



Graphic Controls LLC

CHART NO. MC MP-3000-150F 75DIV
METER 202E-449345

CHART PUT ON
9/11/19
7:11 AM

LOCATION

REMARKS
egf to coyote 8" flex steel
8 hr main line test
Jenart
Just in Langlois

TAKEN OFF
9/11/19
6:43 PM

PRINTED IN U.S.A.

3
Coyote
to
CCF

John Deery
9.11.19
40.026533
-104.930075
8" Flex Results
8hr

Justin Zanglois
Jomax 9.11.19

PRESSURE TEST LOG PAGE 1

REPORT NUMBER

DEADWEIGHT SERIAL NUMBER

202E-449345

cut to coyote

max 900
min 750

| TIME | DEADWT PRESSURE (required) | GAUGE PRESSURE (optional) | AMBIENT TEMP. | PIPE or TEST MEDIUM TEMP. (Part 195 Tests) | REMARKS |
|-------|----------------------------------|---------------------------------|------------------|--|------------------------|
| 9:11 | | 0 | 65 | | |
| 9:33 | | 778 | 66 | 70 | On test |
| 9:38 | | 780 | 67 | 72 | Bump for stabilization |
| 9:53 | | 787 | 67 | 73 | |
| 10:06 | | 785 | 69 | 74 | |
| 10:23 | | 784 | 70 | 75 | |
| 10:38 | | 784 | 70 | 76 | |
| 10:53 | | 783 | 70 | 77 | |
| 11:08 | | 782 | 71 | 78 | |
| 11:23 | | 782 | 71 | 79 | |
| 11:38 | | 781 | 71 | 80 | |
| 11:53 | | 781 | 71 | 81 | |
| 12:08 | | 780 | 73 | 82 | |
| 12:23 | | 780 | 73 | 83 | |
| 12:38 | | 780 | 73 | 83 | |
| 12:53 | | 779 | 74 | 84 | |
| 1:08 | | 779 | 75 | 85 | |
| 1:23 | | 779 | 76 | 86 | |
| 1:38 | | 778 | 76 | 87 | |
| 1:53 | | 776 | 76 | 88 | |
| 2:08 | | 774 | 77 | 89 | |
| 2:23 | | 774 | 80 | 91 | |
| 2:38 | | 777 | 80 | 92 | |
| 2:53 | | 777 | 79 | 92 | |
| 3:08 | | 777 | 79 | 94 | |
| 3:23 | | 777 | 78 | 92 | |
| 3:38 | | 776 | 77 | 92 | Unl cover |
| 3:53 | | 776 | 76 | 91 | |
| 4:08 | | 776 | 76 | 91 | |
| 4:23 | | 773 | 75 | 91 | |
| 4:38 | | 775 | 77 | 92 | Druck/RAIN - int |
| 4:53 | | 774 | 70 | 84 | |
| 5:08 | | 774 | 71 | 86 | |
| 5:23 | | 773 | 70 | 84 | |
| 5:38 | | 773 | 69 | 83 | |
| 5:53 | | 772 | 67 | 81 | |
| 6:08 | | 772 | 63 | 82 | End test |
| | | | | | Tomax |
| | | | | | Justin Langlois |



7200 E. Dry Creek Rd, STE C-102, Centennial, CO 80112

Ph. 303-804-0667 Cal.Lab@Apex-Instruments.com

Calibration Certificate

Certificate Number: 193242

Customer:

JoMax Construction
Erie, CO

Manufacturer: Crystal Engineering
Model Number: nVision 10,000 psi
Serial Number: 814712
Description: Pressure Module
Procedure: CI-001
Calibrated To: Manufacturer's Specifications
Technician: Bradley Golackson

Calibration Date: 8/19/2019
Due Date: 2/19/2020
As Found: In Tolerance
As Left: As Found
Temperature: 69.8 F
Humidity: 39.4 %

Tolerance Specs:

0 to 30% of FS: +/- 0.015% of FS
30% to 110% of FS: +/- 0.05% of Rdg

Technician Notes:

As Left Userspan: 1.00000

Approved Signatory: 

Apex Instruments certifies that the instrument listed above meets the specifications of the manufacturer at the completion of its calibration. Standards used are traceable to the National Institute of Standards and Technology (NIST), or have been derived from accepted values, natural physical constants, or through the use of the ratio method of self-calibration techniques.

Methods used are in accordance with the procedure listed above. This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

Unless otherwise contractually specified, a binary decision rule, utilizing simple acceptance, and simple rejection criteria will be used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and the limits are defined by the manufacturer's stated accuracy.

This certificate does not guarantee the continued performance of the instrument listed above. Any modifications or services performed hereafter may void this certificate.

This certificate is not to be reproduced other than in full, except with prior written approval from Apex Instruments Inc.



APX05453

Standards Used

| Description | Model Number | Serial Number | Calibration Date | Due Date | ID |
|------------------------------|-----------------------|---------------|------------------|------------|----------|
| Electronic Deadweight Tester | RPM4-E-DWT A100M/A10M | 1709 | 11/19/2018 | 11/19/2019 | APX00024 |
| Temp / RH Datalogger | UX100-011 | 20369499 | 8/28/2018 | 8/28/2019 | APX04795 |

Compass Import

Gauge Pressure

Test Description

Nominal

Test Results

As Found - As Left

Tolerance (+/-)

UUT Error

Status

Pass

| | | | | | |
|-------|--------------|-------------|---------|----------|------|
| 0 | 0.10 psi | 0.0 psi | 1.5 psi | -0.1 psi | Pass |
| 2000 | 1999.73 psi | 2000.0 psi | 1.5 psi | 0.3 psi | Pass |
| 4000 | 4000.12 psi | 4000.5 psi | 2.0 psi | 0.4 psi | Pass |
| 6000 | 6000.00 psi | 6000.5 psi | 3.0 psi | 0.5 psi | Pass |
| 8000 | 8000.35 psi | 8000.8 psi | 4.0 psi | 0.4 psi | Pass |
| 10000 | 10000.09 psi | 10000.9 psi | 5.0 psi | 0.8 psi | Pass |
| 8000 | 7999.98 psi | 8000.6 psi | 4.0 psi | 0.6 psi | Pass |
| 6000 | 5999.93 psi | 6000.5 psi | 3.0 psi | 0.6 psi | Pass |
| 4000 | 4000.20 psi | 4000.6 psi | 2.0 psi | 0.4 psi | Pass |
| 2000 | 2000.09 psi | 2000.5 psi | 1.5 psi | 0.4 psi | Pass |
| 0 | -0.08 psi | 0.0 psi | 1.5 psi | 0.1 psi | Pass |

-- End of measurement results--





7200 E. Dry Creek Rd, STE C-102, Centennial, CO 80112

Ph. 303-804-0667 Cal.Lab@Apex-Instruments.com

Calibration Certificate

Certificate Number: 193241

Customer:

JoMax Construction
Erie, CO

Manufacturer: Crystal Engineering
Model Number: nVision RTD100
Serial Number: 815840
Description: Temperature Module (RTD)
Procedure: CRY_R_RTD100p
Calibrated To: Manufacturer's Specifications
Technician: Bradley Golackson

Calibration Date: 8/19/2019
Due Date: 2/19/2020
As Found: In Tolerance
As Left: As Found
Temperature: 69.8 F
Humidity: 39.4 %

Tolerance Specs:

Range: 0 to 400 ohms ; -328 to 1562 degF (PT100 0.00385)

Resistance 0 to 100% of FS: +/- (0.015% of R_{dg} + 0.02 ohms)

Class B Probe Temperature Deviation: +/- (0.3 + 0.005*T) degC

Technician Notes:

As Left Userspan: 1.00000

R0: 100.00

Approved Signatory: 

Apex Instruments certifies that the instrument listed above meets the specifications of the manufacturer at the completion of its calibration. Standards used are traceable to the National Institute of Standards and Technology (NIST), or have been derived from accepted values, natural physical constants, or through the use of the ratio method of self-calibration techniques.

Methods used are in accordance with the procedure listed above. This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

Unless otherwise contractually specified, a binary decision rule, utilizing simple acceptance, and simple rejection criteria will be used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and the limits are defined by the manufacturer's stated accuracy.

This certificate does not guarantee the continued performance of the instrument listed above. Any modifications or services performed hereafter may void this certificate.

This certificate is not to be reproduced other than in full, except with prior written approval from Apex Instruments Inc.



APX05452

Standards Used

| Description | Model Number | Serial Number | Calibration Date | Due Date | ID |
|-------------------------------------|-------------------|---------------|------------------|-----------|----------|
| Digital Multimeter, 8 1/2 Digit | 3458A | 2823A11060 | 1/4/2019 | 1/4/2020 | APX00012 |
| Reference Thermometer Readout / PRT | 1502A / 5628-12-D | B64070 / 3526 | 8/29/2018 | 8/29/2019 | APX00014 |
| Reference Thermometer Readout / PRT | 1502A / 5628-12-D | B0B641 / 3780 | 7/22/2019 | 7/22/2020 | APX00015 |
| Decade Resistor | 1433-28 | E1-17295164 | 7/25/2019 | 7/25/2020 | APX02856 |
| Temp / RH Datalogger | UX100-011 | 20250011 | 1/15/2019 | 1/15/2020 | APX04796 |

Crystal nVision RTD100 w/Probe

Manual Template

| Test Description | Nominal | Test Results | Tolerance (+/-) | UIT Error | Status | Pass |
|---------------------------|-----------------|-----------------|-----------------|---------------|--------|------|
| <u>Measure Resistance</u> | | | | | | |
| 5 Ohms | 5.00 Ω | 5.00 Ω | 0.02 Ω | 0.00 Ω | Pass | |
| 100 Ohms | 100.00 Ω | 100.00 Ω | 0.03 Ω | 0.00 Ω | Pass | |
| 200 Ohms | 200.00 Ω | 200.00 Ω | 0.04 Ω | 0.00 Ω | Pass | |
| 300 Ohms | 300.00 Ω | 300.00 Ω | 0.06 Ω | 0.00 Ω | Pass | |
| 400 Ohms | 400.00 Ω | 400.00 Ω | 0.08 Ω | 0.00 Ω | Pass | |

RTD Probe Verification

Class B / 4-Wire / PT100 0.00385

Serial Number

| | | | | | | |
|-------|-----------|-----------|---------|---------|----------|------|
| 32 F | 32.05 °F | 32.19 °F | 0.54 °F | 0.14 °F | 815840-1 | Pass |
| 250 F | 250.10 °F | 250.72 °F | 1.63 °F | 0.62 °F | | Pass |

Class B / 4-Wire / PT100 0.00385

Serial Number

| | | | | | | |
|-------|-----------|-----------|---------|----------|----------|------|
| 32 F | 32.05 °F | 31.99 °F | 0.54 °F | -0.06 °F | 815840-2 | Pass |
| 250 F | 250.12 °F | 250.08 °F | 1.63 °F | -0.04 °F | | Pass |

-- End of measurement results--





Calibration → Certification → Repair → Rental → Sales

www.hydro-chart.com

7709 E. 42nd Place, Suite 104 Tulsa, OK 74145

918-834-3210

CERTIFICATE OF CALIBRATION

| | |
|--------------------|--|
| Customer Name: | JOMAX CONSTRUCTION |
| Model: | Barton Pressure / Temperature Recorder |
| Serial Number: | 202E-449345 |
| Range: | 0 - 3,000 psi / 0 - 150 Deg. F. |
| Accuracy +/- : | 1% |
| Condition as Left: | Within Tolerance |
| Date Calibrated: | June 04, 2019 |
| Action Performed: | Calibrated/Certified |

Tech: Otto V. Harrison

Authorized Signature: _____

This certificate applies solely for the equipment listed above.

The primary test and measuring equipment used is calibrated and traceable to the National Institute of Standards and Technology (NIST) United States.

Additel SN: 211H13610038 Asset # 1123679 Due Date: 09/12/2019

Fluke SN: 20000053 Asset # 1141854 Due Date: 10/09/2019

Crystal SN: 359513 Asset # 1135247 Due Date: 08/28/2019

Chandler SN: 10161 Asset # 1132202 Due Date: 02/13/2020

Based on Standard Gravity @72 Deg. F. and 39% Relative Humidity.