

**Hall A "LEDEX" RunPlan (Last Updated: 24 July 2006)**  
**2<sup>nd</sup> Low-Energy Beam Period ( $E_0 = 362$  MeV): Aug. 20 – Sep. 1, 2006**  
**E05-004**

KINEMATICS TABLE ("KIN-TABLE"): FOR PRODUCTION  $A(e,e')A$  ELASTIC RUNS: H, D, C, Al, Ta

KIN POINT			Spectrometer Settings		Primary Target(s)	Pre-Run "Raw Rate" Estimates (2 msr) for $I = 1 \mu A$			
Sequence #	Q (Gev/c)	Setting #	$p_{e'}$ (GeV/c)	$\theta_{e'}$ (deg)		$LD_2$		C	
						Rate	Goal Cts	Rate	Goal Cts.
9	0.088	1	0.3599	14.00	All (H, D, Solid)	262 kHz	1 M	119 kHz	1 M
1	0.100	1	0.3593	15.94	All (H, D, Solid)	142 kHz	1M	61.7 kHz	1 M
10	0.125	1	0.3578	20.00	All (H, D, Solid)	46.3 kHz	1 M	18.1 kHz	1 M
2	0.150	1	0.3560	24.12	All (H, D, Solid)	17.2 kHz	1 M	5.74 kHz	1 M
11	0.175	1	0.3538	28.30	All (H, D, Solid)	7.00 kHz	1 M	1.86 kHz	1 M
3	0.200	1	0.3612	32.57	D & Solid	3.03 kHz	1M	593 Hz	1 M
		2	0.3513		All (H, D, Solid)	3.03 kHz	1M	593 Hz	1 M
		3	0.3413		H & D	3.03 kHz	1M		
12	0.225	1	0.3610	36.93	Solid	1.37 kHz	1 M	179 Hz	1 M
		2	0.3485		D				
		3	0.3360		H				
4	0.250	1	0.3607	41.41	Solid	645 Hz	1 M	49.0 Hz	1 M
		2	0.3453		D				
		3	0.3302		H				
13	0.275	1	0.3604	46.02	Solid	312 Hz	1 M	11.4 Hz	100-250 k
		2	0.3418		D				
		3	0.3238		H				
5	0.300	1	0.3601	50.78	Solid	155 Hz	1 M	2.00 Hz	100 k
		2	0.3380		D				
		3	0.3170		H				
14	0.325	1	0.3597	55.74	Solid	78.2 Hz	1 M	0.17 Hz	~1-3 k
		2	0.3338		D				
		3	0.3098		H				
6	0.350	1	0.3593	60.90	Solid	40.2 Hz	1 M	0.002 Hz	??
		2	0.3293		D				
		3	0.3021		H				
15	0.375	1	0.3589	66.33	Solid	20.9 Hz	0.5 -1.0 M	0.04 Hz	~100 ?
		2	0.3245		D				
		3	0.2941		H				
7	0.400	1	0.3584	72.06	Solid	10.9 Hz	100-250 k	0.05 Hz	~100 ?
		2	0.3194		D				
		3	0.2857		H				
16	0.425	1	0.3579	78.17	Solid	5.8 Hz	100-250 k	0.04 Hz	~100 ?
		2	0.3138		D				
		3	0.2770		H				
8	0.450	1	0.3573	84.72	Solid	3.0 Hz	100 k	0.02 Hz	~100 ?
		2	0.3080		D				
		3	0.2681		H				

**CHOOSING CURRENT AND/OR PRESCALES:** want max DAQ rate that keeps *deadtime*  $\approx 10\%$  or less. Current range between  $\approx 0.5 \mu A$  and  $10 \mu A$ . Try for *prescale*=1 when rates get low enough, otherwise use lowest current and set *prescale* to get *deadtime*.