

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 1 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

2525 North Shadeland Avenue, Suite D3

Indianapolis, IN 46219-1791

Mr. Larry J. Stump

Phone: 317-356-7078 Fax: 317-351-2877

E-Mail: lstump@isdh.state.in.us

URL: <http://www.state.in.us/isdh/regsvcs/wtmsr/welcome.html>

NVLAP Code: 20/A01

ANSI/NCSL Z540-1-1994; Part 1

Compliant

DIMENSIONAL

NVLAP Code: 20/D13

Surveying Rods and Tapes

Range	Best Uncertainty (\pm) in in ^{note 1}	Remarks
1 in	0.0022	Rigid Rule
2 in	0.0038	Rigid Rule
3 in	0.0023	Rigid Rule
4 in	0.0032	Rigid Rule
5 in	0.0034	Rigid Rule
6 in	0.0041	Rigid Rule
7 in	0.0030	Rigid Rule
8 in	0.0030	Rigid Rule

December 31, 2004

Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

9 in	0.0020	Rigid Rule
10 in	0.0019	Rigid Rule
11 in	0.0019	Rigid Rule
12 in	0.0015	Rigid Rule
12 in	0.0460	Rigid Rule (aluminum)
18 in	0.0411	Rigid Rule (aluminum)
24 in	0.0283	Rigid Rule (aluminum)
36 in	0.0342	Rigid Rule (aluminum)
48 in	0.0535	Rigid Rule (aluminum)
60 in	0.0620	Rigid Rule (aluminum)
72 in	0.0705	Rigid Rule (aluminum)
84 in	0.0762	Rigid Rule (aluminum)
96 in	0.0776	Rigid Rule (aluminum)
1 ft	0.0045	Bench Method
2 ft	0.0056	Bench Method
3 ft	0.0056	Bench Method

December 31, 2004

Effective through



For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 3 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

4 ft	0.0068	Bench Method
5 ft	0.0058	Bench Method
6 ft	0.0098	Bench Method
7 ft	0.0082	Bench Method
8 ft	0.0091	Bench Method
9 ft	0.0093	Bench Method
10 ft	0.0092	Bench Method
11 ft	0.0156	Bench Method
12 ft	0.0151	Bench Method
13 ft	0.0189	Bench Method
14 ft	0.0184	Bench Method
15 ft	0.0224	Bench Method
16 ft	0.0217	Bench Method
1 ft	0.0116	Tape to Tape
2 ft	0.0235	Tape to Tape
3 ft	0.0289	Tape to Tape

December 31, 2004

Effective through

A handwritten signature in black ink, appearing to read 'William R. Mohr', is written over a horizontal line.

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

4 ft	0.0277	Tape to Tape
5 ft	0.0357	Tape to Tape
6 ft	0.0331	Tape to Tape
7 ft	0.0269	Tape to Tape
8 ft	0.0371	Tape to Tape
9 ft	0.0443	Tape to Tape
10 ft	0.0365	Tape to Tape
15 ft	0.0287	Tape to Tape
20 ft	0.0292	Tape to Tape
25 ft	0.0410	Tape to Tape
30 ft	0.0369	Tape to Tape
35 ft	0.0347	Tape to Tape
40 ft	0.0397	Tape to Tape
45 ft	0.0333	Tape to Tape
50 ft	0.0375	Tape to Tape
55 ft	0.0371	Tape to Tape
60 ft	0.0399	Tape to Tape

December 31, 2004

Effective through



For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

65 ft	0.0438	Tape to Tape
70 ft	0.0450	Tape to Tape
75 ft	0.0452	Tape to Tape
80 ft	0.0482	Tape to Tape
85 ft	0.0427	Tape to Tape
90 ft	0.0465	Tape to Tape
95 ft	0.0342	Tape to Tape
100 ft	0.0524	Tape to Tape

TIME AND FREQUENCY

NVLAP Code: 20/F02

Time Dissemination

Range in hr

< or = 3

Best Uncertainty (\pm) in sec ^{note 1}

0.080

Remarks

Stop Watches

December 31, 2004

Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

MECHANICAL

NVLAP Code: 20/M08

Mass

<i>Range</i>	<i>Best Uncertainty (\pm)^{note 1}</i>	<i>Remarks</i>
50 kg	400.722 mg	Echelon II
30 kg	150.848 mg	Echelon II
25 kg	31.308 mg	Echelon II
20 kg	22.377 mg	Echelon II
10 kg	15.674 mg	Echelon II
5 kg	3.524 mg	Echelon II
4 kg	3.556 mg	Echelon II
3 kg	2.273 mg	Echelon II
2 kg	2.805 mg	Echelon II
1 kg	0.490 mg	Echelon II
500 g	0.331 mg	Echelon II
300 g	0.218 mg	Echelon II
200 g	0.137 mg	Echelon II

December 31, 2004



Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

100 g	0.093 mg	Echelon II
50 g	0.077 mg	Echelon II
30 g	0.063 mg	Echelon II
20 g	0.039 mg	Echelon II
10 g	0.020 mg	Echelon II
5 g	0.014 mg	Echelon II
3 g	0.010 mg	Echelon II
2 g	0.008 mg	Echelon II
1 g	0.007 mg	Echelon II
500 mg	0.006 mg	Echelon II
300 mg	0.006 mg	Echelon II
200 mg	0.005 mg	Echelon II
100 mg	0.005 mg	Echelon II
50 mg	0.004 mg	Echelon II
30 mg	0.002 mg	Echelon II
20 mg	0.003 mg	Echelon II
10 mg	0.002 mg	Echelon II

December 31, 2004

Effective through



For the National Institute of Standards and Technology

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 8 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

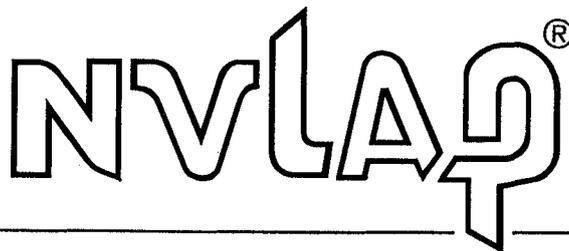
5 mg	0.002 mg	Echelon II
3 mg	0.002 mg	Echelon II
2 mg	0.001 mg	Echelon II
1 mg	0.001 mg	Echelon II
1000 lb	5.354 g	Echelon II
500 lb	2.641 g	Echelon II
250 lb	36.211 g	Echelon II
200 lb	16.858 g	Echelon II
100 lb	0.188 g	Echelon II
50 lb	31.459 mg	Echelon II
30 lb	15.460 mg	Echelon II
25 lb	14.625 mg	Echelon II
20 lb	3.777 mg	Echelon II
10 lb	3.461 mg	Echelon II
5 lb	2.465 mg	Echelon II
3 lb	2.777 mg	Echelon II

December 31, 2004

Effective through

For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 9 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

2 lb	0.310 mg	Echelon II
1 lb	0.127 mg	Echelon II
0.5 lb	0.116 mg	Echelon II
0.3 lb	0.066 mg	Echelon II
0.25 lb	0.070 mg	Echelon II
0.2 lb	0.067 mg	Echelon II
0.1 lb	0.050 mg	Echelon II
0.05 lb	0.019 mg	Echelon II
0.03 lb	0.018 mg	Echelon II
0.02 lb	0.018 mg	Echelon II
0.01 lb	0.007 mg	Echelon II
0.005 lb	0.006 mg	Echelon II
0.003 lb	0.005 mg	Echelon II
0.002 lb	0.005 mg	Echelon II
0.001 lb	0.005 mg	Echelon II
500 μ lb	0.005 mg	Echelon II
300 μ lb	0.005 mg	Echelon II

December 31, 2004

A handwritten signature in black ink, appearing to read "William R. Muhl".

Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

200 μ lb	0.002 mg	Echelon II
100 μ lb	0.002 mg	Echelon II
50 μ lb	0.002 mg	Echelon II
30 μ lb	0.002 mg	Echelon II
20 μ lb	0.002 mg	Echelon II
10 μ lb	0.002 mg	Echelon II
5 μ lb	0.001 mg	Echelon II
3 μ lb	0.001 mg	Echelon II
2 μ lb	0.001 mg	Echelon II
1 μ lb	0.001 mg	Echelon II
500 kg	11.349 g	Echelon III
250 kg	9.257 g	Echelon III
200 kg	9.675 g	Echelon III
100 kg	14.148 g	Echelon III
50 kg	187.389 mg	Echelon III
30 kg	190.670 mg	Echelon III

December 31, 2004



Effective through

For the National Institute of Standards and Technology

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 11 of 17

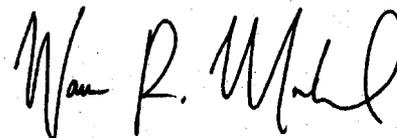
CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

25 kg	182.048 mg	Echelon III
20 kg	28.791 mg	Echelon III
10 kg	85.759 mg	Echelon III
5 kg	81.131 mg	Echelon III
4 kg	47.339 mg	Echelon III
3 kg	8.128 mg	Echelon II
2 kg	2.504 mg	Echelon III
1 kg	2.708 mg	Echelon III
500 g	1.945 mg	Echelon III
464.08 g	1.507 mg	Echelon III
300 g	1.929 mg	Echelon III
200 g	0.197 mg	Echelon III
185.63 g	0.251 mg	Echelon III
100 g	0.083 mg	Echelon III
92.82 g	0.209 mg	Echelon III
50 g	0.077 mg	Echelon III
30 g	0.063 mg	Echelon III

December 31, 2004



Effective through

For the National Institute of Standards and Technology

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 12 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

20 g	0.037 mg	Echelon III
10 g	0.050 mg	Echelon III
5 g	0.014 mg	Echelon III
3 g	0.009 mg	Echelon III
2 g	0.007 mg	Echelon III
1 g	0.006 mg	Echelon III
500 mg	0.006 mg	Echelon III
300 mg	0.005 mg	Echelon III
200 mg	0.004 mg	Echelon III
100 mg	0.004 mg	Echelon III
50 mg	0.004 mg	Echelon III
30 mg	0.002 mg	Echelon III
20 mg	0.002 mg	Echelon III
10 mg	0.002 mg	Echelon III
5 mg	0.002 mg	Echelon III
3 mg	0.002 mg	Echelon III
2 mg	0.001 mg	Echelon III

December 31, 2004



Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

1 mg	0.001 mg	Echelon III
6000 lb	65.940 g	Echelon III
5000 lb	97.997 g	Echelon III
3000 lb	34.626 g	Echelon III
2500 lb	20.919 g	Echelon III
2000 lb	20.347 g	Echelon III
1000 lb	6.848 g	Echelon III
500 lb	3.367 g	Echelon III
250 lb	4.006 g	Echelon III
200 lb	3.969 g	Echelon III
100 lb	0.196 g	Echelon III
75 lb	196.654 mg	Echelon III
50 lb	182.449 mg	Echelon III
30 lb	180.114 mg	Echelon III
25 lb	156.079 mg	Echelon III
20 lb	162.798 mg	Echelon III

December 31, 2004

Effective through



For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 14 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

10 lb	4.343 mg	Echelon III
5 lb	8.083 mg	Echelon III
4 lb	2.469 mg	Echelon III
3 lb	2.469 mg	Echelon III
2 lb	2.678 mg	Echelon III
1 lb	1.920 mg	Echelon III
0.5 lb	0.808 mg	Echelon III
0.03 lb	0.185 mg	Echelon III
0.25 lb	0.278 mg	Echelon III
0.2 lb	0.280 mg	Echelon III
0.1 lb	0.204 mg	Echelon III
0.05 lb	0.175 mg	Echelon III
0.03 lb	0.118 mg	Echelon III
0.02 lb	0.082 mg	Echelon III
0.01 lb	0.011 mg	Echelon III
0.005 lb	0.013 mg	Echelon III
0.003 lb	0.008 mg	Echelon III

December 31, 2004

A handwritten signature in black ink, appearing to read 'William R. Muhl'.

Effective through

For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 15 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

0.002 lb	0.011 mg	Echelon III
0.001 lb	0.007 mg	Echelon III
2 oz	0.354 mg	Echelon III
1 oz	0.212 mg	Echelon III
0.5 oz	0.207 mg	Echelon III
0.25 oz	0.131 mg	Echelon III
0.125 oz	0.074 mg	Echelon III
0.0625 oz	0.088 mg	Echelon III
0.0313 oz	0.088 mg	Echelon III

December 31, 2004

Effective through

A handwritten signature in black ink, appearing to read 'William R. Mohr'. The signature is written in a cursive style.

For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC 17025:1999
ISO 9002:1994

Scope of Accreditation



Page 16 of 17

CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

NVLAP Code: 20/M12

Volume and Density

<i>Range</i>	<i>Best Uncertainty (\pm)^{note 1}</i>	<i>Remarks</i>
1000 gal	87.661 in ³	Volume Transfer
100 gal	5.363 in ³	Volume Transfer
50 gal	2.136 in ³	Volume Transfer
5 gal	0.246 in ³	Volume Transfer
20 l	3.009 ml	Volume Transfer
1 gill	0.110 ml	Volume Transfer
20 gal	0.553 in ³	Water Draw - DSVP
5 gal	0.001 gal	Gravimetric
1 gill	0.100 ml	Gravimetric
25 ml	0.136 ml	Gravimetric

December 31, 2004

A handwritten signature in black ink, appearing to read 'William R. Muhl'.

Effective through

For the National Institute of Standards and Technology

Scope of Accreditation



CALIBRATION LABORATORIES

NVLAP LAB CODE 200421-0

INDIANA DIVISION OF WEIGHTS AND MEASURES

THERMODYNAMIC

NVLAP Code: 20/T03

Laboratory Thermometers

<i>Range in °C</i>	<i>Best Uncertainty (±) in °C^{note 1}</i>	<i>Remarks</i>
0	0.036	Liquid in Glass
20	0.105	Liquid in Glass
30	0.172	Liquid in Glass
50	0.178	Liquid in Glass
60	0.120	Liquid in Glass
90	0.111	Liquid in Glass
100	0.149	Liquid in Glass

1. Represents an expanded uncertainty using a coverage factor, $k=2$.

December 31, 2004

Effective through

For the National Institute of Standards and Technology