



innovation in
geotechnical
instrumentation

Calibration Record

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Vibrating Wire Pressure Transducer

Customer : PT Unggul Ejawantah Industri
Model : VW-2100A-1.0
Serial Number : VW34674
Mfg Number : 333665
Range : 1000.0 kPa
Temperature : 20.0 deg C
Barometric Pressure : 1012.0 millibars
Cable Length : 150 meters
Cable Colour Code : red/black (coil) Green/white (thermistor)
Cable Insulation / Jacket : PEPolyethylene / PVC 6EL380004
Thermistor Type : 3 kΩ

Applied Pressure (kPa)	Readings Up (B units)	Readings Down (B units)	Average Readings (B units)	Calculated Linear (kPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.0	9131	9131	9131	2.1	0.20	0.00
208.0	8422	8422	8422	207.7	-0.03	0.01
418.0	7528	7528	7528	414.1	-0.19	-0.02
624.0	6625	6625	6625	622.3	-0.06	0.00
832.0	5718	5718	5718	831.8	-0.02	0.02
1040.0	4807	4807	4807	1042.0	0.19	-0.01
Max. Error (%)					0.20	0.02

Linear Calibration Factor :

Regression Zero :

Temperature Correction Factor :

C.F.= 0.23079 kPa / B unit

At Calibration Bi = 9321.7 B unit

Tk = 0.14901 kPa / deg C rise

Polynomial gage Factors

A : -7.8492E-07

B : -0.21970

C : 2114.1

Pressure is calculated with the following equations :

Linear, $P \text{ (kPa)} = C.F. \times (Li - Lc) - [Tk(Ti - Tc)] + [0.014504 (Bi - Bc)]$

Polynomial, $P \text{ (kPa)} = A(Lc)^2 + BLc + C + Tk(Tc - Ti) - [0.014504(Bc - Bi)]$

DATE VW2106 TEMP degC BARO
(dd/mm/yy) Pos.B (Li) (Ti) (Bi)
SHIPPED ZERO READINGS : 13-Dec-18 9324 20.5 1013.8

Li, Lc = initial (at installation) and current readings

Ti, Tc = initial (at installation) and current temperature deg C

Bi, Bc = initial (at installation) and current barometric pressure readings, in millibars

B units = B scale output of VW 2104, VW 2106 readouts

B units = Hz²/1000 ie. 1700Hz = 2890 B units

Certified By : I. Kurchavov *IK*

Date : 13-Dec-18

This instrument has been calibrated using standard traceable to the NIST in compliance with ANSI Z540-1

