

Fiducial Data Summary for 50Q Rafts

50Q-33

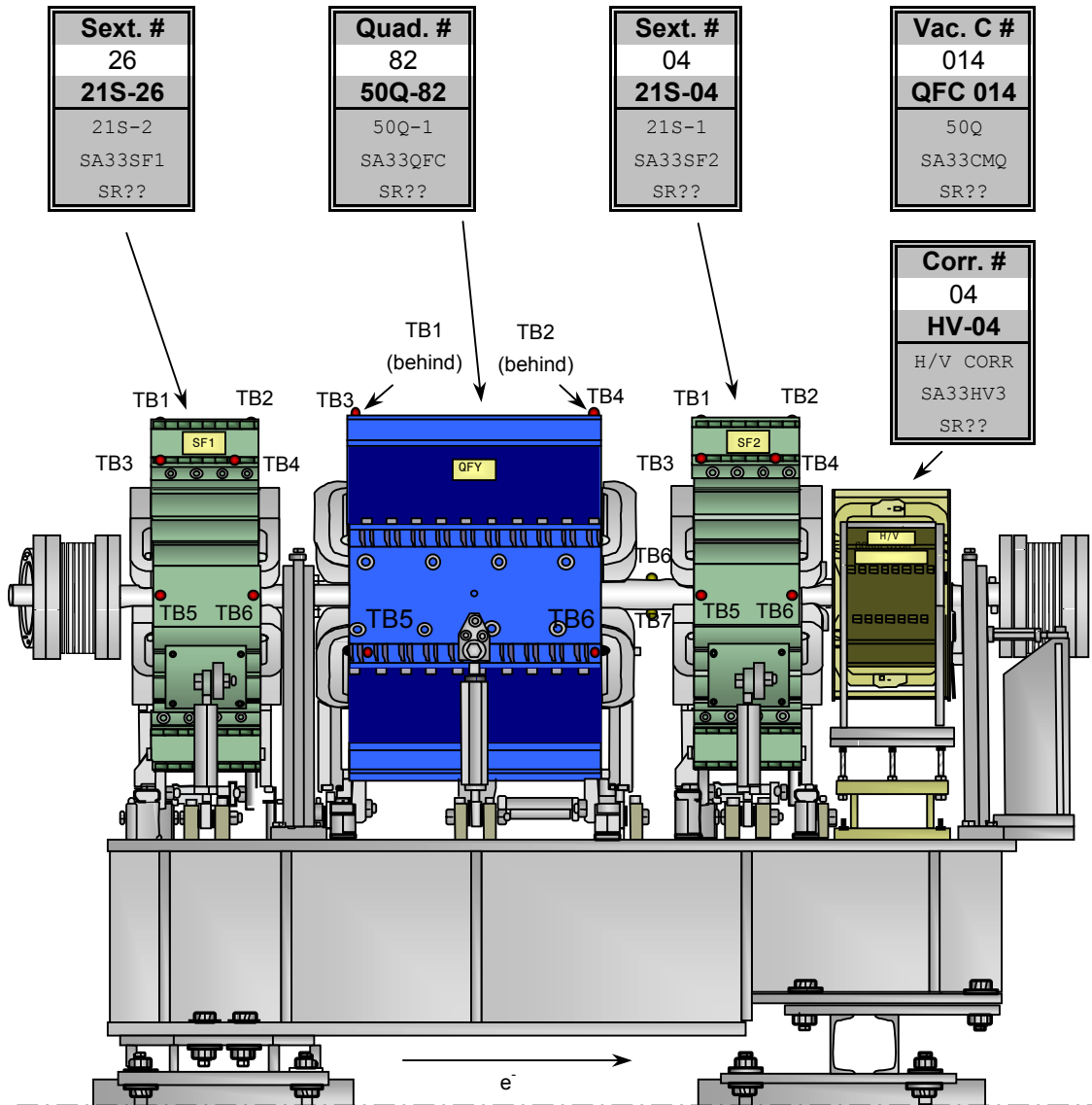
Raft Description:

Date November 27, 2001

| | | | |
|-------------------------------|-----------------------------|------------------------------|-----------------------------|
| Raft # 33 50Q-33 | Type 1 50Q T-1 | Bld. 750 Name SA33 | S3 Ring Name SR?? |
|-------------------------------|-----------------------------|------------------------------|-----------------------------|

Notes:

The above date represents the latest fiducial date of all components listed below.
SPEAR3 Ring number not yet known.



Sextupole: Fiducial Values for Upstream (21S-2) Sextupole

| Fiducial | Z | X | Y |
|----------|--------|---------|--------|
| TB1 | -3.547 | 4.228 | 15.514 |
| TB2 | 3.572 | 4.201 | 15.513 |
| TB3 | -3.642 | -10.495 | 12.540 |
| TB4 | 2.382 | -10.529 | 12.520 |
| TB5 | -3.759 | -15.062 | 0.065 |
| TB6 | 3.751 | -15.059 | 0.061 |

inches inches inches

SEXTUPOLE
21S-26

SA33SF1
SR??

11/27/01

Description:
Fiducials based on values posted on web-page. (Check for updates.)

Quadrupole: Fiducial Values for Quadrupole (50Q-1)

| Fiducial | Z | X | Y |
|----------|--------|---------|--------|
| TB1 | -9.455 | 11.231 | 16.202 |
| TB2 | 9.457 | 11.223 | 16.207 |
| TB3 | -9.432 | -11.218 | 16.202 |
| TB4 | 9.447 | -11.254 | 16.205 |
| TB5 | -8.357 | -15.200 | -4.732 |
| TB6 | 9.296 | -15.202 | -4.770 |

inches inches inches

QUADRUPOLE
50Q-82

SA33QFC
SR??

10/30/01

Description:
Fiducials based on values posted on web-page. (Check for updates.)

Sextupole: Fiducial Values for Downstream (21S-1) Sextupole

| Fiducial | Z | X | Y |
|----------|--------|---------|--------|
| TB1 | -3.707 | 4.275 | 15.508 |
| TB2 | 3.748 | 4.192 | 15.508 |
| TB3 | -3.637 | -10.494 | 12.544 |
| TB4 | 2.291 | -10.501 | 12.541 |
| TB5 | -3.702 | -15.062 | 0.032 |
| TB6 | 3.731 | -15.062 | 0.012 |

inches inches inches

SEXTUPOLE
21S-04

SA33SF2
SR??

11/20/01

Description:
Fiducials based on values posted on web-page. (Check for updates.)

H/V Corrector: Fiducial Values for Corrector

| Fiducial | Z | X | Y |
|----------|--------|---------|---------|
| 1 | -0.003 | -0.323 | -10.196 |
| 2 | -0.002 | -10.046 | -10.205 |
| A | 0.000 | -20.003 | 0.000 |
| B | 0.000 | -20.003 | 0.000 |
| C | 0.000 | -20.003 | 0.000 |
| D | 0.000 | -20.003 | 0.000 |
| E | 0.000 | 0.000 | 17.935 |
| F | 0.000 | 0.000 | 17.935 |

inches inches inches

H/V CORRECTOR
HV-04

SA33HV3
SR??

No Date

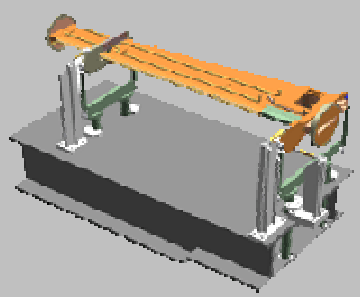
Description:
Fiducials based on known nominal values.

Vacuum Chamber: Fiducial Values for QFC (50Q) Vacuum Chamber

| Fiducial | Z | X | Y |
|----------|---------|--------|--------|
| TB1 | -13.803 | -3.137 | 4.413 |
| TB2 | -13.866 | 7.307 | 4.374 |
| TB3 | 37.433 | -5.195 | 4.421 |
| TB4 | 37.545 | 13.310 | 2.928 |
| TB5 | 33.425 | 7.563 | 2.057 |
| TB6 | 13.412 | 2.588 | 2.384 |
| TB7 | 13.442 | 2.595 | -2.349 |

inches inches inches

VACUUM CHAMBER
QFC 014



SA33CMQ
SR??

11/19/01

Description:
Fiducials based on values posted on web-page. (Check for updates.)

Building 750 Deck: Positions of Component Origins

| 750 Name | Z | X | Y | Yaw |
|----------|--------|-------|-------|--------|
| SA33SF1 | -0.535 | 0.000 | 0.000 | 0.0000 |
| SA33QFC | 0.000 | 0.000 | 0.000 | 0.0000 |
| SA33CMQ | 0.000 | 0.000 | 0.000 | 0.0000 |
| SA33SF2 | 0.535 | 0.000 | 0.000 | 0.0000 |

meters meters meters degrees

Date of Deck File: April 16, 2002

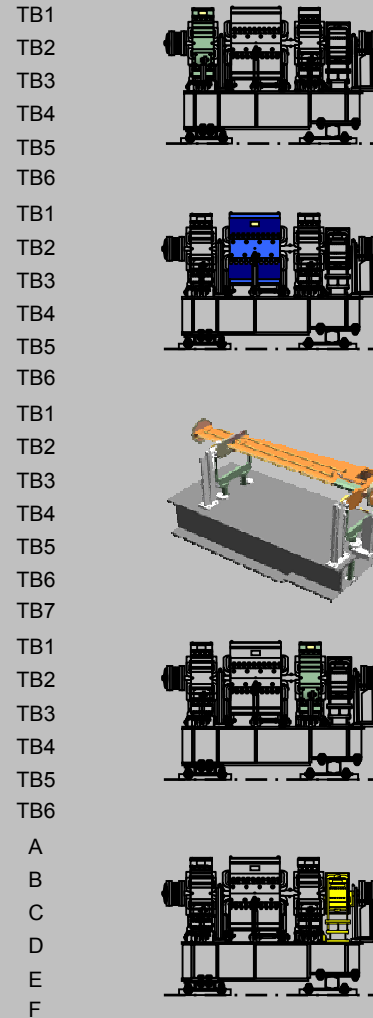
Location of Raft: EAST

50Q-33

Description:
Deck coordinates representing origin of the specific component's coordinate system.

Building 750 As-Built:

| 750 Name | delta Z | delta X | delta Y (delta H) |
|----------|---------|---------|------------------------|
| SA33SF1 | 0.016 | -0.003 | 0.001 |
| | 0.012 | 0.003 | 0.004 |
| | 0.001 | 0.002 | 0.003 |
| | -0.002 | -0.005 | 0.002 |
| | -0.004 | 0.001 | 0.003 |
| | -0.007 | -0.003 | 0.003 |
| SA33QFC | 0.001 | 0.000 | -0.002 |
| | 0.001 | -0.002 | 0.000 |
| | -0.003 | 0.003 | -0.003 |
| | -0.006 | -0.003 | -0.004 |
| | -0.002 | -0.002 | -0.003 |
| | -0.004 | 0.004 | -0.003 |
| SA33CMQ | 0.009 | -0.004 | -0.003 |
| | 0.001 | -0.003 | -0.004 |
| | -0.002 | -0.001 | -0.002 |
| | -0.003 | 0.001 | 0.001 |
| | -0.008 | -0.003 | -0.006 |
| | -0.003 | -0.004 | -0.038 |
| | N/A | N/A | N/A |
| SA33SF2 | -0.003 | -0.002 | 0.002 |
| | 0.004 | 0.003 | 0.003 |
| | -0.003 | 0.003 | 0.001 |
| | -0.003 | -0.003 | -0.001 |
| | -0.011 | 0.007 | 0.002 |
| | -0.012 | -0.004 | 0.000 |
| SA33HV3 | | -0.033 | |
| | | -0.025 | |
| | | -0.033 | |
| | | -0.022 | |
| | | | 0.003 |
| | | | 0.008 |
| | inches | inches | inches |



Latest File Date: March 6, 2002

50Q-33

Description:

Values representing the difference between the design and actual fiducial measurements.