



Certificate of Calibration & Compliance For:
ILLIANA INSTRUMENTATION SERVICE
 1831 GOVERT DRIVE
 SCHERERVILLE, IN 46375



CALIBRATION
 NVLAP LAB CODE: 200496-0

GeoCorp, Inc.
 www.geocorpinc.com
 9010 River Road • Huron, Ohio 44839
 P: 419-433-1101 F: 419-433-1102
 17025 Accredited Lab

NVLAP is a U.S. Government entity
 administered by the NIST, an agency
 of the Department of Commerce.

| Calibration # | Z-8963 | Temperature | Reading | | Correction | | ASTM E29 AVG. CORRECTION |
|---------------|-------------------|-------------|---------|--------|------------|------|--------------------------|
| | | | FRONT | BACK | FRONT | BACK | |
| Degree: ° | F | Point | | | | | |
| | | 32 | 32.1 | 32.1 | -0.1 | -0.1 | -0.1 |
| P.O. #: | 4042 | 100 | 100.1 | 100.1 | -0.1 | -0.1 | -0.1 |
| | | 200 | 199.9 | 199.8 | 0.1 | 0.2 | 0.2 |
| Description: | Thermocouple Wire | 400 | 399.6 | 399.4 | 0.4 | 0.6 | 0.5 |
| TYPE | K | 600 | 600.2 | 600.0 | -0.2 | 0.0 | -0.1 |
| 500' | K20-2-HG | 800 | 801.0 | 800.8 | -1.0 | -0.8 | -0.9 |
| | | 1000 | 1001.8 | 1001.7 | -1.8 | -1.7 | -1.8 |
| | | 1200 | 1202.7 | 1202.7 | -2.7 | -2.7 | -2.7 |
| | | 1400 | 1402.8 | 1402.9 | -2.8 | -2.9 | -2.8 |
| | | 1600 | 1603.4 | 1603.5 | -3.4 | -3.5 | -3.4 |
| Spool # | GK91121-4-10 | | | | | | |
| Test Date: | 1/22/2020 | | | | | | |
| Job #: | 233316 | | | | | | |

This Item meets ASTM E230 Special Limits Standard Limits New Calibration Recalibration

BAC 5621 L, Table V +/- 2 °F (+/- 1.1 °C) to 1000° F, +/- 0.4% above AMS 2750 E Noble Metal +/- 1° F (+/- 0.6 °C) or +/- 0.1%

BAC 5621 L, Table V, FL 4 +/- 2 °F (+/- 1.1 °C) or +/- 0.4% AMS 2750 E Base Metal +/- 2° F (+/- 1.1 °C) or +/- 0.4%

The calibrated equipment used for this test, listed below, is maintained in accordance with AMS 2750E, BAC 5621L (no PSD's), ANSI/NCSL Z540-3, ISO 10012, ISO/IEC 17025, RRP 54000, PWA (F-40). Measurement results are traceable to standards maintained at the NIST. Test methods are per ASTM E220-19, ASTM E230/E230M-17, GEOCORP QW-001-O

| | | | |
|---|--|--|--|
| NIST SENSOR: 292827 Calibrated: 11/22/2019 Due: 11/22/2020 Type: S | Primary Sensor: A-4216 Calibrated: 1/2/2020 Due: 1/2/2021 Type: S | Primary Inst: Keithley 2701 S/N: 1212892 Calibrated: 8/14/2019 Due: 8/14/2020 | Humidity: 40% Nominal Ambient Temp: 72° F Immersion Depth: 24" tech: BW by: BW Issue Date: 1/22/2020 |
|---|--|--|--|

Estimated uncertainty, k=2, 95%
 Thermocouple Types-K and N: -196° C to < 0° C = .71° C; 0° C to 1093 = .89° C; >1093 to 1344 = 1.9° C
 Thermocouple Type-J: -196° C to < 0° C = .70° C; 0° C to 760° C = .88° C

Noreen Roth
NOREEN ROTH
 APPROVED SIGNATORY

TYPE
K Thermocouple Wire

