RST Instruments Ltd.

200 - 2050 Hartley Ave., Coquitlam, British Columbia, Canada V3K 6W5

Vibrating Wire Pressure Transducer Calibration

Customer:		Yukon Zinc Corporation	
Model:		VW2100-1.0	
Serial Number:		VW1229	
Mfg Number		04-5808	
Range:		1.0 MPa	
Date of Calibration:		11-May-04	
Temperature:		21.5 °C	
Barometric Pressure:		995.77 millibars	
W.O. Number:		Q04057	
Cable Length:		100 meters	
Cable Colour Code:	red / black (coil)	green / white	(thermistor)
Cable Insulation	Polyurethane		
Thermistor type:		3 Kohms	

Applied Pressure (MPa)	First Reading (B units)	Applied Pressure (MPa)	Second Reading (B units)	Average Pressure (MPa)	Average Readings (B units)	Calculated Linear (MPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.000	8983	0.000	8982	0.000	8983	0.002	0.20	0.01
0.200	8228	0.200	8229	0.200	8229	0.200	-0.05	-0.01
0.400	7469	0.400	7470	0.400	7470	0.398	-0.16	-0.01
0.600	6706	0.600	6705	0.600	6706	0.598	-0.15	0.00
0.800	5937	0.800	5937	0.800	5937	0.800	-0.02	0.02
1.000	5166	1.000	5166	1.000	5166	1.002	0.18	-0.01
						Max. Error (%):	0.20	0.02

Linear Calibration Factor: **C.F.=** **0.00026196 MPa/B unit**
Regression Zero: **At Calibration Bi =** **8990.1** B unit
Temperature Correction Factor: **Tk =** **0.0000340 MPa/°C rise**

Polynomial Gage Factors (MPa) **A:** -9.8717E-10 **B:** -0.00024799 **C:** 2.30735

Pressure is calculated with the following equations:
Linear, P(MPa) = C.F. X (Li - Lc) - [Tk (Ti - Tc)] + [0.10 (Bi - Bc)]
Polynomial: $P(MPa)=A(Lc)^2+BLc+C+Tk(Tc-Ti)-[0.10(Bc-Bi)]$

	DATE (dd/mm/yr)	VW2104 Pos. B (Li)	TEMP °C (Ti)	BARO (Bi)
FACTORY ZERO READINGS:	14-May-04	8978	23.7	1003.0
SHIPPED ZERO READINGS:	13-Apr-05	8981	19.9	1018.1

Li, Lc = initial (at installation) and current readings
Ti, Tc = initial (at installation) and current temperature, in °C
Bi, Bc = initial (at installation) and current barometric pressure readings, in millibars
B units = B scale output of VW 2102, VW 2104 readouts
B units = Hz^2 / 1000 ie: 1700Hz = 2890 B units

Technician: C Christen CC Date: 13-Apr-05

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

Applied Science Technologists and Technicians of British Columbia
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RST Instruments Ltd.

200 - 2050 Hartley Ave., Coquitlam, British Columbia, Canada V3K 6W5

Vibrating Wire Pressure Transducer Calibration

Customer:		Yukon Zinc Corporation	
Model:		VW2100-1.0	
Serial Number:		VW1230	
Mfg Number		04-5809	
Range:		1.0 MPa	
Date of Calibration:		11-May-04	
Temperature:		21.5 °C	
Barometric Pressure:		995.77 millibars	
W.O. Number:		Q04057	
Cable Length:		100 meters	
Cable Colour Code:	red / black (coil)	green / white	(thermistor)
Cable Insulation	Polyurethane		
Thermistor type:		3 Kohms	

Applied Pressure (MPa)	First Reading (B units)	Applied Pressure (MPa)	Second Reading (B units)	Average Pressure (MPa)	Average Readings (B units)	Calculated Linear (MPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.000	8545	0.000	8545	0.000	8545	0.002	0.17	-0.01
0.200	7759	0.200	7758	0.200	7759	0.200	-0.02	0.01
0.400	6969	0.400	6969	0.400	6969	0.399	-0.14	0.00
0.600	6176	0.600	6175	0.600	6176	0.598	-0.16	-0.02
0.800	5376	0.800	5376	0.800	5376	0.800	-0.03	0.01
1.000	4573	1.000	4574	1.000	4574	1.002	0.18	0.00
						Max. Error (%):	0.18	0.02

Linear Calibration Factor:	**C.F.=**	**0.00025181**	**MPa/B unit**
Regression Zero:	**At Calibration Bi =**	**8551.9**	**B unit**
Temperature Correction Factor:	**Tk =**	**0.0000590**	**MPa/°C rise**

Polynomial Gage Factors (MPa) **A:** -8.5536E-10 **B:** -0.00024059 **C:** 2.11821

Pressure is calculated with the following equations:
Linear, P(MPa) = C.F. X (Li - Lc) - [Tk (Ti - Tc)] + [0.10 (Bi - Bc)]
Polynomial: $P(MPa)=A(Lc)^2+BLc+C+Tk(Tc-Ti)-[0.10(Bc-Bi)]$

	DATE (dd/mm/yr)	VW2104 Pos. B (Li)	TEMP °C (Ti)	BARO (Bi)
FACTORY ZERO READINGS:	14-May-04	8539	23.5	1003.0
SHIPPED ZERO READINGS:	13-Apr-05	8541	20.4	1018.1

Li, Lc = initial (at installation) and current readings
Ti, Tc = initial (at installation) and current temperature, in °C
Bi, Bc = initial (at installation) and current barometric pressure readings, in millibars
B units = B scale output of VW 2102, VW 2104 readouts
B units = Hz^2 / 1000 ie: 1700Hz = 2890 B units

Technician: C Christen Date: 13-Apr-05

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

RST Instruments Ltd.

200 - 2050 Hartley Ave., Coquitlam, British Columbia, Canada V3K 6W5

Vibrating Wire Pressure Transducer Calibration

Customer:		Yukon Zinc Corporation	
Model:		VW2100-2.0	
Serial Number:		VW1835	
Mfg Number		04-6906	
Range:		2.0	MPa
Date of Calibration:		28-Jun-04	
Temperature:		22.4	°C
Barometric Pressure:		995.6	millibars
W.O. Number:		Q04057	
Cable Length:		180	meters
Cable Colour Code:	red / black (coil)	green / white	(thermistor)
Cable Insulation	Polyurethane		
Thermistor type:		3	Kohms

Applied Pressure (MPa)	First Reading (B units)	Applied Pressure (MPa)	Second Reading (B units)	Average Pressure (MPa)	Average Readings (B units)	Calculated Linear (MPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.000	8848	0.000	8848	0.000	8848	0.004	0.22	0.00
0.400	8095	0.400	8094	0.400	8095	0.400	-0.02	0.02
0.800	7339	0.800	7339	0.800	7339	0.796	-0.22	-0.03
1.200	6575	1.200	6574	1.200	6575	1.197	-0.17	0.01
1.600	5806	1.600	5807	1.600	5807	1.599	-0.04	0.01
2.000	5034	2.000	5034	2.000	5034	2.004	0.22	-0.01
						Max. Error (%):	0.22	0.03

Linear Calibration Factor:	**C.F.=**	**0.00052436 MPa/B unit**
Regression Zero:	**At Calibration Bi =**	**8856.5 B unit**
Temperature Correction Factor:	**Tk =**	**0.0002604 MPa/°C rise**

Polynomial Gage Factors (MPa) **A:** -2.3332E-09 **B:** -0.00049197 **C:** 4.53555

Pressure is calculated with the following equations:

Linear, $P(MPa) = C.F. \times (Li - Lc) - [Tk (Ti - Tc)] + [0.10 (Bi - Bc)]$

Polynomial: $P(MPa)=A(Lc)^2+BLc+C+Tk(Tc-Ti)-[0.10(Bc-Bi)]$

	DATE (dd/mm/yr)	VW2104 Pos. B (Li)	TEMP °C (Ti)	BARO (Bi)
FACTORY ZERO READINGS:	10-Sep-04	8850	24.2	991.3
SHIPPED ZERO READINGS:	13-Apr-05	8850	20.5	1018.1

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

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

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

B units = B scale output of VW 2102, VW 2104 readouts

B units = $Hz^2 / 1000$ ie: 1700Hz = 2890 B units

Technician: C Christen CC Date: 13-Apr-05

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

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RST Instruments Ltd.

200 - 2050 Hartley Ave., Coquitlam, British Columbia, Canada V3K 6W5

Vibrating Wire Pressure Transducer Calibration

Customer:		Yukon Zinc Corporation	
Model:		VW2100-2.0	
Serial Number:		VW1836	
Mfg Number		05-1898	
Range:		2.0	MPa
Date of Calibration:		16-Mar-05	
Temperature:		23.8	°C
Barometric Pressure:		990.2	millibars
W.O. Number:		Q04057	
Cable Length:		220	meters
Cable Colour Code:	red / black (coil)	green / white	(thermistor)
Cable Insulation	Polyurethane		
Thermistor type:		3	Kohms

Applied Pressure (MPa)	First Reading (B units)	Applied Pressure (MPa)	Second Reading (B units)	Average Pressure (MPa)	Average Readings (B units)	Calculated Linear (MPa)	Linearity F.S. Error (%)	Polynomial Fit (% FS)
0.000	8808	0.000	8808	0.000	8808	0.005	0.26	0.00
0.400	8089	0.400	8089	0.400	8089	0.399	-0.04	0.01
0.800	7365	0.800	7366	0.800	7366	0.796	-0.22	-0.01
1.200	6635	1.200	6635	1.200	6635	1.196	-0.21	0.01
1.600	5900	1.600	5899	1.600	5900	1.599	-0.06	0.00
2.000	5158	2.000	5158	2.000	5158	2.005	0.26	0.00
						Max. Error (%):	0.26	0.01

Linear Calibration Factor:	**C.F.=**	**0.00054795 MPa/B unit**
Regression Zero:	**At Calibration Bi =**	**8817.4 B unit**
Temperature Correction Factor:	**Tk =**	**0.0004722 MPa/°C rise**

Polynomial Gage Factors (MPa) **A:** -2.9472E-09 **B:** -0.00050679 **C:** 4.69239

Pressure is calculated with the following equations:

Linear, $P(MPa) = C.F. \times (Li - Lc) - [Tk (Ti - Tc)] + [0.10 (Bi - Bc)]$

Polynomial: $P(MPa)=A(Lc)^2+BLc+C+Tk(Tc-Ti)-[0.10(Bc-Bi)]$

	DATE (dd/mm/yr)	VW2104 Pos. B (Li)	TEMP °C (Ti)	BARO (Bi)
FACTORY ZERO READINGS:	6-Apr-05	8810	28.7	995.6
SHIPPED ZERO READINGS:	13-Apr-05	8810	26.2	1015.1

Li, Lc = initial (at installation) and current readings
Ti, Tc = initial (at installation) and current temperature, in °C
Bi, Bc = initial (at installation) and current barometric pressure readings, in millibars
B units = B scale output of VW 2102, VW 2104 readouts
B units = Hz^2 / 1000 ie: 1700Hz = 2890 B units

Technician: C Christen CC Date: 13-Apr-05

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

Applied Science Technologists and Technicians of British Columbia 22724 A.C. AL CULLEY ASCT

RST INSTRUMENTS LTD.
200 - 2050 Hartley Avenue, Coquitlam, British Columbia, Canada V3K 6W5

Certificate of Compliance

Model DT2011 Vibrating Wire Data Logger

This is to certify that s/n 01771 meets RST Instruments specifications for this product.

Technician: KAH Date: Apr 13, 05 ELL0158A.DOC

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Certificate of Compliance

Model DT2011 Vibrating Wire Data Logger

This is to certify that s/n 01768 meets RST Instruments specifications for this product.

Technician: KAH Date: Apr 13, 05 ELL0158A.DOC

200 - 2050 Hartley Avenue, Coquitlam, British Columbia, Canada V3K 6W5

Certificate of Compliance

Model DT2011 Vibrating Wire Data Logger

This is to certify that s/n 01770 meets RST Instruments specifications for this product.

Technician: KAH Date: Apr 13, 05 ELL0158A.DOC

200 - 2050 Hartley Avenue, Coquitlam, British Columbia, Canada V3K 6W5

Certificate of Compliance

Model DT2011 Vibrating Wire Data Logger

This is to certify that s/n 01769 meets RST Instruments specifications for this product.

Technician: KAH Date: Apr 13, 05 ELL0158A.DOC