

p(e,e'K) Λ Run Sheet

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

Date: 18 / 11 / 29
yy mm dd

Initials: SK

Use a separate sheet for each configuration.

Configuration Name: p(e,e')p

Hydrogen elastic singles
setting #1

E_{beam}: 3.835 GeV

I_{beam}: 50 μ A

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2.5 x 2.5

Beam position and angle on target:

3H07A	X	Y
<u>0.019</u> mm	<u>-0.2</u> mm	
Nomin:	Nomin:	
3H07C	X	Y
<u>-1</u> mm	<u>-0.2</u> mm	
Nomin:	Nomin:	

HMS

SHMS

Q1	I-SET (from PSU) <u>391.7284</u> A B-HALL <u>0.384</u> kG	I-SET (from PSU) <u>996.218</u> A B-HALL <u>6.329</u> kG	HB
Q2	I-SET (from PSU) <u>311.4421</u> A B-HALL <u>-0.541</u> kG	I-SET (from PSU) <u>631.3790</u> A B-HALL <u>-4.468</u> kG	Q1
Q3	I-SET (from PSU) <u>151.5882</u> A B-HALL <u>0.302</u> kG	I-SET (from PSU) <u>1060.51</u> A B-HALL <u>9.932</u> kG	Q2
D	I-READ <u>979.42</u> A B-NMR <u>0.8231</u> T	I-SET (from PSU) <u>697.8080</u> A B-HALL <u>6.808</u> kG	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>959.415</u> A B-NMR <u>-6.922</u> kG	D

Run Number:

6595

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

PS1: -1
PS2: 6
PS3: 5
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

01:47

Stop time (from RC):

02:06

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

HMS prescale 733 k
pretrig: 733
e-K Λ evts: —

SHMS prescale 600 k
pretrig: 600
 Σ e-K Λ evts: —

COIN pretrig: — k
☒ Data ok
☐ Junk

Comments:

50k replays look very odd, may be junk?

Run Number:

6596

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

PS1: -1
PS2: 6
PS3: 5
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

02:08

Stop time (from RC):

02:25

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

HMS prescale 792 k
pretrig: 792
e-K Λ evts: —

SHMS prescale 600 k
pretrig: 600
 Σ e-K Λ evts: —

COIN pretrig: — k
☒ Data ok
☐ Junk

Comments:

50k replays look very odd... junk?

Run Number:

6597

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

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

Start time (from RC):

02:45

Stop time (from RC):

02:59

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

HMS prescale 311 k
pretrig: 311
e-K Λ evts: —

SHMS prescale 292 k
pretrig: 292
 Σ e-K Λ evts: —

COIN pretrig: — k
☒ Data ok
☐ Junk

Comments:

Tracking efficiency in SHMS dropped, seen in 1X1 & 1X2 in DC (down to 71.22%)

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale _____ k
pretrig: _____
e-K Λ evts: _____

SHMS prescale _____ k
pretrig: _____
 Σ e-K Λ evts: _____

COIN pretrig: _____ k
☐ Data ok
☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 20
yy mm dd

Initials: RA

Use a separate sheet for each configuration.

Configuration Name: $p(e,e'K)\Lambda$

Hydrogen elastic singles
Setting #2

E_{beam} : 3.835 GeV

I_{beam} : 50 μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2.5×2.5

Beam position and angle on target:

3H07A	X	Y
-0.002	mm	-0.196
Nomin: 0		Nomin: -0.2
3H07C	X	Y
-0.044	mm	-0.213
Nomin: -1		Nomin: -0.2

HMS

SHMS

Q1	I-SET (from PSU) 361.58 A B-HALL 0.363 kG	A	I-SET (from PSU) 938.47 A B-HALL 5.964 kG	HB
Q2	I-SET (from PSU) 293.508 A B-HALL -0.555 kG	A	I-SET (from PSU) 595.054 A B-HALL -4.183 kG	Q1
Q3	I-SET (from PSU) 142.8631 A B-HALL 0.286 kG	A	I-SET (from PSU) 944.5 A B-HALL 9.362 kG	Q2
D	I-READ 865.77 A B-NMR 0.77584T kG	A	I-SET (from PSU) 657.66 A B-HALL 6.395 kG	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?		I-SET (from PSU) 904.217 A B-NMR -6.520 kG	D

Run Number:

6598

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

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

Start time (from RC):

03:18:15

Stop time (from RC):

03:29

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

HMS prescale
pretrig: 416 k

$e-K\Lambda$ evts: —

SHMS prescale
pretrig: 530 k

$\Sigma e-K\Lambda$ evts: —

COIN
pretrig: — k

☒ Data ok

☐ Junk

Comments:

Tracking efficiency in SHMS dropped, seen in 1x1 & 1x2 plane of DC (61.74% eff.)

Run Number:

6599

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

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

Start time (from RC):

03:37

Stop time (from RC):

—

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

HMS prescale
pretrig: — k

$e-K\Lambda$ evts: —

SHMS prescale
pretrig: — k

$\Sigma e-K\Lambda$ evts: —

COIN
pretrig: — k

☐ Data ok

☒ Junk

Comments:

Rescaler Not Saved Junk

Run Number:

6600

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

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

Start time (from RC):

03:37

Stop time (from RC):

03:52

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

HMS prescale
pretrig: 454 k

$e-K\Lambda$ evts: —

SHMS prescale
pretrig: 763 k

$\Sigma e-K\Lambda$ evts: —

COIN
pretrig: — k

☒ Data ok

☐ Junk

Comments:

Tracking efficiency in SHMS still low in DC (88.83%)

Run Number:

6601

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

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

Start time (from RC):

03:53

Stop time (from RC):

04:09

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

HMS prescale
pretrig: 472 k

$e-K\Lambda$ evts: —

SHMS prescale
pretrig: 745 k

$\Sigma e-K\Lambda$ evts: —

COIN
pretrig: — k

☒ Data ok

☐ Junk

Comments:

Tracking efficiency normal again

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 29
yy mm dd

Initials: mt

Use a separate sheet for each configuration.

Configuration Name: $p(e,e')p$

Hydrogen elastic singles
Setting #3

E_{beam} : 3.835 GeV

I_{beam} : 50 μA

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2.5 x 2.5

Beam position and angle on target:

3H07A	X	Y
<u>-0.008</u> mm		<u>-0.214</u> mm
Nomin: <u>0</u>		Nomin: <u>-0.2</u>
3H07C	X	Y
<u>-1.007</u> mm		<u>-0.194</u> mm
Nomin: <u>-1</u>		Nomin: <u>-0.2</u>

HMS

SHMS

Q1	I-SET (from PSU) <u>353.4151</u> A B-HALL <u>0.347</u> kG	I-SET (from PSU) <u>898.123</u> A B-HALL <u>5.690</u> kG	HB
Q2	I-SET (from PSU) <u>280.9653</u> A B-HALL <u>-0.528</u> kG	I-SET (from PSU) <u>569.6480</u> A B-HALL <u>-4.021</u> kG	Q1
Q3	I-SET (from PSU) <u>136.7815</u> A B-HALL <u>60.271</u> kG	I-SET (from PSU) <u>956.825</u> A B-HALL <u>8.955</u> kG	Q2
D	I-READ <u>828.50</u> A B-NMR <u>0.74277</u> kG	I-SET (from PSU) <u>629.582</u> A B-HALL <u>6.147</u> kG	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) <u>8865.6110</u> A B-NMR <u>-6.274</u> kG	D

Run Number:

6602

Comments:

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

PS1: -1
PS2: 4
PS3: 2
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

04:27

Stop time (from RC):

04:44

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

HMS prescale
pretrig: 530 k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: 965 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: — k

- ☒ Data ok
☐ Junk

Run Number:

6603

Comments:

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

PS1: -1
PS2: 4
PS3: 2
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

04:45

Stop time (from RC):

04:59

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

HMS prescale
pretrig: 777 k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: 476 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: — k

- ☒ Data ok
☐ Junk

Run Number:

6604

Comments:

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

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

Start time (from RC):

05:18

Stop time (from RC):

05:28

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

HMS prescale
pretrig: 401 k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: 418 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: — k

- ☐ Data ok
☐ Junk

Run Number:

Comments:

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: _____ k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: _____ k

- ☐ Data ok
☐ Junk

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 29
yy mm dd

Initials: AA

Use a separate sheet for each configuration.

Configuration Name: $p(e,e')p$

Hydrogen elastic singlet
Setting #4

E_{beam} : 3.835 GeV

I_{beam} : 50 μA

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2.5 x 2.5

Beam position and angle on target:

3H07A	X	Y
-0.017 mm		-0.210 mm
Nomin: 0		Nomin: -0.2
3H07C	X	Y
-0.991 mm		-0.189 mm
Nomin: -1.0		Nomin: -0.2

HMS

SHMS

Q1	I-SET (from PSU) 336.4738 A B-HALL 0.331 kG	I-SET (from PSU) 854.81 A B-HALL 5.418 kG	HB
Q2	I-SET (from PSU) 267.4892 A B-HALL -0.501 kG	I-SET (from PSU) 542.352 A B-HALL -3.817 kG	Q1
Q3	I-SET (from PSU) 130.2476 A B-HALL 0.258 kG	I-SET (from PSU) 910.9770 A B-HALL 8.546 kG	Q2
D	I-READ 788.47 A B-NMR 0.70707T kG	I-SET (from PSU) 519.414 A B-HALL 5.818 kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) 824.133 A B-NMR -5.947 kG	D

Run Number:

6605

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: _____ k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-K\Lambda$ evts:

COIN
pretrig: _____ k

- ☐ Data ok
☒ Junk

Comments:

Junk!

Run Number:

6606

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: 215 k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: 505 k

$\Sigma e-K\Lambda$ evts:

COIN
pretrig: _____ k

- ☒ Data ok
☐ Junk

Comments:

SHMS DC 1X1 & 1X2 efficiency dropped (62.42%)

Run Number:

6607

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: _____ k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: _____ k

$\Sigma e-K\Lambda$ evts:

COIN
pretrig: _____ k

- ☐ Data ok
☒ Junk

Comments:

Junk!

Run Number:

6608

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: 703 k

$e-K\Lambda$ evts:

SHMS prescale
pretrig: 955 k

$\Sigma e-K\Lambda$ evts:

COIN
pretrig: _____ k

- ☒ Data ok
☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 29
yy mm dd

Initials: RA

Continuation of Configuration:

$p(e,e')p$ Hydrogen elastic singles
Setting #4

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

Run Number: <u>6609</u>	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l. <input type="checkbox"/>	PS1: <u>-1</u> PS2: <u>2</u> PS3: <u>1</u> PS4: <u>-1</u> PS5: <u>-1</u> PS6: <u>-1</u>	Start time (from RC): <u>06:29</u> Stop time (from RC): <u>06:45</u>	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK? <input checked="" type="checkbox"/> 50k OK?	HMS prescale <u>666</u> k pretrig: <u>—</u> $e-K\Lambda$ evts: <u>—</u>	SHMS prescale <u>905</u> k pretrig: <u>—</u> $\Sigma e-K\Lambda$ evts: <u>—</u>	COIN pretrig: <u>—</u> k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
----------------------------	---	--	---	---	--	--	---

Drop in SHMS Tracking efficiency, DC 1 1x1, 1x2

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

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 21
yy mm dd

Initials: AT

Use a separate sheet for each configuration.

Configuration Name: $p(e,e')p$

Hydrogen elastic singles
Setting #5

E_{beam}: 3.835 GeV

I_{beam}: 50 μ A

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2.5 x 2.5

Beam position and angle
on target:

3H07A	X	Y
0.001 mm	-0.978 mm	
Nomin: 6	Nomin: -1.0	
3H07C	X	Y
-0.215 mm	-0.20 mm	
Nomin: -0.2	Nomin: -0.2	

HMS

SHMS

Q1	I-SET (from PSU) 322.7405 A B-HALL 0.316 kG	I-SET (from PSU) 819.8570 A B-HALL 5.235 kG	HB
Q2	I-SET (from PSU) 256.6046 A B-HALL -0.479 kG	I-SET (from PSU) 520.305 A B-HALL -3.655 kG	Q1
Q3	I-SET (from PSU) 124.9702 A B-HALL 0.250 kG	I-SET (from PSU) 873.945 A B-HALL 8.220 kG	Q2
D	I-READ 756.25 A B-NMR 0.6784083 T	I-SET (from PSU) 575.048 A B-HALL 5.570 kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) 790.632 A B-NMR -5.701 kG	D

Run Number:

6610

Comments:

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

PS1: -1
PS2: 2
PS3: 0
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

06:56

Stop time (from RC):

07:13

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Drop in SHMS Tracking efficiency, seen in DC 1X1, 1X2 (76.46%)

Run Number:

6611

Comments:

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

PS1: -1
PS2: 2
PS3: 0
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

07:14

Stop time (from RC):

07:30

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

cc

" (66.20 %)

Run Number:

6612

Comments:

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

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

Start time (from RC):

07:41

Stop time (from RC):

07:57

☒ Settings
Verified?

☒ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Run Number:

6613

Comments:

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

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

Start time (from RC):

11:44

Stop time (from RC):

11:46

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

(Junk)

p(e,e'K) Λ Run Sheet

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

Date: 18/11/29
yy mm dd

Initials: JRC

Use a separate sheet for each configuration.

Configuration Name: _____

Purpose:

☐ Production

☐ Test

☐ Optics

☒ Other: Raster check
Zn detector for detector

Raster: ☒ On ☐ Off

Size: _____

E_{beam}: 3.835 GeV

I_{beam}: 5.20 μ A

HMS

p: +2.0260 θ (TV): 38.59 \rightarrow 30
From GUI Nearest 0.005

SHMS

p: +23.007 θ (TV): 9.50
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Beam position and angle on target:

3H07A	X	Y
-0.3 mm	-0.2 mm	
Nomin:	Nomin:	
3H07C	X	Y
-1.3 mm	-0.2 mm	
Nomin:	Nomin:	

HMS

SHMS

Q1

Q2

Q3

D

HB

Q1

Q2

Q3

D

I-SET (from PSU)	A	I-SET (from PSU)	A
B-HALL	kg	B-HALL	kg
I-SET (from PSU)	A	I-SET (from PSU)	A
B-HALL	kg	B-HALL	kg
I-SET (from PSU)	A	I-SET (from PSU)	A
B-HALL	kg	B-HALL	kg
I-READ	A	I-SET (from PSU)	A
B-NMR	kg	B-HALL	kg
If momentum increased:		I-SET (from PSU)	A
<input type="checkbox"/> HMS cycled?		B-NMR	kg
<input type="checkbox"/> SHMS cycled?			

Run Number:

6616

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

PS1: 0
PS2: _____
PS3: _____
PS4: 0
PS5: _____
PS6: _____

Start time (from RC):

17:35

Stop time (from RC):

17:40

☐ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale pretrig: k

e-K Λ evts:

SHMS prescale pretrig: k

Σ e-K Λ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

Raster check with Carbon hole

Run Number:

6617

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

PS1: 0
PS2: _____
PS3: _____
PS4: 0
PS5: _____
PS6: _____

Start time (from RC):

17:42

Stop time (from RC):

17:47

☐ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale pretrig: k

e-K Λ evts:

SHMS prescale pretrig: k

Σ e-K Λ evts:

COIN pretrig: k

☐ Data ok

☐ Junk

Comments:

Moved x to left (-) for 0.3 mm, beam centered now

Run Number:

6618

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

PS1: 10
PS2: _____
PS3: _____
PS4: 0
PS5: _____
PS6: _____

Start time (from RC):

18:07

Stop time (from RC):

18:09

☐ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale pretrig: k

e-K Λ evts:

SHMS prescale pretrig: k

Σ e-K Λ evts:

COIN pretrig: k

☐ Data ok

☒ Junk

Comments:

HMS moved to 30 degrees, beam current = 20 nA. PS1 needs to change

Run Number:

6619

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

PS1: 10
PS2: _____
PS3: _____
PS4: 0
PS5: _____
PS6: _____

Start time (from RC):

18:10

Stop time (from RC):

18:18

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 500 k

e-K Λ evts:

SHMS prescale pretrig: 500 k

Σ e-K Λ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

Changed PS1 to 10 inelastic carbon run

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18, 11, 29
yy mm dd

Initials: JJ

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP Single #1.

#2.

E_{beam}: 3.835 GeV

I_{beam}: 20 μ A

Purpose:

☒ Production

☐ Test

☒ Optics

☐ Other: _____

Raster: ☒ On ☒ Off

Size: 2.25 x 2.25

Beam position and angle on target:

3H07A	X	Y
-0.3 mm		-0.2 mm
Nomin:		Nomin:
3H07C	X	Y
-1.3 mm		-0.2 mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) 263.387 A B-HALL kg	I-SET (from PSU) 996.218 A B-HALL kg	HB
Q2	I-SET (from PSU) 209.749 A B-HALL kg	I-SET (from PSU) 631.379 A B-HALL kg	Q1
Q3	I-SET (from PSU) 102.2527 A B-HALL kg	I-SET (from PSU) 1060.510 A B-HALL kg	Q2
D	I-READ 619.933 A B-NMR 0.554612 kg	I-SET (from PSU) 697.808 A B-HALL kg	Q3
	If momentum increased: <input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) 959.415 A B-NMR kg	D

Run Number:

6620

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

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

Start time (from RC):

18:28

Stop time (from RC):

18:36

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

e-K Λ evts:

SHMS prescale
pretrig: 500 k

Σ e-K Λ evts:

COIN
pretrig: 500 k

☒ Data ok

☐ Junk

Comments:

SHMS Sieve in, 1.5% Carbon. 20 μ A, raster off.

Run Number:

6621

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

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

Start time (from RC):

19:43

Stop time (from RC):

19:58

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

e-K Λ evts:

SHMS prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Mixed SHMS sieve out, LH2 raster on. 50 μ A, PS2 \rightarrow 5
HEEP Single #1. SHMS @ 21.1K HMS @ 38.6 Total \sim 1M.

Run Number:

6622

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

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

Start time (from RC):

20:09

Stop time (from RC):

20:24

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 51.26 k

e-K Λ evts:

SHMS prescale
pretrig: 1014 k

Σ e-K Λ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

HEEP Single #1, 10cm Dummy, 40 μ A, PS2 \rightarrow 3
Total \sim 1.1M

Run Number:

6623

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

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

Start time (from RC):

20:33

Stop time (from RC):

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: k

e-K Λ evts:

SHMS prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

HEEP Single #2, LH2, 50 μ A

p(e,e'K) Λ Run Sheet

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

Date: 18/11/29
yy mm dd

Initials: JRZ

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP single #2

E_{beam}: 3.835 GeV

I_{beam}: 50 μ A

HMS

p: +/- 2.026 θ (TV): 38.6
From GUI Nearest 0.005

SHMS

p: +/- 2.834 θ (TV): 24.00
From GUI Nearest 0.005

Collimator:

HMS: Large ☒ Sieve ☐

SHMS: Large ☒ Sieve ☐

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off

Size: 25 x 2.25

Beam position and angle on target:

3H07A	X	Y
<u>-0.3</u> mm		<u>-0.2</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-1.3</u> mm		<u>-0.2</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>938.47</u> A kG	HB
Q2	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>595.05</u> A kG	Q1
Q3	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>999.50</u> A kG	Q2
D	I-READ B-NMR A kG	I-SET (from PSU) B-HALL <u>657.662</u> A kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) B-NMR <u>904.2170</u> A kG	D

Run Number:

6623

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

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

Start time (from RC):

20:33

Stop time (from RC):

20:48

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 97.7 k

e-K Λ evts:

SHMS prescale pretrig: 974 k

Σ e-K Λ evts:

COIN pretrig: k

☒ Data ok?

☐ Junk

Comments:

50 uA

PS scales_gui was stuck. DT probably high.

Total ~ 1 M.

Run Number:

6624

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

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

Start time (from RC):

20:51

Stop time (from RC):

21:06

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 129 k

e-K Λ evts:

SHMS prescale pretrig: 731 k

Σ e-K Λ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

Changed PS2 to 4.

Total ~ 861 k

Run Number:

6625

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

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

Start time (from RC):

21:19

Stop time (from RC):

21:33

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale pretrig: 32 k

e-K Λ evts:

SHMS prescale pretrig: 694 k

Σ e-K Λ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

40 uA

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale pretrig: k

e-K Λ evts:

SHMS prescale pretrig: k

Σ e-K Λ evts:

COIN pretrig: k

☒ Data ok

☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18/11/29
yy mm dd

Initials: JJZ

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP single #3

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

E_{beam}: 3.835 GeV

I_{beam}: 40 for D_{um}
50 for L_{H2} μ A

Raster: ☒ On ☐ Off

Size: 2.25 x 2.25

Beam position and angle
on target:

3H07A	X	Y
<u>-0.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-1.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>898.1230</u> A kG	HB
Q2	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>569.6480</u> A kG	Q1
Q3	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>956.8250</u> A kG	Q2
D	I-READ B-NMR A kG	I-SET (from PSU) B-HALL <u>629.5820</u> A kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) B-NMR <u>865.6110</u> A kG	D

Run Number:

6626

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

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

Start time (from RC):

21:40

Stop time (from RC):

21:50

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 23 k

e-K Λ evts:

SHMS
prescale
pretrig: 700 k

Σ e-K Λ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

6627

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

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

Start time (from RC):

21:57

Stop time (from RC):

22:13

☒ Settings
Verified?

☒ HV OK?

☒ 50k OK?

HMS
prescale
pretrig: 156 k

e-K Λ evts:

SHMS
prescale
pretrig: 960 k

Σ e-K Λ evts:

COIN
pretrig: k

☒ Data ok

☐ Junk

Comments:

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

☐ Settings
Verified?

☐ HV OK?

☐ 50k OK?

HMS
prescale
pretrig: k

e-K Λ evts:

SHMS
prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

☐ Data ok

☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18/11/19
yy mm dd

Initials: JJC

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP single #4

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

E_{beam}: 3.835 GeV

I_{beam}: 40 50 μ A dummy LH₂

Raster: ☒ On ☐ Off

Size: 2.25 X 2.25

Beam position and angle on target:

3H07A	X	Y
<u>-0.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-1.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>854.8100</u> A kG	HB
Q2	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>542.3520</u> A kG	Q1
Q3	I-SET (from PSU) B-HALL A kG	I-SET (from PSU) B-HALL <u>90.9770</u> A kG	Q2
D	I-READ B-NMR A kG	I-SET (from PSU) B-HALL <u>599.4140</u> A kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?	I-SET (from PSU) B-NMR <u>824.1330</u> A kG	D

Run Number:

6628

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

PS1: -1
PS2: 2
PS3: 0
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

22:23

Stop time (from RC):

22:28

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

HMS prescale
pretrig: k

e-K Λ evts:

SHMS prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

- ☐ Data ok
☒ Junk

Comments:

Junk. magnets not fully set.

Run Number:

6629

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

PS1: -1
PS2: 2
PS3: 0
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

22:25

Stop time (from RC):

22:40

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

HMS prescale
pretrig: 133 k

e-K Λ evts:

SHMS prescale
pretrig: 826 k

Σ e-K Λ evts:

COIN
pretrig: k

- ☒ Data ok
☐ Junk

Comments:

Run Number:

6630

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

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

Start time (from RC):

22:47

Stop time (from RC):

22:56

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

HMS prescale
pretrig: 23 k

e-K Λ evts:

SHMS prescale
pretrig: 432 k

Σ e-K Λ evts:

COIN
pretrig: k

- ☒ Data ok
☐ Junk

Comments:

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

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

HMS prescale
pretrig: k

e-K Λ evts:

SHMS prescale
pretrig: k

Σ e-K Λ evts:

COIN
pretrig: k

- ☐ Data ok
☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 19
yy mm dd

Initials: JHC

Use a separate sheet for each configuration.

Configuration Name: _____

HEEP single #5

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

E_{beam}: 3.835 GeV

I_{beam}: 50 μ A

40 for Dumm
CH₂

Raster: ☒ On ☐ Off

Size: 2.25 x 2.25

HMS

p: +0.2026 θ (TV): 38.6
From GUI Nearest 0.005

SHMS

p: +/- 2.478 θ (TV): 30.00
From GUI Nearest 0.005

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Beam position and angle on target:

3H07A	X	Y
<u>-0.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:
3H07C	X	Y
<u>-1.3</u>	mm	<u>-0.2</u> mm
Nomin:		Nomin:

HMS

SHMS

Q1	I-SET (from PSU) <u>263.8870</u> A B-HALL kG	A	I-SET (from PSU) <u>819.8570</u> A B-HALL kG	A	HB
Q2	I-SET (from PSU) <u>209.7491</u> A B-HALL kG	A	I-SET (from PSU) <u>520.3050</u> A B-HALL kG	A	Q1
Q3	I-SET (from PSU) <u>102.2524</u> A B-HALL kG	A	I-SET (from PSU) <u>873.9450</u> A B-HALL kG	A	Q2
D	I-READ <u>619.9330</u> A B-NMR kG	A	I-SET (from PSU) <u>575.0480</u> A B-HALL kG	A	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input type="checkbox"/> SHMS cycled?		I-SET (from PSU) <u>790.6320</u> A B-NMR kG	A	D

Run Number:

6631

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

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

Start time (from RC):

23:03

Stop time (from RC):

23:08

☒ Settings Verified?

☒ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

e-K Λ evts: _____

SHMS prescale
pretrig: _____ k

Σ e-K Λ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☒ Junk

Comments:

Beam was off.

Run Number:

6632

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

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

Start time (from RC):

00:21

Stop time (from RC):

00:31

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: 28 k

e-K Λ evts: _____

SHMS prescale
pretrig: 38 k

Σ e-K Λ evts: _____

COIN
pretrig: _____ k

☒ Data ok

☐ Junk

Comments:

Run Number:

6633

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

PS1: -1
PS2: 2
PS3: 0
PS4: -1
PS5: -1
PS6: -1

Start time (from RC):

00:40

Stop time (from RC):

00:55

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale
pretrig: _____ k

e-K Λ evts: _____

SHMS prescale
pretrig: _____ k

Σ e-K Λ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

Run Number:

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

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

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale
pretrig: _____ k

e-K Λ evts: _____

SHMS prescale
pretrig: _____ k

Σ e-K Λ evts: _____

COIN
pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

$p(e,e'K)\Lambda$ Run Sheet

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

Date: 18 / 11 / 20

Initials: SK

Use a separate sheet for each configuration.

HMS

SHMS

Configuration Name: _____

HEEP COIN

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

E_{beam} : 3.835 GeV

I_{beam} : 50 μA

Raster: ☒ On ☐ Off

Size: 2.25x2.25

HMS

p : +/- -2.026 $\theta(\text{TV})$: 38.600
From GUI Nearest 0.005

SHMS

p : +/- +2.583 $\theta(\text{TV})$: 24.305
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:

Q1	I-SET (from PSU) 26.8870 A B-HALL 0.256 kG	I-SET (from PSU) 854.81 A B-HALL -5.406 kG	HB
Q2	I-SET (from PSU) 29.7691 A B-HALL -0.385 kG	I-SET (from PSU) 542.3520 A B-HALL 3.844 kG	Q1
Q3	I-SET (from PSU) 102.2524 A B-HALL 0.201 kG	I-SET (from PSU) 910.9770 A B-HALL -8.587 kG	Q2
D	I-READ 618.55 A B-NMR 0.5546102 T kG	I-SET (from PSU) 599.4140 A B-HALL -5.880 kG	Q3
	If momentum increased: <input type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET (from PSU) 824.1330 A B-NMR 5.903 kG	D

Run Number:

6634

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

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

Start time (from RC):

01:33

Stop time (from RC):

01:48

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 95 k
pretrig: 95 k

$e-K\Lambda$ evts:

SHMS prescale 768 k
pretrig: 768 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: 53 k

☒ Data ok

☐ Junk

Comments:

~26 K good COIN

Run Number:

6635

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

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

Start time (from RC):

01:49

Stop time (from RC):

02:10

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale 75 k
pretrig: 75 k

$e-K\Lambda$ evts:

SHMS prescale 608 k
pretrig: 608 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: 47 k

☒ Data ok

☐ Junk

Comments:

~20 K good COIN

Run Number:

6636

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

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

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

☐ 50k OK?

HMS prescale _____ k
pretrig: _____ k

$e-K\Lambda$ evts:

SHMS prescale _____ k
pretrig: _____ k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: _____ k

☐ Data ok

☐ Junk

Comments:

junk (2 min run only)

Run Number:

6637

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

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

Start time (from RC):

09:32

Stop time (from RC):

9:45

☒ Settings Verified?

☒ HV OK?

☒ 50k OK?

HMS prescale .05 k
pretrig: .05 k

$e-K\Lambda$ evts:

SHMS prescale 1.7 k
pretrig: 1.7 k

$\Sigma e-K\Lambda$ evts:

COIN pretrig: .01 k

☐ Data ok

☐ Junk

Comments:

Heepcheck, Thick RUN