

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

Purpose:
 Production
 Test
 Optics
 Other: Heep

E_{beam} : 3.660 GeV I_{beam} : 70 μA

Raster: On Off
Size: 2x2 mm²

HMS
 p : +02.140 $\theta(\text{TV})$: 35.650
From GUI Nearest 0.005

Beam position and angle on target:

| | | |
|------------------|---|-----------------|
| 3H07A | X | Y |
| <u>-0.29</u> mm | | <u>0.157</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>-0.782</u> mm | | <u>0.529</u> mm |
| Nomin: | | Nomin: |

SHMS
 p : -2.3000 $\theta(\text{TV})$: 32.395
From GUI Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

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

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: <u>8569</u> | <input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input checked="" type="checkbox"/> <u>C-hole</u> | PS1: <u>0</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>0</u> PS5: <u>-1</u> PS6: <u>-1</u> | Start time (from RC): <u>19:18</u> Stop time (from RC): <u>19:32</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u> | SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u> | COIN pretrig: <u>/</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

Carbon hole looked good first time

| | | | | | | | |
|----------------------------|---|---|--|---|---|--|--|
| Run Number: <u>8570</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>5</u> PS2: <u>-1</u> PS3: <u>3</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): 19:18 <u>21:55</u> Stop time (from RC): <u>22:11</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>94</u> k $e-\pi n$ evts: <u>/</u> | SHMS prescale pretrig: <u>380</u> k $\Sigma e-\pi n$ evts: <u>/</u> | COIN pretrig: <u>143</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|--|---|---|--|--|

94k/380k/143k PS PT-1

| | | | | | | | |
|----------------------------|---|---|---|---|---|--|--|
| Run Number: <u>8571</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>5</u> PS2: <u>-1</u> PS3: <u>3</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>22:11</u> Stop time (from RC): <u>22:26</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>84</u> k $e-\pi n$ evts: <u>/</u> | SHMS prescale pretrig: <u>340</u> k $\Sigma e-\pi n$ evts: <u>/</u> | COIN pretrig: <u>128</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|---|--|--|

84k/340k/128k PS PT-1

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| Run Number: <u>8572</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>5</u> PS2: <u>-1</u> PS3: <u>3</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>22:36</u> Stop time (from RC): <u>22:49</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>/</u> k $e-\pi n$ evts: <u>/</u> | SHMS prescale pretrig: <u>/</u> k $\Sigma e-\pi n$ evts: <u>/</u> | COIN pretrig: <u>/</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/

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°

$E_{\text{beam}}: \underline{3.660}$ GeV $I_{\text{beam}}: \underline{70}$ μA

HMS
 $p: \underline{-1.182}$ From GUI $\theta(\text{TV}): \underline{33.646}$
 Nearest 0.005

SHMS
 $p: \underline{+2.412}$ From GUI $\theta(\text{TV}): \underline{11.755}$
 Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

Purpose:
 Production
 Test
 Optics
 Other: _____

Raster: On Off
 Size: 2x2mm

Beam position and angle on target:

| | | |
|-----------------|---|-----------------|
| 3H07A | X | Y |
| <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 B-HALL | I-SET (from PSU) <u>797.8970</u> A B-HALL | HB |
| | <u>0.151</u> kg | <u>-5.050</u> kg | |
| Q2 | I-SET (from PSU) <u>122.2579</u> A B-HALL | I-SET (from PSU) <u>506.447</u> A B-HALL | Q1 |
| | <u>-0.207</u> kg | <u>3.600</u> kg | |
| Q3 | I-SET (from PSU) <u>59.8336</u> A B-HALL | I-SET (from PSU) <u>850.668</u> A B-HALL | Q2 |
| | <u>0.118</u> kg | <u>-8.021</u> kg | |
| D | I-READ <u>360.37</u> A B-NMR | I-SET (from PSU) <u>559.7320</u> A B-HALL | Q3 |
| | <u>0.323638</u> T | <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 B-NMR | D |
| | | <u>5.601</u> kg | |

| | | | | | | | |
|----------------------------|---|--|---|---|---|---|---|
| Run Number: <u>8573</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>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>9</u> PS5: <u>-1</u> PS6: <u>0</u> | Start time (from RC): <u>23:28</u> Stop time (from RC): <u>23:53</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: _____ k $e-\pi n$ evts: _____ | SHMS prescale pretrig: _____ k $\Sigma e-\pi n$ evts: _____ | COIN pretrig: _____ k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|---|---|

3/4 Test Run ~3m events

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: <u>8574</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>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>00:11</u> Stop time (from RC): <u>00:14</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>1200</u> k $e-\pi n$ evts: <u>594</u> | SHMS prescale pretrig: <u>1800</u> k $\Sigma e-\pi n$ evts: <u>594</u> | COIN pretrig: <u>600</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|--|--|

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|----------------------------|---|--|---|---|--|---|---|
| Run Number: <u>8575</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>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>00:18</u> Stop time (from RC): <u>00:24</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>14</u> k $e-\pi n$ evts: <u>671</u> | SHMS prescale pretrig: <u>22</u> k $\Sigma e-\pi n$ evts: <u>1265</u> | COIN pretrig: <u>70</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|---|

| | | | | | | | |
|----------------------------|---|--|---|---|--|--|--|
| Run Number: <u>8576</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>13</u> PS2: <u>7</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>01:06</u> Stop time (from RC): <u>02:09</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>126</u> k $e-\pi n$ evts: <u>6068</u> | SHMS prescale pretrig: <u>190</u> k $\Sigma e-\pi n$ evts: <u>7333</u> | COIN pretrig: <u>581</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> 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: Cam

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 A

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

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam} : 3.647 GeV I_{beam} : 70 μ A

Raster: On Off
 Size: 2x2

HMS
 p : +1.1820 θ (TV): 33.640
From GUI Nearest 0.005

SHMS
 p : +/-2.4120 θ (TV): 13.755
From GUI Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

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 | I-SET (from PSU) <u>7.97.65</u> A B-HALL <u>-5.048</u> kg | HB |
| Q2 | I-SET (from PSU) <u>122.2579</u> A B-HALL <u>-0.207</u> kg | I-SET (from PSU) <u>506.67</u> A B-HALL <u>3.600</u> kg | Q1 |
| Q3 | I-SET (from PSU) <u>59.8336</u> A B-HALL <u>0.117</u> kg | I-SET (from PSU) <u>850.72</u> A B-HALL <u>-8.021</u> kg | Q2 |
| D | I-READ <u>361.0000</u> A B-NMR <u>0.3236203</u> T | I-SET (from PSU) <u>560.29</u> A B-HALL <u>-5.488</u> kg | Q3 |
| | <input checked="" type="checkbox"/> Momentum increased: <input 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 | D |

| | | | | | | | |
|----------------------------|---|--|---|---|---|---|--|
| Run Number: <u>8583</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>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>7:03</u> Stop time (from RC): <u>7:47</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>158</u> k $e-\pi n$ evts: <u>8848</u> | SHMS prescale pretrig: <u>171</u> k $\Sigma e-\pi n$ evts: <u>8848</u> | COIN pretrig: <u>588</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|---|---|--|

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: <u>8584</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>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>7:48</u> Stop time (from RC): <u>8:26</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>141.9</u> k $e-\pi n$ evts: <u>7803</u> | SHMS prescale pretrig: <u>153.4</u> k $\Sigma e-\pi n$ evts: <u>16651</u> | COIN pretrig: <u>526</u> k <input checked="" 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 |
|-------------|--|--|---|--|--|--|--|

Setting is continued at Run 8655.

| | | | | | | | |
|-------------|--|--|---|--|--|--|--|
| 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: 19/7/1
yy mm dd

Initials: _____

Use a separate sheet for each configuration.

Configuration Name: _____
 $Q^2 = 0.375, W = 2.2$
 middle Σ , Right 2

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam}: 3.65 GeV **I_{beam}:** 20 μ A

Raster: On Off
Size: 2x2

HMS
p: +0.135 **θ (TV):** 15.83
From GUI Nearest 0.005

SHMS
p: +2.3 **θ (TV):** 5.75
From GUI Nearest 0.005

Collimator: **HMS:** Large Sieve **SHMS:** Large Sieve

Beam position and angle on target:

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

HMS

SHMS

| | | | | | |
|----|---|----|------------------|----|----|
| Q1 | I-SET (from PSU) | A | I-SET (from PSU) | A | HB |
| | <u>175.7924</u> | | <u>760.654</u> | | |
| | B-HALL | kg | B-HALL | kg | |
| | <u>0.171</u> | | <u>-4.866</u> | | |
| Q2 | I-SET (from PSU) | A | I-SET (from PSU) | A | Q1 |
| | <u>139.6732</u> | | <u>482.93</u> | | |
| | B-HALL | kg | B-HALL | kg | |
| | <u>-0.242</u> | | <u>3.438</u> | | |
| Q3 | I-SET (from PSU) | A | I-SET (from PSU) | A | Q2 |
| | <u>68.2769</u> | | <u>811.168</u> | | |
| | B-HALL | kg | B-HALL | kg | |
| | <u>0.132</u> | | <u>-7.696</u> | | |
| D | I-READ | A | I-SET (from PSU) | A | Q3 |
| | <u>412.17</u> | | <u>533.741</u> | | |
| | B-NMR | T | B-HALL | kg | |
| | <u>0.3695216</u> | | <u>-5.28</u> | | |
| | If momentum increased: | | I-SET (from PSU) | A | D |
| | <input checked="" type="checkbox"/> HMS cycled? | | <u>733.839</u> | | |
| | <input type="checkbox"/> SHMS cycled? | | B-NMR | kg | |
| | | | <u>5.349</u> | | |

Run Number: 8585

LH2 10cm PS1: 13 Start time (from RC): 14:09 Settings Verified? HMS prescale 317 k SHMS prescale 160 k COIN pretrig: 2955 k

LD2 10cm PS2: -1 Stop time (from RC): 14:39 HV OK? 50k OK? $e-\pi n$ evts: 23445 $\Sigma e-\pi n$ evts: 16554 Data ok

MT thick 10cm PS3: 9 C 1.5% r.l. PS4: -1 C 0.5% r.l. PS5: 0 PS6: -1 Junk

Comments: 20 μ A 16554 added 8 cuts for HMS

Run Number: 8586

LH2 10cm PS1: 13 Start time (from RC): 14:39 Settings Verified? HMS prescale 317 k SHMS prescale 151 k COIN pretrig: 3583 k

LD2 10cm PS2: -1 Stop time (from RC): 15:19 HV OK? 50k OK? $e-\pi n$ evts: 18716 $\Sigma e-\pi n$ evts: 35,270 Data ok

MT thick 10cm PS3: 9 C 1.5% r.l. PS4: -1 C 0.5% r.l. PS5: 0 PS6: -1 Junk

Comments:

Run Number: 8587

LH2 10cm PS1: 13 Start time (from RC): 15:20 Settings Verified? HMS prescale 372 k SHMS prescale 188 k COIN pretrig: 3505 k

LD2 10cm PS2: -1 Stop time (from RC): 15:50 HV OK? 50k OK? $e-\pi n$ evts: 19292 $\Sigma e-\pi n$ evts: 54,562 Data ok

MT thick 10cm PS3: 9 C 1.5% r.l. PS4: -1 C 0.5% r.l. PS5: 0 PS6: -1 Junk

Comments:

Run Number: 8588

LH2 10cm PS1: 13 Start time (from RC): 15:56 Settings Verified? HMS prescale _____ k SHMS prescale _____ k COIN pretrig: _____ k

LD2 10cm PS2: -1 Stop time (from RC): 16:20:35 HV OK? 50k OK? $e-\pi n$ evts: 260 $\Sigma e-\pi n$ evts: _____ Data ok

MT thick 10cm PS3: 9 C 1.5% r.l. PS4: -1 C 0.5% r.l. PS5: 0 PS6: -1 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: _____
 $a^2 = 0.375$ Middle ϵ
 $\theta = 5.75$

E_{beam}: 3.65 GeV **I_{beam}:** 10 μ A

HMS
p: ± 1.3500 **θ (TV):** 15.830
From GUI Nearest 0.005

SHMS
p: ± 2.3000 **θ (TV):** 5.750
From GUI Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

Purpose:
 Production
 Test
 Optics
 Other: _____

Raster: On Off
Size: 2x2

Beam position and angle on target:

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

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

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

Runs 8599-8602 short runs to center beam on target.

| | | | | | | | |
|-----------------------------------|---|--|---|--|--|--|---|
| Run Number: <u>8603</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>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>00:04</u> Stop time (from RC): <u>00:54</u> | <input type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>285</u> k $e-\pi n$ evts: <u>17612</u> | SHMS prescale pretrig: <u>138</u> k $\Sigma e-\pi n$ evts: <u>72174</u> | COIN pretrig: <u>1373</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|--|---|--|--|--|---|

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

| | | | | | | | |
|-----------------------------------|---|--|---|--|---|--|--|
| Run Number: <u>8604</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>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>00:54</u> Stop time (from RC): <u>01:40</u> | <input type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>237</u> k <u>285</u> k $e-\pi n$ evts: <u>14,049</u> | SHMS prescale pretrig: <u>115</u> k <u>138</u> k $\Sigma e-\pi n$ evts: <u>86223</u> | COIN pretrig: <u>1213</u> k <u>1373</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|--|---|--|---|--|--|

| | | | | | | | |
|-----------------------------------|---|--|---|--|--|--|---|
| Run Number: <u>8605</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>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>01:41</u> Stop time (from RC): <u>02:12</u> | <input type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>210</u> k $e-\pi n$ evts: <u>12128</u> | SHMS prescale pretrig: <u>103</u> k $\Sigma e-\pi n$ evts: <u>98351</u> | COIN pretrig: <u>1334</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|--|---|--|--|--|---|

Current increased to 15 μ A

$p(e, e'\pi)n$ 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 |
|----------------------------|---|--|---|---|--|--|--|

Comments: 15 μ A

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

Comments: 15 μ A

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

Comments: 15 μ A

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

Comments: 15 μ A

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

Comments: 15 μ A

| | | | | | | | |
|----------------------------|---|--|---|---|---|---|--|
| 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>1261</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 |
|----------------------------|---|--|---|---|---|---|--|

Comments: short run (before beam energy mas.)

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

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

Date: / /
yy mm dd

Initials:

Use a separate sheet for each configuration.

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) <u>176.18</u> A B-HALL | A | I-SET (from PSU) <u>760.35</u> A B-HALL | A | HB |
| | <u>-0.002</u> kG | | <u>-486.00</u> kG | | |
| Q2 | I-SET (from PSU) <u>139.55</u> A B-HALL | A | I-SET (from PSU) <u>487.84</u> A B-HALL | A | Q1 |
| | <u>-0.243</u> kG | | <u>3.442</u> kG | | |
| Q3 | I-SET (from PSU) <u>67.76</u> A B-HALL | A | I-SET (from PSU) <u>811.64</u> A B-HALL | A | Q2 |
| | <u>0.133</u> kG | | <u>-7692</u> kG | | |
| D | I-READ <u>412.20</u> A B-NMR | A | I-SET (from PSU) <u>533.72</u> A B-HALL | A | Q3 |
| | <u>0.36957</u> T | | <u>-5.228</u> kG | | |
| | If momentum increased: | | I-SET (from PSU) <u>733.88</u> A B-NMR | A | D |
| | <input checked="" type="checkbox"/> HMS cycled? | | <u>5.343</u> kG | | |
| | <input checked="" type="checkbox"/> SHMS cycled? | | | | |

HMS

p : $+/\ominus$ 1.3500 $\theta(\text{TV})$: 15.840
From GUI Nearest 0.005

SHMS

p : $+/\ominus$ 2300 $\theta(\text{TV})$: 6.870
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve

SHMS: Large Sieve

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 191 k
pretrig:

$e-\pi$ evts: 13429

SHMS prescale 73 k
~~1089~~
pretrig:

$\Sigma e-\pi$ evts: 13429

COIN pretrig: 1089 k

- Data ok
 Junk

Comments:

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 475 k
pretrig:

$e-\pi$ evts: 33571

SHMS prescale 183 k
pretrig:

$\Sigma e-\pi$ evts: 47000

COIN pretrig: 2677 k

- Data ok
 Junk

Comments:

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 409 k
pretrig:

$e-\pi$ evts: 28438

SHMS prescale 154 k
pretrig:

$\Sigma e-\pi$ evts: 75438

COIN pretrig: 2160 k

- Data ok
 Junk

Comments:

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 109 k
pretrig:

$e-\pi$ evts: 8191

SHMS prescale 42 k
pretrig:

$\Sigma e-\pi$ evts: 83629

COIN pretrig: 424 k

- Data ok
 Junk

Comments:

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

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

Date: 19/07/10
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: <u>13</u> PS2: <u>-1</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>13:46</u> Stop time (from RC): <u>14:16</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 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: <u>13</u> PS2: <u>-1</u> PS3: <u>3</u> PS4: <u>-3</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>14:18</u> Stop time (from RC): <u>15:00</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>407</u> k $e-\pi n$ evts: <u>27829</u> | SHMS prescale pretrig: <u>157</u> k $\Sigma e-\pi n$ evts: <u>111458</u> | COIN pretrig: <u>285</u> k <input checked="" type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|---|

| | | | | | | | |
|----------------------------|---|--|---|---|--|---|--|
| 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: <u>13</u> PS2: <u>-1</u> PS3: <u>3</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>15:01</u> Stop time (from RC): <u>15:57</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>631</u> k $e-\pi n$ evts: <u>41763</u> | SHMS prescale pretrig: <u>244</u> k $\Sigma e-\pi n$ evts: <u>153221</u> | COIN pretrig: <u>454</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|--|

| | | | | | | | |
|--------------------------------|---|--|---|---|---|--|--|
| 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: <u>13</u> PS2: <u>-1</u> PS3: <u>1</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>16:16</u> Stop time (from RC): <u>17:00</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>130</u> k $e-\pi n$ evts: <u>1187</u> | SHMS prescale pretrig: <u>43</u> k $\Sigma e-\pi n$ evts: | COIN pretrig: <u>401</u> k <input checked="" 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: 19/07/10
yy mm dd

Initials: JH

Continuation of Configuration:

$Q^2 = 0.375$ middle

$\theta = 8.57^\circ$

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 pretrig: <u>161</u> k $e-\pi n$ evts: <u>22462</u> | SHMS prescale pretrig: <u>182</u> k $\Sigma e-\pi n$ evts: <u>97150</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 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 |
|----------------------------|---|---|---|--|--|--|---|

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 pretrig: <u>322</u> k $e-\pi n$ evts: <u>45339</u> | SHMS prescale pretrig: <u>364</u> k $\Sigma e-\pi n$ 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 pretrig: <u>33</u> k $e-\pi n$ evts: <u>45909</u> | SHMS prescale pretrig: <u>372</u> k $\Sigma e-\pi n$ 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 ~~it~~ 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 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'π)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

$\theta = 10.865^\circ$

Purpose:

Production

Test

Optics

Other: _____

E_{beam}: 3.6 GeV

I_{beam}: 10.18 μ A

Raster: On Off

Size: 2x2

HMS

SHMS

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

HMS

p: +0 1.35° θ (TV): 15.830°
From GUI Nearest 0.005

Beam position and angle on target:

| | | |
|-----------|---|----------|
| 3H07A | X | Y |
| 0.026 mm | | 0.207 mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| -0.913 mm | | 0.398 mm |
| Nomin: | | Nomin: |

SHMS

p: -1 2.300° θ (TV): 10.865°
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve

SHMS: Large Sieve

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 but 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: 166 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. | 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>02:35</u> Stop time (from RC): <u>04:03</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>247</u> k SHMS prescale <u>211</u> k COIN pretrig: <u>1511</u> k | $e-\pi n$ evts: <u>29810</u> $\Sigma e-\pi n$ evts: <u>109749</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|---|--|--|
| 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. | 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>04:25</u> Stop time (from RC): <u>05:53</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>165</u> k SHMS prescale <u>141</u> k COIN pretrig: <u>950</u> k | $e-\pi n$ evts: <u>20177</u> $\Sigma e-\pi n$ evts: <u>129926</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| 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. | 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>05:54</u> Stop time (from RC): <u>06:59</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>226</u> k SHMS prescale <u>193</u> k COIN pretrig: <u>1383</u> k | $e-\pi n$ evts: <u>27118</u> $\Sigma e-\pi n$ evts: <u>157044</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|---|--|--|
| 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. | 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>6:59</u> Stop time (from RC): <u>7:50</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>120</u> k SHMS prescale <u>102</u> k COIN pretrig: <u>834</u> k | $e-\pi n$ evts: <u>14348</u> $\Sigma e-\pi n$ evts: <u>171393</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| 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. | 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>7:51</u> Stop time (from RC): <u>8:36</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>172</u> k COIN pretrig: <u>1442</u> k | $e-\pi n$ evts: <u>23827</u> $\Sigma e-\pi n$ evts: <u>195220</u> | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|---|---|---|--|
| 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. | 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>8:45</u> Stop time (from RC): <u>9:22</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale <u>255</u> k SHMS prescale <u>668</u> k COIN pretrig: <u>226</u> k | $e-\pi n$ evts: <u>717</u> $\Sigma e-\pi n$ evts: <u>717</u> | <input checked="" 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 / 19
yy mm dd

Initials: _____

Use a separate sheet for each configuration.

Configuration Name: _____

$Q^2 = .375$, middle E

$W = 2.2$ $\Theta = 12.87$

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam}: 3.651 GeV

I_{beam}: _____ μ A

Raster: On Off

Size: _____

HMS

p: +0 1.35 θ (TV): 15.830

From GUI

Nearest 0.005

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: |

SHMS

p: +0 2.30 θ (TV): 12.865

From GUI

Nearest 0.005

Collimator:

HMS: Large Sieve

SHMS: Large Sieve

HMS

SHMS

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

Run Number:

8645

- 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 μ A
 $e-\pi n$ evts: 15,348

SHMS prescale 167 k
 pretrig: @25 μ A
 $\Sigma e-\pi n$ evts: 15,348

COIN pretrig: 0.9 k
 Data ok
 Junk

Started at 15 μ A, ended at 25 μ A

MCC was working on delivering higher current

Run Number:

8646

- 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 μ A. As such, most of the run was taken at 15 μ A.

Run Number:

8647

- 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 μ A & ended at 15 μ A, but ~20 min in b/t was at 25 μ A

Run Number:

8648

- 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 μ A

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

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

Date: 19 / 07 / 14
yy mm dd

Initials: _____

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_e
 $W = 2.02$, $\theta_{SHMS} = 13.76$

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam}: 3.65 GeV **I_{beam}:** 15 μ A

Raster: On Off
Size: 2x2

HMS
p: +01.382 **θ (TV):** 33.04
From GUI Nearest 0.005

SHMS
p: +2.412 **θ (TV):** 13.76
From GUI Nearest 0.005

Collimator: **HMS:** Large Sieve **SHMS:** Large Sieve

Beam position and angle on target:

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

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

| | | | | | | | |
|-----------------------------------|---|---|---|--|---|---|--|
| Run Number: <u>8655</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>9</u> PS6: <u>-1</u> | Start time (from RC): <u>12:02</u> Stop time (from RC): <u>12:14</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK? | HMS prescale: <u>—</u> k pretrig: <u>—</u> $e-\pi n$ evts: <u>—</u> | SHMS prescale: <u>—</u> k pretrig: <u>—</u> $\Sigma e-\pi n$ evts: <u>—</u> | COIN pretrig: <u>—</u> k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk |
|-----------------------------------|---|---|---|--|---|---|--|

Junk, no beam

| | | | | | | | |
|-----------------------------------|---|---|---|--|---|---|--|
| Run Number: <u>8656</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>9</u> PS6: <u>-1</u> | Start time (from RC): <u>12:23</u> Stop time (from RC): <u>12:27</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input type="checkbox"/> 50k OK? | HMS prescale: <u>—</u> k pretrig: <u>—</u> $e-\pi n$ evts: <u>—</u> | SHMS prescale: <u>—</u> k pretrig: <u>—</u> $\Sigma e-\pi n$ evts: <u>—</u> | COIN pretrig: <u>—</u> k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk |
|-----------------------------------|---|---|---|--|---|---|--|

Junk, no beam

| | | | | | | | |
|-----------------------------------|---|---|---|---|---|--|---|
| Run Number: <u>8657</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>9</u> PS6: <u>-1</u> | Start time (from RC): <u>13:17</u> Stop time (from RC): <u>13:36</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>0.68</u> k pretrig: <u>—</u> $e-\pi n$ evts: <u>25</u> | SHMS prescale: <u>2.1</u> k pretrig: <u>—</u> $\Sigma e-\pi n$ evts: <u>25</u> | COIN pretrig: <u>13</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|--|---|

Short run. Ended to change PS1, PS3

| | | | | | | | |
|-----------------------------------|---|--|---|---|---|---|---|
| Run Number: <u>8658</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>9</u> PS2: <u>-6</u> PS3: <u>-1</u> PS4: <u>-1</u> PS5: <u>9</u> PS6: <u>-1</u> | Start time (from RC): <u>13:37</u> Stop time (from RC): <u>14:15</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>32</u> k pretrig: <u>—</u> $e-\pi n$ evts: <u>48</u> | SHMS prescale: <u>98</u> k pretrig: <u>—</u> $\Sigma e-\pi n$ evts: <u>73</u> | COIN pretrig: <u>25</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|--|---|---|---|---|---|

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

p(e,e'π)n Run Sheet

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

Date: 19/7/14
yy mm dd

Initials: WL

Continuation of Configuration:

$Q^2 = 1.45$, Low E

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

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: 0 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: 58 k SHMS prescale: 178 k COIN pretrig: 23.8 k | e-π evts: 92 Σ e-π evts: 165 | <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: — k SHMS prescale: — k COIN pretrig: — k | e-π evts: — Σ e-π evts: — | <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: 209 k SHMS prescale: 231 k COIN pretrig: 101 k | e-π evts: 2272 Σ e-π evts: 2272 | <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: 194 k SHMS prescale: 213 k COIN pretrig: 107 k | e-π evts: 2196 Σ e-π evts: 4468 | <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: 224 k SHMS prescale: 247 k COIN pretrig: 99 k | e-π evts: 2517 Σ e-π evts: 6985 | <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: 211 k SHMS prescale: 233 k COIN pretrig: 94 k | e-π evts: 2414 Σ e-π evts: 9399 | <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
 $W = 2.02$, $\theta_{\text{shms}} = 13.76$

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: <u>1063</u> | SHMS prescale pretrig: <u>276</u> k $\Sigma e-\pi n$ evts: <u>1062</u> | COIN pretrig: <u>132</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | 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 |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| 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 checked="" 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 |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|--|--|---|---|--|--|
| 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 |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| 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>84</u> k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | | |

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|---|
| 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 |
| Comments: | | | | | | | |

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

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

Date: 19/07/15
yy mm dd

Initials: v.k

Use a separate sheet for each configuration.

Configuration Name: _____

Q2-1.95 low E

W = 2.02 LEFT

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam}: 3.65 GeV

I_{beam}: 20 μA

Raster: On Off

Size: 2 x 2 mm

HMS

p: +0.182 θ(TV): 33.64
From GUI Nearest 0.005

SHMS

p: +2.412 θ(TV): 15.76
From GUI Nearest 0.005

Beam position and angle on target:

| | | |
|---------------|----|--------------|
| 3H07A | X | Y |
| <u>0.603</u> | mm | <u>0.177</u> |
| Nomin: | | |
| 3H07C | X | Y |
| <u>-0.867</u> | mm | <u>0.525</u> |
| Nomin: | | |

Collimator:

HMS: Large Sieve

SHMS: Large Sieve

| | HMS | SHMS | |
|----|---|---|-----------------|
| Q1 | I-SET (from PSU) <u>154.16</u> A B-HALL <u>0.150</u> kg | I-SET (from PSU) <u>797.65</u> A B-HALL <u>-5.044</u> kg | HB |
| Q2 | I-SET (from PSU) <u>122.01</u> A B-HALL <u>-0.207</u> kg | I-SET (from PSU) <u>506.36</u> A B-HALL <u>3.603</u> kg | Q1 |
| Q3 | I-SET (from PSU) <u>59.29</u> A B-HALL <u>0.116</u> kg | I-SET (from PSU) <u>851.00</u> A B-HALL <u>-8.020</u> kg | Q2 |
| D | I-READ <u>360.69</u> A B-NMR <u>0.32358</u> T | I-SET (from PSU) <u>559.56</u> A B-HALL <u>-5.476</u> kg | Q3 |
| | If momentum increased: | | D |
| | <input type="checkbox"/> HMS cycled? | | <u>769.72</u> A |
| | <input type="checkbox"/> SHMS cycled? | | <u>5.588</u> kg |

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

e-πn evts: 2878

2913

SHMS prescale pretrig: 229 k

Σ e-πn evts: 2878

2913

COIN pretrig: 109 k

Data ok

Junk

Comments:

current 17.85 μA.

~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

e-πn evts: 1945

1968

SHMS prescale pretrig: 149 k

Σ e-πn evts: 4881

4881

COIN pretrig: 81 k

Data ok

Junk

Comments:

current 17.85 μA.

~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

e-πn evts: 938

938

SHMS prescale pretrig: 75 k

Σ e-πn evts: 5743

5819

COIN pretrig: 39 k

Data ok

Junk

Comments:

current 11.28 μA.

(Hall A get current) ~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

e-πn evts: 1936

1936

SHMS prescale pretrig: 154 k

Σ e-πn evts: 7755

7755

COIN pretrig: 78 k

Data ok

Junk

Comments:

current 11.19 μA

~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: Joff

Continuation of Configuration:

$Q_2 = 1.45$ low ξ

$w = 2.02$ $x = 0.31$ LEFT

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

| | | | | | | | |
|----------------------------|---|--|--|---|---|---|---|
| Run Number: <u>8675</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>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: ~55mL

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: <u>8676</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>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: ~76mL

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|---|
| Run Number: <u>8677</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>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 μ A \rightarrow 70 μ A \sim 133mL

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: <u>8678</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>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 μ A

| | | | | | | | |
|----------------------------|---|--|---|---|---|--|--|
| Run Number: <u>8679</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>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: <u>8680</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>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>134</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'π)n Run Sheet

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

Date: 19/07/15
yy mm dd

Initials: MD

Use a separate sheet for each configuration.

HMS

SHMS

GRS

Configuration Name:
 $Q^2 = 0.425$ Middle E
 $\theta = 9.20^\circ$

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: |

HMS
 $p = +0.13230$ From GUI $\theta(\text{TV}) = 17.025$ Nearest 0.005

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

Collimator: HMS: Large Sieve SHMS: Large Sieve

| | | | | |
|----|--|---|---|----|
| Q1 | I-SET (from PSU) 172,2738 A B-HALL 0,168 KG | A | 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 | A | 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 | A | I-SET (from PSU) 820,3370 A B-HALL -7,775 KG | Q2 |
| D | I-READ 404,4000 A B-NMR 0,362237 T | A | 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 |

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| Run Number: 8681 | <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: 0 PS6: -1 | Start time (from RC): 21:09 Stop time (from RC): 21:42 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|--|--|

50 μA ,

| | | | | | | | |
|----------------------------|--|--|---|--|--|--|---|
| Run Number: 8682 | <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 checked="" type="checkbox"/> Junk |
|----------------------------|--|--|---|--|--|--|---|

junk, short run

| | | | | | | | |
|----------------------------|---|---|---|---|--|--|---|
| Run Number: 8683 | <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: 11 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 21:44 Stop time (from RC): 22:46 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|---|---|---|--|--|---|

40 μA

| | | | | | | | |
|----------------------------|---|--|---|---|--|---|--|
| Run Number: 8684 | <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: 4 PS4: -1 PS5: 0 PS6: -1 | Start time (from RC): 22:46 Stop time (from RC): 23:42 | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|----------------------------|---|--|---|---|--|---|--|

40 μA

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

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

Date: 1907
 yy mm dd

Initials: V.K

Continuation of Configuration:

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

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

| | | | | | | | |
|--|---|---|---|--|---|---|--|
| Run Number: 8685 | <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>10</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>00:00</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: _____ 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: <u>10cm dummy / current 40uA.</u> | | | | | | | |

| | | | | | | | |
|----------------------------|---|---|---|--|---|---|---|
| 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): 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: <u>Junk</u> | | | | | | | |

| | | | | | | | |
|-----------------------------------|---|---|---|---|--|---|---|
| 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: <u>current 40uA.</u> | | | | | | | |

| | | | | | | | |
|----------------------------------|---|---|---|---|--|---|---|
| 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: <u>current 50uA</u> | | | | | | | |

| | | | | | | | |
|----------------------------------|---|---|--|---|---|--|--|
| 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: <u>current 50uA</u> | | | | | | | |

| | | | | | | | |
|-------------|--|--|---|--|---|---|--|
| 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: 14/7/16
yy mm dd

Initials: V.K

Use a separate sheet for each configuration.

HMS

SHMS

Configuration Name:
 $Q^2 = 0.425$, middle leg
SHMS $Q = 11.20$

Purpose:

- Production
 Test
 Optics
 Other: _____

E_{beam}: 3.65 GeV **I_{beam}:** 50 μ A

Raster: On Off
Size: 2x2 mm

HMS
p: +0.1323 (TV): 17.025
From GUI Nearest 0.005

SHMS
p: +2.3260 (TV): 11.20
From GUI Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

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: |

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

| | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|--|
| Run Number: <u>8690</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>2:45</u> Stop time (from RC): <u>3:44</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>94</u> k $e-\pi n$ evts: <u>32805</u> | SHMS prescale pretrig: <u>89</u> k $\Sigma e-\pi n$ evts: <u>32805</u> | COIN pretrig: <u>6573</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|---|--|

current 50 μ A

| | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|--|
| Run Number: <u>8691</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>03:45</u> Stop time (from RC): <u>04:29</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>83</u> k $e-\pi n$ evts: <u>29136</u> | SHMS prescale pretrig: <u>78</u> k $\Sigma e-\pi n$ evts: <u>61941</u> | COIN pretrig: <u>5837</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|---|--|

current 50 μ A

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|-----------------------------------|---|---|---|---|---|---|--|
| Run Number: <u>8692</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>04:30</u> Stop time (from RC): <u>05:02</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>97</u> k $e-\pi n$ evts: <u>33554</u> | SHMS prescale pretrig: <u>92</u> k $\Sigma e-\pi n$ evts: <u>95495</u> | COIN pretrig: <u>6856</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|---|--|

current 50 μ A

| | | | | | | | |
|-----------------------------------|---|---|---|---|---|--|--|
| Run Number: <u>8693</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>05:04</u> Stop time (from RC): <u>05:19</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale pretrig: <u>38</u> k $e-\pi n$ evts: <u>13466</u> | SHMS prescale pretrig: <u>36</u> k $\Sigma e-\pi n$ evts: <u>108961</u> | COIN pretrig: <u>2720</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|--|--|

current 50 μ A

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

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

Date: 19/7/16
yy mm dd

Initials: V.K

Continuation of Configuration:

$\theta^i = 0.425$, middle ϵ
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: 18 k SHMS prescale: 27 k COIN pretrig: 206 k e- π n evts: 479 Σ e- π n evts: 479 | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: 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: 159 k SHMS prescale: 151 k COIN pretrig: 1125 k e- π n evts: 54779 Σ e- π n evts: 163740 | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: 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: 37 k SHMS prescale: 35 k COIN pretrig: 260 k e- π n evts: 12730 Σ e- π n evts: 176470 | <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: 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: _____ k SHMS prescale: _____ k COIN pretrig: _____ k e- π n evts: Σ e- π n evts: | <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: _____ k SHMS prescale: _____ k COIN pretrig: _____ k e- π n evts: Σ e- π n evts: | <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: _____ k SHMS prescale: _____ k COIN pretrig: _____ k e- π n evts: Σ e- π n evts: | <input type="checkbox"/> Data ok <input type="checkbox"/> Junk |
| Comments: | | | | | | |

p(e,e' π)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

HMS
p: +0.1323 **θ (TV):** 17.025
From GUI Nearest 0.005

SHMS
p: +2.326 **θ (TV):** 13.20
From GUI Nearest 0.005

Collimator: HMS: Large Sieve SHMS: Large Sieve

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>0.192</u> mm |
| Nomin: | | Nomin: |
| 3H07C | X | Y |
| <u>0.276</u> mm | | <u>-0.99</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? | | D |
| | | I-SET (from PSU) <u>742.24</u> A B-NMR <u>0</u> kg | D |

| | | | | | | | |
|-----------------------------------|---|---|---|---|--|---|--|
| Run Number: <u>8697</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>7:17</u> Stop time (from RC): <u>7:22</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>14</u> k pretrig: $e-\pi n$ evts: <u>4430</u> | SHMS prescale: <u>9</u> k pretrig: $\Sigma e-\pi n$ evts: <u>4430</u> | COIN pretrig: <u>740</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|--|---|--|

50 μ A

| | | | | | | | |
|-----------------------------------|---|---|---|---|--|---|---|
| Run Number: <u>8698</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>7:23</u> Stop time (from RC): <u>8:26</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>100</u> k pretrig: $e-\pi n$ evts: <u>24515</u> | SHMS prescale: <u>69</u> k pretrig: $\Sigma e-\pi n$ evts: <u>33945</u> | COIN pretrig: <u>5311</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|--|---|---|

~~50~~ μ A 50 μ A current

| | | | | | | | |
|-----------------------------------|---|---|---|---|--|--|--|
| Run Number: <u>8699</u> | <input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. | PS1: <u>14</u> PS2: <u>-1</u> PS3: <u>12</u> PS4: <u>-1</u> PS5: <u>0</u> PS6: <u>-1</u> | Start time (from RC): <u>8:26</u> Stop time (from RC): <u>9:30</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>211</u> k pretrig: $e-\pi n$ evts: <u>44514</u> | SHMS prescale: <u>143</u> k pretrig: $\Sigma e-\pi n$ evts: <u>78459</u> | COIN pretrig: <u>14300</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|--|--|--|

70 μ A last LH2

| | | | | | | | |
|-----------------------------------|---|---|---|---|---|--|--|
| Run Number: <u>8700</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>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>9:36</u> Stop time (from RC): <u>9:56</u> | <input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK? | HMS prescale: <u>1616</u> k pretrig: $e-\pi n$ evts: <u>807</u> | SHMS prescale: <u>8.5</u> k pretrig: $\Sigma e-\pi n$ evts: <u>807</u> | COIN pretrig: <u>229</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk |
|-----------------------------------|---|---|---|---|---|--|--|

40 μ A