

## Instrument B Calibration Data

\*\*\*\*\*

Traveler Number \_\_\_\_\_

Traveler Operation(s) \_\_\_\_\_ Traveler Page(s) \_\_\_\_\_

Document Title

Nominal and Actual Calibration Data

Instrument B

10/5/2017 12:10

Equipment Used: equipment notes

NOTE: calibration notes

Min and Max PLC Nominal Counts: -27648.00 27648.00

Min and Max Nominal EU (units): -100.00 100.00

Measured Counts Measured EU (units)

-----	-----
1265.00	-90.00
5209.00	-50.00
10093.00	0.00
22345.00	50.00
26989.00	90.00

The least squares fit 2 degree polynomial is:

$-1.3044131E-07x^2 + 0.010228648x + -99.379737$

Measured EU Calcd EU Error % of EU Range

-----	-----	-----	-----
-90.00	-86.65	3.351	1.675%
-50.00	-49.64	0.362	0.181%
0.00	-9.43	-9.430	-4.715%
50.00	64.05	14.050	7.025%
90.00	81.67	-8.333	-4.167%

Calibrated engineering units for the min and max

PLC counts are as follows:

EU at min and max PLC Counts: -481.8923 83.7110

## Instrument B Calibration Data

Compensate for a non-zero count value at zero EU.  
Shift the curve fit up or down by the count value of  
the zero EU value (the x-intercept of EU axis).  
The adjusted count values vs EU values are:

Adjusted Counts	Measured EU (units)
-----	-----
-10097.16	-90.00
-6153.16	-50.00
-1269.16	0.00
10982.84	50.00
15626.84	90.00

The least squares fit 2 degree polynomial for the adjusted counts is:  
 $-1.3044131E-07x^2 + 0.0072644577x + -3.4650805E-06$

Calibrated engineering units for the adjusted  
min and max PLC counts are as follows:  
EU at min and max PLC Counts:     -300.5586            101.1368

Mfg Sign/Date    -----

QA Sign/Date    -----

\*\*\*\*\*

# Nominal and Actual Calibration Curves

Instrument B 10/5/2017 12:10

