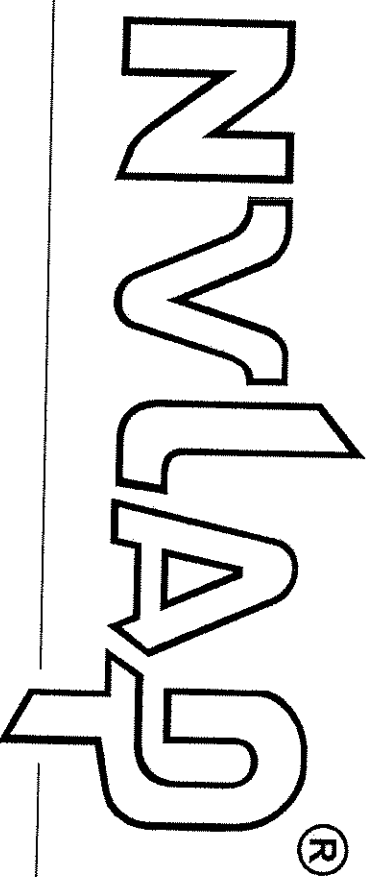


United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200420-0

State of Ohio Metrology Laboratory
Reynoldsburg, OH

*is accredited by the National Voluntary Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

CALIBRATION LABORATORIES

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
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 January 2009).*

2011-07-01 through 2012-06-30

Effective dates



Dale S. Bruce
For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

State of Ohio Metrology Laboratory
8995 East Main Street
Reynoldsburg, OH 43068-3399
Mrs. Fran Elson-Houston
Phone: 614-728-6290 Fax: 614-728-6424
E-mail: houston@agri.ohio.gov
URL: http://www.agri.ohio.gov/weights

CALIBRATION LABORATORIES

NVLAP LAB CODE 200420-0

NVLAP Code: 20/A01

ANSI/NCSL Z540-1-1994; Part 1

Compliant

DIMENSIONAL

NVLAP Code: 20/D13
Surveying Rods and Tapes

<i>Range in inches</i>	<i>Best Uncertainty (±) in inches ^{note 1}</i>	<i>Remarks</i>
6 to 12	0.0068	Rigid Rules, 72 inch
6 to 18	0.011	Rigid Rules, 72 inch
6 to 24	0.011	Rigid Rules, 72 inch
6 to 36	0.015	Rigid Rules, 72 inch
6 to 48	0.018	Rigid Rules, 72 inch
6 to 60	0.022	Rigid Rules, 72 inch
6 to 72	0.028	Rigid Rules, 72 inch
1 to 2	0.0038	Rigid Rules, 18 inch
1 to 3	0.0038	Rigid Rules, 18 inch
1 to 4	0.0038	Rigid Rules, 18 inch
1 to 5	0.0038	Rigid Rules, 18 inch
1 to 6	0.0038	Rigid Rules, 18 inch
1 to 7	0.0068	Rigid Rules, 18 inch
1 to 8	0.0068	Rigid Rules, 18 inch
1 to 9	0.0068	Rigid Rules, 18 inch
1 to 10	0.0068	Rigid Rules, 18 inch
1 to 11	0.0068	Rigid Rules, 18 inch

2011-07-01 through 2012-06-30

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NVLAP LAB CODE 200420-0

<i>Range in inches</i>	<i>Best Uncertainty (±) in inches ^{note 1}</i>	<i>Remarks</i>
1 to 12	0.0068	Rigid Rules, 18 inch
1 to 13	0.011	Rigid Rules, 18 inch
1 to 14	0.011	Rigid Rules, 18 inch
1 to 15	0.011	Rigid Rules, 18 inch
1 to 16	0.011	Rigid Rules, 18 inch
1 to 17	0.011	Rigid Rules, 18 inch
1 to 18	0.011	Rigid Rules, 18 inch

<i>Range in feet</i>	<i>Best Uncertainty (±) in inches ^{note 1}</i>	<i>Remarks</i>
0 to 6	0.010	Tape to Bench
0 to 30	0.033	Tape to Bench
0 to 50	0.041	Tape to Bench
0 to 100	0.065	Tape to Bench

MECHANICAL

NVLAP Code: 20/M08
Mass- Metric

<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
100 kg	0.60 g	Echelon II
50 kg	68 mg	Echelon II
30 kg	38 mg	Echelon II
25 kg	10 mg	Echelon II
20 kg	30 mg	Echelon II
10 kg	9.4 mg	Echelon II
5 kg	5.9 mg	Echelon II
3 kg	4.3 mg	Echelon II
2 kg	0.24 mg	Echelon II
1 kg	0.18 mg	Echelon II
500 g	0.04 mg	Echelon II
300 g	0.066 mg	Echelon II
200 g	0.062 mg	Echelon II
100 g	0.026 mg	Echelon II
50 g	0.017 mg	Echelon II

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CALIBRATION LABORATORIES

NVLAP LAB CODE 200420-0

<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
30 g	0.016 mg	Echelon II
20 g	0.022 mg	Echelon II
10 g	0.010 mg	Echelon II
5 g	0.0069 mg	Echelon II
3 g	0.0039 mg	Echelon II
2 g	0.0032 mg	Echelon II
1 g	0.0040 mg	Echelon II
500 mg	0.0016 mg	Echelon II
300 mg	0.0022 mg	Echelon II
200 mg	0.0013 mg	Echelon II
100 mg	0.0011 mg	Echelon II
50 mg	0.0017 mg	Echelon II
30 mg	0.0009 mg	Echelon II
20 mg	0.0010 mg	Echelon II
10 mg	0.0005 mg	Echelon II
5 mg	0.00082 mg	Echelon II
3 mg	0.00080 mg	Echelon II
2 mg	0.0017 mg	Echelon II
1 mg	0.00060 mg	Echelon II

Mass- Avoirdupois

2000 lb	3.3 g	Echelon II
1000 lb	0.92 g	Echelon II
500 lb	0.79 g	Echelon II
50 lb	19 mg	Echelon II
25 lb	4.6 mg	Echelon II
20 lb	3.0 mg	Echelon II
10 lb	2.6 mg	Echelon II
5 lb	1.6 mg	Echelon II
2 lb	0.20 mg	Echelon II
1 lb	0.10 mg	Echelon II
0.5 lb	0.063 mg	Echelon II

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<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
0.3 lb	0.051 mg	Echelon II
0.2 lb	0.034 mg	Echelon II
0.1 lb	0.017 mg	Echelon II
0.05 lb	0.015 mg	Echelon II
0.03 lb	0.018 mg	Echelon II
0.02 lb	0.0014 mg	Echelon II
0.01 lb	0.0066 mg	Echelon II
0.005 lb	0.039 mg	Echelon II
0.003 lb	0.0047 mg	Echelon II
0.002 lb	0.0037 mg	Echelon II
0.001 lb	0.0026 mg	Echelon II

Mass-Metric

1000 kg	14 g	Echelon III
500 kg	6.1 g	Echelon III
300 kg	4.8 g	Echelon III
200 kg	3.4 g	Echelon III
100 kg	0.22 g	Echelon III
50 kg	0.11 g	Echelon III
25 kg	0.054 g	Echelon III
20 kg	0.039 g	Echelon III
10 kg	0.026 g	Echelon III
5 kg	5.5 mg	Echelon III
2 kg	6.2 mg	Echelon III
1 kg	0.16 mg	Echelon III
500 g	0.17 mg	Echelon III
300 g	0.078 mg	Echelon III
200 g	0.11 mg	Echelon III
100 g	0.82 mg	Echelon III
50 g	0.047 mg	Echelon III
30 g	0.018 mg	Echelon III
20 g	0.027 mg	Echelon III

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CALIBRATION LABORATORIES

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<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
10 g	0.32 mg	Echelon III
5 g	0.27 mg	Echelon III
3 g	0.0026 mg	Echelon III
2 g	0.034 mg	Echelon III
1g	0.21 mg	Echelon III
500 mg	0.0032 mg	Echelon III
300 mg	0.0021 mg	Echelon III
200 mg	0.0036 mg	Echelon III
100 mg	0.0039 mg	Echelon III
50 mg	0.0019 mg	Echelon III
30 mg	0.00096 mg	Echelon III
20 mg	0.0026 mg	Echelon III
10 mg	0.0020 mg	Echelon III
5 mg	0.0020 mg	Echelon III
3 mg	0.00086 mg	Echelon III
2 mg	0.0017 mg	Echelon III
1 mg	0.00069 mg	Echelon III

Mass-Avoirdupois

2500 lb	35 g	Echelon III
2000 lb	14 g	Echelon III
1000 lb	6.6 g	Echelon III
500 lb	4.0 g	Echelon III
50 lb	25 mg	Echelon III
25 lb	29 mg	Echelon III
20 lb	2.8 mg	Echelon III
10 lb	25 mg	Echelon III
5 lb	7.8 mg	Echelon III
2 lb	0.72 mg	Echelon III
1 lb	0.34 mg	Echelon III
0.5 lb	1.5 mg	Echelon III
0.3 lb	0.12 mg	Echelon III

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CALIBRATION LABORATORIES

NVLAP LAB CODE 200420-0

<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
0.2 lb	0.13 mg	Echelon III
0.1 lb	0.94 mg	Echelon III
0.05 lb	0.025 mg	Echelon III
0.03 lb	0.026 mg	Echelon III
0.02 lb	0.28 mg	Echelon III
0.01 lb	0.003 mg	Echelon III
0.005 lb	0.033 mg	Echelon III
0.003 lb	0.072 mg	Echelon III
0.002 lb	0.018 mg	Echelon III
0.001 lb	0.020 mg	Echelon III

NVLAP Code: 20/M12
Volume

<i>Range</i>	<i>Best Uncertainty (±) ^{note 1}</i>	<i>Remarks</i>
100 gal	4.9 in ³	Volume Transfer
50 gal	3.4 in ³	Volume Transfer
25 gal	1.1 in ³	Volume Transfer
5 gal	0.35 in ³	Volume Transfer
50 gal	2.8 in ³	Gravimetric Method
25 gal	1.0 in ³	Gravimetric Method
5 gal	0.39 in ³	Gravimetric Method
1 gal	0.53 in ³	Gravimetric Method
½ gal	0.026 in ³	Gravimetric Method
1 qt	0.021 in ³	Gravimetric Method
1 pt	0.018 in ³	Gravimetric Method
1 L	0.021 in ³	Gravimetric Method
100 mL	0.0092 in ³	Gravimetric Method

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1. Represents an expanded uncertainty using a coverage factor, $k = 2$, at an approximate level of confidence of 95%.

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