/> Junk <input type="checkbox"/>
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Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: Par

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles Prod

#1

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

HMS

p: +/- 2.6170 θ (TV): 11.505
From GUI Nearest 0.005

SHMS

p: +/- 2.6170 θ (TV): 11.020
From GUI Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Large ☒
Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm²

Beam position and angle
on target:

3H07A	X	Y
<u>0.04</u>	mm	<u>-0.85</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>0.20</u>	mm	<u>0.55</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>339.2105</u> A B-HALL <u>0.330</u> kG	I-SET (from PSU) <u>866.1340</u> A B-HALL <u>5.502</u> kG	HB
Q2	I-SET (from PSU) <u>269.6661</u> A B-HALL <u>-0.505</u> kG	I-SET (from PSU) <u>549.4910</u> A B-HALL <u>-3.859</u> kG	Q1
Q3	I-SET (from PSU) <u>131.3031</u> A B-HALL <u>0.261</u> kG	I-SET (from PSU) <u>922.9680</u> A B-HALL <u>8.621</u> kG	Q2
D	I-READ <u>797.4060</u> A B-NMR <u>0.7129357</u> T	I-SET (from PSU) <u>607.3040</u> A B-HALL <u>5.878</u> kG If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	Q3
		<u>834.9810</u> A B-NMR <u>-6.092</u> kG	D

Run Number:

8482

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

04:12

Stop time (from RC):

04:26

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 1184 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 1332 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

7 μ A

Run Number:

8483

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

04:34

Stop time (from RC):

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS
prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

40 μ A

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS
prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS
prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19.06.27
yy mm dd

Initials Cam

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles Prod

#2

E_{beam}: 2.758 GeV

I_{beam}: 15/40 μ A

HMS

p: +/- 2.5730 θ (TV): 13.005
From GUI Nearest 0.005

SHMS

p: +/- 2.5730 θ (TV): 13.005
From GUI Nearest 0.005

Collimator:

HMS: Large ☐
Sieve ☐

SHMS: Large ☐
Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off
Size: _____

Beam position and angle
on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>335.1706</u> A	I-SET (from PSU) <u>851.4800</u> A	HB
	B-HALL <u>0.328</u> kG	B-HALL <u>5.409</u> kG	
Q2	I-SET (from PSU) <u>265.4526</u> A	I-SET (from PSU) <u>540.2520</u> A	Q1
	B-HALL <u>-0.499</u> kG	B-HALL <u>-3.817</u> kG	
Q3	I-SET (from PSU) <u>129.7450</u> A	I-SET (from PSU) <u>907.4500</u> A	Q2
	B-HALL <u>0.259</u> kG	B-HALL <u>8.540</u> kG	
D	I-READ <u>787.8000</u> A	I-SET (from PSU) <u>597.0940</u> A	Q3
	B-NMR <u>0.7043880</u> T	B-HALL <u>5.796</u> kG	
If momentum increased:		I-SET (from PSU) <u>820.9420</u> A	D
<input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		B-NMR <u>-6.086</u> kG	

Run Number:

8484

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

05:41

Stop time (from RC):

06:01

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS
prescale
pretrig: 587 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 611 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

A lot of this run had almost no current.
Change from 5:41 - 5:50

Run Number:

8485

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

06:13

Stop time (from RC):

06:52

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS
prescale
pretrig: 1335 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 1389 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

8486

- ☒ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

07:01

Stop time (from RC):

07:16

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

124145
1154221

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

1154121

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

- ☐ Settings Verified?
☐ HV OK?
☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: Cam

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles

#3

E_{beam}: 2.758 GeV

I_{beam}: 35/40 μ A

HMS

p: +/- 2.501 θ (TV): 15.226
From GUI Nearest 0.005

SHMS

p: +/- 2.501 θ (TV): 15.225
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2mm

Beam position and angle on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	<u>325.787</u> A	I-SET (from PSU)	<u>765.6000</u> A	HB
	B-HALL	<u>0.316</u> kG	B-HALL	<u>5.227</u> kG	
Q2	I-SET (from PSU)	<u>258.9889</u> A	I-SET (from PSU)	<u>525.1340</u> A	Q1
	B-HALL	<u>-0.484</u> kG	B-HALL	<u>-3.697</u> kG	
Q3	I-SET (from PSU)	<u>126.1262</u> A	I-SET (from PSU)	<u>882.0570</u> A	Q2
	B-HALL	<u>0.252</u> kG	B-HALL	<u>8.295</u> kG	
D	I-READ	<u>765.600</u> A	I-SET (from PSU)	<u>580.3850</u> A	Q3
	B-NMR	<u>0.6846919</u> T	B-HALL	<u>5.630</u> kG	
	If momentum increased:		I-SET (from PSU)	<u>797.906</u> A	D
	<input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		B-NMR	<u>-5.846</u> kG	

Run Number:

8487

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

07:36

Stop time (from RC):

08:07

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale 1405 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 1342 k
pretrig: _____

$\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Run Number:

8488

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

08:14

Stop time (from RC):

08:34

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale 1370 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 1309 k
pretrig: _____

$\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k

☐ Data ok

☐ Junk

Run Number:

8489

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

08:44

Stop time (from RC):

08:56

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale 262 k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale 282 k
pretrig: _____

$\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale _____ k
pretrig: _____

$e-\pi n$ evts: _____

SHMS prescale _____ k
pretrig: _____

$\Sigma e-\pi n$ evts: _____

COIN pretrig: _____ k

☐ Data ok

☐ Junk

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: H.M.

Use a separate sheet for each configuration.

Configuration Name: _____

Heep Singles
#4

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

E_{beam}: 27.58 GeV

I_{beam}: 35 μ A

Raster: ☒ On ☐ Off

Size: _____

HMS

p: +/- 2.30 θ (TV): 21.20
From GUI Nearest 0.005

SHMS

p: +/- 2.30 θ (TV): 21.20
From GUI Nearest 0.005

Collimator:

HMS: Large ☒
Sieve ☐

SHMS: Large ☒
Sieve ☐

Beam position and angle
on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>300.43</u> A B-HALL <u>0.293</u> kG	I-SET (from PSU) <u>760.4</u> A B-HALL <u>4.862</u> kG	HB
Q2	I-SET (from PSU) <u>238.04</u> A B-HALL <u>-0.442</u> kG	I-SET (from PSU) <u>482.8</u> A B-HALL <u>-3.411</u> kG	Q1
Q3	I-SET (from PSU) <u>115.56</u> A B-HALL <u>0.231</u> kG	I-SET (from PSU) <u>811.68</u> A B-HALL <u>7.643</u> kG	Q2
D	I-READ <u>703.17</u> A B-NMR <u>0.62969</u> T	I-SET (from PSU) <u>533.72</u> A B-HALL <u>5.218</u> kG	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>733.8</u> A B-NMR <u>-5.355</u> kG	D

Run Number:

8490

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

12:05

Stop time (from RC):

12:12

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

Beam off at beginning of run

Run Number:

8491

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

12:49

Stop time (from RC):

13:04

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: 22.6 k

$e-\pi n$ evts:

SHMS
prescale
pretrig: 27.8 k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

8492

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 9
PS3: 9
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

Stop time (from RC):

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

Beam off for controlled access

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/27
yy mm dd

Initials: A.L.

Use a separate sheet for each configuration.

Configuration Name: _____

~~Wagon/Bug/Net~~

π^+ $Q^2 = 0.375$ Center SHMS

E_{beam}: 2.77 GeV

I_{beam}: 37.11 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	B-HALL	<u>58.26</u>	B-HALL	<u>760.65</u>	
Q2	I-SET (from PSU)	A	I-SET (from PSU)	A	Q1
	B-HALL	<u>0.058</u> kg	B-HALL	<u>-4.864</u> kg	
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	B-HALL	<u>46.1696</u>	B-HALL	<u>482.93</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	Q3
	B-HALL	<u>-0.054</u> kg	B-HALL	<u>3.440</u> kg	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-HALL	<u>22.94</u>	B-HALL	<u>811.168</u>	
D	I-SET (from PSU)	A	I-SET (from PSU)	A	D
	B-HALL	<u>0.041</u> kg	B-HALL	<u>-7.694</u> kg	
D	I-READ	A	I-SET (from PSU)	A	D
	B-NMR	<u>136.00</u>	B-HALL	<u>533.74</u>	
D	I-READ	A	I-SET (from PSU)	A	D
	B-NMR	<u>0.12255</u> T	B-HALL	<u>-5.237</u> kg	
D	If momentum increased:		I-SET (from PSU)	A	D
	<input type="checkbox"/> HMS cycled?		B-NMR	<u>733.839</u>	
D	<input type="checkbox"/> SHMS cycled?		B-NMR	<u>5.349</u> kg	

Run Number:

8493

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

19:39

Stop time (from RC):

19:50

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

$e\pi n$ evts:

SHMS prescale
pretrig: k

$\Sigma e\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

Beam current is chaging between 20 μ A \rightarrow 40 μ A.
162 k events.

Run Number:

8494

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

19:58

Stop time (from RC):

20:06

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

$e\pi n$ evts:

SHMS prescale
pretrig: k

$\Sigma e\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

2.3 M events. 37 μ A

Run Number:

8495

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

20:08

Stop time (from RC):

20:11

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

$e\pi n$ evts:

SHMS prescale
pretrig: k

$\Sigma e\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

Beam current 37 μ A. Drift chamber fails.

Run Number:

8496

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

20:12

Stop time (from RC):

20:13

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: k

$e\pi n$ evts:

SHMS prescale
pretrig: k

$\Sigma e\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

35 μ A.

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 06 / 27
yy mm dd

Initials: A.L

Use a separate sheet for each configuration.

Configuration Name: _____

production

$Q^2=0.375$ $W=2.2$ Central SHMS

E_{beam} : 2.77 GeV

I_{beam} : 35 μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle
on target:

3H07A	X	Y
<u>-0.025</u> mm		<u>0.192</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.680</u> mm		<u>0.564</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>58.26</u> A	A	I-SET (from PSU) <u>760.65</u> A	A	HB
	B-HALL <u>0.058</u> kG		B-HALL <u>-4.864</u> kG		
Q2	I-SET (from PSU) <u>46.16</u> A	A	I-SET (from PSU) <u>482.93</u> A	A	Q1
	B-HALL <u>+0.054</u> kG		B-HALL <u>3.440</u> kG		
Q3	I-SET (from PSU) <u>22.94</u> A	A	I-SET (from PSU) <u>811.168</u> A	A	Q2
	B-HALL <u>0.041</u> kG		B-HALL <u>-7.694</u> kG		
D	I-READ <u>136.00</u> A	A	I-SET (from PSU) <u>533.74</u> A	A	Q3
	B-NMR <u>0.1225</u> T		B-HALL <u>-5.237</u> kG		
If momentum increased:			I-SET (from PSU) <u>733.839</u> A	A	D
<input checked="" type="checkbox"/> HMS cycled?			B-NMR <u>5.349</u> kG		
<input checked="" type="checkbox"/> SHMS cycled?					

Run Number:

8497

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

20.33

Stop time (from RC):

20:57

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 28.5 k
pretrig:

$e-\pi n$ evts:

968

SHMS
prescale 155 k
pretrig:

$\Sigma e-\pi n$ evts:

968

COIN
pretrig: 635 k

☒ Data ok

☐ Junk

Comments:

HMS HV alarmed. \therefore run stopped.

Run Number:

8498

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

20.58

Stop time (from RC):

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 57 k
pretrig:

$e-\pi n$ evts:

2033

SHMS
prescale 316 k
pretrig:

$\Sigma e-\pi n$ evts:

968 2033
3001

COIN
pretrig: 1292 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8499

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale _____ k
pretrig:

$e-\pi n$ evts:

SHMS
prescale _____ k
pretrig:

$\Sigma e-\pi n$ evts:

2033

COIN
pretrig: _____ k

☐ Data ok

☒ Junk

Comments:

Run Number:

8500

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

22.04

Stop time (from RC):

23.00

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 73 k
pretrig:

$e-\pi n$ evts:

2448

SHMS
prescale 400 k
pretrig:

$\Sigma e-\pi n$ evts:

2448
5449

COIN
pretrig: 1633 k

☒ Data ok

☐ Junk

Comments:

2 M events.

p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/28
yy mm dd

Initials: Cam

Continuation of Configuration:

Production

$Q^2 = 0.375$ SHMS centre

This sheet is only to be used to continue a running configuration.

Run Number: <u>8501</u>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): <u>N/a</u> Stop time (from RC): <u>N/a</u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k <u>0</u>	SHMS prescale pretrig: _____ k <u>5449</u>	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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Last Shift No Record

Run Number: <u>8502</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>4:06</u> Stop time (from RC): <u>4:11</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>20</u> k <u>139</u>	SHMS prescale pretrig: <u>16</u> k <u>5588</u>	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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BPMs ~~are~~ are off from sticky note values when beam came back

Run Number: <u>8503</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>4:13</u> Stop time (from RC): <u>4:25</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>51</u> k <u>404</u>	SHMS prescale pretrig: <u>38</u> k <u>5992</u>	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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BPMs off from board/sticky values

Run Number: <u>8504</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>4:27</u> Stop time (from RC): <u>5:18</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>241</u> k <u>2011</u>	SHMS prescale pretrig: <u>165</u> k <u>8003</u>	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Poor calibration on full replay results.

Run Number: <u>8505</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>5:18</u> Stop time (from RC): <u>6:02</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>216</u> k <u>1896</u>	SHMS prescale pretrig: <u>149</u> k <u>9899</u>	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <u>8506</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>6:03</u> Stop time (from RC): <u>6:42</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>147</u> k <u>1282</u>	SHMS prescale pretrig: <u>101</u> k <u>11181</u>	COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/28
yy mm dd

Initials: Car

Continuation of Configuration:

Production

$Q^2 = 0.375$ SHMS Centre

This sheet is only to be used to continue a running configuration.

Run Number: <u>8507</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>8</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>0</u>	Start time (from RC): <u>6:52</u> Stop time (from RC): <u>6:58</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e\pi n$ evts: <u>11381</u>	SHMS prescale pretrig: <u> </u> k $\Sigma e\pi n$ evts: <u>11381</u>	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Open Trigger trial for Simona
PS6

220

Run Number: <u>8508</u>	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>12</u> PS2: <u>7</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>9</u> PS6: <u>-1</u>	Start time (from RC): <u>07:09</u> Stop time (from RC): <u>07:35</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>73</u> k $e\pi n$ evts: <u>N/a</u>	SHMS prescale pretrig: <u>111</u> k $\Sigma e\pi n$ evts: <u>N/a</u>	COIN pretrig: <u> </u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

35 μ A instead of 40 μ A \rightarrow 26 mins

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u> </u> PS2: <u> </u> PS3: <u> </u> PS4: <u> </u> PS5: <u> </u> PS6: <u> </u>	Start time (from RC): <u> </u> Stop time (from RC): <u> </u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e\pi n$ evts: <u> </u>	SHMS prescale pretrig: <u> </u> k $\Sigma e\pi n$ evts: <u> </u>	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u> </u> PS2: <u> </u> PS3: <u> </u> PS4: <u> </u> PS5: <u> </u> PS6: <u> </u>	Start time (from RC): <u> </u> Stop time (from RC): <u> </u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e\pi n$ evts: <u> </u>	SHMS prescale pretrig: <u> </u> k $\Sigma e\pi n$ evts: <u> </u>	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u> </u> PS2: <u> </u> PS3: <u> </u> PS4: <u> </u> PS5: <u> </u> PS6: <u> </u>	Start time (from RC): <u> </u> Stop time (from RC): <u> </u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e\pi n$ evts: <u> </u>	SHMS prescale pretrig: <u> </u> k $\Sigma e\pi n$ evts: <u> </u>	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u> </u> PS2: <u> </u> PS3: <u> </u> PS4: <u> </u> PS5: <u> </u> PS6: <u> </u>	Start time (from RC): <u> </u> Stop time (from RC): <u> </u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: <u> </u> k $e\pi n$ evts: <u> </u>	SHMS prescale pretrig: <u> </u> k $\Sigma e\pi n$ evts: <u> </u>	COIN pretrig: <u> </u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/28
yy mm dd

Initials: H.M.

Use a separate sheet for each configuration.

Configuration Name: _____

Production

$Q^2 = 0.425$ SHMS Centre

E_{beam} : 2.77 GeV

I_{beam} : 35 μA

HMS

p : +0.421 $\theta(\text{TV})$: 35.18
From GUI Nearest 0.005

← probably
35.175

SHMS

p : +2.326 $\theta(\text{TV})$: 5.70
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: _____

Beam position and angle
on target:

3H07A	X	Y
	mm	mm
Nomin:		Nomin:
3H07C	X	Y
	mm	mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>53.9</u>	B-HALL	<u>768.1</u>
Q2	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>0.065</u> kG	B-HALL	<u>-4.866</u> kG
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>45.9</u>	B-HALL	<u>488.7</u>
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>-0.046</u> kG	B-HALL	<u>3.479</u> kG
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>22.3</u>	B-HALL	<u>820.4</u>
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>0.040</u> kG	B-HALL	<u>-7.775</u> kG
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>127.7</u>	B-HALL	<u>540.3</u>
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>0.11524</u> T	B-HALL	<u>-5.319</u> kG
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>741.6</u>	B-HALL	<u>5.431</u> kG
D	I-SET (from PSU)	A	I-SET (from PSU)	A
	B-HALL	<u>741.6</u>	B-HALL	<u>5.431</u> kG

Run Number:

8509

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 14
PS2: -1
PS3: 8
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

09:45

Stop time (from RC):

10:35

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 204 k

$e-\pi n$ evts:

2368

SHMS prescale
pretrig: 182 k

$\Sigma e-\pi n$ evts:

COIN pretrig: 2120 k

☒ Data ok

☐ Junk

Run Number:

8510

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 14
PS2: -1
PS3: 8
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

10:58

Stop time (from RC):

11:28

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 127 k

$e-\pi n$ evts:

1459

SHMS prescale
pretrig: 113 k

$\Sigma e-\pi n$ evts:

COIN pretrig: 693 k

☒ Data ok

☐ Junk

Run Number:

8511

☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 8
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

11:41

Stop time (from RC):

12:39

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 1590 k

$e-\pi n$ evts:

2573

SHMS prescale
pretrig: 2816 k

$\Sigma e-\pi n$ evts:

6400

COIN pretrig: 1191 k

☐ Data ok

☐ Junk

Run Number:

8512

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 8
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

12:40

Stop time (from RC):

13:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 249 k

$e-\pi n$ evts:

2946

SHMS prescale
pretrig: 442 k

$\Sigma e-\pi n$ evts:

COIN pretrig: 1356 k

☒ Data ok

☐ Junk

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/28
yy mm dd

Initials: H.M.

Continuation of Configuration:

$$Q^2 = 0.425$$

SHMS centre

This sheet is only to be used to continue a running configuration.

Run Number: 8513	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-3</u> PS3: <u>8</u> PS4: <u>-3</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>13:44</u> Stop time (from RC): <u>14:29</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>1203</u> k $e-\pi n$ evts: <u>1059</u>	SHMS prescale pretrig: <u>6683</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <u>505</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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At beginning ²⁻³ ~~trips~~ ~~during run~~ (beam off/on!!)

Run Number: 8514	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>-3</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>14:31</u> Stop time (from RC): <u>15:05</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>1347</u> k $e-\pi n$ evts: <u>1183</u>	SHMS prescale pretrig: <u>7515</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <u>557</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8515	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-6</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>15:27</u> Stop time (from RC): <u>16:05</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>1027</u> k $e-\pi n$ evts: <u>1183</u>	SHMS prescale pretrig: <u>90</u> k $\Sigma e-\pi n$ evts:	COIN pretrig: <u>545</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8516	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>21</u> PS5: <u>-3</u> PS6: <u>0</u>	Start time (from RC): <u>16:06</u> Stop time (from RC): <u>16:31</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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4-2 M events / 3/4 trigger test run for Simona

Run Number: 8517	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>21</u> PS5: <u>-3</u> PS6: <u>0</u>	Start time (from RC): <u>17:01</u> Stop time (from RC): <u>17:11</u>	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>8</u> PS4: <u>21</u> PS5: <u>-3</u> PS6: <u>0</u>	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19.06.28
yy mm dd

Initials: JZ

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.425$ $\theta_{SHMS} = 7.750^\circ$
LEFT-1

E_{beam} : 2.75 GeV

I_{beam} : _____ μA

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2mm x 2mm

Beam position and angle on target:

3H07A	X	Y
<u>0.009</u>	mm	<u>0.204</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.805</u>	mm	<u>0.555</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>54.7275</u> A B-HALL	I-SET (from PSU) <u>769.2990</u> A B-HALL	HB
	<u>0.054</u> kG	<u>-4.886</u> kG	
Q2	I-SET (from PSU) <u>43.3707</u> A B-HALL	I-SET (from PSU) <u>488.3900</u> A B-HALL	Q1
	<u>-0.048</u> kG	<u>3.479</u> kG	
Q3	I-SET (from PSU) <u>21.5935</u> A B-HALL	I-SET (from PSU) <u>820.3370</u> A B-HALL	Q2
	<u>0.040</u> kG	<u>-7.776</u> kG	
D	I-READ <u>127.9660</u> A B-NMR	I-SET (from PSU) <u>539.7740</u> A B-HALL	Q3
	<u>0.11524</u> T	<u>-5.319</u> kG	
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>742.1340</u> A B-NMR	D
		<u>5.431</u> kG	

Run Number:

8518

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

22:23

Stop time (from RC):

22:25

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig:

SHMS
prescale
pretrig:

COIN
pretrig:

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☐ Data ok

☒ Junk

Comments:

0.3M events

Run Number:

8519

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 10
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

22:26

Stop time (from RC):

23:00

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig:

SHMS
prescale
pretrig:

COIN
pretrig:

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☒ Data ok

☐ Junk

Comments:

Run Number:

8520

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

23:06

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig:

SHMS
prescale
pretrig:

COIN
pretrig:

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☐ Data ok

☒ Junk

Comments:

Run Number:

8521

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 9
PS6: -1

Start time (from RC):

23:10

Stop time (from RC):

23:17

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig:

SHMS
prescale
pretrig:

COIN
pretrig:

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☒ Data ok

☐ Junk

Comments:

250k events

Short run at 60 + 50 μA to check tracking.

$p(e, e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/28
yy mm dd

Initials: GH
NM

Continuation of Configuration:

$Q^2 = 0.425$ Left 1

This sheet is only to be used to continue a running configuration.

Run Number: 8522	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 23:18 Stop time (from RC): 23:59	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 93 k $e-\pi n$ evts: 2534	SHMS prescale pretrig: 135 k $\Sigma e-\pi n$ evts: 3234	COIN pretrig: 608 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments: ~~test~~ run is 50 ~~micro~~ ^{MA} 1.01 M events.

Run Number: 8523	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 00:37 Stop time (from RC): 00:52	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 147 k $e-\pi n$ evts: 4370	SHMS prescale pretrig: 214 k $\Sigma e-\pi n$ evts: 7604	COIN pretrig: 959 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8524	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 00:53 Stop time (from RC): 1:36	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 123 k $e-\pi n$ evts: 3624	SHMS prescale pretrig: 178 k $\Sigma e-\pi n$ evts: 11228	COIN pretrig: 803 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: 8525	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 1:40 Stop time (from RC): 2:21	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 114 k $e-\pi n$ evts: 3285	SHMS prescale pretrig: 172 k $\Sigma e-\pi n$ evts: 14513	COIN pretrig: 895 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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up to 60 nA

Run Number: 8526	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 2:21 Stop time (from RC): 3:07	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 106 k $e-\pi n$ evts: 3025	SHMS prescale pretrig: 160 k $\Sigma e-\pi n$ evts: 17538	COIN pretrig: 837 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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beam when went down for a bit during run

Run Number: 8527	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 3:04 Stop time (from RC): 3:43	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 107 k $e-\pi n$ evts: 3051	SHMS prescale pretrig: 161 k $\Sigma e-\pi n$ evts: 20589	COIN pretrig: 835 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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similar beam behavior as before

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 17/08/29
yy mm dd

Initials: NH

Continuation of Configuration:

$$Q^2 = 0.425$$

Leg 1

This sheet is only to be used to continue a running configuration.

Run Number: <u>8528</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>3:44</u> Stop time (from RC): <u>4:31</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <u>173</u> k $e-\pi n$ evts: <u>3327</u>	SHMS prescale pretrig: <u>170</u> k $\Sigma e-\pi n$ evts: <u>23916</u>	COIN pretrig: <u>824</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Combined replay gives 23218 neutrons

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k $e-\pi n$ evts: _____	SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 06 / 29
yy mm dd

Initials: NH

Use a separate sheet for each configuration.

Configuration Name: _____

$Q = 0.425$ left-2
SHMS $\theta = 9.75^\circ$

E_{beam}: _____ GeV

I_{beam}: varies
60 μ A

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2 x 2 mm

Beam position and angle on target:

3H07A	X	Y
	<u>-0.02</u> mm	<u>0.202</u> mm
Nomin:		
3H07C	X	Y
	<u>-0.723</u> mm	<u>0.596</u> mm
Nomin:		

HMS

SHMS

Q1	I-SET (from PSU) <u>54.66</u> A B-HALL <u>0.05</u> kG	I-SET (from PSU) <u>769.15</u> A B-HALL <u>-4.866</u> kG	HB
Q2	I-SET (from PSU) <u>413.02</u> A B-HALL <u>-0.04</u> kG	I-SET (from PSU) <u>488.40</u> A B-HALL <u>3.480</u> kG	Q1
Q3	I-SET (from PSU) <u>21.08</u> A B-HALL <u>0.041</u> kG	I-SET (from PSU) <u>820.72</u> A B-HALL <u>-7.770</u> kG	Q2
D	I-READ <u>128.37</u> A B-NMR <u>0.11524</u> T	I-SET (from PSU) <u>559.76</u> A B-HALL <u>-5.320</u> kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>742.24</u> A B-NMR <u>5.431</u> kG	D

Run Number:

8529

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☒ Dumpling

PS1: 10
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

4:54

Stop time (from RC):

5:16

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 126 k

SHMS prescale
pretrig: 94 k

COIN pretrig: 28 k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

- ☒ Data ok
☐ Junk

Comments:

40 μ A

Run Number:

8530

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

5:41

Stop time (from RC):

6:16

- ☒ Settings Verified?
☒ HV OK?
☐ 50k OK?

HMS prescale
pretrig: 122 k

SHMS prescale
pretrig: 119 k

COIN pretrig: 742 k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

- ☒ Data ok
☐ Junk

Comments:

70 μ A

Run Number:

8531

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

6:16

Stop time (from RC):

6:56

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 164 k

SHMS prescale
pretrig: 160 k

COIN pretrig: 997 k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

- ☒ Data ok
☐ Junk

Comments:

70 μ A

Run Number:

8532

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

6:57

Stop time (from RC):

7:37

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 156 k

SHMS prescale
pretrig: 153 k

COIN pretrig: 444 k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

- ☒ Data ok
☐ Junk

Comments:

70 μ A

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/tpi/

Date: 19/06/29
yy mm dd

Initials: NH

Continuation of Configuration:

$Q = 0.425$ left-2

This sheet is only to be used to continue a running configuration.

Run Number: <u>8533</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>7:38</u> Stop time (from RC): <u>8:20</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale <u>159</u> k pretrig: <u>155</u> $e-\pi n$ evts: <u>3515</u>	SHMS prescale <u>155</u> k pretrig: <u>155</u> $\Sigma e-\pi n$ evts: <u>13641</u>	COIN pretrig: <u>974</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <u>8534</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>8:28</u> Stop time (from RC): <u>9:30</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale <u>241</u> k pretrig: <u>241</u> $e-\pi n$ evts: <u>5411</u>	SHMS prescale <u>236</u> k pretrig: <u>236</u> $\Sigma e-\pi n$ evts: <u>19052</u>	COIN pretrig: <u>1472</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <u>8535</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>9:31</u> Stop time (from RC): <u>10:28</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale <u>233</u> k pretrig: <u>233</u> $e-\pi n$ evts: <u>5172</u>	SHMS prescale <u>228</u> k pretrig: <u>228</u> $\Sigma e-\pi n$ evts: <u>24223</u>	COIN pretrig: <u>1416</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number: <u>8536</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>10:30</u> Stop time (from RC): <u>11:00</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale <u>126</u> k pretrig: <u>126</u> $e-\pi n$ evts: <u>2836</u>	SHMS prescale <u>123</u> k pretrig: <u>123</u> $\Sigma e-\pi n$ evts: <u>27059</u>	COIN pretrig: <u>764</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale _____ k pretrig: _____ $e-\pi n$ evts: _____	SHMS prescale _____ k pretrig: _____ $\Sigma e-\pi n$ evts: _____	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/29
yy mm dd

Initials: JZ

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.375$ $W = 2.2$

low ϵ SHMS $\theta_{TV} = 29.7^\circ$

$E_{beam} = 2.751$ GeV

$I_{beam} = 70$ μA

HMS

$p = \pm 0.4480$ $\theta(TV) = 31.965$
From GUI Nearest 0.005

SHMS

$p = \pm 2.3000$ $\theta(TV) = 9.705$
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2mm x 2mm

Beam position and angle on target:

3H07A	X	0.121	mm	Y	0.185	mm
Nomin:				Nomin:		
3H07C	X	0.277	mm	Y	0.185	mm
Nomin:				Nomin:		

HMS

SHMS

Q1	I-SET (from PSU)	A	136.0360	A	760.6540	A
	B-HALL		0.056	kG	-4.864	kG
Q2	I-SET (from PSU)	A	46.1696	A	482.9300	A
	B-HALL		-0.053	kG	3.438	kG
Q3	I-SET (from PSU)	A	22.9497	A	811.1680	A
	B-HALL		0.042	kG	-7.695	kG
D	I-READ	A	136.0360	A	533.7410	A
	B-NMR		0.12264	T	-5.237	kG
	If momentum increased:		I-SET (from PSU)			
	<input type="checkbox"/> HMS cycled?		733.84		A	
	<input type="checkbox"/> SHMS cycled?		5.346		kG	

Run Number:

8537

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 8
PS6: -1

Start time (from RC):

13:04

Stop time (from RC):

14:02

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 288 k

$e\pi n$ evts:

6431

SHMS prescale
pretrig: 225 k

$\Sigma e\pi n$ evts:

6431

COIN pretrig: 1846 k

☒ Data ok

☐ Junk

Run Number:

8538

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 9
PS4: 8
PS5: -1
PS6: -1

Start time (from RC):

14:03

Stop time (from RC):

14:54

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 269 k

$e\pi n$ evts:

6254

SHMS prescale
pretrig: 209 k

$\Sigma e\pi n$ evts:

12685

COIN pretrig: 1708 k

☒ Data ok

☐ Junk

Run Number:

8539

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 8
PS6: -1

Start time (from RC):

15:14

Stop time (from RC):

16:19

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 280 k

$e\pi n$ evts:

6316

SHMS prescale
pretrig: 217 k

$\Sigma e\pi n$ evts:

18495

COIN pretrig: 1760 k

☒ Data ok

☐ Junk

Run Number:

8540

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 8
PS6: -1

Start time (from RC):

16:20

Stop time (from RC):

17:20

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 281 k

$e\pi n$ evts:

6299

SHMS prescale
pretrig: 218 k

$\Sigma e\pi n$ evts:

25294

COIN pretrig: 1760 k

☒ Data ok

☐ Junk

p(e,e' π)n Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 14 / 6 / 29
yy mm dd

Initials: SK

Continuation of Configuration:

$$Q^2 = 0.375$$

SHMS $\text{Le} \approx 2 - 9.7^\circ$

This sheet is only to be used to continue a running configuration.

Run Number: 8541	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>17:36</u> Stop time (from RC): <u>17:41</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
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Comments:

Junk, ~~no~~ no beam from MCC, advised it'd be a few minutes

Run Number: 8542	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input checked="" type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: <u>13</u> PS2: <u>-1</u> PS3: <u>9</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u>	Start time (from RC): <u>18:30</u> Stop time (from RC): <u>18:50</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
----------------------------	---	--	---	---	---	---	---

Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
-------------	--	--	---	--	---	---	--

Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
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Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 6 / 29
yy mm dd

Initials: SK

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.375$

SHMS Left 1

$E_{\text{beam}} = 2.758$ GeV

$I_{\text{beam}} = 58$ ~~70~~ (40) μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm

Beam position and angle on target:

3H07A	X	Y
<u>-0.100</u> mm		<u>0.209</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.897</u> mm		<u>0.582</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>58.2461</u> A B-HALL <u>0.057</u> kG	I-SET (from PSU) <u>766.6540</u> A B-HALL <u>-4.8866</u> kG	HB
Q2	I-SET (from PSU) <u>46.1696</u> A B-HALL <u>0.054</u> kG	I-SET (from PSU) <u>482.9300</u> A B-HALL <u>3.438</u> kG	Q1
Q3	I-SET (from PSU) <u>22.9497</u> A B-HALL <u>0.040</u> kG	I-SET (from PSU) <u>811.168</u> A B-HALL <u>-7.695</u> kG	Q2
D	I-READ <u>135.81</u> A B-NMR <u>0.1226376</u> T	I-SET (from PSU) <u>533.7410</u> A B-HALL <u>-5.237</u> kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>733.8390</u> A B-NMR <u>5.349</u> kG	D

Run Number:

8543

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

19:59

Stop time (from RC):

19:37

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts: _____

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Dummy target

Run Number:

8544

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

19:47

Stop time (from RC):

20:37

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 208 k

$e-\pi n$ evts: 5599

SHMS prescale
pretrig: 255 k

$\Sigma e-\pi n$ evts: 5599

COIN
pretrig: 208 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8545

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

20:38

Stop time (from RC):

21:18

- ☒ Settings Verified?
☒ HV OK?
☒ 50k OK?

HMS prescale
pretrig: 207 k

$e-\pi n$ evts: 5864

SHMS prescale
pretrig: 256 k

$\Sigma e-\pi n$ evts: 11463

COIN
pretrig: 2050 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8546

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 13
PS2: -1
PS3: 9
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:19

Stop time (from RC):

22:27

- ☒ Settings Verified?
☒ HV OK?
☐ 50k OK?

HMS prescale
pretrig: 300 k

$e-\pi n$ evts: 10090

SHMS prescale
pretrig: 448 k

$\Sigma e-\pi n$ evts: 21553

COIN
pretrig: 3614 k

☒ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 6 / 29
yy mm dd

Initials: PM

Continuation of Configuration:

$$Q^2 = 0.375$$

SHMS Left - 1

This sheet is only to be used to continue a running configuration.

Run Number: 8547	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 13 PS2: -1 PS3: 9 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 22:27 Stop time (from RC): 23:01	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: 166 k $e-\pi n$ evts: 4639	SHMS prescale pretrig: 207 k $\Sigma e-\pi n$ evts: 28192	COIN pretrig: 1668 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/29
yy mm dd

Initials: P4

Use a separate sheet for each configuration.

Configuration Name: _____

2.7 GeV Heep check

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

Raster: ☒ On ☐ Off

Size: 2x2

HMS

p: +/- 1.729 θ (TV): 37.1
From GUI Nearest 0.005

SHMS

p: +/- 1.729 θ (TV): 37.1
From GUI Nearest 0.005

Beam position and angle on target:

3H07A	X	Y
<u>0.146</u> mm		<u>0.205</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.954</u> mm		<u>0.577</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>225.1827</u> A	I-SET (from PSU) <u>571.15</u> A	HB
	B-HALL <u>0.219</u> kG	B-HALL <u>-3.589</u> kG	
Q2	I-SET (from PSU) <u>178.9613</u> A	I-SET (from PSU) <u>362.88</u> A	Q1
	B-HALL <u>-322</u> kG	B-HALL <u>2.588</u> kG	
Q3	I-SET (from PSU) <u>87.3252</u> A	I-SET (from PSU) <u>610.24</u> A	Q2
	B-HALL <u>0.171</u> kG	B-HALL <u>-5.736</u> kG	
D	I-READ <u>528.33</u> A	I-SET (from PSU) <u>401.16</u> A	Q3
	B-NMR <u>47337</u> T	B-HALL <u>-3.913</u> kG	
If momentum increased:		I-SET (from PSU)	D
<input type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?		<u>551.76</u> A B-NMR <u>4.040</u> kG	

Run Number:

8548

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 5
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

23:52

Stop time (from RC):

00:10

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts: _____

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Run Number:

8549

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 5
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

00:10

Stop time (from RC):

00:25

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 752 k

$e-\pi n$ evts: _____

SHMS prescale
pretrig: 779 k

$\Sigma e-\pi n$ evts: _____

COIN
pretrig: 478 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8551

- ☒ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 5
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

00:38

Stop time (from RC):

00:53

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts: _____

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Pumping

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts: _____

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/30
yy mm dd

Initials: NH

Use a separate sheet for each configuration.

Configuration Name: _____

elastic singles
 $\theta = 21.2$

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle
on target:

3H07A	X	Y
<u>0.094</u>	mm	<u>0.242</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.770</u>	mm	<u>0.607</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>300.43</u> A	A	I-SET (from PSU) <u>760.35</u> A	A	HB
	B-HALL <u>0.291</u> kG		B-HALL <u>4.861</u> kG		
Q2	I-SET (from PSU) <u>238.07</u> A	A	I-SET (from PSU) <u>482.8</u> A	A	Q1
	B-HALL <u>0.441</u> kG		B-HALL <u>-3.412</u> kG		
Q3	I-SET (from PSU) <u>115.53</u> A	A	I-SET (from PSU) <u>811.64</u> A	A	Q2
	B-HALL <u>0.231</u> kG		B-HALL <u>7.642</u> kG		
D	I-READ <u>703.32</u> A	A	I-SET (from PSU) <u>533.72</u> A	A	Q3
	B-NMR <u>0.62961</u> T		B-HALL <u>5.215</u> kG		
If momentum increased:				I-SET (from PSU) <u>733.92</u> A	D
<input type="checkbox"/> HMS cycled?				B-NMR <u>-5.355</u> kG	
<input type="checkbox"/> SHMS cycled?					

Run Number:

8552

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 5
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

2:07

Stop time (from RC):

2:08

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

forgot prescalers

Run Number:

8553

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 7
PS2: -1
PS3: 7
PS4: X
PS5: X
PS6: X

Start time (from RC):

2:09

Stop time (from RC):

2:11

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

forgot to hit save on prescalers!

Run Number:

8554

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 7
PS2: -1
PS3: 7
PS4: X
PS5: X
PS6: X

Start time (from RC):

2:12

Stop time (from RC):

2:33

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

wrong trigger!!

Run Number:

8555

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 7
PS2: -1
PS3: 7
PS4: X
PS5: X
PS6: X

Start time (from RC):

2:33

Stop time (from RC):

2:41

☒ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

$e-\pi n$ evts:

SHMS
prescale
pretrig: k

$\Sigma e-\pi n$ evts:

COIN
pretrig: k

☐ Data ok

☒ Junk

Comments:

beam tripped then stayed down

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19 / 06 / 30
yy mm dd

Initials: NH

Continuation of Configuration:

elastic singles
 $\theta = 21.2$

This sheet is only to be used to
continue a running configuration.

Run Number: 8556	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: 7 PS2: -1 PS3: 7 PS4: X PS5: X PS6: X	Start time (from RC): 2:42 Stop time (from RC): 3:01	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input checked="" type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

wrong trigger!

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: k $e-\pi n$ evts:	SHMS prescale pretrig: k $\Sigma e-\pi n$ evts:	COIN pretrig: k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/30
yy mm dd

Initials: NW

Use a separate sheet for each configuration.

Configuration Name: _____

elastic singles

$\theta = 30.4$

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle
on target:

3H07A	X	Y
<u>-0.033</u> mm		<u>0.170</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.928</u> mm		<u>0</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU)	A	I-SET (from PSU)	A	HB
	<u>256.48</u>		<u>648.85</u>		
Q2	B-HALL		B-HALL		Q1
	<u>0.251</u> kG		<u>4.132</u> kG		
Q3	I-SET (from PSU)	A	I-SET (from PSU)	A	Q2
	<u>203.21</u>		<u>412.32</u>		
	B-HALL		B-HALL		
	<u>-0.372</u> kG		<u>-2.922</u> kG		
D	I-SET (from PSU)	A	I-SET (from PSU)	A	Q3
	<u>96.66</u>		<u>693.12</u>		
	B-HALL		B-HALL		
	<u>0.195</u> kG		<u>6.500</u> kG		
D	I-READ	A	I-SET (from PSU)	A	D
	<u>600.00</u>		<u>455.72</u>		
	B-NMR		B-HALL		
	<u>0.53763</u> T		<u>4.387</u> kG		
D	If momentum increased:		I-SET (from PSU)	A	D
	<input type="checkbox"/> HMS cycled?		<u>626.84</u>		
	<input checked="" type="checkbox"/> SHMS cycled?		B-NMR		
			<u>-4.544</u> kG		

Run Number:

8557

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 4
PS3: 3
PS4: X
PS5: X
PS6: X

Start time (from RC):

3:20

Stop time (from RC):

3:41

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 1568 k

e- π n evts:

SHMS
prescale
pretrig: 1125 k

Σ e- π n evts:

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Run Number:

8558

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 4
PS3: 3
PS4: -1
PS5: X
PS6: X

Start time (from RC):

3:42

Stop time (from RC):

4:02

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: 1497 k

e- π n evts:

SHMS
prescale
pretrig: 1073 k

Σ e- π n evts:

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Run Number:

8559

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 4
PS3: 3
PS4: X
PS5: X
PS6: X

Start time (from RC):

4:10

Stop time (from RC):

4:25

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 191 k

e- π n evts:

SHMS
prescale
pretrig: 166 k

Σ e- π n evts:

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Running 40 μ A

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: _____ k

e- π n evts:

SHMS
prescale
pretrig: _____ k

Σ e- π n evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: 19/06/30
yy mm dd

Initials: NH

Use a separate sheet for each configuration.

HMS

SHMS

Configuration Name: _____

elastic singles
 $\theta = 33.6^\circ$

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

HMS

p: +/- 1.8480 θ (TV): 33.640
From GUI Nearest 0.005

SHMS

p: +/- 1.8480 θ (TV): 33.645
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
<u>0.015</u>	mm	<u>0.147</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-0.758</u>	mm	<u>0.597</u> mm
Nomin:		Nomin:

241.31

Q1

0.234

Q2

191.1

Q3

92.80

0.183

I-SET (from PSU)	A	I-SET (from PSU)	A
<u>610.45</u>		<u>610.50</u>	
B-HALL	kG	B-HALL	kG
<u>3.859</u>		<u>3.859</u>	
I-SET (from PSU)	A	I-SET (from PSU)	A
<u>387.88</u>		<u>387.92</u>	
B-HALL	kG	B-HALL	kG
<u>-2720</u>		<u>-2720</u>	
I-SET (from PSU)	A	I-SET (from PSU)	A
<u>652.32</u>		<u>652.32</u>	
B-HALL	kG	B-HALL	kG
<u>6.092</u>		<u>6.091</u>	
I-READ	A	I-SET (from PSU)	A
<u>564.30</u>		<u>428.80</u>	
B-NMR	kG	B-HALL	kG
<u>0.50583</u>		<u>4.140</u>	
If momentum increased:		I-SET (from PSU)	A
<input type="checkbox"/> HMS cycled?		<u>589.68</u>	
<input type="checkbox"/> SHMS cycled?		B-NMR	kG
		<u>-4.288</u>	

Run Number:

8560

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 1
PS2: 4
PS3: 3
PS4: X
PS5: X
PS6: X

Start time (from RC):

4:38

Stop time (from RC):

4:38

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN pretrig: _____ k

☐ Data ok

☒ Junk

Comments:

Prescaler test

Run Number:

8561

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 1
PS2: 0
PS3: 0
PS4: X
PS5: X
PS6: X

Start time (from RC):

4:39

Stop time (from RC):

4:45

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 505 k

$e-\pi n$ evts:

SHMS prescale
pretrig: 867 k

$\Sigma e-\pi n$ evts:

COIN pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Dummy 40uA

Run Number:

8562

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

5:00

Stop time (from RC):

5:00

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN pretrig: _____ k

☐ Data ok

☒ Junk

Comments:

Coda Restart

Run Number:

8563

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 1
PS2: 0
PS3: 0
PS4: X
PS5: X
PS6: X

Start time (from RC):

5:03

Stop time (from RC):

5:03

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

$e-\pi n$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-\pi n$ evts:

COIN pretrig: _____ k

☐ Data ok

☒ Junk

Comments:

Prescale test

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Date: ____/____/____
yy mm dd

Initials: ____

Continuation of Configuration:

elastic singles
 $\theta = 33.64^\circ$

*This sheet is only to be used to
continue a running configuration.*

Run Number: <i>8564</i>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <i>-1</i> PS2: <i>3</i> PS3: <i>3</i> PS4: <i>X</i> PS5: <i>X</i> PS6: <i>X</i>	Start time (from RC): <i>5:05</i> Stop time (from RC): <i>5:27</i>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <i>800</i> k <i>e-πn</i> evts:	SHMS prescale pretrig: <i>1127</i> k <i>Σ e-πn</i> evts:	COIN pretrig: <i>X</i> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: <i>8565</i>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <i>-1</i> PS2: <i>3</i> PS3: <i>3</i> PS4: <i>X</i> PS5: <i>X</i> PS6: <i>X</i>	Start time (from RC): <i>5:27</i> Stop time (from RC): <i>5:48</i>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale pretrig: <i>780</i> k <i>e-πn</i> evts:	SHMS prescale pretrig: <i>1099</i> k <i>Σ e-πn</i> evts:	COIN pretrig: <i>X</i> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k <i>e-πn</i> evts:	SHMS prescale pretrig: _____ k <i>Σ e-πn</i> evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k <i>e-πn</i> evts:	SHMS prescale pretrig: _____ k <i>Σ e-πn</i> evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k <i>e-πn</i> evts:	SHMS prescale pretrig: _____ k <i>Σ e-πn</i> evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number:	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC):	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK?	HMS prescale pretrig: _____ k <i>e-πn</i> evts:	SHMS prescale pretrig: _____ k <i>Σ e-πn</i> evts:	COIN pretrig: _____ k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

$p(e,e'\pi)n$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/fpi/

Use a separate sheet for each configuration.

Date: 19/08/30
yy mm dd

Initials: NH

HMS

SHMS

Configuration Name: _____

Re-do elastic
Singles $\theta = 21.2$

E_{beam}: 2.758 GeV

I_{beam}: 70 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle
on target:

3H07A	X	0.223	Y	0.223
		0.006 mm		-0.415 mm
Nomin:			Nomin:	
3H07C	X	-0.264	Y	0.388
		-0.264 mm		0.388 mm
Nomin:			Nomin:	

Q1	I-SET (from PSU)	A	300.43	A	760.50	A	HB
	B-HALL		0.294	kG	4.860	kG	
Q2	I-SET (from PSU)	A	238.04	A	482.88	A	Q1
	B-HALL		-0.443	kG	-3.411	kG	
Q3	I-SET (from PSU)	A	115.54	A	811.60	A	Q2
	B-HALL		0.230	kG	7.642	kG	
D	I-READ	A	703.11	A	533.72	A	Q3
	B-NMR		0.62963	T	5.215	kG	
	If momentum increased:						D
	<input checked="" type="checkbox"/> HMS cycled?						
	<input checked="" type="checkbox"/> SHMS cycled?						
	I-SET (from PSU)	A	733.88	A			
	B-NMR				-5.355	kG	

Run Number:

8566

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 3
PS3: 2
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

6:14

Stop time (from RC):

6:36

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 280 k
pretrig: _____

$e-\pi n$ evts:

SHMS
prescale 1499 k
pretrig: _____

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Run Number:

8567

- ☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: -1
PS2: 3
PS3: 2
PS4: X
PS5: X
PS6: X

Start time (from RC):

6:38

Stop time (from RC):

6:52

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 23112 k
pretrig: _____

$e-\pi n$ evts:

SHMS
prescale 14907 k
pretrig: _____

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale _____ k
pretrig: _____

$e-\pi n$ evts:

SHMS
prescale _____ k
pretrig: _____

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Run Number:

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale _____ k
pretrig: _____

$e-\pi n$ evts:

SHMS
prescale _____ k
pretrig: _____

$\Sigma e-\pi n$ evts:

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments: