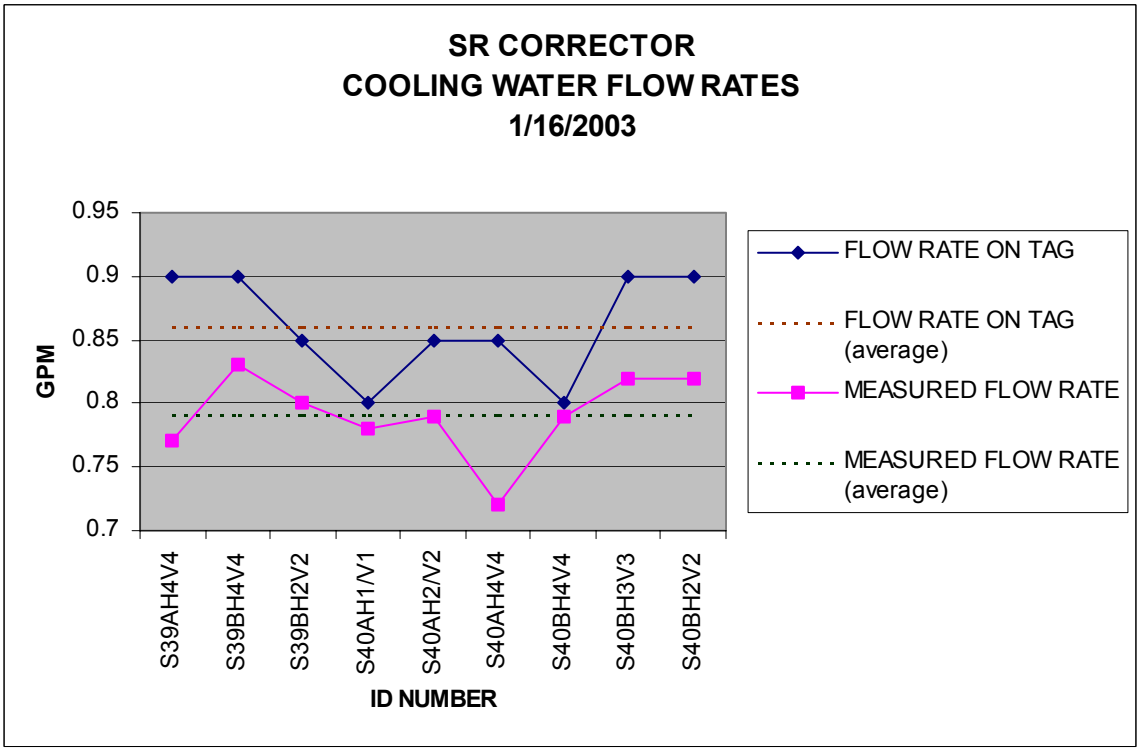
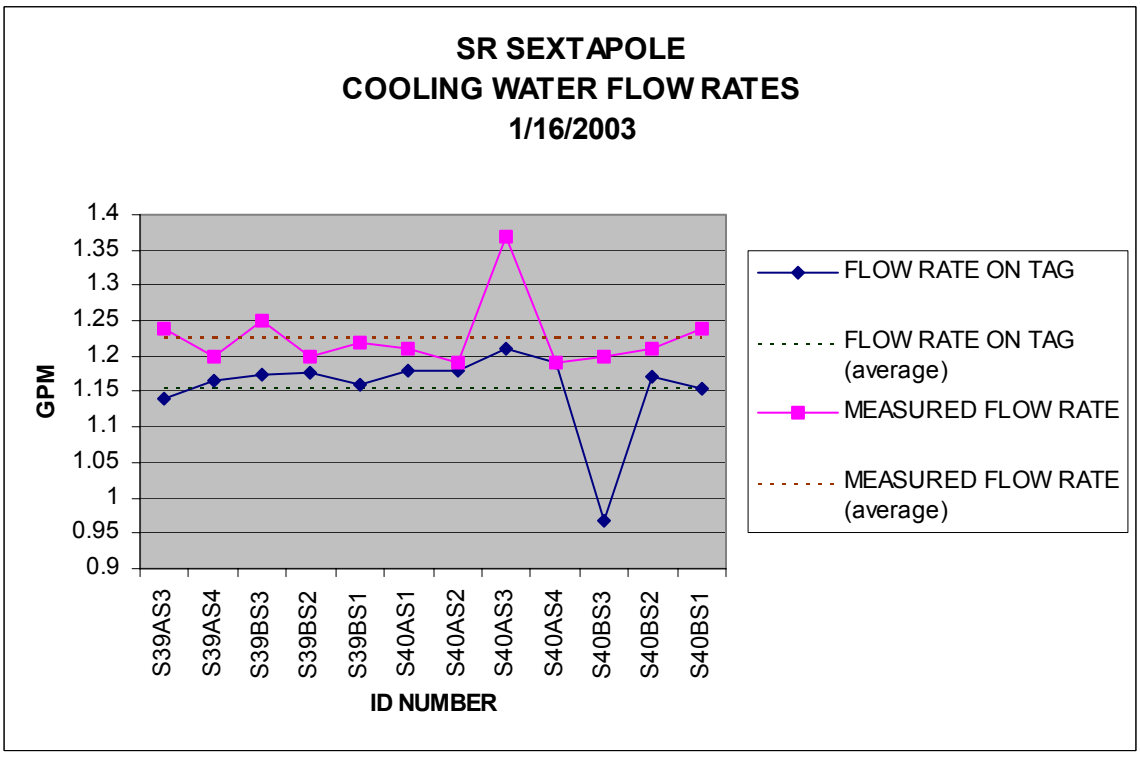
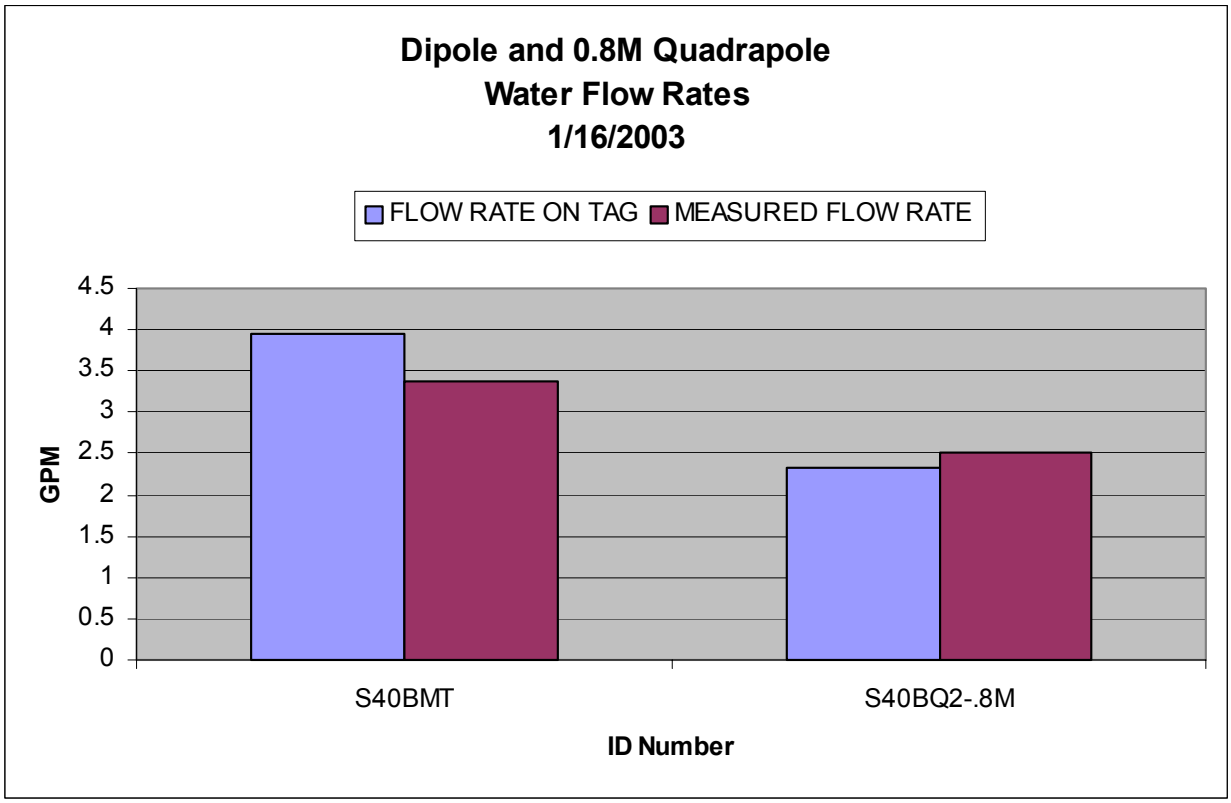
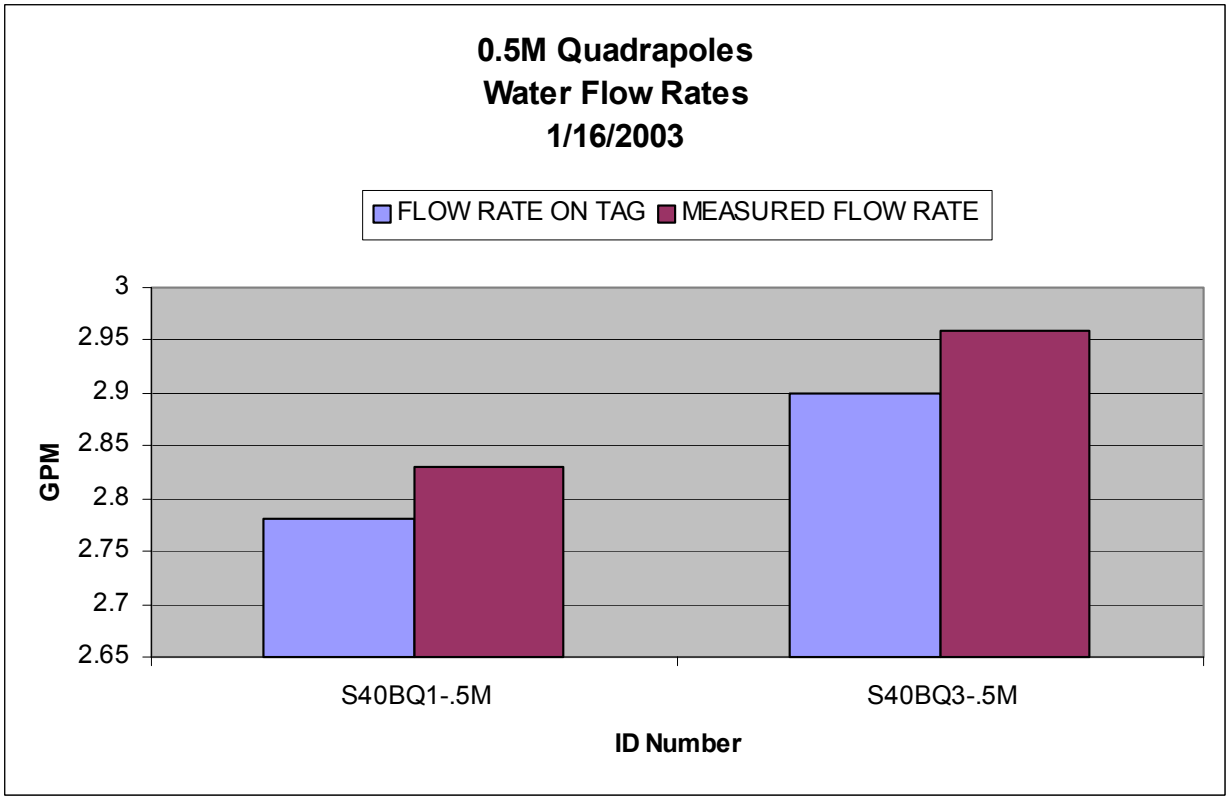
Storage Ring Magnet Water Flow Rates Taken During January 2003 shutdown

Magnet water flow rates were taken using an ultrasonic flow meter in sectors 39 and 40. Flow rates were only taken on magnets that had 10 inches of ½ inch diameter SS tubing installed in the flow path to accept the transducer for the flow meter. The results are plotted in the following charts.






Dipole and 0.8M Quadrapole
Water Flow Rates
1/16/2003
FLOW RATE ON TAG
MEASURED FLOW RATE
GPM
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
S40BMT
S40BQ2-.8M
ID Number


0.5M Quadrapoles
Water Flow Rates
1/16/2003
FLOW RATE ON TAG
MEASURED FLOW RATE
GPM
3
2.95
2.9
2.85
2.8
2.75
2.7
2.65
S40BQ1-.5M
S40BQ3-.5M
ID Number

DATA

SECTION	ID				Type	SERIAL NO.	FLOW ON TAG	PRESSURE ON TAG	FLOW 1/16/2003
							GPM	PSI	GPM
SECTION 2	S	39	A	H3V3	Corrector				
	S	39	A	S2	Sextapole				
	S	39	A	MT	Dipole				
	S	39	A	S3	Sextapole	ANL-SRS-031	1.14	100	1.24
SECTION 3	S	39	A	Q4	Quadrupole				
	S	39	A	H4V4	Corrector	SRHVC-055-AH4	0.9	100	0.77
	S	39	A	Q5	Quadrupole				
	S	39	A	S4	Sextapole	ANL-SRS-011	1.165	100	1.2
	S	39	B	Q5	Quadrupole				
	S	39	B	H4V4	Corrector	SRHVC-277	0.9	100	0.83
	S	39	B	Q4	Quadrupole				
SECTION 4	S	39	B	S3	Sextapole	ANL-SRS-15-BS301	1.174	100	1.25
	S	39	B	MT	Dipole				
	S	39	B	S2	Sextapole	ANL-SRS-005	1.176	100	1.2
	S	39	B	H3V3	Corrector	H/VC-134	0.9		0.7
SECTION 5	S	39	B	Q3	Quadrupole				
	S	39	B	S1	Sextapole	006	1.161	100	1.22
	S	39	B	Q2	Quadrupole				
	S	39	B	H2V2	Corrector	SRHVC-308-BH2	0.85	100	0.8
	S	39	B	Q1	Quadrupole				
	S	39	B	H1V1	Corrector				
SECTION 1	S	40	A	H1/V1	Corrector	SR H/VC-166	0.8	100	0.78
	S	40	A	Q1	Quadrupole				
	S	40	A	H2/V2	Corrector	SR H/VC-102	0.85	100	0.79
	S	40	A	Q2	Quadrupole				
	S	40	A	S1	Sextapole	ANL-SRS-072-*STD*	1.18	100	1.21
	S	40	A	Q3	Quadrupole				
SECTION 2	S	40	A	H3V3	Corrector				
	S	40	A	S2	Sextapole	ANL-SRS-079-*STD*	1.18	100	1.19
	S	40	A	MT	Dipole				
	S	40	A	S3	Sextapole	ANL-SRS-078 *STD*	1.21	100	1.37
SECTION 3	S	40	A	Q4	Quadrupole				
	S	40	A	H4V4	Corrector	SR H/VC-105 AH4	0.85	100	0.72
	S	40	A	Q5	Quadrupole				
	S	40	A	S4	Sextapole	ANL-SRS-022-AS403	1.19	100	1.19
	S	40	B	Q5	Quadrupole				
	S	40	B	H4V4	Corrector	SR R/VC-101	0.8	100	0.79
	S	40	B	Q4	Quadrupole				
SECTION 4	S	40	B	S3	Sextapole	ANL-SRS-023-BS303	0.968	100	1.2
	S	40	B	MT	Dipole	SRD 10	3.96	80	3.37
	S	40	B	S2	Sextapole	ANL-SRS-070 *STD*	1.17	100	1.21
	S	40	B	H3V3	Corrector	SRH/VC-041-BH3	0.9	100	0.82
SECTION 5	S	40	B	Q3	Quadrupole	.5M-027	2.9	100	2.96
	S	40	B	S1	Sextapole	002	1.154	100	1.24
	S	40	B	Q2	Quadrupole	.8M-024-BQ202	2.33	100	2.52
	S	40	B	H2V2	Corrector	SR-H/VC 240 BH2	0.9	100	0.82
	S	40	B	Q1	Quadrupole	.5M-045-BQ1	2.781	100	2.83
	S	40	B	H1V1	Corrector	SRCHVC 064	N/C		0.77