

Aug 08 Optics / H(e, e'p) Checkout **DONE**

Sep 12-16 Pre-Beam Checkout

(hardware trigger - **DONE**, set spectrometers @ MF kinematics - **PENDING**)

Sep 17 - 28

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|----------------------------|----------------------------------------------|------------------|
| 1. Beam / Trigger Checkout | ~ 1 hr | - PENDING |
| 2. BCM Calibrations | ~ 1 hr | - PENDING |
| 3. SHMS Hodo HV Test | ~ 30 min | - PENDING |
| 4. HMS Proton Absorption | ~ 40 min | - PENDING |
| 5. Target Boiling Studies | ~ 1 hr | - PENDING |
| 6. Production Mean-Field | ~ 8 hrs (1 hr / target) + Al dummy (20 min) | - PENDING |
| 7. Production SRC | ~ 151 hrs | - PENDING |

subtotal 165 hrs

target changes ~ 1 hr (3 min/target | target boiling - 2 targets, MF - 9 targets, SRC - 9 targets)

HMS spec. rotation/magnet change ~ 40 min (time needed to get precise dipole NMR in HMS)

TOTAL ~ 167 hrs (7 days)

* **NOTE_1:** 0.5 “fudge factor” applied in production MF and SRC count estimates (account for detector inefficiencies and model underestimates)

* **NOTE_2:** beam time estimates assume a 50% beam efficiency

Break-Up of *PAC hours for CaFe production

*PAC: beam-on-target hours

Target	Run Hour SRC (PAC hour)	Number of event (SRC)	Run hour MF (PAC hour)	Number of event (MF)
D2	7	5.3k	0.5	250k
C12	7	5.0k	0.5	52k
Ca48	12	8.7k	0.5	53k
Ca40	12	8.7k	0.5	53k
Fe54	20	8.7k	1.0	55k
Be9	4	4.6k	0.5	98k
B10	6.5	4.5k	0.5	57k
B11	6.5	5.0k	0.5	63k

Table from Dien Nguyen

CaFe Production Kinematics

	Ebeam (GeV)	E' (GeV)	θ_e Degree	$ P_p $ GeV	θ_p Degree	Pm GeV	Q2_center
SRC	10.6	8.55	8.3	1.325	66.4	0.4	2.1
MF	10.6	8.55	8.3	1.820	48.3	0.15	2.1

Table from Dien Nguyen