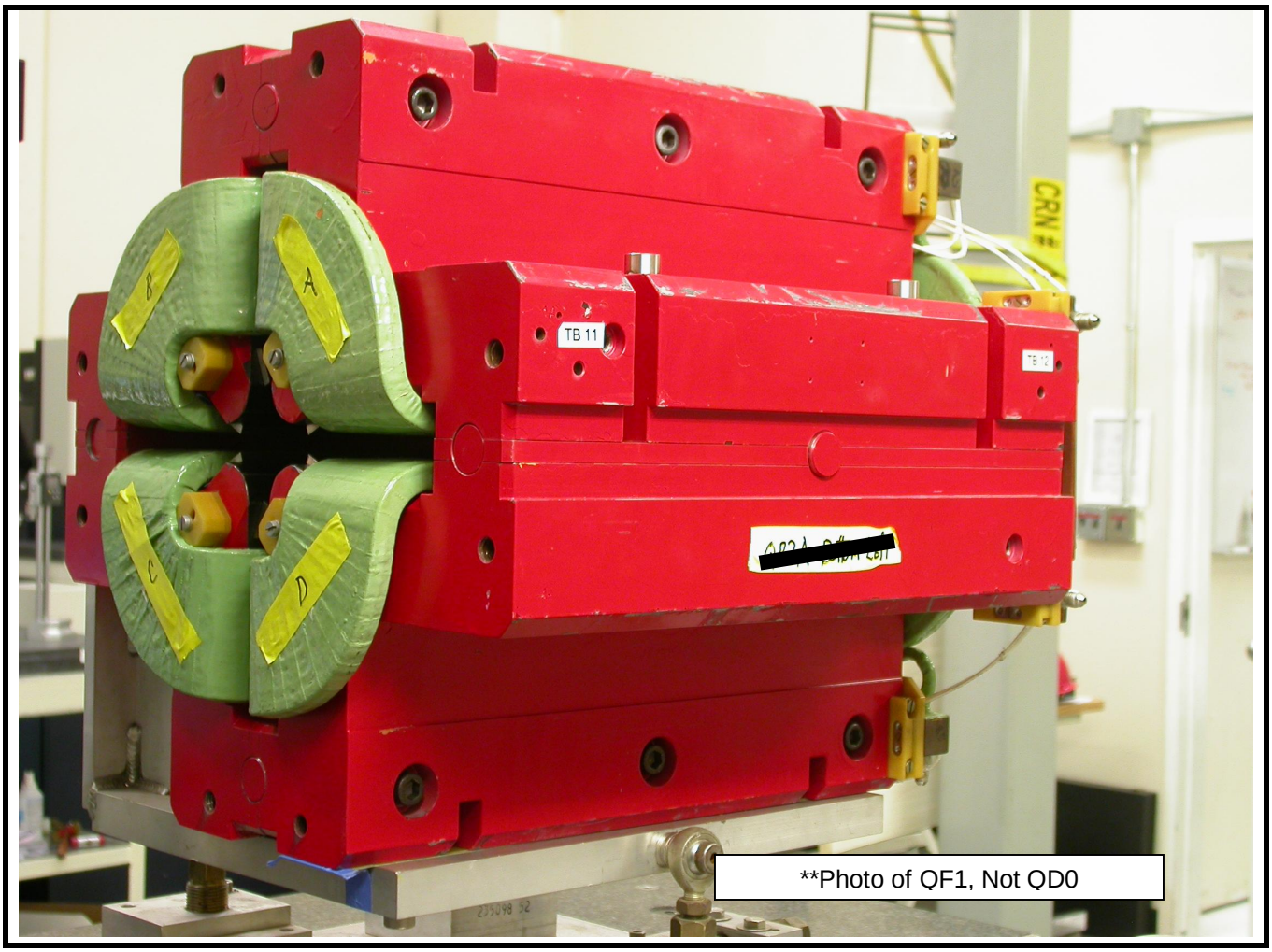
QD0 Quadrupole Magnet
FIDUCIALIZATION REPORT



Inspector:	Keith Caban
Responsible Engineer:	Cherrill Spencer
Date:	Wednesday, April 16, 2008
Work Order/Charge No.:	1111143
Serial Number:	QD0 (Formerly QC3)
URL of Fiducial Report:	http://www-group.slac.stanford.edu/met/Quality/FIDUCIAL REPORTS/CHERRILL SPENCER/QD0.PDF

Part Set-up – Coordinate System Set-up

Spatial Alignment

- Geometric axis of the poles of the magnet.

Planar Alignment

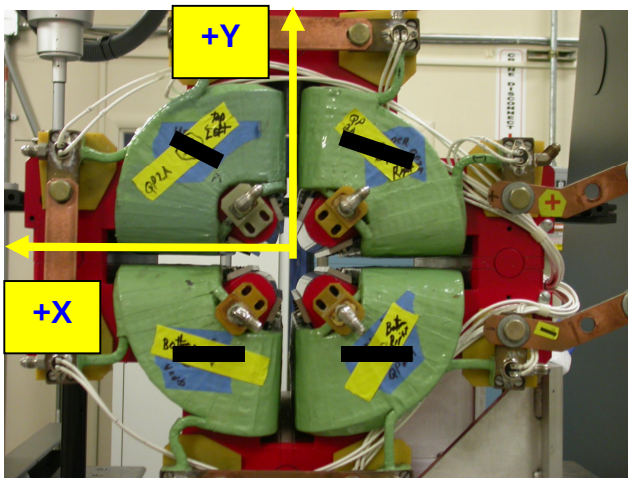
- Top Plane (+Y) of the Magnet (Top most surface).

“Z” Zero

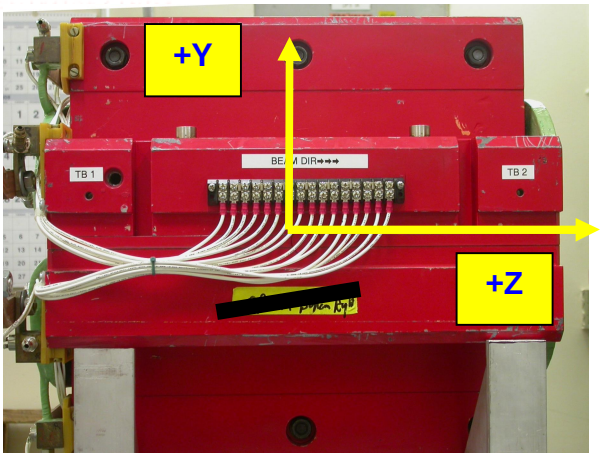
- Mid-plane of the magnet (middle of upstream and downstream ends).

“X” & “Y” Zero

- Geometric axis of the poles of the magnet.



Back View
(Looking from upstream side –Z)

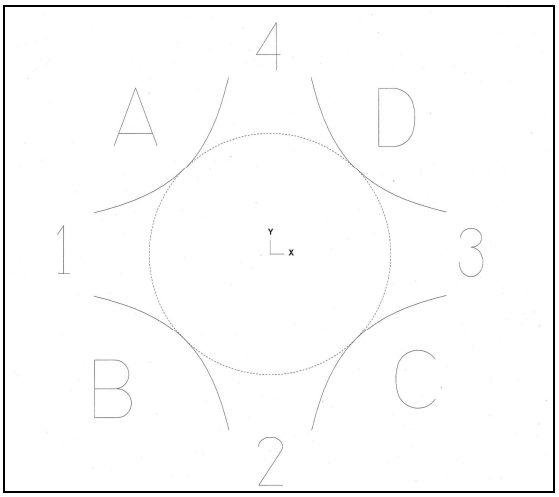


Side View
(looking from –X side)

Tooling Ball Locations for QD0
Used Standard ½" Tooling Balls w/ 1" extension

Tooling Ball	X	Y	Z
TB 1	-9.86913	1.58922	-7.37043
TB 2	-9.87028	1.58966	7.35011
TB 3	-7.17313	5.08962	4.13867
TB 4	-7.16787	5.09117	-4.18066
TB 5	-1.60260	9.87313	-7.36915
TB 6	-1.60538	9.87194	7.34844
TB 7	1.57893	9.87330	7.34911
TB 8	1.58237	9.87250	-7.36892
TB 9	7.16487	5.08915	-4.18049
TB 10	7.16397	5.08932	4.15874
TB 11	9.86642	1.59377	7.34863
TB 12	9.86781	1.59381	-7.37132

Pole Tip Additional Data
*Data looking from Downstream End (+Z End) **Revised correctly per C. Spencer 5/6/08)



Side	Pole Dist A-C	Pole Dist B-D	Gap 1	Gap 2	Gap 3	Gap 4
Downstream End (+Z)	1.96992	1.96906	0.85141	0.85105	0.85170	0.85079
Upstream End (-Z)	1.96933	1.96988	0.85130	0.85103	0.85176	0.85137