EQUIPMENT
CALIBRATION CHECK

INSTRUMENT CHECKED: ROSEMOUNT DIFFERENTIAL TRANSMITTER

INSTRUMENT DESCRIPTION: 0 TO 30" H2P DIFFERENTIAL TRANSMITTER

MODEL #: 115DP3J12B1 **S/N** 697430 **SWRI #:**

TOLERANCE: TO MANUFACTURER'S OR BETTER

STANDARDS

STANDARD NO.	mfr./ MODEL	DESCRIPTION	S/N	CAL. DUE DATE
1	HEISE 901B	DIGITAL PRESSURE INDICATOR	S9-19647	7/12/97
2	KEITHLEY 177	DIGITAL MULTIMETER	10943	11/10/97
3	MERIAM 34FB2	MICRO MANOMETER	A27175	2/28/98
4				

The Standards indicated above are traceable to the National Institute of Standards and Technology (formerly N.B.S.)

ENVIRONMENT

TEMPERATURE 75°F ± 2°F **LOCATION** SwRI BLDG. 131

PROCEDURE

APPLIED PRESSURES USING THE ABOVE STANDARDS. BAROMETRIC PRESSURE WAS 29.142 "Hg.
SUPPLY VOLTAGE WAS 24 VOLTS DC.

RESULTS

SEE ATTACHED WORKSHEET FOR DATA POINTS.

TECH. ROBERT P. GAUSS

SIGNED

DATE 5/7/97

RECORD #: 1607

NEXT CALIBRATION DUE: 11/7/97

CALIBRATION WORKSHEET

DATE: 5/7/97 **TECH.:** ROBERT P. GAUSS

INWC	=	VOLTS
9.6779	=	4.574
9.0866	=	4.416
4.4677	=	3.184
3.7223	=	2.986
1.4901	=	2.392
11.167	=	4.979
14.889	=	5.974
22.334	=	7.967
26.056	=	8.960

SDIS Form 1118, January 9, 1996

EQUIPMENT
CALIBRATION CHECK

INSTRUMENT CHECKED: ROSEMOUNT DIFFERENTIAL TRANSMITTER

INSTRUMENT DESCRIPTION: 0 TO 30" H2O DIFFENENTIAL TRANSMITTER

MODEL #: 115DP3J12B1 **S/N** 697430 **SWRI #:**

TOLERANCE: TO MANUFACTURER'S OR BETTER

STANDARDS

STANDARD NO.	mfr./ MODEL	DESCRIPTION	S/N	CAL. DUE DATE
1	HEISE 901B	DIGITAL PRESSURE INDICATOR	S9-19647	7/12/97
2	FLUKE 8842A	DIGITAL MULTIMETER	3923084	7/5/97
3	MERIAM 34FB2	MICRO MANOMETER	A27175	2/23/97
4				

The Standards indicated above are traceable to the National Institute of Standards and Technology (formerly N.B.S.)

ENVIRONMENT

TEMPERATURE 75°F ± 2°F **LOCATION** SwRI BLDG. 131

PROCEDURE

APPLIED PRESSURES USING THE ABOVE STANDARDS. BAROMETRIC PRESSURE WAS 29.413 "Hg.

RESULTS

SEE ATTACHED WORK SHEET

TECH. ROBERT P. GAUSS

SIGNED

DATE 11/13/96

RECORD #: 1556

NEXT CALIBRATION DUE: 5/13/97

SDIS November 3, 1992 Form 1030

75°F
29.413 INHG

Given that:

$dL = 6$ cm
$A = 8.814$ cm^2
$K = 10^{-3}$ cm/s

Hill, Melissa X 2012
charge # 20-9998-001

$Q = 130$ mL/hr $= 0.036$ mL/s $= 24.582$ cmH_2O = 0.3496 psi

$Q = 122 \frac{mL}{hr} \times \frac{1\ hr}{60\ min} \times \frac{1\ min}{60\ s} = 0.0339 \frac{mL}{s}$

9.6779 INWC = [redacted] mA
9.145
4.5725 V

$$\frac{QdL}{AK} = dh$$

$$\frac{0.0339\ cm^3/s\ (6\ cm)}{8.814\ cm^2\ (1\times10^{-3}\ cm/s)} = 23.08\ cm\ H_2O$$

4.416 V
8.832
9.0866 INWC = [redacted] mA

$$psi = \frac{23.08\ cm\ H_2O}{27.68\ (2.54\ cm)} = 0.328\ psi$$

$Q = 50$ mL/h $= 0.0139$ mL/s $= 9.4547$ cmH_2O = 0.1345 psi

3.7223 INWC = [redacted] mA
5.980
2.990 V

$Q = 20 \frac{mL}{hr} = 0.00556 \frac{mL}{s}$

$$\frac{0.00556\ mL/s\ (6\ cm)}{8.814\ cm^2\ (1\times10^{-3}\ cm/s)} = 3.785\ cm\ H_2O = 0.0538\ psi$$

1.4901 INWC = [redacted] mA
4.790
2.395 V

$Q = 60 \frac{mL}{hr} = 0.01667 \frac{mL}{s}$

$$\frac{0.01667\ mL/s\ (6\ cm)}{8.814\ cm^2\ (1\times10^{-3}\ cm/s)} = 11.348\ cm\ H_2O = 0.1614\ psi$$

3.188 V
4.4677 INWC = [redacted] mA
6.376

$Q = 150 \frac{mL}{h} = 0.04167 \frac{mL}{s}$

$\frac{0.04167 \, mL/s \, (6 \, cm)}{8.814 \, cm^2 \, (1.4 \times 10^{-3} \, cm/s)} = 28.364 \, cm \, H_2O = 0.403 \, psi$

11,167 INWC = 9.955 mA

4.9775 V

$Q = 200 \frac{mL}{h} = 0.0556 \, mL/s = 37.819 \, cm \, H_2O = 0.538 \, psi$

14.889 INWC = 11.943 mA

5.9715 V

$Q = 250 \, mL/h =$ 47.27 cm H_2O = 0.672 psi

18.610 INWC = 13.933 mA

6.9665 V

$Q = 300 \frac{mL}{h} = 0.0833 \, mL/s = 56.728 \, cm \, H_2O = 0.807 \, psi$

22.334 INWC = 15.928 mA

7.964 V

$Q = 350 \frac{mL}{h} = 0.0972 = 66.183 \, cm \, H_2O = 0.941 \, psi$

26,056 INWC = 17.915 mA

8.9575 V

EQUIPMENT CALIBRATION CHECK

INSTRUMENT CHECKED: ROSEMOUNT DIFFERENTIAL TRANSMITTER
INSTRUMENT DESCRIPTION: 0 TO 30" H2O DIFFERENTIAL TRANSMITTER

MODEL #: 115DP3J12B1 **S/N** 697430 **SWRI #:**
TOLERANCE: TO MANUFACTURER'S OR BETTER

STANDARDS

STANDARD NO.	mfr./ MODEL	DESCRIPTION	S/N	CAL. DUE DATE
1	MERIAL/34FB2	MICROMANOMETER	A27175	2/28/98
2	KEITHLEY/177	MULTIMETER	10943	5/26/98
3	HEISE/901B	PRESSURE READOUT	S9-221709	1/11/98
4				

The Standards indicated above are traceable to the National Institute of Standards and Technology (formerly N.B.S.)

ENVIRONMENT

TEMPERATURE 70±2°F **LOCATION** SwRI BLDG. 131

PROCEDURE

APPLIED PRESSURES USING THE ABOVE STANDARDS. BAROMETRIC PRESSURE WAS 28.978" Hg. AMBIENT TEMPERATURE WAS 71°F, SYPPLY VOLTAGE WAS 24 VOLTS DC.

RESULTS

SEE ATTACHED WORKSHEET FOR DATA POINTS.

CHECKED BY: ROBERT P. GAUSS
SIGNED
DATE 12/1/97
NEXT CALIBRATION DUE: 5/1/97

↑ typo
5/1/98 M.H.

RECORD #: 1683

SDIS November 3, 1992 Form 1030

CALIBRATION WORKSHEET

DATE: 12/1/97 **BY:** ROBERT P. GAUSS

BEFORE		AFTER	
INWC	VOLTS	INWC	VOLTS
1.4901	2.4250	1.4901	2.4060
3.7223	3.0090	3.7223	2.9860
4.4677	3.2040	4.4677	3.1790
9.0866	4.4250	9.0866	4.3870
9.6779	4.5820	9.6779	4.5400
11.1670	4.9820	11.1670	4.9590
14.8890	5.9750	14.8890	5.9430
22.3340	7.9600	22.3340	7.9140
26.0560	8.9470	26.0560	8.9000