



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Verichek Technical Services
3000 Industrial Blvd.
Bethel Park, PA 15102

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION and TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L1190-1

Certificate Number



ANAB Approval

Certificate Valid Through: 07/15/2021
Version No. 003 Issued: 07/11/2019



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Verichek Technical Services

3000 Industrial Blvd.
Bethel Park, PA 15102
Evan T. Sivetz 412-854-1800

CALIBRATION AND TESTING

Valid to: July 15, 2021

Certificate Number: L1190-1

CALIBRATION

Chemical Quantities

| Parameter/Equipment ^{1,2} | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|------------------------------------|------------------|---|--|
| Optical Emission Spectroscopy | Matrix Dependent | See Note 2 | ASTM E305 |

TESTING

Chemical

| Specific Tests and/or Properties Measured ¹ | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|--|--|------------------------------------|-------------------------------------|
| Positive Metal Identification | ASTM E415 ASTM E1476 ASTM E1916 | Metals | Elemental Analysis (OES and x-Ray) |
| Positive Metal Identification | ASTM E1476 ASTM E1916 | Metals | Sorting-Qualitative (OES and x-Ray) |
| Spark Testing | ASTM E1476 ASTM E1916 | Metals | Sorting-Qualitative |

Mechanical

| Specific Tests and/or Properties Measured ¹ | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|--|--|------------------------------------|---|
| Hardness Testing | (20 to 2 000) HV | ASTM A1038 | Metals Hardness by Ultrasonic Contact Impedance |
| | (20 to 999) HL | ASTM A956 | Leeb Hardness of Metals |

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

- Notes:
1. On-site calibration and testing service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
 2. The uncertainty of measurement varies depending upon the element (matrix) involved. Uncertainty estimates are available upon request.
 3. This scope is formatted as part of a single document including Certificate of Accreditation No. L1190-1.



Vice President

