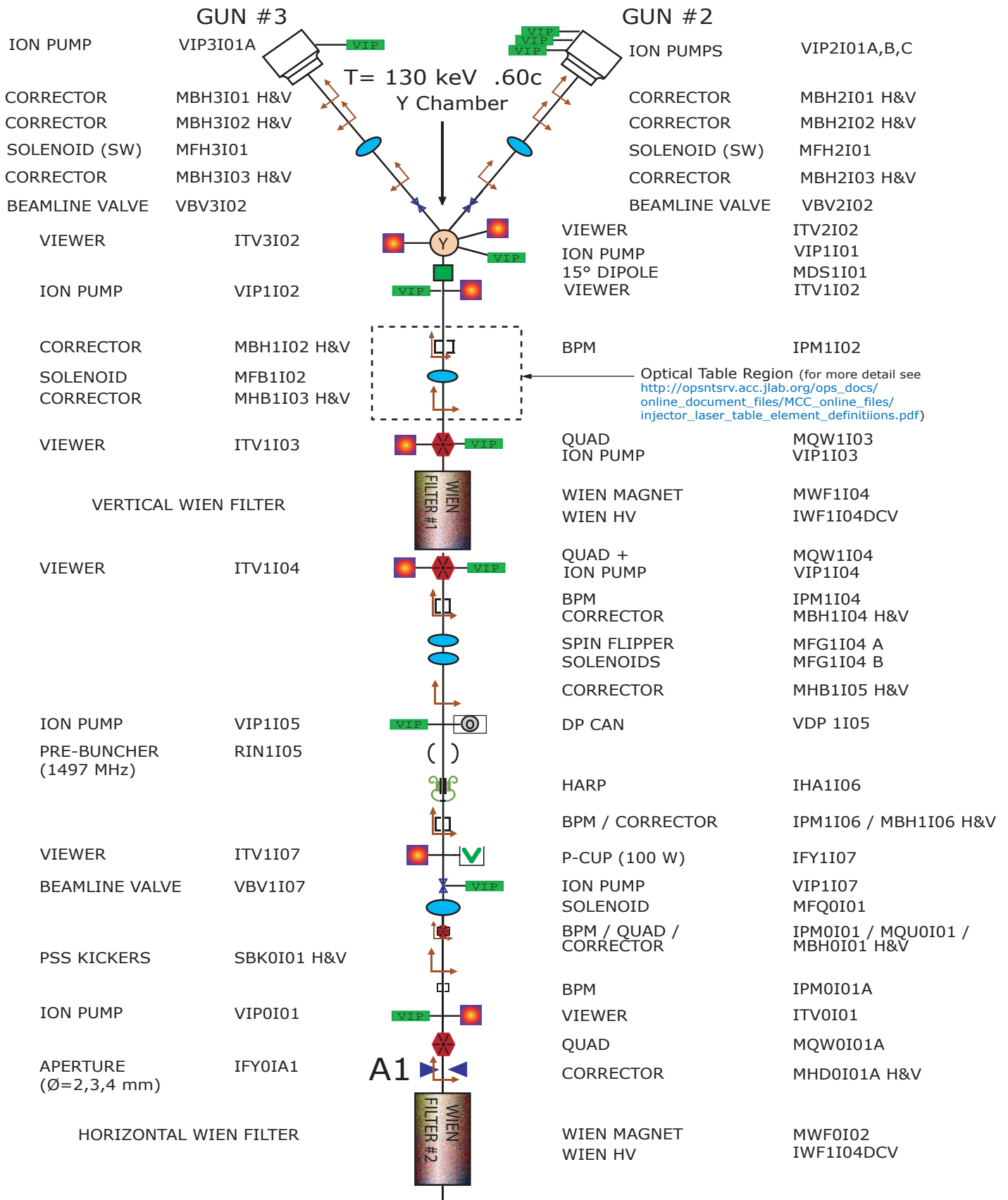


INJECTOR QUICK REFERENCE DRAWING

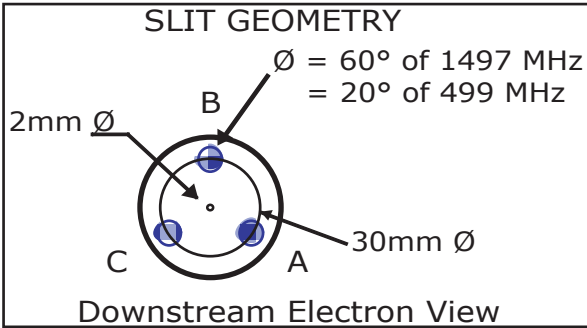


CORRECTOR MBH0I02 H&V
 VIEWER ITV0I02
 APERTURE (Ø=4,6,8 mm) IFY0IA2

CHOPPER #1 (499 MHz)

MASTER SLIT
 SLIT A
 SLIT B
 SLIT C
 VIEWER
 CENTER PLUG

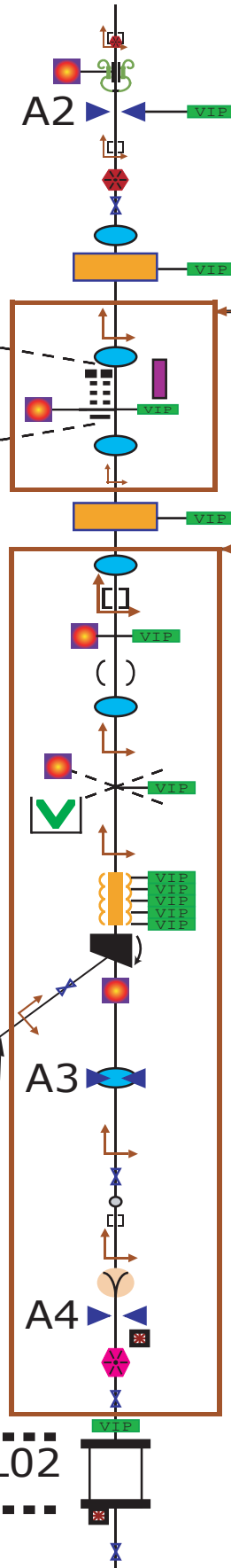
CHOPPER #2 (499 MHz)



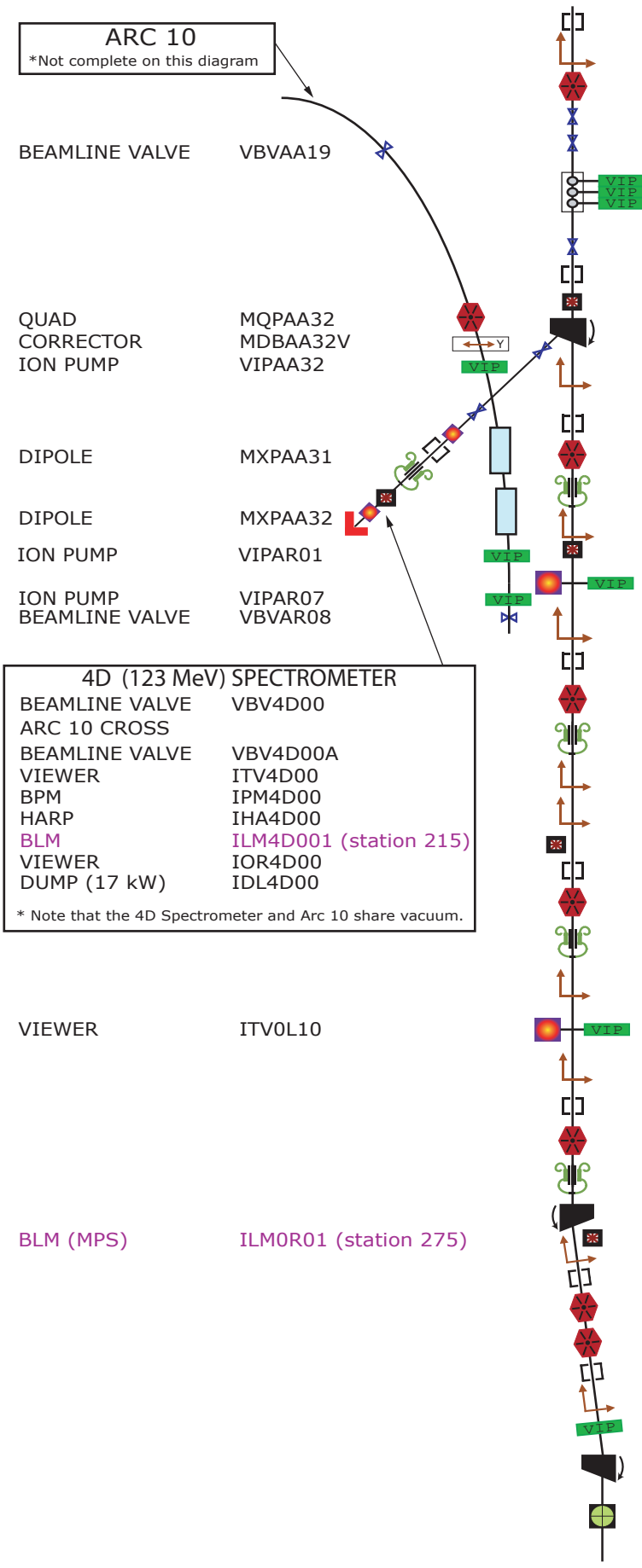
CAPTURE
 T= 500keV .86c

130 keV/500 keV SPECTROMETER
 BEAMLINE VALVE VBV1D00
 CORRECTOR MAD1D00 H&V
 BROCK CAVITY ICB1D00
 HARP IHA1D00
 VIEWER ITV1D00
 500 keV Dump (1kW) IDL1D00

¼ CRYOMODULE 0L02
 T= 6.2 MeV



BPM / QUAD IPM0I02 / MQU0I02
 HARP (disconnected) IHA0I02
 ION PUMP VIP0I02
 CORRECTOR / BPM MBH0I02A H&V / IPM0I02A
 QUAD MQU0I02A
 BEAMLINE VALVE VBV0I02
 SOLENOID MFA0I03
 ION PUMP VIP0I03
 EARTH CORRECTING COIL MED0I03
 CORRECTOR MBH0I03 H&V
 SOLENOID MFD0I04
 Quick Access CARM #1 of 3
 VIEWER + ION PUMP ITV0I04 + VIP0I04
 SOLENOID(same supply as MFD0I04) MFD0I04A
 CORRECTOR MBH0I04 H&V
 ION PUMP VIP0I04A
 EARTH CORRECTING COIL MEE0I05
 SOLENOID MFA0I05
 CORRECTOR/BPM MBH0I05 H&V / IPM0I05
 VIEWER + ION PUMP ITV0I05 + VIP0I05
 BUNCHER (1497 MHz)
 SOLENOID MFA0I06
 CORRECTOR MBH0I06 H&V
 VIEWER ITV0I06
 ION PUMP VIP0I06
 FARADAY CUP #1 (100W) IFY0I06
 CORRECTOR MAD0I06A H&V
 CAPTURE ION PUMPS VIP0I06A,B,C,D,E
 DIPOLE MBO0I06
 VIEW SCREEN ITV0I06A
 APERTURE (Ø=6mm) / SOLENOID IFY0IA3 / MFL0I07
 CORRECTOR MAD0I07 H&V
 BEAMLINE VALVE VBV0I07
 DIFFERENTIAL PUMP VDP0I07
 BPM IPM0I07
 CORRECTOR MBH0I07A H&V
 YAO CAVITY ICB0I07
 APERTURE (Ø=6.5mm) IFY0IA4
 BLM (MPS) ILM0I07
 SKEW QUAD MQS0I07
 BEAMLINE VALVE VBV0L00A
 ION PUMP VIP0L00
 BLM (MPS) ILM0L01A
 BEAMLINE VALVE VBV0L00B



- BPM IPM0L06
- CORRECTORS MDB0L06H & MDJ0L06V
- QUAD MQD0L06
- FAST VALVE VFV0L06
- BEAMLINE VALVE VBV0L06A
- DIFF PUMP + ION PUMPS VDP0L06 + VIP0L06A,B,C
- BEAMLINE VALVE VBV0L06B
- BPM IPM0L06A
- BLM (MPS) ILM0L06B (station 190)
- DIPOLE MBF0L06 "SPECTROMETER"
- CORRECTORS MDB0L07H & MDJ0L07V
- BPM IPM0L07
- QUAD MQB0L07
- HARP IHA0L07
- CORRECTOR MAT0L07V
- BLM (MPS) ILM0L07 (station 210)
- VIEWER + ION PUMP ITV0L08 + VIP0L08
- CORRECTORS MDB0L08H & MDJ0L08V
- BPM IPM0L08
- QUAD MQB0L08
- HARP IHA0L08
- CORRECTOR MAT0L08 H&V
- CORRECTORS MDB0L09H & MDJ0L09V
- BLM (MPS) ILM0L09 (station 240)
- BPM IPM0L09
- QUAD MQB0L09
- HARP IHA0L09B
- CORRECTOR MAT0L09H
- ION PUMP VIP0L10
- CORRECTORS MDB0L10H & MDJ0L10V
- BPM IPM0L10
- QUAD MQB0L10
- HARP IHA0L10
- CHICANE DIPOLE MBL0R01
- CORRECTOR MAT0R01 H&V
- BPM IPM0R01
- QUAD MQD0R01
- QUAD MQD0R02
- BPM IPM0R02
- CORRECTOR MAT0R02 H&V
- ION PUMP VIP0R02
- CHICANE DIPOLE MBL0R02
- SLM ISR0R02

Source Material Used:

12 GeV Song Sheets:	ACC-000-2845-001	rev. -
	ACC-000-2845-002	rev. 4
	ACC-000-2845-003	rev. 11
	ACC-000-2845-004	rev. 9
	ACC-000-2845-029	rev. 7

CEBAF Element Database queried at various times

Mike Spata's notes on CED corrections dated 9/27/2013

Joe Grames' notes on the beam line up to the PSS Gate from 10/1/2013

Revisions to the this document from Yan Wang received 10/8/2013

Revisions to this document from Joe Grames received 10/16/2013

Notes on injector ion pumps from Marcy Stutzman and Phil Adderley received 10/16/2013

Revisions to song sheet from Yan Wang received 10/18/2013

Numerous personal inspections of the beam line and conversations with others