

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

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

Date: 19 / 06 / 30
yy mm dd

Initials: GH

Use a separate sheet for each configuration.

Configuration Name: _____

Heep - coin

3.6 GeV

E_{beam}: 3.660 GeV

I_{beam}: 70 μ A

HMS

p: +02.1140
From GUI

θ (TV): 35.650
Nearest 0.005

SHMS

p: +2.3000
From GUI

θ (TV): 32.395
Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Purpose:

☐ Production

☐ Test

☐ Optics

☒ Other: Heep

Raster: ☒ On ☐ Off

Size: 2x2 mm²

Beam position and angle on target:

| | | |
|-----------|---|----------|
| 3H07A | X | Y |
| -0.29 mm | | 0.157 mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| -0.782 mm | | 0.529 mm |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | | |
|----|---|---|--|---|----|
| Q1 | I-SET (from PSU) 275.3549 B-HALL 0.267 kg | A | I-SET (from PSU) 760.6540 B-HALL -4.866 kg | A | HB |
| Q2 | I-SET (from PSU) 218.8714 B-HALL -0.401 kg | A | I-SET (from PSU) 482.9300 B-HALL 3.440 kg | A | Q1 |
| Q3 | I-SET (from PSU) 106.6753 B-HALL 0.212 kg | A | I-SET (from PSU) 811.1680 B-HALL -7.699 kg | A | Q2 |
| D | I-READ 646.8430 B-NMR 0.5787934 T | A | I-SET (from PSU) 533.7410 B-HALL -5.237 kg | A | Q3 |
| | If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled? | | I-SET (from PSU) 733.8390 B-NMR 5.355 kg | A | D |

Run Number:

8569

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

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

Start time (from RC):

19:18

Stop time (from RC):

19:32

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

$e-\pi$ evts:

SHMS prescale
pretrig: k

$\Sigma e-\pi$ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

Carbon hole looked good first time

Run Number:

8570

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

PS1: 5
PS2: -1
PS3: 3
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:55

Stop time (from RC):

22:11

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 94 k

$e-\pi$ evts:

SHMS prescale
pretrig: 380 k

$\Sigma e-\pi$ evts:

COIN pretrig: 143 k

☒ Data ok

☐ Junk

Comments:

94k/380k/143k PS PT \rightarrow

Run Number:

8571

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

PS1: 5
PS2: -1
PS3: 3
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

22:11

Stop time (from RC):

22:26

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 84 k

$e-\pi$ evts:

SHMS prescale
pretrig: 340 k

$\Sigma e-\pi$ evts:

COIN pretrig: 128 k

☒ Data ok

☐ Junk

Comments:

84k/340k/128k PS PT \rightarrow

Run Number:

8572

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

PS1: 5
PS2: -1
PS3: 3
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

22:36

Stop time (from RC):

22:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

$e-\pi$ evts:

SHMS prescale
pretrig: k

$\Sigma e-\pi$ 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 / 6 / 30
yy mm dd

Initials: SK

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 1.45$

SHMS Right 11.76°

E_{beam}: 3.660 GeV

I_{beam}: 70 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm

Beam position and angle on target:

| | | |
|-----------------|---|-----------------|
| 3H07A | X | Y |
| <u>6.027</u> mm | | <u>0.182</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>6.779</u> mm | | <u>0.618</u> mm |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | |
|----|---|---|---------------------------------------|----|
| Q1 | I-SET (from PSU) <u>59.8336</u> A | A | I-SET (from PSU) <u>797.8970</u> A | HB |
| | B-HALL <u>0.151</u> kG | | B-HALL <u>-5.050</u> kG | |
| Q2 | I-SET (from PSU) <u>122.2579</u> A | A | I-SET (from PSU) <u>506.447</u> A | Q1 |
| | B-HALL <u>-0.207</u> kG | | B-HALL <u>3.600</u> kG | |
| Q3 | I-SET (from PSU) <u>59.8336</u> A | A | I-SET (from PSU) <u>850.668</u> A | Q2 |
| | B-HALL <u>0.118</u> kG | | B-HALL <u>-8.021</u> kG | |
| D | I-READ <u>360.37</u> A | A | I-SET (from PSU) <u>559.7320</u> A | Q3 |
| | B-NMR <u>0.323638</u> T | | B-HALL <u>-5.448</u> kG | |
| | If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled? | | I-SET (from PSU) <u>769.5740</u> A | D |
| | | | B-NMR <u>5.601</u> kG | |

Run Number:

8573

Comments:

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

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

Start time (from RC):

23:28

Stop time (from RC):

23:53

☒ 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

3/4 Test Run ~3m events

Run Number:

8574

Comments:

☒ 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):

00:11

Stop time (from RC):

00:14

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS

prescale 1200 k
pretrig: _____

$e-\pi n$ evts: 594

SHMS

prescale 1800 k
pretrig: _____

$\Sigma e-\pi n$ evts: 594

COIN

pretrig: 600 k

☒ Data ok

☐ Junk

Run Number:

8575

Comments:

☒ 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):

00:18

Stop time (from RC):

00:24

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS

prescale 14 k
pretrig: _____

$e-\pi n$ evts: 671

SHMS

prescale 22 k
pretrig: _____

$\Sigma e-\pi n$ evts: 1265

COIN

pretrig: 70 k

☒ Data ok

☐ Junk

Run Number:

8576

Comments:

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

PS1: 13
PS2: 7
PS3: -1
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

01:06

Stop time (from RC):

02:09

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS

prescale 126 k
pretrig: _____

$e-\pi n$ evts: 6068

SHMS

prescale 190 k
pretrig: _____

$\Sigma e-\pi n$ evts: 7333

COIN

pretrig: 581 k

☒ Data ok

☐ Junk

Periods of lower current (Hall B bleedthrough)

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

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

Date: 19/07/01
yy mm dd

Initials: Can

Continuation of Configuration:

$$Q^2 = 1.45$$

SHMS Right 11.76°

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

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8577 | <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>13</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>2:09</u> Stop time (from RC): <u>2:45</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>186</u> k $e-\pi n$ evts: <u>6543</u> | SHMS prescale pretrig: <u>206</u> k $\Sigma e-\pi n$ evts: <u>13876</u> | COIN pretrig: <u>683</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments: Stopped Run for Hall B due to scan of bleed through (Good run!!!)

| | | | | | | | |
|----------------------------|---|--|---|---|--|---|--|
| Run Number: 8578 | <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>13</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>2:56</u> Stop time (from RC): <u>3:10</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>22</u> k $e-\pi n$ evts: <u>1187</u> | SHMS prescale pretrig: <u>34</u> k $\Sigma e-\pi n$ evts: <u>15063</u> | COIN pretrig: <u>120</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|--|

Comments:

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8579 | <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>13</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>3:41</u> Stop time (from RC): <u>4:34</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>198</u> k $e-\pi n$ evts: <u>9508</u> | SHMS prescale pretrig: <u>301</u> k $\Sigma e-\pi n$ evts: <u>24571</u> | COIN pretrig: <u>996</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments:

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8580 | <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>13</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>4:39</u> Stop time (from RC): <u>5:19</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>128</u> k $e-\pi n$ evts: <u>6173</u> | SHMS prescale pretrig: <u>194</u> k $\Sigma e-\pi n$ evts: <u>30744</u> | COIN pretrig: <u>646</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments:

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: 8581 | <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>13</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>5:22</u> Stop time (from RC): <u>5:28</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>23</u> k $e-\pi n$ evts: <u>1131</u> | SHMS prescale pretrig: <u>35</u> k $\Sigma e-\pi n$ evts: <u>31,875</u> | COIN pretrig: <u>116</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

Comments:

| | | | | | | | |
|----------------------------|---|--|---|--|--|--|--|
| Run Number: 8582 | <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>11</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>5:46</u> Stop time (from RC): <u>6:10</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" 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: 40 μ l

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

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

Date: 19 / 07 / 01
yy mm dd

Initials: Cam

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 1.45$

SHMS Right 13.76

E_{beam}: 3.647 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>0.02</u> mm | | <u>0.23</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>-0.78</u> mm | | <u>0.61</u> mm |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | | |
|----|--|---|--|---|----|
| Q1 | I-SET (from PSU) <u>153.8991</u> A B-HALL <u>0.151</u> kG | A | I-SET (from PSU) <u>7.97.65</u> A B-HALL <u>-5.048</u> kG | A | HB |
| Q2 | I-SET (from PSU) <u>122.2579</u> A B-HALL <u>-0.207</u> kG | A | I-SET (from PSU) <u>506.67</u> A B-HALL <u>3.600</u> kG | A | Q1 |
| Q3 | I-SET (from PSU) <u>59.8336</u> A B-HALL <u>0.117</u> kG | A | I-SET (from PSU) <u>850.72</u> A B-HALL <u>-8.021</u> kG | A | Q2 |
| D | I-READ <u>361.0000</u> A B-NMR <u>0.3236203</u> T | A | I-SET (from PSU) <u>560.29</u> A B-HALL <u>-5.488</u> kG | A | Q3 |
| | If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled? | | I-SET (from PSU) <u>769.02</u> A B-NMR <u>5.595</u> kG | A | D |

Run Number:

8583

- ☒ 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):

7:03

Stop time (from RC):

7:47

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 158 k

SHMS prescale
pretrig: 171 k

COIN
pretrig: 588 k

$e-\pi n$ evts:
8848

$\Sigma e-\pi n$ evts:
8848

☒ Data ok
☐ Junk

Run Number:

8584

- ☒ 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):

7:48

Stop time (from RC):

8:26

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 141.9 k

SHMS prescale
pretrig: 153.4 k

COIN
pretrig: 526 k

$e-\pi n$ evts:
7803

$\Sigma e-\pi n$ evts:
16651

☒ 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
pretrig: _____ k

SHMS prescale
pretrig: _____ k

COIN
pretrig: _____ k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☐ Data ok
☐ Junk

Setting is continued at Run 8655.

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

SHMS prescale
pretrig: _____ k

COIN
pretrig: _____ k

$e-\pi n$ evts:

$\Sigma e-\pi n$ evts:

☐ Data ok
☐ Junk

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

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

Date: 19 / 7 / 1
yy mm dd

Initials: _____

Use a separate sheet for each configuration.

Configuration Name: _____

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

middle Σ , Right 2

E_{beam} : 3.65 GeV

I_{beam} : 20 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>175.7924</u> | B-HALL | <u>760.654</u> | |
| Q2 | I-SET (from PSU) | A | I-SET (from PSU) | A | Q1 |
| | B-HALL | <u>0.171</u> | B-HALL | <u>-4.866</u> | |
| Q3 | I-SET (from PSU) | A | I-SET (from PSU) | A | Q2 |
| | B-HALL | <u>139.6732</u> | B-HALL | <u>482.93</u> | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | Q3 |
| | B-HALL | <u>-0.242</u> | B-HALL | <u>3.438</u> | |
| D | I-READ | A | I-SET (from PSU) | A | D |
| | B-NMR | <u>68.2769</u> | B-HALL | <u>811.188</u> | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | D |
| | B-HALL | <u>0.132</u> | B-HALL | <u>-7.696</u> | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | D |
| | B-HALL | <u>412.17</u> | B-HALL | <u>533.741</u> | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | D |
| | B-HALL | <u>0.3695216</u> | B-HALL | <u>-5.28</u> | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | D |
| | B-HALL | <u>733.839</u> | B-HALL | <u>5.349</u> | |

Run Number:

8585

- ☒ 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):

14:09

Stop time (from RC):

14:39

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

HMS prescale
pretrig: 317 k

SHMS prescale
pretrig: 160 k

COIN pretrig: 2955 k

$e-\pi n$ evts:
23445

$\Sigma e-\pi n$ evts:
16554

☒ Data ok
☐ Junk

Comments:

20 μ A

added 8 cuts for HMS

Run Number:

8586

- ☒ 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):

14:39

Stop time (from RC):

15:19

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

HMS prescale
pretrig: 317 k

SHMS prescale
pretrig: 181 k

COIN pretrig: 3883 k

$e-\pi n$ evts:
18716

$\Sigma e-\pi n$ evts:
35,270

☒ Data ok
☐ Junk

Comments:

Run Number:

8587

- ☒ 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):

15:20

Stop time (from RC):

15:50

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

HMS prescale
pretrig: 372 k

SHMS prescale
pretrig: 188 k

COIN pretrig: 3505 k

$e-\pi n$ evts:
19292

$\Sigma e-\pi n$ evts:
54,562

☒ Data ok
☐ Junk

Comments:

Run Number:

8588

- ☒ 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):

15:56

Stop time (from RC):

16:20:35

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

HMS prescale
pretrig: 260 k

SHMS prescale
pretrig: _____ k

COIN pretrig: _____ k

$e-\pi n$ evts:
260

$\Sigma e-\pi n$ evts:

☐ Data ok
☐ Junk

Comments:

DUMMY RUN

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

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

Date: 19/09/09.
yy mm dd

Initials: GH

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.375$ Middle ϵ

$\theta = 5.75$

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

E_{beam} : 3.65 GeV

I_{beam} : 10 μA

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

| | | |
|-------------|------------|---|
| 3H07A | X | Y |
| 0.005 mm | 0.211 mm | |
| Nomin: 0.0 | Nomin: 0.2 | |
| 3H07C | X | Y |
| -0.909 mm | 0.393 mm | |
| Nomin: -0.9 | Nomin: 0.4 | |

HMS

SHMS

| | | | | | |
|----|---|---|--|---|----|
| Q1 | I-SET (from PSU) 175.7924 B-HALL Not working kg | A | I-SET (from PSU) 760.6546 B-HALL -4.861 kg | A | HB |
| Q2 | I-SET (from PSU) 139.6732 B-HALL -0.243 kg | A | I-SET (from PSU) 482.9308 B-HALL +3.441 kg | A | Q1 |
| Q3 | I-SET (from PSU) 68.2769 B-HALL 0.133 kg | A | I-SET (from PSU) 811.1680 B-HALL -7.692 kg | A | Q2 |
| D | I-READ 412.3608 B-NMR 0.3695822 T | A | I-SET (from PSU) 533.7410 B-HALL -5.228 kg | A | Q3 |
| | If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled? | | I-SET (from PSU) 733.8590 B-NMR +5.349 kg | A | D |

Run Number:

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

PS1: 0
PS2: -1
PS3: -1
PS4: 0
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:

Runs 8599-8602

short runs to center beam on target.

Run Number:

8603

- ☒ 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):

Stop time (from RC):

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

HMS prescale
pretrig: 285 k
 $e-\pi n$ evts: 17612

SHMS prescale
pretrig: 138 k
 $\Sigma e-\pi n$ evts: 72174

COIN pretrig: 1373 k
☒ Data ok
☐ Junk

Comments:

FIRST PRODUCTION RUN !!! (since power outage) July 10, 2019

Run Number:

8604

- ☒ 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):

Stop time (from RC):

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

HMS prescale
pretrig: 237 k
 $e-\pi n$ evts: 14,049

SHMS prescale
pretrig: 115 k
 $\Sigma e-\pi n$ evts: 86223

COIN pretrig: 1213 k
☒ Data ok
☐ Junk

Comments:

Run Number:

8605

- ☒ 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):

Stop time (from RC):

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

HMS prescale
pretrig: 210 k
 $e-\pi n$ evts: 12128

SHMS prescale
pretrig: 103 k
 $\Sigma e-\pi n$ evts: 98351

COIN pretrig: 1334 k
☒ Data ok
☐ Junk

Comments:

Current increased to 15 μA

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

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

Date: 19/07/10
yy mm dd

Initials: CY

Continuation of Configuration:

$Q^2 = 0.375$ Middle e

$\theta = 5.75$ (right 2)

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

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: 8606 | <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>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>02:28</u> Stop time (from RC): <u>03:05</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>205</u> k SHMS prescale <u>101</u> k COIN pretrig: <u>1375</u> k | $e-\pi n$ evts: <u>11693</u> $\Sigma e-\pi n$ evts: <u>110044</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

15 μA

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: 8607 | <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>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>03:06</u> Stop time (from RC): <u>03:37</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>202</u> k SHMS prescale <u>100</u> k COIN pretrig: <u>1373</u> k | $e-\pi n$ evts: <u>11604</u> $\Sigma e-\pi n$ evts: <u>121648</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

15 μA

| | | | | | | | |
|----------------------------|---|--|---|---|---|---|--|
| Run Number: 8608 | <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>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>03:37</u> Stop time (from RC): <u>04:13</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>157</u> k SHMS prescale <u>77</u> k COIN pretrig: <u>1062</u> k | $e-\pi n$ evts: <u>9032</u> $\Sigma e-\pi n$ evts: <u>130680</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|---|--|

15 μA

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8609 | <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>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>04:13</u> Stop time (from RC): <u>04:51</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>183</u> k SHMS prescale <u>91</u> k COIN pretrig: <u>1253</u> k | $e-\pi n$ evts: <u>10407</u> $\Sigma e-\pi n$ evts: <u>141087</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

15 μA

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: 8610 | <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>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>04:52</u> Stop time (from RC): <u>05:33</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>322</u> k SHMS prescale <u>159</u> k COIN pretrig: <u>2213</u> k | $e-\pi n$ evts: <u>18236</u> $\Sigma e-\pi n$ evts: <u>159323</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

15 μA

| | | | | | | | |
|----------------------------|---|--|---|---|--|---|--|
| Run Number: 8611 | <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>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>06:00</u> Stop time (from RC): <u>06:05</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>181</u> k SHMS prescale <u>91</u> k COIN pretrig: <u>12614</u> k | $e-\pi n$ evts: <u>1057</u> $\Sigma e-\pi n$ evts: <u>160380</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|--|

short run (before beam energy mas.)

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

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

Use a separate sheet for each configuration.

Date: / /
yy mm dd

Initials:

Configuration Name:

$Q^2 = 0.375$ Middle e

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other:

E_{beam} : 3.65 GeV

I_{beam} : ~15 μA

Raster: ☒ On ☐ Off

Size: 2x2

Beam position and angle on target:

| | | |
|------------------|---|-----------------|
| 3H07A | X | Y |
| <u>-0.006</u> mm | | <u>0.240</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>-0.902</u> mm | | <u>0.371</u> mm |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | | |
|----|--|---|-------------------|---|----|
| Q1 | I-SET (from PSU) | A | I-SET (from PSU) | A | HB |
| | <u>176.18</u> | | <u>760.35</u> | | |
| Q2 | B-HALL | | B-HALL | | Q1 |
| | <u>-0.002</u> kG | | <u>-486.80</u> kG | | |
| Q3 | I-SET (from PSU) | A | I-SET (from PSU) | A | Q2 |
| | <u>139.55</u> | | <u>487.84</u> | | |
| D | B-HALL | | B-HALL | | Q3 |
| | <u>-0.243</u> kG | | <u>3.442</u> kG | | |
| D | I-SET (from PSU) | A | I-SET (from PSU) | A | D |
| | <u>67.76</u> | | <u>811.64</u> | | |
| D | B-HALL | | B-HALL | | D |
| | <u>0.133</u> kG | | <u>-7692</u> kG | | |
| D | I-READ | | I-SET (from PSU) | A | D |
| | <u>412.20</u> A | | <u>533.72</u> | | |
| D | B-NMR | | B-HALL | | D |
| | <u>0.36957</u> T | | <u>-5.228</u> kG | | |
| D | If momentum increased: | | I-SET (from PSU) | A | D |
| | <input checked="" type="checkbox"/> HMS cycled? | | <u>733.88</u> | | |
| D | <input checked="" type="checkbox"/> SHMS cycled? | | B-NMR | | D |
| | | | <u>5.343</u> kG | | |

Run Number:

8612

- ☒ 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):

10:04

Stop time (from RC):

10:27

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

HMS prescale
pretrig: 191 k

$e-\pi n$ evts:

13429

SHMS prescale
pretrig: 73 k

$\Sigma e-\pi n$ evts:

13429

COIN pretrig: 1089 k

☒ Data ok

☐ Junk

Run Number:

8613

- ☒ 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):

10:34

Stop time (from RC):

11:31

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

HMS prescale
pretrig: 475 k

$e-\pi n$ evts:

33571

SHMS prescale
pretrig: 183 k

$\Sigma e-\pi n$ evts:

47000

COIN pretrig: 2677 k

☒ Data ok

☐ Junk

Run Number:

8614

- ☒ 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):

11:32

Stop time (from RC):

12:33

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

HMS prescale
pretrig: 409 k

$e-\pi n$ evts:

28438

SHMS prescale
pretrig: 154 k

$\Sigma e-\pi n$ evts:

75438

COIN pretrig: 2160 k

☒ Data ok

☐ Junk

Run Number:

8615

- ☒ 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):

12:34

Stop time (from RC):

13:00

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

HMS prescale
pretrig: 109 k

$e-\pi n$ evts:

8191

SHMS prescale
pretrig: 42 k

$\Sigma e-\pi n$ evts:

83629

COIN pretrig: 424 k

☒ Data ok

☐ Junk

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

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

Date: 19 / 07 / 10
yy mm dd

Initials: XL

Continuation of Configuration:

$Q^2 = 0.375$, Middle E

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

| | | | | | | | |
|---------------------|---|--|---|--|--|--|---|
| Run Number: 8656 | <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: -1 PS4: -1 PS5: -1 PS6: -1 | Start time (from RC): 13:46 Stop time (from RC): 14:16 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" 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 current $\sim 7 \mu A$, many trips, Junk!

| | | | | | | | |
|---------------------|---|--|---|---|--|---|--|
| Run Number: 8617 | <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: -1 PS4: -1 PS5: -1 PS6: -1 | Start time (from RC): 14:18 Stop time (from RC): 15:00 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 407 k $e-\pi n$ evts: 27829 | SHMS prescale pretrig: 157 k $\Sigma e-\pi n$ evts: 111458 | COIN pretrig: 285 k <input checked="" type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk |
|---------------------|---|--|---|---|--|---|--|

Comments:

| | | | | | | | |
|---------------------|---|--|---|---|--|---|---|
| Run Number: 8618 | <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: -1 PS4: -1 PS5: -1 PS6: -1 | Start time (from RC): 15:01 Stop time (from RC): 15:57 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 631 k $e-\pi n$ evts: 41763 | SHMS prescale pretrig: 244 k $\Sigma e-\pi n$ evts: 153221 | COIN pretrig: 454 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|--|---|---|--|---|---|

Comments:

| | | | | | | | |
|--------------------------------|---|--|---|---|---|---|---|
| Run Number: 8619 | <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: 13 PS2: -1 PS3: -1 PS4: -1 PS5: -1 PS6: -1 | Start time (from RC): 16:16 Stop time (from RC): 17:00 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 130 k $e-\pi n$ evts: 1187 | SHMS prescale pretrig: 43 k $\Sigma e-\pi n$ evts: — | COIN pretrig: 401 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 |
|-------------|--|--|---|--|--|--|--|

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:

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

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

Date: 19/07/10
yy mm dd

Initials: *HH*

Use a separate sheet for each configuration.

Configuration Name:

$Q^2 = 0.375$ Middle E
 $\theta = 8.87^\circ$

$E_{\text{beam}} = 3.6$ GeV

$I_{\text{beam}} =$ μA

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other:

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

| | | |
|--------|----|--------|
| 3H07A | X | Y |
| -0.024 | mm | 0.226 |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| -0.879 | mm | 0.390 |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | |
|----|---|---|----|
| Q1 | I-SET (from PSU) 175.7924 A B-HALL NOT WORKING KG | I-SET (from PSU) 760.6540 A B-HALL -4.859 KG | HB |
| Q2 | I-SET (from PSU) 139.6732 A B-HALL -0.243 KG | I-SET (from PSU) 482.9300 A B-HALL 3.442 KG | Q1 |
| Q3 | I-SET (from PSU) 68.2769 A B-HALL 0.135 KG | I-SET (from PSU) 811.1680 A B-HALL -7.694 KG | Q2 |
| D | I-READ 412.4550 A B-NMR 0.3695736 T | I-SET (from PSU) 533.7910 A B-HALL -5.225 KG | Q3 |
| | If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled? | I-SET (from PSU) 733.8390 A B-NMR +5.343 KG | D |

Run Number:

8620

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

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

Start time (from RC):

17:38:19

Stop time (from RC):

18:10:20

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

HMS prescale
pretrig: 130 k

$e-\pi n$ evts:
1072
~~266~~

SHMS prescale
pretrig: 31 k

$\Sigma e-\pi n$ evts:
—

COIN pretrig: 497 k

- ☒ Data ok
☐ Junk

Comments:

Beam current 19.71 μA

Run Number:

8621

- ☒ 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):

18:23

Stop time (from RC):

18:24

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

HMS prescale
pretrig: ~~100~~ k

$e-\pi n$ evts:
—

SHMS prescale
pretrig: 3 k

$\Sigma e-\pi n$ evts:
—

COIN pretrig: k

- ☐ Data ok
☒ Junk

Comments:

Increase prescale factors

Run Number:

8622

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

18:25

Stop time (from RC):

19:25

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

HMS prescale
pretrig: 362 k

$e-\pi n$ evts:
50690
50794

SHMS prescale
pretrig: 410 k

$\Sigma e-\pi n$ evts:
50794

COIN pretrig: 4072 k

- ☒ Data ok
☐ Junk

Comments:

20 μA

57x rates ~ 600 kHz $e-\pi n$ evts = 50690

Run Number:

8623

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

19:26

Stop time (from RC):

19:54

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

HMS prescale
pretrig: 169 k

$e-\pi n$ evts:
23834
23897

SHMS prescale
pretrig: 194 k

$\Sigma e-\pi n$ evts:
74688

COIN pretrig: 1901 k

- ☒ Data ok
☐ Junk

Comments:

$e-\pi n$! 23834 ~~20 MB IFE IFE 2~~ when don it send it in field sh it is zombie

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

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

Date: 19 / 07 / 10
yy mm dd

Initials: JH

Continuation of Configuration:

$Q^2 = 0.375$ middle

$\theta = 8.87^\circ$

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

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| Run Number: <u>8624</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>12</u> PS2: <u>-1</u> PS3: <u>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>19:56:17</u> Stop time (from RC): <u>20:25:45</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>161</u> k pretrig: $e-\pi n$ evts: <u>22462</u> | SHMS prescale <u>182</u> k pretrig: $\Sigma e-\pi n$ evts: <u>77150</u> | COIN pretrig: <u>1805</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|--|--|

$e-\pi n$ evts: 22457

| | | | | | | | |
|----------------------------|---|---|---|--|---|---|--|
| Run Number: <u>8625</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>12</u> PS2: <u>-1</u> PS3: <u>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>20:24:54</u> Stop time (from RC): <u>20:50:28</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK? | HMS prescale <u>322</u> k pretrig: $e-\pi n$ evts: | SHMS prescale <u>364</u> k pretrig: $\Sigma e-\pi n$ evts: | COIN pretrig: <u>3549</u> k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk |
|----------------------------|---|---|---|--|---|---|--|

Beam was really bad-constant trips. Accelerator having vlm trips

| | | | | | | | |
|----------------------------|---|---|---|---|--|---|--|
| Run Number: <u>8626</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>12</u> PS2: <u>-1</u> PS3: <u>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>21:00:24</u> Stop time (from RC): <u>22:00:48</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>322</u> k pretrig: $e-\pi n$ evts: <u>45339</u> | SHMS prescale <u>364</u> k pretrig: $\Sigma e-\pi n$ evts: <u>142489</u> | COIN pretrig: <u>3549</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|---|--|

~~4645909~~
45195

| | | | | | | | |
|----------------------------|---|---|---|---|---|---|--|
| Run Number: <u>8627</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>12</u> PS2: <u>-1</u> PS3: <u>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>22:01:26</u> Stop time (from RC): <u>22:56:50</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>33</u> k pretrig: $e-\pi n$ evts: <u>45909</u> | SHMS prescale <u>372</u> k pretrig: $\Sigma e-\pi n$ evts: | COIN pretrig: <u>3777</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|---|---|--|

Check this run: It was fully replayed but ~~at~~ no ptes were shown.

| | | | | | | | |
|-------------|--|--|---|--|--|--|---|
| 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 _____ 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 |
|-------------|--|--|---|--|--|--|---|

| | | | | | | | |
|-------------|--|--|---|--|--|--|---|
| 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 _____ 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 |
|-------------|--|--|---|--|--|--|---|

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

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

Date: 19/07/10
yy mm dd

Initials: JH

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.375$ middle e

$\theta = 10.865^\circ$

$E_{\text{beam}} = 3.6$ GeV

$I_{\text{beam}} = 10.13$ μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2×2

Beam position and angle on target:

| | | |
|--------|----|--------|
| 3H07A | X | Y |
| 0.026 | mm | 0.207 |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| -0.013 | mm | 0.398 |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | |
|----|---|---|----|
| Q1 | I-SET (from PSU) 176.16 A B-HALL -0.002 kg | I-SET (from PSU) 760.35 A B-HALL -4.840 kg | HB |
| Q2 | I-SET (from PSU) 139.55 A B-HALL -0.242 kg | I-SET (from PSU) 482.76 A B-HALL 3.442 kg | Q1 |
| Q3 | I-SET (from PSU) 67.74 A B-HALL 0.134 kg | I-SET (from PSU) 811.68 A B-HALL -7.692 kg | Q2 |
| D | I-READ 412.20 A B-NMR 0.36957 T | I-SET (from PSU) 533.72 A B-HALL -5.227 kg | Q3 |
| | If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled? | I-SET (from PSU) 733.84 A B-NMR 5.343 kg | D |

Run Number:

8628

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

23:13:54

Stop time (from RC):

23:58:09

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 250

$e-\pi n$ evts: 28703

SHMS prescale
pretrig: 212 k

$\Sigma e-\pi n$ evts: 28703

COIN pretrig: 2200 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8629

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

23:59:28

Stop time (from RC):

00:04

☒ Settings Verified?

☐ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 32 k

$e-\pi n$ evts: 3666

SHMS prescale
pretrig: 27 k

$\Sigma e-\pi n$ evts: 32369

COIN pretrig: 289 k

☒ Data ok

☐ Junk

Comments:

Note! some channels were dead JUNK k We have some events from the replay while this run was going.

Run Number:

8630

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

01:14

Stop time (from RC):

01:52

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale
pretrig: 214 k

$e-\pi n$ evts: 24469

SHMS prescale
pretrig: 181 k

$\Sigma e-\pi n$ evts: 56838

COIN pretrig: 1868 k

☒ Data ok

☐ Junk

Comments:

Run Number:

8631

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

PS1: 12
PS2: -1
PS3: 10
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

01:53

Stop time (from RC):

2:35

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 196 k

$e-\pi n$ evts: 23101

SHMS prescale
pretrig: 146 k

$\Sigma e-\pi n$ evts: 79939

COIN pretrig: 1550 k

☒ Data ok

☐ Junk

Comments:

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

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

Date: 19/07/11
yy mm dd

Initials: CY

Continuation of Configuration:

$Q^2 = 0.375$, Middle E

$\theta = 10.865$

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

| | | | | | | | |
|---------------------|---|---|---|---|--|---|--|
| Run Number: 8632 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 02:35 Stop time (from RC): 04:03 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 247 k $e-\pi n$ evts: 29810 | SHMS prescale pretrig: 211 k $\Sigma e-\pi n$ evts: 109749 | COIN pretrig: 1511 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|---|--|

| | | | | | | | |
|---------------------|---|---|---|---|--|---|---|
| Run Number: 8633 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 04:25 Stop time (from RC): 05:53 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 165 k $e-\pi n$ evts: 20177 | SHMS prescale pretrig: 141 k $\Sigma e-\pi n$ evts: 129926 | COIN pretrig: 950 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|---|---|

| | | | | | | | |
|---------------------|---|---|---|---|--|---|--|
| Run Number: 8634 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 05:54 Stop time (from RC): 06:59 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 226 k $e-\pi n$ evts: 27118 | SHMS prescale pretrig: 193 k $\Sigma e-\pi n$ evts: 157044 | COIN pretrig: 1383 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|---|--|

| | | | | | | | |
|---------------------|---|---|---|---|--|---|---|
| Run Number: 8635 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 6:59 Stop time (from RC): 7:50 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 120 k $e-\pi n$ evts: 14348 | SHMS prescale pretrig: 102 k $\Sigma e-\pi n$ evts: 171393 | COIN pretrig: 834 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|---|---|

| | | | | | | | |
|---------------------|---|---|---|---|--|---|--|
| Run Number: 8636 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 7:51 Stop time (from RC): 8:36 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 202 k $e-\pi n$ evts: 23827 | SHMS prescale pretrig: 172 k $\Sigma e-\pi n$ evts: 195220 | COIN pretrig: 1442 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|---|--|

| | | | | | | | |
|---------------------|---|---|---|---|--|--|---|
| Run Number: 8637 | <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: 12 PS2: -1 PS3: 10 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 8:45 Stop time (from RC): 9:22 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 255 k $e-\pi n$ evts: 717 | SHMS prescale pretrig: 668 k $\Sigma e-\pi n$ evts: 717 | COIN pretrig: 226 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|--|--|---|

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

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

Date: 19 / 07 / 19
yy mm dd

Initials: _____

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = .375$, middle E

$W = 2.2$ $\Theta = 12.87$

$E_{\text{beam}} = 3.651$ GeV

$I_{\text{beam}} =$ _____ μA

HMS

$p = +1.35$

$\theta(\text{TV}) = 15.830$

From GUI

Nearest 0.005

SHMS

$p = +2.30$

$\theta(\text{TV}) = 12.865$

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 |
| -0.04 | mm | 0.174 |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| -0.818 | mm | 0.48 |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | | |
|----|---------------------------------------|----|--------------------------------------|----|----|
| Q1 | I-SET (from PSU) 176.18 B-HALL | A | I-SET (from PSU) 760.30 B-HALL | A | HB |
| | 0.171 | kG | -4.860 | kG | |
| Q2 | I-SET (from PSU) 139.51 B-HALL | A | I-SET (from PSU) 482.68 B-HALL | A | Q1 |
| | -0.241 | kG | 3.441 | kG | |
| Q3 | I-SET (from PSU) 67.74 B-HALL | A | I-SET (from PSU) 811.64 B-HALL | A | Q2 |
| | 0.132 | kG | -7.692 | kG | |
| D | I-READ 412.41 B-NMR | A | I-SET (from PSU) 533.80 B-HALL | A | Q3 |
| | 0.36957 | T | -5.227 | kG | |
| | If momentum increased: | | I-SET (from PSU) | | D |
| | <input type="checkbox"/> HMS cycled? | | 733.84 B-NMR | | |
| | <input type="checkbox"/> SHMS cycled? | | 5.343 | | kG |

Run Number:

8645

Comments:

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

23:08

Stop time (from RC):

23:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 167 k
pretrig: @25 μA

$e-\pi n$ evts:

15,348

SHMS
prescale 167 k
pretrig: @25 μA

$\Sigma e-\pi n$ evts:

15,348

COIN
pretrig: 0.9 k
@25 μA

☒ Data ok

☐ Junk

Started at 15 μA , ended at 25 μA

MCC was working on delivering higher current

Run Number:

8646

Comments:

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

00:41

Stop time (from RC):

01:49

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 141 k
pretrig:

$e-\pi n$ evts:

26,137

SHMS
prescale 178 k
pretrig:

$\Sigma e-\pi n$ evts:

41,485

COIN
pretrig: 1548 k

☒ Data ok

☐ Junk

Beam was very unstable when current > 15 μA . As such, most of the run was taken at 15 μA .

Run Number:

8647

Comments:

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

01:51

Stop time (from RC):

02:42

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 128 k
pretrig:

$e-\pi n$ evts:

22,875

SHMS
prescale 160 k
pretrig:

$\Sigma e-\pi n$ evts:

64,360

COIN
pretrig: 1643 k

☒ Data ok

☐ Junk

Started at 15 μA & ended at 15 μA , but ~20 min in b/t was at 25 μA

Run Number:

8648

Comments:

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

02:43

Stop time (from RC):

03:54

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale 152 k
pretrig:

$e-\pi n$ evts:

28,195

SHMS
prescale 141 k
pretrig:

$\Sigma e-\pi n$ evts:

92,555

COIN
pretrig: 1519 k

☒ Data ok

☐ Junk

15 μA

p(e,e' π)n Run Sheet

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

Date: 19 / 07 / 14
yy mm dd

Initials: _____

Continuation of Configuration:

$Q^2 = 0.375$, Middle e

$W = 2.2$, $\theta = 12.87$

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

| | | | | | | | |
|---|---|---|---|---|--|--|---|
| Run Number: <u>8649</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>12</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>03:54</u> Stop time (from RC): <u>05:14</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>150</u> k $e-\pi n$ evts: <u>28014</u> | SHMS prescale pretrig: <u>189</u> k $\Sigma e-\pi n$ evts: <u>120,569</u> | COIN pretrig: <u>1570</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: <u>15 μA beam current</u> | | | | | | | |

| | | | | | | | |
|--|---|---|---|---|---|--|---|
| Run Number: <u>8650</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>12</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>05:14</u> Stop time (from RC): <u>07:05</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>159</u> k $e-\pi n$ evts: <u>30,108</u> | SHMS prescale pretrig: <u>200</u> k $\Sigma e-\pi n$ evts: <u>150,677</u> | COIN pretrig: <u>1484</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: <u>Started at 15 μA, had problems with beam trapping, so MCC reduced current to 12 μA</u> | | | | | | | |

| | | | | | | | |
|--|---|---|---|---|---|--|--|
| Run Number: <u>8651</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>12</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>07:05</u> Stop time (from RC): <u>08:04</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>77</u> k $e-\pi n$ evts: <u>14419</u> | SHMS prescale pretrig: <u>97</u> k $\Sigma e-\pi n$ evts: <u>165096</u> | COIN pretrig: <u>659</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: <u>12 μA. Stopped early b/c MCC was taking had some issue with magnets.</u> | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|--|---|--|
| Run Number: <u>8652</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>12</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>08:05</u> Stop time (from RC): <u>09:12</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>100</u> k $e-\pi n$ evts: <u>18270</u> | SHMS prescale pretrig: <u>126</u> k $\Sigma e-\pi n$ evts: <u>183966</u> | COIN pretrig: <u>866</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|--|---|---|---|--|
| Run Number: <u>8653</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>12</u> PS2: <u>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>9:12</u> Stop time (from RC): <u>10:00</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>82.7</u> k $e-\pi n$ evts: <u>15367</u> | SHMS prescale pretrig: <u>104</u> k $\Sigma e-\pi n$ evts: <u>199333</u> | COIN pretrig: <u>737</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------------|---|---|---|---|--|--|--|
| Run Number: <u>8654</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>-1</u> PS3: <u>11</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>10:07</u> Stop time (from RC): <u>11:17</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 $e-\pi n$ evts: <u>1258</u> | SHMS prescale pretrig: <u>45.9</u> k $\Sigma e-\pi n$ evts: | COIN pretrig: <u>252</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: <u>Dummy target</u> | | | | | | | |

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

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

Date: 19/07/14
yy mm dd

Initials: WL

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 1.45$, Low E
 $W = 2.02$, $\theta_{\text{SHMS}} = 13.76$

E_{beam}: 3.65 GeV

I_{beam}: 15 μA

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) B-HALL 153.8990 A 0.152 kG | A | I-SET (from PSU) B-HALL 797.8970 A -5.044 kG | A | HB |
| Q2 | I-SET (from PSU) B-HALL 122.2579 A -0.207 kG | A | I-SET (from PSU) B-HALL 506.4470 A 3.603 kG | A | Q1 |
| Q3 | I-SET (from PSU) B-HALL 59.8336 A 0.115 kG | A | I-SET (from PSU) B-HALL 850.668 A -8.019 kG | A | Q2 |
| D | I-READ B-NMR 360.9970 A 0.32358 T | A | I-SET (from PSU) B-HALL 554.7320 A -5.475 kG | A | Q3 |
| | If momentum increased: <input type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled? | | I-SET (from PSU) B-NMR 769.5740 A 5.588 kG | | D |

Run Number:

8655

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: -9
PS6: -9

Start time (from RC):

12:02

Stop time (from RC):

12:14

☒ 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:

Junk, no beam

Run Number:

8656

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: -9
PS6: -9

Start time (from RC):

12:23

Stop time (from RC):

12:27

☒ 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:

Junk, no beam

Run Number:

8657

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

PS1: 12
PS2: -1
PS3: 11
PS4: -1
PS5: -9
PS6: -9

Start time (from RC):

13:17

Stop time (from RC):

13:36

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

pretrig: 0.68 k

$e-\pi n$ evts: 25

SHMS prescale

pretrig: 2.1 k

$\Sigma e-\pi n$ evts: 25

COIN pretrig: 13 k

☒ Data ok

☐ Junk

Comments:

Short run. Ended to change PS1, PS3

Run Number:

8658

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

PS1: 9
PS2: -1
PS3: 6
PS4: -1
PS5: -9
PS6: -9

Start time (from RC):

13:37

Stop time (from RC):

14:15

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale

pretrig: 32 k

$e-\pi n$ evts: 48

SHMS prescale

pretrig: 98 k

$\Sigma e-\pi n$ evts: 73

COIN pretrig: 25 k

☒ Data ok

☐ Junk

Comments:

Changed PS1=9; PS3=6, Ended run, beam off

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

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

Date: 19 / 7 / 14
yy mm dd

Initials: WL

Continuation of Configuration:

$Q^2 = 1.45$, Low E

$W = 2.02$, $\theta_{\text{SKMS}} = 13.7^\circ$

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

| | | | | | | | |
|---------------------|---|--|---|---|--|--|--|
| Run Number: 8658 | <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: 9 PS2: -1 PS3: 6 PS4: -1 PS5: -9 PS6: -1 | Start time (from RC): 14:31 Stop time (from RC): 15:00 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 58 k $e-\pi n$ evts: 92 | SHMS prescale pretrig: 178 k $\Sigma e-\pi n$ evts: 165 | COIN pretrig: 23.8 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|--|---|---|--|--|--|

Comments:

$I_{\text{beam}} \sim 25 \mu\text{A}$ (Hall A down!)

| | | | | | | | |
|---------------------|--|--|---|--|--|--|---|
| Run Number: 8660 | <input checked="" type="checkbox"/> LH2 10cm <input checked="" 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 checked="" type="checkbox"/> Junk |
|---------------------|--|--|---|--|--|--|---|

Comments:

Junk. Stop to change PS1.

| | | | | | | | |
|---------------------|---|--|---|---|---|---|---|
| Run Number: 8661 | <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: 11 PS2: -1 PS3: 6 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 15:08 Stop time (from RC): 15:48 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 208 k $e-\pi n$ evts: 2272 | SHMS prescale pretrig: 231 k $\Sigma e-\pi n$ evts: 2272 | COIN pretrig: 101 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|--|---|---|---|---|---|

Comments:

LH2; PS1 = 11; PS3 = 6. $I_{\text{beam}} \sim 25 \mu\text{A} \sim 51 \text{mC}$

| | | | | | | | |
|---------------------|---|--|---|---|---|---|---|
| Run Number: 8662 | <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: 11 PS2: -1 PS3: 6 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 16:10 Stop time (from RC): 17:40 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 194 k $e-\pi n$ evts: 2196 | SHMS prescale pretrig: 213 k $\Sigma e-\pi n$ evts: 4468 | COIN pretrig: 107 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|--|---|---|---|---|---|

Comments:

~~Ratty~~ Ratty Beam (Postel) $\sim 46 \text{mC}$

| | | | | | | | |
|---------------------|---|---|---|---|---|---|--|
| Run Number: 8663 | <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: 11 PS2: -1 PS3: 6 PS4: -1 PS5: 0 PS6: 1 | Start time (from RC): 17:55 Stop time (from RC): 19:04 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 224 k $e-\pi n$ evts: 2517 | SHMS prescale pretrig: 247 k $\Sigma e-\pi n$ evts: 6985 | COIN pretrig: 99 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|---|---|--|

Comments:

$\sim 54 \text{mC}$

| | | | | | | | |
|---------------------|---|---|---|---|---|---|--|
| Run Number: 8664 | <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: 11 PS2: -1 PS3: 6 PS4: -1 PS5: 0 PS6: 1 | Start time (from RC): 19:05 Stop time (from RC): 20:06 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 211 k $e-\pi n$ evts: 2414 | SHMS prescale pretrig: 233 k $\Sigma e-\pi n$ evts: 9399 | COIN pretrig: 94 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|---|---|---|--|

Comments:

$\sim 51 \text{mC}$

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

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

Date: 19 7 14
yy mm dd

Initials: MJ

Continuation of Configuration:

$Q^2 = 1.45$, Low E
 $W = 2.02$, $\theta_{\text{miss}} = 13.76$

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

| | | | | | | | |
|----------------------------|---|--|---|---|---|---|--|
| Run Number: <u>8665</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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>20:06</u> Stop time (from RC): <u>22:04</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>251</u> k $e-\pi n$ evts: 1000 | SHMS prescale pretrig: <u>276</u> k $\Sigma e-\pi n$ evts: 1000 | COIN pretrig: <u>132</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|---|--|

2712 12111

| | | | | | | | |
|----------------------------|--|--|---|---|---|--|--|
| Run Number: <u>8666</u> | <input checked="" type="checkbox"/> LH2 10cm <input checked="" 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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>22:04</u> Stop time (from RC): <u>23:19</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>140</u> k $e-\pi n$ evts: <u>1522</u> | SHMS prescale pretrig: <u>154</u> k $\Sigma e-\pi n$ evts: <u>13633</u> | COIN pretrig: <u>77</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|--|--|---|---|---|--|--|

| | | | | | | | |
|----------------------------|---|--|---|--|---|--|--|
| Run Number: <u>8667</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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>22:20</u> Stop time (from RC): <u>00:08</u> | <input checked="" type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>21</u> k $e-\pi n$ evts: <u>231</u> | SHMS prescale pretrig: <u>230</u> k $\Sigma e-\pi n$ evts: <u>13864</u> | COIN pretrig: <u>33</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|--|---|--|--|

| | | | | | | | |
|----------------------------|---|--|--|---|---|--|--|
| Run Number: <u>8668</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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>00:33</u> Stop time (from RC): <u>1:36</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>160</u> k $e-\pi n$ evts: <u>1701</u> | SHMS prescale pretrig: <u>177</u> k $\Sigma e-\pi n$ evts: <u>15565</u> | COIN pretrig: <u>73</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|--|---|---|--|--|

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: <u>8669</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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>01:36</u> Stop time (from RC): <u>02:50</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>127</u> k $e-\pi n$ evts: <u>2072</u> | SHMS prescale pretrig: <u>207</u> k $\Sigma e-\pi n$ evts: <u>17637</u> | COIN pretrig: <u>04</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|---|
| Run Number: <u>8670</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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>2:51</u> Stop time (from RC): <u>4:23</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>231</u> k $e-\pi n$ evts: <u>2478</u> | SHMS prescale pretrig: <u>255</u> k $\Sigma e-\pi n$ evts: <u>20115</u> | COIN pretrig: <u>104</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|---|

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

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

Date: 19/07/15
yy mm dd

Initials: N.K

Use a separate sheet for each configuration.

Configuration Name: _____

Q2-1.95 low E

W = 2.02 LEFT

E_{beam}: 3.65 GeV

I_{beam}: 20 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>0.003</u> mm | <u>0.177</u> mm | |
| Nomin: | Nomin: | |
| 3H07C | X | Y |
| <u>-0.867</u> mm | <u>0.525</u> mm | |
| Nomin: | Nomin: | |

HMS

SHMS

| | | | |
|----|---|---|----|
| Q1 | I-SET (from PSU) B-HALL <u>154.16</u> A <u>0.150</u> kG | I-SET (from PSU) B-HALL <u>797.65</u> A <u>-5.044</u> kG | HB |
| Q2 | I-SET (from PSU) B-HALL <u>122.01</u> A <u>-0.202</u> kG | I-SET (from PSU) B-HALL <u>506.36</u> A <u>3.603</u> kG | Q1 |
| Q3 | I-SET (from PSU) B-HALL <u>59.29</u> A <u>0.116</u> kG | I-SET (from PSU) B-HALL <u>851.00</u> A <u>-8.020</u> kG | Q2 |
| D | I-READ B-NMR <u>360.69</u> A <u>0.32358</u> T | I-SET (from PSU) B-HALL <u>559.56</u> A <u>-5.476</u> kG | Q3 |
| | If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled? | I-SET (from PSU) B-NMR <u>769.72</u> A <u>5.588</u> kG | D |

Run Number:

8671

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

PS1: 11
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

4:35

Stop time (from RC):

5:45

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 229 k

2278 2913

$e-\pi n$ evts:

SHMS prescale pretrig: 229 k

2278 2913

$\Sigma e-\pi n$ evts:

COIN pretrig: 109 k

☒ Data ok

☐ Junk

Comments:

current 17.85 μ A

~72mC

Run Number:

8672

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

PS1: 11
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

5:46

Stop time (from RC):

6:53

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 145 k

1445 1968

$e-\pi n$ evts:

SHMS prescale pretrig: 149 k

1445 1968

$\Sigma e-\pi n$ evts:

COIN pretrig: 81 k

☒ Data ok

☐ Junk

Comments:

current 17.85 μ A

72mC

~47mC

Run Number:

8673

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

PS1: 11
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

6:54

Stop time (from RC):

7:32

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 98 k

938 5819

$e-\pi n$ evts:

SHMS prescale pretrig: 75 k

938 5819

$\Sigma e-\pi n$ evts:

COIN pretrig: 39 k

☒ Data ok

☐ Junk

Comments:

current 11.28 μ A

(Hall A gate closed) ~24mC

Run Number:

8674

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

PS1: 11
PS2: -1
PS3: 6
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

7:40

Stop time (from RC):

8:55

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 204 k

1936 7755

$e-\pi n$ evts:

SHMS prescale pretrig: 154 k

1936 7755

$\Sigma e-\pi n$ evts:

COIN pretrig: 78 k

☒ Data ok

☐ Junk

Comments:

current 11.19 μ A

~49mC

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

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

Date: 19 / 7 / 15
yy mm dd

Initials: JoH

Continuation of Configuration:

$Q^2 = 1.45$ low Σ

$W = 2.02$ $x = 0.31$ LEFT

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

| | | | | | | | |
|----------------------------|---|--|--|---|---|---|---|
| Run Number: 8675 | <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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>8:56</u> Stop time (from RC): <u>10:00</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>225</u> k $e-\pi n$ evts: <u>2158</u> | SHMS prescale pretrig: <u>172</u> k $\Sigma e-\pi n$ evts: <u>9913</u> | COIN pretrig: <u>87</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|--|---|---|---|---|

Comments: ~ 55 mC

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8676 | <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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>10:11</u> Stop time (from RC): <u>11:24</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>313</u> k $e-\pi n$ evts: <u>3094</u> | SHMS prescale pretrig: <u>240</u> k $\Sigma e-\pi n$ evts: <u>13011</u> | COIN pretrig: <u>129</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments: ~ 76 mC

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|---|
| Run Number: 8677 | <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>11</u> PS2: <u>-1</u> PS3: <u>6</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>12:52</u> Stop time (from RC): <u>13:49</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>621</u> k $e-\pi n$ evts: <u>5785</u> | SHMS prescale pretrig: <u>475</u> k $\Sigma e-\pi n$ evts: <u>18796</u> | COIN pretrig: <u>369</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|---|

Comments: Current increased $12 \mu A \rightarrow 70 \mu A$ ~ 153 mC

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8678 | <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>12</u> PS2: <u>-1</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>13:51</u> Stop time (from RC): <u>14:50</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>450</u> k $e-\pi n$ evts: <u>8478</u> | SHMS prescale pretrig: <u>390</u> k $\Sigma e-\pi n$ evts: <u>27274</u> | COIN pretrig: <u>607</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments: Prescales adjusted for higher current, $70 \mu A$

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: 8679 | <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>12</u> PS2: <u>-1</u> PS3: <u>7</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>14:51</u> Stop time (from RC): <u>15:20</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>232</u> k $e-\pi n$ evts: <u>4200</u> | SHMS prescale pretrig: <u>174</u> k $\Sigma e-\pi n$ evts: <u>31474</u> | COIN pretrig: <u>312</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|--|--|

Comments: Last 4Hz Run

| | | | | | | | |
|----------------------------|---|---|---|--|---|---|---|
| Run Number: 8680 | <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>9</u> PS2: <u>-1</u> PS3: <u>5</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>15:33</u> Stop time (from RC): <u>15:57</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>3134</u> k $e-\pi n$ evts: <u>105</u> | SHMS prescale pretrig: <u>151</u> k $\Sigma e-\pi n$ evts: | COIN pretrig: <u>22</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|--|---|---|---|

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

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

Use a separate sheet for each configuration.

Date: 19/07/15
yy mm dd

Initials: MD
GRS

HMS

SHMS

Configuration Name: _____

$Q^2 = 0.425$ Middle ϵ

$\theta = 9.20^\circ$

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

$E_{\text{beam}} = 3.65$ GeV

$I_{\text{beam}} =$ _____ μA

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: |

| | | | |
|----|--|---|----|
| Q1 | I-SET (from PSU) 172.2738 A B-HALL 0.168 kg | I-SET (from PSU) 769.2990 A B-HALL -4.860 kg | HB |
| Q2 | I-SET (from PSU) 136.8744 A B-HALL -0.238 kg | I-SET (from PSU) 488.3900 A B-HALL 3.482 kg | Q1 |
| Q3 | I-SET (from PSU) 66.9199 A B-HALL 0.132 kg | I-SET (from PSU) 820.3370 A B-HALL -7.775 kg | Q2 |
| D | I-READ 404.4000 A B-NMR 0.362237 T | I-SET (from PSU) 539.7740 A B-HALL -5.308 kg | Q3 |
| | If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled? | I-SET (from PSU) 742.1340 A B-NMR +5.418 kg | D |

HMS

p: +01.3230 $\theta(\text{TV})$: 17.025
From GUI Nearest 0.005

SHMS

p: -2.3260 $\theta(\text{TV})$: 9.200
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Run Number:

8681

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:09

Stop time (from RC):

21:42

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 258 k

$e-\pi n$ evts:
30253

SHMS prescale
pretrig: 111 k

$\Sigma e-\pi n$ evts:
30253

COIN pretrig: 8016 k

☒ Data ok

☐ Junk

Comments:

50 μA ,

Run Number:

8682

- ☐ 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:

junk, short run

Run Number:

8683

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

PS1: 14
PS2: -1
PS3: 11
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:44

Stop time (from RC):

22:46

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 287 k

$e-\pi n$ evts:
66758

SHMS prescale
pretrig: 187 k

$\Sigma e-\pi n$ evts:
97011

COIN pretrig: 11078 k

☒ Data ok

☐ Junk

Comments:

40 μA

Run Number:

8684

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

PS1: 14
PS2: -1
PS3: 4
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

22:46

Stop time (from RC):

23:42

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 266 k

$e-\pi n$ evts:
61121

SHMS prescale
pretrig: 173 k

$\Sigma e-\pi n$ evts:
158132

COIN pretrig: 1029 k

☒ Data ok

☐ Junk

Comments:

40 μA

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

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

Date: 19.07
yy mm dd

Initials: V.L

Continuation of Configuration:

$Q^2 = .425$, mid E , $\theta = 9.2^\circ$

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

| | | | | | | | |
|----------------------------|--|---|---|--|---|---|--|
| Run Number: 8685 | <input checked="" 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>-1</u> PS3: <u>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>00:02</u> Stop time (from RC): <u>00:29</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" 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 |
|----------------------------|--|---|---|--|---|---|--|

Comments:

10cm dummy / current 40 μ A

| | | | | | | | |
|----------------------------|---|---|---|--|---|---|---|
| Run Number: 8686 | <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>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</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 checked="" type="checkbox"/> Junk |
|----------------------------|---|---|---|--|---|---|---|

Comments:

Junk

| | | | | | | | |
|----------------------------|---|---|---|---|--|---|---|
| Run Number: 8687 | <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>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>00:42</u> Stop time (from RC): <u>01:11</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>24</u> k $e-\pi n$ evts: <u>11531</u> | SHMS prescale pretrig: <u>31</u> k $\Sigma e-\pi n$ evts: <u>169663</u> | COIN pretrig: <u>1818</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|---|---|

Comments:

current 40 μ A

| | | | | | | | |
|----------------------------|---|---|---|---|--|---|---|
| Run Number: 8688 | <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>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>01:11</u> Stop time (from RC): <u>01:38</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>63</u> k $e-\pi n$ evts: <u>21665</u> | SHMS prescale pretrig: <u>82</u> k $\Sigma e-\pi n$ evts: <u>491328</u> | COIN pretrig: <u>6017</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|---|---|

Comments:

current 50 μ A

| | | | | | | | |
|----------------------------|---|---|--|---|---|--|--|
| Run Number: 8689 | <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>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>01:50</u> Stop time (from RC): <u>2:33</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>133</u> k $e-\pi n$ evts: <u>44634</u> | SHMS prescale pretrig: <u>171</u> k $\Sigma e-\pi n$ evts: <u>235962</u> | COIN pretrig: <u>12632</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|--|---|---|--|--|

Comments:

current 50 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. | 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 |
|-------------|--|--|---|--|---|---|--|

Comments:

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

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

Date: 14/7/16
yy mm dd

Initials: V.L

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = 0.425$, middle
SHMS $Q = 11.20$

E_{beam} : 3.65 GeV

I_{beam} : 50 μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm

Beam position and angle on target:

| | | |
|-----------------|---|-----------------|
| 3H07A | X | Y |
| <u>0.005</u> mm | | <u>0.166</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>0.787</u> mm | | <u>0.524</u> mm |
| Nomin: | | Nomin: |

HMS

SHMS

| | | | | | |
|---------------------------------------|-------------------------------------|---|-------------------------------------|---|----|
| Q1 | I-SET (from PSU) <u>172.63</u> A | A | I-SET (from PSU) <u>769.15</u> A | A | HB |
| | B-HALL <u>0.167</u> kG | | B-HALL <u>-4.860</u> kG | | |
| Q2 | I-SET (from PSU) <u>136.71</u> A | A | I-SET (from PSU) <u>488.28</u> A | A | Q1 |
| | B-HALL <u>-0.237</u> kG | | B-HALL <u>3.481</u> kG | | |
| Q3 | I-SET (from PSU) <u>66.41</u> A | A | I-SET (from PSU) <u>820.72</u> A | A | Q2 |
| | B-HALL <u>0.132</u> kG | | B-HALL <u>-7.774</u> kG | | |
| D | I-READ <u>404.10</u> A | A | I-SET (from PSU) <u>539.64</u> A | A | Q3 |
| | B-NMR <u>0.36218</u> T | | B-HALL <u>-5.310</u> kG | | |
| If momentum increased: | | | I-SET (from PSU) <u>742.28</u> A | A | D |
| <input type="checkbox"/> HMS cycled? | | | B-NMR <u>5.431</u> kG | | |
| <input type="checkbox"/> SHMS cycled? | | | | | |

Run Number:

8690

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

2:45

Stop time (from RC):

3:44

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 94 k

$e\pi n$ evts:
32805

SHMS prescale
pretrig: 89 k

$\Sigma e\pi n$ evts:
32805

COIN
pretrig: 6573 k

☒ Data ok
☐ Junk

Comments:

current 50 μA

Run Number:

8691

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

03:45

Stop time (from RC):

04:29

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 83 k

$e\pi n$ evts:
29136

SHMS prescale
pretrig: 78 k

$\Sigma e\pi n$ evts:
61941

COIN
pretrig: 5837 k

☒ Data ok
☐ Junk

Comments:

current 50 μA

Run Number:

8692

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

04:30

Stop time (from RC):

05:02

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 97 k

$e\pi n$ evts:
33554

SHMS prescale
pretrig: 92 k

$\Sigma e\pi n$ evts:
95495

COIN
pretrig: 6856 k

☒ Data ok
☐ Junk

Comments:

current 50 μA

Run Number:

8693

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

05:04

Stop time (from RC):

05:19

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 38 k

$e\pi n$ evts:
13466

SHMS prescale
pretrig: 36 k

$\Sigma e\pi n$ evts:
108961

COIN
pretrig: 2720 k

☒ Data ok
☐ Junk

Comments:

current 50 μA

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

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

Date: 19.7.16
yy mm dd

Initials: V.L

Continuation of Configuration:

$Q^2 = 0.425$, middle E
11.20'

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

| | | | | | | | |
|---------------------|---|---|---|--|---|---|---|
| Run Number: 8694 | <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: 12 PS2: -1 PS3: 4 PS4: -1 PS5: -9 PS6: -1 | Start time (from RC): 5:25 Stop time (from RC): 5:37 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK? | HMS prescale pretrig: 18 k $e-\pi n$ evts: 479 | SHMS prescale pretrig: 27 k $\Sigma e-\pi n$ evts: 479 | COIN pretrig: 206 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|---|--|---|---|---|

40 μ A current.

| | | | | | | | |
|---------------------|---|---|--|---|--|---|--|
| Run Number: 8695 | <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: 14 PS2: 7 PS3: 12 PS4: -1 PS5: -9 PS6: -1 | Start time (from RC): 05:45 Stop time (from RC): 6:41 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 159 k $e-\pi n$ evts: 54779 | SHMS prescale pretrig: 151 k $\Sigma e-\pi n$ evts: 163740 | COIN pretrig: 11258 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|---|--|---|--|---|--|

50 μ A current.

| | | | | | | | |
|---------------------|---|--|---|---|---|--|---|
| Run Number: 8696 | <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: 14 PS2: -1 PS3: 12 PS4: -1 PS5: -9 PS6: -1 | Start time (from RC): 6:42 Stop time (from RC): 7:10 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: 37 k $e-\pi n$ evts: 12730 | SHMS prescale pretrig: 35 k $\Sigma e-\pi n$ evts: 176470 | COIN pretrig: 2601 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|---------------------|---|--|---|---|---|--|---|

50 μ A current.

| | | | | | | | |
|-------------|--|--|---|--|---|---|---|
| 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 |
|-------------|--|--|---|--|---|---|---|

| | | | | | | | |
|-------------|--|--|---|--|---|---|---|
| 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 |
|-------------|--|--|---|--|---|---|---|

| | | | | | | | |
|-------------|--|--|---|--|---|---|---|
| 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 |
|-------------|--|--|---|--|---|---|---|

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

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

Date: 19 / 7 / 16
yy mm dd

Initials: VJK

Use a separate sheet for each configuration.

Configuration Name: _____

Q2 = 0.425, middle e.
13.2°

E_{beam}: 3.65 GeV

I_{beam}: 50 μ A

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2 mm

Beam position and angle on target:

| | | |
|------------------|-----------------|---|
| 3H07A | X | Y |
| <u>-0.004</u> mm | <u>0.142</u> mm | |
| Nomin: | Nomin: | |
| 3H07C | X | Y |
| <u>0.276</u> mm | <u>-0.49</u> mm | |
| Nomin: | Nomin: | |

HMS

SHMS

| | | | |
|----|---|---|----|
| Q1 | I-SET (from PSU) <u>172.65</u> A B-HALL <u>0.167</u> kG | I-SET (from PSU) <u>769.15</u> A B-HALL <u>-4.859</u> kG | HB |
| Q2 | I-SET (from PSU) <u>136.68</u> A B-HALL <u>-0.236</u> kG | I-SET (from PSU) <u>488.24</u> A B-HALL <u>3.482</u> kG | Q1 |
| Q3 | I-SET (from PSU) <u>66.39</u> A B-HALL <u>0.132</u> kG | I-SET (from PSU) <u>820.72</u> A B-HALL <u>-7.775</u> kG | Q2 |
| D | I-READ <u>404.07</u> A B-NMR <u>0.36218</u> T | I-SET (from PSU) <u>539.80</u> A B-HALL <u>-5.309</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>-</u> kG | D |

Run Number:

8697

Comments:

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

7:17

Stop time (from RC):

7:22

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 14 k

$e-\pi n$ evts:
4430

SHMS prescale
pretrig: 9 k

$\Sigma e-\pi n$ evts:
4430

COIN pretrig: 740 k

☒ Data ok
☐ Junk

50 μ A

Run Number:

8698

Comments:

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

7:23

Stop time (from RC):

8:26

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 100 k

$e-\pi n$ evts:
24515

SHMS prescale
pretrig: 69 k

$\Sigma e-\pi n$ evts:
33945

COIN pretrig: 5311 k

☒ Data ok
☐ Junk

~~50~~ μ A 50 μ A current

Run Number:

8699

Comments:

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

8:26

Stop time (from RC):

9:30

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 211 k

$e-\pi n$ evts:
44514

SHMS prescale
pretrig: 143 k

$\Sigma e-\pi n$ evts:
78459

COIN pretrig: 14300 k

☒ Data ok
☐ Junk

70 μ A Last LH2

Run Number:

8700

Comments:

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

PS1: 14
PS2: -1
PS3: 12
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

9:36

Stop time (from RC):

9:56

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 1616 k

$e-\pi n$ evts:
807

SHMS prescale
pretrig: 8.5 k

$\Sigma e-\pi n$ evts:
807

COIN pretrig: 229 k

☒ Data ok
☐ Junk

40 μ A