

**PEP-II Quadrupole and Sextupole
Alignment Engineering Group Survey**

REGION 9 HER

Summer Downtime 2004
Final As Built Positions PEP-II Magnets

	BH9AQUMD	0.030	0.151	0.022
	BH9AQU MW	0.028	0.163	0.025
	BH9AQU MX	0.018	0.155	0.022
BH9AQUN	BH9AQUNA	0.062	0.151	0.026
	BH9AQUND	0.065	0.150	0.027
	BH9AQUNW	0.055	0.171	0.026
	BH9AQUNX	0.060	0.171	0.028
BH9AQUP	BH9AQUPA	0.008	0.149	0.037
	BH9AQU PD	0.014	0.148	0.034
	BH9AQU PW	0.013	0.155	0.034
	BH9AQU PX	0.014	0.158	0.033
BH9AQUQ	BH9AQUQA	0.030	0.157	0.029
	BH9AQUQD	0.030	0.158	0.027
	BH9AQUQW	0.032	0.169	0.025
	BH9AQUQX	0.034	0.163	0.029
BH9ASXD	BH9ASXDM	4.184	2.298	15.784
	BH9ASXDM	-4.005	2.149	15.780
	BH9ASXDM	-3.888	-1.808	15.778
	BH9ASXDM	-3.757	16.862	-0.306
	BH9ASXDM	4.363	16.804	-0.466
BH9ASXE	BH9ASXEM	4.539	1.788	15.776
	BH9ASXEM	-3.945	2.216	15.794
	BH9ASXEM	-3.745	-1.681	15.802
	BH9ASXEM	3.482	16.825	-0.287
	BH9ASXEM	-3.062	16.814	-0.216
	BH9ASXEM	0.000	0.000	0.000
BH9ASXF	BH9ASXFM	4.407	1.558	15.778
	BH9ASXFM	-3.817	1.908	15.771
	BH9ASXFM	-3.978	-1.601	15.762
	BH9ASXFM	4.819	16.800	0.334
	BH9ASXFM	-3.847	16.854	0.031
BH9ASXG	BH9ASXGM	4.231	1.536	15.780
	BH9ASXGM	-4.023	1.756	15.774
	BH9ASXGM	-4.119	-1.715	15.768
	BH9ASXGM	3.259	16.849	0.415
	BH9ASXGM	-3.245	16.813	0.095
BH9ASXH	BH9ASXHM	4.299	1.848	15.805
	BH9ASXHM	-4.061	1.856	15.807
	BH9ASXHM	-3.933	-1.689	15.792
	BH9ASXHM	3.219	16.817	-0.200
	BH9ASXHM	-3.315	16.803	0.039
BH9ASXI	BH9ASXIM	4.376	2.274	15.783
	BH9ASXIM	-3.943	2.075	15.775
	BH9ASXIM	-3.833	-1.688	15.779
	BH9ASXIM	3.743	16.853	-0.149
	BH9ASXIM	-3.107	16.859	0.074
BH9ASXJ	BH9ASXJM	4.351	1.952	15.795
	BH9ASXJM	-4.063	2.109	15.778
	BH9ASXJM	-4.096	-1.762	15.776
	BH9ASXJM	3.236	16.872	0.042
	BH9ASXJM	-3.111	16.851	0.560
	BH9ASXJM	0.000	0.000	0.000

BH9ASXK	BH9ASXKM	4.530	1.881	15.791
	BH9ASXKM	-3.933	2.060	15.813
	BH9ASXKM	-4.027	-1.827	15.807
	BH9ASXKM	3.644	16.879	-0.324
	BH9ASXKM	-2.891	16.869	0.030
BH9ASXL	BH9ASXLM	4.188	1.946	15.803
	BH9ASXLM	-4.290	1.905	15.782
	BH9ASXLM	-4.353	-1.717	15.780
	BH9ASXLM	3.958	16.848	-0.301
	BH9ASXLM	-4.119	16.855	0.207
BH9ASXM	BH9ASXMM	4.308	1.967	15.786
	BH9ASXMM	-4.260	1.686	15.797
	BH9ASXMM	-4.153	-1.454	15.806
	BH9ASXMM	3.254	16.828	-0.295
	BH9ASXMM	-3.242	16.791	-0.486
BH9ASXN	BH9ASXNM	4.229	1.876	15.781
	BH9ASXNM	-4.023	1.859	15.795
	BH9ASXNM	-3.984	-1.654	15.795
	BH9ASXNM	3.272	16.910	-0.659
	BH9ASXNM	-2.939	16.862	-0.352
BH9ASXP	BH9ASXPM	4.161	1.834	15.789
	BH9ASXPM	-4.241	1.604	15.789
	BH9ASXPM	-4.193	-1.607	15.789
	BH9ASXPM	3.225	16.864	-0.209
	BH9ASXPM	-3.282	16.866	-0.087
BH9ASXQ	BH9ASXQM	4.366	1.759	15.790
	BH9ASXQM	-4.031	1.811	15.785
	BH9ASXQM	-3.976	-1.710	15.775
	BH9ASXQM	3.464	16.868	-0.332
	BH9ASXQM	-3.135	16.866	-0.548
BH9BQUA	BH9BQUAA	0.040	0.164	0.013
	BH9BQUAD	0.045	0.167	0.010
	BH9BQUAW	0.036	0.163	0.010
	BH9BQUAX	0.038	0.166	0.007
BH9BQUB	BH9BQUBA	0.009	0.150	0.010
	BH9BQUBD	0.008	0.146	0.015
	BH9BQUBW	-0.005	0.161	0.008
	BH9BQUBX	0.006	0.160	0.016
BH9BQUC	BH9BQUCA	0.006	0.155	0.026
	BH9BQUCD	-0.003	0.156	0.021
	BH9BQUCW	0.006	0.165	0.025
	BH9BQUCX	0.012	0.162	0.024
BH9BQUD	BH9BQUDA	0.010	0.164	0.016
	BH9BQUDD	0.015	0.166	0.015
	BH9BQUDW	0.018	0.170	0.020
	BH9BQUDX	0.014	0.174	0.016
BH9BQUE	BH9BQUEA	-0.011	0.156	0.015
	BH9BQUED	-0.008	0.163	0.020
	BH9BQUEW	-0.009	0.167	0.019
	BH9BQUEX	-0.009	0.167	0.021
BH9BQUF	BH9BQUFA	-0.020	0.162	0.028
	BH9BQUFD	-0.017	0.155	0.031

	BH9BQUFW	-0.024	0.169	0.024
	BH9BQUFX	-0.023	0.163	0.031
BH9BQUG	BH9BQUGA	-0.012	0.164	0.036
	BH9BQUGD	-0.008	0.163	0.044
	BH9BQUGW	-0.014	0.174	0.036
	BH9BQUGX	-0.010	0.173	0.046
BH9BQUH	BH9BQUHA	-0.018	0.169	0.027
	BH9BQUHD	-0.018	0.165	0.030
	BH9BQUHW	-0.026	0.173	0.031
	BH9BQUHX	-0.012	0.161	0.026
BH9BQUI	BH9BQUIA	-0.030	0.166	0.044
	BH9BQUID	-0.027	0.164	0.051
	BH9BQUIW	-0.033	0.171	0.046
	BH9BQUIX	-0.030	0.170	0.052
BH9BQUJ	BH9BQUJA	-0.012	0.169	0.029
	BH9BQUJD	-0.009	0.177	0.032
	BH9BQUJW	-0.010	0.177	0.022
	BH9BQUJX	-0.011	0.188	0.031
BH9BQUK	BH9BQUKA	-0.020	0.178	0.026
	BH9BQUKD	-0.015	0.167	0.027
	BH9BQUKW	-0.022	0.181	0.026
	BH9BQUKX	-0.019	0.173	0.026
BH9BQUL	BH9BQULA	-0.014	0.178	0.022
	BH9BQU LD	-0.017	0.176	0.020
	BH9BQULW	-0.013	0.185	0.021
	BH9BQULX	-0.018	0.182	0.020
BH9BQUM	BH9BQUMA	-0.040	0.171	0.018
	BH9BQUMD	-0.038	0.176	0.017
	BH9BQUMW	-0.033	0.181	0.019

	BH9BQUMX	-0.028	0.181	0.016
BH9BQUN	BH9BQUNA	-0.048	0.151	0.027
	BH9BQUND	-0.045	0.150	0.016
	BH9BQUNW	-0.048	0.163	0.024
	BH9BQUNX	-0.041	0.158	0.018
BH9BQUP	BH9BQUPA	-0.037	0.156	0.042
	BH9BQUPD	-0.040	0.154	0.041
	BH9BQUPW	-0.035	0.165	0.041
	BH9BQUPX	-0.044	0.165	0.040
BH9BSXA	BH9BSXAM	4.385	1.643	15.785
	BH9BSXAM	-4.038	2.013	15.785
	BH9BSXAM	-4.039	-1.547	15.785
	BH9BSXAM	3.413	16.887	-0.444
	BH9BSXAM	-3.092	16.883	-0.263
BH9BSXB	BH9BSXBM	4.198	1.808	15.769
	BH9BSXBM	-4.212	1.578	15.770
	BH9BSXBM	-4.194	-1.711	15.768
	BH9BSXBM	4.212	16.831	-0.313
	BH9BSXBM	-4.171	16.834	-0.355
BH9BSXC	BH9BSXCM	4.257	2.067	15.775
	BH9BSXCM	-4.094	1.818	15.790
	BH9BSXCM	-4.168	-1.793	15.781
	BH9BSXCM	3.285	16.906	0.044
	BH9BSXCM	-3.128	16.900	0.359
BH9BSXD	BH9BSXDM	4.345	2.111	15.777
	BH9BSXDM	-4.178	2.115	15.786
	BH9BSXDM	-4.135	-1.843	15.789
	BH9BSXDM	4.250	16.883	-0.159
	BH9BSXDM	-4.144	16.860	0.067
BH9BSXE	BH9BSXEM	4.298	1.955	15.772
	BH9BSXEM	-4.099	1.665	15.780
	BH9BSXEM	-4.090	-1.445	15.780
	BH9BSXEM	4.160	16.887	-0.346
	BH9BSXEM	-4.115	16.886	-0.265
BH9BSXF	BH9BSXFM	4.263	1.941	15.804
	BH9BSXFM	-4.090	1.951	15.799
	BH9BSXFM	-4.092	-1.619	15.801
	BH9BSXFM	3.350	16.897	-0.272
	BH9BSXFM	-3.213	16.873	-0.147
BH9BSXG	BH9BSXGM	4.344	1.988	15.800
	BH9BSXGM	-4.139	1.865	15.800
	BH9BSXGM	-4.082	-1.467	15.801
	BH9BSXGM	4.266	16.915	-0.239
	BH9BSXGM	-4.144	16.860	-0.069
BH9BSXH	BH9BSXHM	4.127	1.753	15.808
	BH9BSXHM	-4.148	1.569	15.800
	BH9BSXHM	-4.229	-1.814	15.806
	BH9BSXHM	4.219	16.874	-0.112
	BH9BSXHM	-4.216	16.870	-0.242
BH9BSXI	BH9BSXIM	4.206	1.868	15.865
	BH9BSXIM	-4.193	2.039	15.847
	BH9BSXIM	-4.208	-1.471	15.835

	BH9BSXIM	3.251	16.884	0.309
	BH9BSXIM	-3.385	16.861	0.239
BH9BSXJ	BH9BSXJM	4.183	2.002	15.813
	BH9BSXJM	-4.131	2.063	15.815
	BH9BSXJM	-4.158	-1.625	15.807
	BH9BSXJM	3.261	16.895	0.160
	BH9BSXJM	-3.118	16.905	0.219
BH9BSXK	BH9BSXKM	4.439	1.849	15.774
	BH9BSXKM	-3.963	1.806	15.789
	BH9BSXKM	-3.943	-1.763	15.789
	BH9BSXKM	3.380	16.904	-0.217
	BH9BSXKM	-3.070	16.864	0.116

**PEP-II Quadrupole and Sextupole
Alignment Engineering Group Survey**

REGION 9 LER

Summer Downtime 2004
Final As Built Positions PEP-II Magnets

Magnet Name	Target Name	Z	X	Y
BL9AQUA	BL9AQUAA	0.033	0.077	0.014
	BL9AQUAB	0.031	0.077	0.013
	BL9AQUAC	0.033	0.075	0.015
BL9AQUB	BL9AQUBA	0.002	0.070	0.011
	BL9AQUBB	-0.006	0.075	0.018
	BL9AQUBC	-0.004	0.074	0.018
BL9AQUC	BL9AQUCA	0.048	0.073	0.020
	BL9AQUCB	0.047	0.071	0.022
	BL9AQUCC	0.047	0.073	0.022
BL9AQUD	BL9AQUDA	0.041	0.064	0.022
	BL9AQUDB	0.031	0.067	0.023
	BL9AQUDC	0.038	0.065	0.021
BL9AQUE	BL9AQUEA	-0.001	0.080	0.029
	BL9AQUEB	-0.007	0.070	0.030
	BL9AQUEC	-0.007	0.071	0.031
BL9AQUF	BL9AQUFA	0.049	0.081	0.019
	BL9AQUFB	0.050	0.081	0.020
	BL9AQUFC	0.046	0.082	0.021
BL9AQUG	BL9AQUGA	0.033	0.078	0.010
	BL9AQUGB	0.037	0.075	0.017
	BL9AQUGC	0.023	0.086	0.013
BL9AQUH	BL9AQUHA	0.023	0.091	0.025
	BL9AQUHB	0.024	0.090	0.022
	BL9AQUHC	0.023	0.088	0.025
BL9AQUI	BL9AQUIA	0.020	0.091	0.009
	BL9AQUIB	0.027	0.094	0.011
	BL9AQUIC	0.018	0.098	0.010
BL9AQUJ	BL9AQUJA	0.004	0.103	0.005
	BL9AQUJB	-0.001	0.100	0.011
	BL9AQUJC	-0.002	0.105	0.009
BL9AQUK	BL9AQUKA	0.008	0.103	0.011
	BL9AQUKB	-0.002	0.099	0.012
	BL9AQUKC	0.007	0.094	0.012
BL9AQL	BL9AQLA	-0.023	0.087	0.024
	BL9AQLB	-0.021	0.090	0.029
	BL9AQLC	-0.024	0.092	0.027
BL9AQU M	BL9AQU MA	0.001	0.099	0.012
	BL9AQU MB	-0.005	0.102	0.018
	BL9AQU MC	-0.001	0.107	0.011
BL9AQU N	BL9AQU NA	0.014	0.112	0.012
	BL9AQU NB	0.020	0.117	0.017
	BL9AQU NC	0.010	0.116	0.017
BL9AQU P	BL9AQU PA	0.003	0.104	0.020
	BL9AQU PB	0.001	0.105	0.021
	BL9AQU PC	-0.002	0.104	0.022
BL9AQU Q	BL9AQU QA	-0.023	0.100	0.032
	BL9AQU QB	-0.027	0.101	0.028
	BL9AQU QC	-0.023	0.093	0.031
BL9ASXH	BL9ASXH3	0.030	0.090	0.021

	BL9ASXH4	0.019	0.087	0.025
	BL9ASXH5	0.018	0.095	0.026
	BL9ASXH6	0.028	0.094	0.027
BL9ASXL	BL9ASXL3	-0.039	0.085	0.034
	BL9ASXL4	-0.042	0.079	0.026
	BL9ASXL5	-0.109	0.084	0.022
	BL9ASXL6	-0.111	0.079	0.017
BL9ASXN	BL9ASXN3	-0.107	0.110	0.008
	BL9ASXN4	-0.112	0.103	0.002
	BL9ASXN5	-0.099	0.098	0.018
	BL9ASXN6	-0.090	0.107	0.010
BL9BQUA	BL9BQUAA	-0.026	0.116	0.015
	BL9BQUAB	-0.026	0.116	0.014
	BL9BQUAC	-0.029	0.118	0.017
BL9BQUB	BL9BQUBA	-0.036	0.113	0.010
	BL9BQUBB	-0.036	0.118	0.011
	BL9BQUBC	-0.035	0.114	0.011
BL9BQUC	BL9BQUCA	-0.036	0.100	0.016
	BL9BQUCB	-0.042	0.108	0.015
	BL9BQUCC	-0.037	0.102	0.017
BL9BQUD	BL9BQUDA	-0.030	0.092	0.018
	BL9BQUDB	-0.026	0.095	0.016
	BL9BQUDC	-0.025	0.095	0.018
BL9BQUE	BL9BQUEA	-0.033	0.092	0.019
	BL9BQUEB	-0.026	0.097	0.019
	BL9BQUEC	-0.029	0.091	0.020
BL9BQUF	BL9BQUFA	-0.023	0.098	0.009
	BL9BQUFB	-0.022	0.096	0.006
	BL9BQUFC	-0.019	0.100	0.009
BL9BQUG	BL9BQUGA	-0.007	0.094	0.012
	BL9BQUGB	-0.014	0.105	0.009
	BL9BQUGC	-0.012	0.101	0.010
BL9BQUH	BL9BQUHA	-0.024	0.094	0.022
	BL9BQUHB	-0.024	0.100	0.015
	BL9BQUHC	-0.020	0.098	0.020
BL9BQUI	BL9BQUIA	-0.009	0.089	0.019
	BL9BQUIB	-0.008	0.093	0.020
	BL9BQUIC	-0.011	0.088	0.020
BL9BQUJ	BL9BQUJA	-0.027	0.102	0.011
	BL9BQUJB	-0.029	0.106	0.012
	BL9BQUJC	-0.033	0.107	0.017
BL9BQUK	BL9BQUKA	0.003	0.113	0.018
	BL9BQUKB	0.003	0.121	0.022
	BL9BQUKC	-0.002	0.117	0.022
BL9BQUL	BL9BQUA	-0.031	0.100	0.020
	BL9BQULB	-0.027	0.103	0.019
	BL9BQUA	-0.028	0.099	0.023
BL9BQUM	BL9BQUA	-0.042	0.093	0.009
	BL9BQUMB	-0.043	0.089	0.010
	BL9BQUMC	-0.050	0.091	0.012
BL9BQUN	BL9BQUA	-0.034	0.081	0.009
	BL9BQUNB	-0.020	0.085	0.010

	BL9BQUNC	-0.021	0.079	0.014
BL9BQUP	BL9BQUPA	-0.060	0.085	0.016
	BL9BQUPB	-0.061	0.091	0.017
	BL9BQUPC	-0.064	0.087	0.018
BL9BQUQ	BL9BQUQA	-0.040	0.083	0.000
	BL9BQUQB	-0.034	0.080	-0.001
	BL9BQUQC	-0.036	0.085	0.003
BL9BSXB	BL9BSXB3	-0.170	0.112	0.012
	BL9BSXB4	-0.152	0.112	0.014
	BL9BSXB5	-0.144	0.099	0.014
	BL9BSXB6	-0.166	0.085	0.014
BL9BSXD	BL9BSXD3	-0.133	0.101	0.017
	BL9BSXD4	-0.136	0.096	0.012
	BL9BSXD5	-0.138	0.103	0.023
	BL9BSXD6	-0.131	0.093	0.025
BL9BSXH	BL9BSXH3	-0.123	0.081	0.029
	BL9BSXH4	-0.115	0.075	0.029
	BL9BSXH5	-0.110	0.067	0.026
	BL9BSXH6	-0.115	0.088	0.026
BL9BSXJ	BL9BSXJ3	-0.060	0.106	0.016
	BL9BSXJ4	-0.052	0.107	0.016
	BL9BSXJ5	-0.042	0.113	0.025
	BL9BSXJ6	-0.042	0.118	0.020
BL9BSXN	BL9BSXN3	-0.075	0.080	0.020
	BL9BSXN4	-0.073	0.083	0.017
	BL9BSXN6	-0.064	0.089	0.021