



APPLICATION FOR REGISTRATION AS A REGISTERED SERVICE COMPANY
 Public Service Commission
 SFN 51277 (2/2014)



TYPE OR PRINT - AN INCOMPLETE OR ILLEGIBLE APPLICATION WILL BE REJECTED

Name of Company Fairbanks Scales	Email Address rlouderback@fairbanks.com	Application Date 11/10/15	
Mailing Address 2500 Cleveland Ave North	City St. Paul	State MN	Zip Code 55113
Telephone Number 651-631-9287	Cell Phone Number 651-283-3437	Fax Number 651-631-2547	

Select below all device types your company will certify:

Scales (include maximum capacity, if applicable)	Liquid (include maximum flow rate, if applicable)
<input checked="" type="checkbox"/> 1. Rail <input checked="" type="checkbox"/> 2. Truck <input checked="" type="checkbox"/> 3. Livestock <input checked="" type="checkbox"/> 4. Hopper: Max. Capacity: _____ <input type="checkbox"/> 5. Belt <input type="checkbox"/> 6. Over 30 lbs.: Max. Capacity: _____ <input checked="" type="checkbox"/> 7. 30 lbs. or less <input type="checkbox"/> 8. Class II (indicate on your calibration report which weight kit is Class II certified) <input type="checkbox"/> 9. Other: Please List:	<input type="checkbox"/> 1. Retail Fuel (less than 20 gal. per minute) <input type="checkbox"/> 2. High Flow Retail Fuel (20 gal. per minute or greater) <input type="checkbox"/> 3. Vehicle Tank: Max. Flow Rate: _____ <input type="checkbox"/> 4. Stationary Bulk (fuel or oil): Max. Flow Rate: _____ <input type="checkbox"/> 5. LPG <input type="checkbox"/> 6. Stationary LPG <input type="checkbox"/> 7. Fertilizer: Max. Flow Rate: _____ <input type="checkbox"/> 8. Chemical <input type="checkbox"/> 9. Anhydrous <input type="checkbox"/> 10. Loading Rack <input type="checkbox"/> 11. Other: Please List:

List below all persons employed by your company as a North Dakota Registered Service Person and the device types they are registered to certify (attach a separate sheet to list additional employees):

Permit No.	Employee	Device Types Registered to Certify (list using device type numbers from above)
e.g. 1001	e.g. John Doe	e.g. Scales - 2, 3, 6, 8; e.g. Liquid - 1, 2, 6
1743	Dean Spilde	Scales - 1, 2, 3, 4, 7
1744	Scott Wolf	Scales - 1, 2, 3, 4, 7



List below all field standards (attach current calibration reports):

1 - 5000# Test Cart	1 - 3000# Test Cart
16 - 1000# Test Weights	18 - 1000# Test Weights
40 - 25# Test Weights	20 - 50# Test Weights
1 - 30# Test Kit	1 - 25# Test Weight
1 - Metric Test Kit	1 - 30# Test Kit
	1 - Metric Test Kit

Additional Application Items (initial where appropriate):

Standardized Test Report	<input checked="" type="checkbox"/> Copy enclosed <input checked="" type="checkbox"/> No change in report filed previously
Tested and Approved Sticker	<input checked="" type="checkbox"/> Copy enclosed <input checked="" type="checkbox"/> No change in sticker filed previously
Photocopy of Crimped Lead Wire Seal	<input checked="" type="checkbox"/> Copy enclosed <input checked="" type="checkbox"/> No change in crimped lead wire seal filed previously

Public Company Listing:

Include my company information on your registered service company list for public contact.
 Yes No

I am Ron Louderback, and have authority to represent this company. By signing this application, I declare that I have examined this form and accompanying documentation, and to the best of my knowledge and belief, the facts stated and documentation provided is true, correct, and complete.


Signature

Send Completed Application and Related Documents To:

Public Service Commission
600 E Boulevard Ave Dept 408
Bismarck ND 58505-0480
Telephone: (701) 328-2400
Fax: (701) 328-2410



Receipt Date: October 26, 2015
 Test Date: October 27, 2015
 Report Date: October 27, 2015

State Test No.: 334989
 Set Serial No.: 031811K
 Barcode: 202171

Calibration Report

FAIRBANKS
 2500 CLEVELAND AVENUE NORTH
 ROSEVILLE, MN 55113-2728
 Contact: RON LOUDERBACK
 Phone: 651-815-9000
 PO Number: NONE
 SOP: 12
 Technician ID: 11

Item(s) Submitted: 5000 lb Cart
 Manufacturer: Kanawha
 ASTM E617 Type: NA
 Equipment ID#: None
 Condition: Good
 Temperature: 20.5 °C
 Pressure: 740.4 mmHg
 Relative Humidity: 41. %

Nominal Value	Serial No.	Correction (g)		NIST HB105-8 Tol		Unc. (g) (k = 2)
		As Found	As Left	As Found	As Left	
5000 lb	031811K	-1290	50	*	Meets	60

* Weight Cart as found exceeds NIST HB 105-8 tolerance.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Pete Whelbe

 Metrologist

Reviewed by:
 Mark Nicollet

 Quality Manager



Receipt Date: October 26, 2015
Test Date: October 27, 2015
Report Date: October 27, 2015

State Test No.: 334990
Set Serial No.: 614-26 to 614-41
Barcode: 200739

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: RON LOUDERBACK
Phone: 651-815-9000
PO Number: NONE
SOP: 12
Technician ID: 11

Item(s) Submitted: Cast Cube Weights
Manufacturer: Western Iron Works
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 20.1 °C
Pressure: 740.9 mmHg
Relative Humidity: 41. %

Nominal Value	Serial No.	Correction (g)		NIST HB105-1 Class		Unc. (g) (k = 2)
		As Found	As Left	As Found	As Left	
1000 lb	614-26	18	18	F	F	5
1000 lb	614-27	23	23	F	F	5
1000 lb	614-28	11	11	F	F	5
1000 lb	614-29	30	30	F	F	5
1000 lb	614-30	0	0	F	F	5
1000 lb	614-31	102	2	*	F	5
1000 lb	614-32	12	12	F	F	5
1000 lb	614-33	39	39	F	F	5
1000 lb	614-34	19	19	F	F	5
1000 lb	614-35	0	0	F	F	5
1000 lb	614-36	-5	-5	F	F	5
1000 lb	614-37	38	38	F	F	5
1000 lb	614-38	11	11	F	F	5
1000 lb	614-39	17	17	F	F	5
1000 lb	614-40	6	6	F	F	5
1000 lb	614-41	1	1	F	F	5

* Weight(s) as found exceed NIST HB 105-1 Class F tolerance.

When used as a set these weights meet NIST HB 105-1 class F tolerances.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Pete Whebbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: October 26, 2015
Test Date: October 26, 2015
Report Date: October 27, 2015

State Test No.: 334988
Set Serial No.: 614 (900 - 939)
Barcode: 200740

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: 25 lb Hand Weights
Manufacturer: Fairbanks
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 19.9 °C
Pressure: 742.8 mmHg
Relative Humidity: 40.6%

Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Unc. (mg) (k = 2)
		As Found	As Left	As Found	As Left	
25 lb	900	730	730	F	F	75
25 lb	901	-370	-370	F	F	75
25 lb	902	1100	30	*	F	75
25 lb	903	990	990	F	F	75
25 lb	904	610	610	F	F	75
25 lb	905	1270	20	*	F	75
25 lb	906	1220	50	*	F	75
25 lb	907	1560	20	*	F	75
25 lb	908	440	440	F	F	75
25 lb	909	500	500	F	F	75
25 lb	910	720	720	F	F	75
25 lb	911	2310	-50	*	F	75
25 lb	912	570	570	F	F	75
25 lb	913	940	940	F	F	75
25 lb	914	-70	-70	F	F	75
25 lb	915	540	540	F	F	75
25 lb	916	810	810	F	F	75
25 lb	917	550	550	F	F	75
25 lb	918	1950	-40	*	F	75
25 lb	919	1190	30	*	F	75
25 lb	920	700	700	F	F	75
25 lb	921	1640	100	*	F	75
25 lb	922	600	600	F	F	75
25 lb	923	1040	20	*	F	75
25 lb	924	250	250	F	F	75
25 lb	925	50	50	F	F	75
25 lb	926	1520	20	*	F	75
25 lb	927	780	780	F	F	75
25 lb	928	-280	-280	F	F	75
25 lb	929	1030	90	*	F	75



Receipt Date: October 26, 2015
Test Date: October 26, 2015
Report Date: October 27, 2015

State Test No.: 334988
Set Serial No.: 614 (900 - 939)
Barcode: 200740

Continued,

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: 25 lb Hand Weights
Manufacturer: Fairbanks
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 19.9°C
Pressure: 742.8 mmHg
Relative Humidity: 40.6%

Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Unc. (mg) (k=2)
		As Found	As Left	As Found	As Left	
25 lb	930	1510	90	*	F	75
25 lb	931	-220	-220	F	F	75
25 lb	932	1370	120	*	F	75
25 lb	933	870	870	F	F	75
25 lb	934	1060	-30	*	F	75
25 lb	935	1030	70	*	F	75
25 lb	936	1140	-40	*	F	75
25 lb	937	1030	60	*	F	75
25 lb	938	290	290	F	F	75
25 lb	939	1300	20	*	F	75

* Weight(s) as found exceed NIST HB105-1 Class F Tolerance.

When used as a set these weights meet NIST HB105-1 Class F Tolerance.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Erik Alfvin

Metrologist

Reviewed by:

Pete Whebbe

Metrologist



Receipt Date: October 26, 2015
Test Date: October 29, 2015
Report Date: October 30, 2015

State Test No.: 334993
Set Serial No.: Fuel Sub Weights
Barcode: 200514

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: 8 oz Disk Weights
Manufacturer: Rice Lake
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 20.5 °C
Pressure: 731. mmHg
Relative Humidity: 43.8 %

Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Unc. (mg) (k = 2)
		As Found	As Left	As Found	As Left	
8 OZ		11.4	11.4	F	F	6.0
8 OZ		8.8	8.8	F	F	6.0
8 OZ		14.6	14.6	F	F	6.0
8 OZ		15.0	15.0	F	F	6.0
8 OZ		16.1	16.1	F	F	6.0
8 OZ		16.5	16.5	F	F	6.0
8 OZ		8.7	8.7	F	F	6.0
8 OZ		18.8	18.8	F	F	6.0
8 OZ		10.2	10.2	F	F	6.0

When used as a set these weights meet NIST HB 105-1 class F tolerances.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Erik Alfvin

Metrologist

Reviewed by:
Pete Whebbe

Metrologist



Receipt Date: October 26, 2015
Test Date: October 29, 2015
Report Date: October 30, 2015

State Test No.: 334992
Set Serial No.: 614-808
Barcode: 200738

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: Metric Weight Kit - ASTM
Manufacturer: Rice Lake
ASTM E617 Type: I & II
Equipment ID#: None
Condition: Good
Temperature: 20.5 °C
Pressure: 729.1 mmHg
Relative Humidity: 44.3 %

Nominal Value	Serial No.	Correction (mg)		ASTM E617 Class		Unc. (mg) (k = 2)
		As Found	As Left	As Found	As Left	
5000 g		232	232	6	6	25
2000 g		69	69	5	5	10.
2000 . g		84	84	5	5	10.
1000 g		47.8	47.8	6	6	6.0
500 g		21.9	21.9	5	5	6.0
200 g		8.6	8.6	5	5	1.0
200 . g		11.2	11.2	5	5	1.0
100 g		-5.67	-5.67	5	5	0.45
50 g		2.43	2.43	5	5	0.25
20 g		0.75	0.75	5	5	0.25
20 . g		1.89	1.89	5	5	0.25
10 g		0.16	0.16	4	4	0.12
5 g		0.65	0.65	5	5	0.10
2 g		0.240	0.240	5	5	0.070
2 . g		0.550	0.550	5	5	0.070
1 g		0.420	0.420	5	5	0.070

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Erik Alfvin
Erik Alfvin
Metrologist

Reviewed by:
Pete Whebbe
Pete Whebbe
Metrologist



Receipt Date: October 26, 2015
Test Date: October 29, 2015
Report Date: October 30, 2015

State Test No.: 334991
Set Serial No.: 614-706
Barcode: 200741

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: AVDP Weight Kit - F
Manufacturer: Rice Lake
ASTM E617 Type: I & II
Equipment ID#: None
Condition: Good
Temperature: 20.6 °C
Pressure: 729.9 mmHg
Relative Humidity: 44.5 %

Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Unc. (mg) (k = 2)
		As Found	As Left	As Found	As Left	
5 lb		16	16	F	F	10.
5 . lb		12	12	F	F	10.
5 .. lb		18	18	F	F	10.
5 ... lb		11	11	F	F	10.
5 lb		24	24	F	F	10.
1 lb		14.0	14.0	F	F	6.0
1 . lb		17.9	17.9	F	F	6.0
1 .. lb		11.1	11.1	F	F	6.0
1 ... lb		18.2	18.2	F	F	6.0
1 lb		15.7	15.7	F	F	6.0
8 oz		25.0	25.0	F	F	6.0
4 oz		8.450	8.450	F	F	0.070
2 oz		2.680	2.680	F	F	0.070
1 oz		1.540	1.540	F	F	0.070
1/2 oz		0.730	0.730	F	F	0.070
1/4 oz		1.040	1.040	F	F	0.070
1/8 oz		0.790	0.790	F	F	0.070
1/16 oz		0.200	0.200	F	F	0.070
1/32 oz		0.490	0.490	F	F	0.070
1/32 .. oz		-0.030	-0.030	F	F	0.070



Receipt Date: October 26, 2015
Test Date: October 29, 2015
Report Date: October 30, 2015

Continued,
State Test No.: 334991
Set Serial No.: 614-706
Barcode: 200741

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: Ron Louderback
Phone: 651-815-9000
PO Number: None
SOP: 12
Technician ID: 19

Item(s) Submitted: AVDP Weight Kit - F
Manufacturer: Rice Lake
ASTM E617 Type: I & II
Equipment ID#: None
Condition: Good
Temperature: 20.6°C
Pressure: 729.9 mmHg
Relative Humidity: 44.5 %

Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Unc. (mg) (k = 2)
		As Found	As Left	As Found	As Left	
0.2 lb		1.920	1.920	F	F	0.070
0.2 lb		3.200	3.200	F	F	0.070
0.1 lb		3.050	3.050	F	F	0.070
0.05 lb		0.710	0.710	F	F	0.070
0.02 lb		-0.480	-0.480	F	F	0.070
0.02 lb		0.430	0.430	F	F	0.070
0.01 lb		0.670	0.670	F	F	0.070
0.005 lb		0.750	0.750	F	F	0.070
0.002 lb		0.060	0.060	F	F	0.070
0.002 lb		0.140	0.140	F	F	0.070
0.001 lb		-0.060	-0.060	F	F	0.070

When used as a set these weights meet NIST HB105-1 Class F Tolerance.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Erik Alfvin

Metrologist

Reviewed by:

Pete Whebbe

Metrologist



SERVICE FOR YOUR WORLD



November 10, 2015

Public Service Commission
Attn: Shelly Bauske
600 E Boulevard Ave Dept 408
Bismarck ND 58505-0480

RE: Registered Service Company Annual Permit Application

Shelly,

Enclosed is our Application for Registration as a Registered Service Company. Please note that the weights in Scott Wolf's truck will be with the State of Minnesota for calibration the week of November 16th. I will forward the calibration reports as soon as I receive them.

Please contact me if you have any questions.

Sincerely,
Fairbanks Scales

Ron Louderback
Area Service Manager

Receipt Date: November 16, 2015
 Test Date: November 17, 2015
 Report Date: November 17, 2015

State Test No.: 335083
 Set Serial No.: 100512 K
 Barcode: 202170

Calibration Report

FAIRBANKS
 2500 CLEVELAND AVENUE NORTH
 ROSEVILLE, MN 55113
 Contact: RON LOUDERBACK
 Phone: 651-815-9000
 PO Number: NONE
 SOP: 12
 Technician ID: 11

Item(s) Submitted: 3000 lb Weight Cart
 Manufacturer: Kanawha
 ASTM E617 Type: NA
 Equipment ID#: None
 Condition: Good
 Temperature: 19.7 °C
 Pressure: 729.3 mmHg
 Relative Humidity: 45.1 %



Nominal Value	Serial No.	Correction (g)		NIST HB105-8 Tolerance		Uncertainty (g) (k = 2)
		As Found	As Left	As Found	As Left	
3000 lb	100512 K	510.	180.	*	Meets	60.

* Weight Cart as found exceeds NIST HB 105-8 tolerance.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. All of the tolerances and specifications were evaluated according to NIST Handbook 105-8 (2003). Uncertainty calculations contain the components in NIST SOP 8 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). Results apply to items identified in this report only.

Pete Whobbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager

Receipt Date: November 16, 2015
Test Date: November 16, 2015
Report Date: November 16, 2015

State Test No.: 335082
Set Serial No.: 614-51 through 68
Barcode: 201271

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: RON LOUDERBACK
Phone: 651-815-9000
PO Number: NONE
SOP: 12
Technician ID: 11

Item(s) Submitted: Cast Cube Weights
Manufacturer: Rice Lake
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 19.9 °C
Pressure: 731.7 mmHg
Relative Humidity: 41.8 %



Nominal Value	Serial No.	Correction (g)		NIST HB105-1 Class		Uncertainty (g) (k = 2)
		As Found	As Left	As Found	As Left	
1000 lb	614-51	-27	-27	F	F	5
1000 lb	614-52	-17	-17	F	F	5
1000 lb	614-53	-37	-37	F	F	5
1000 lb	614-54	-37	-37	F	F	5
1000 lb	614-55	-46	5	*	F	5
1000 lb	614-56	-43	10	*	F	5
1000 lb	614-57	-11	-11	F	F	5
1000 lb	614-58	-13	-13	F	F	5
1000 lb	614-59	-49	0	*	F	5
1000 lb	614-60	-36	-36	F	F	5
1000 lb	614-61	-23	-23	F	F	5
1000 lb	614-62	-20	-20	F	F	5
1000 lb	614-63	-43	-24	*	F	5
1000 lb	614-64	-39	-39	F	F	5
1000 lb	614-65	-34	-34	F	F	5
1000 lb	614-66	-26	-26	F	F	5
1000 lb	614-67	-41	12	*	F	5
1000 lb	614-68	-33	-33	F	F	5

* Weight(s) as found exceed NIST HB 105-1 Class F tolerance.

When used as a set these weights meet NIST HB 105-1 class F tolerances.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. All of the tolerances and specifications were evaluated according to NIST Handbook 105-1 (1990). Uncertainty calculations contain the components in NIST SOP 8 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). Results apply to items identified in this report only.

Pete Whelbe



Metrologist

Reviewed by:

Mark Nicollet



Quality Manager

Receipt Date: November 16, 2015
Test Date: November 17, 2015
Report Date: November 17, 2015

State Test No.: 335092
Set Serial No.: 614-3_, -4_, -5_
Barcode: 200658

Calibration Report

FAIRBANKS
2500 CLEVELAND AVENUE NORTH
ROSEVILLE, MN 55113-2728
Contact: RON LOUDERBACK
Phone: 651-815-9000
PO Number: NONE
SOP: 12
Technician ID: 11

Item(s) Submitted: Cast Hand Weights
Manufacturer: Assorted
ASTM E617 Type: II
Equipment ID#: None
Condition: Good
Temperature: 20. °C
Pressure: 727.9 mmHg
Relative Humidity: 46.5 %



Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Uncertainty (mg) (k = 2)
		As Found	As Left	As Found	As Left	
50 lb	614-352	-770	-770	F	F	110
50 lb	614-354	-1320	-1320	F	F	110
50 lb	614-356	-1350	-1350	F	F	110
50 lb	614-450	-1930	-1930	F	F	110
50 lb	614-454	-1180	-1180	F	F	110
50 lb	614-455	-410	-410	F	F	110
50 lb	614-459	-2020	-2020	F	F	110
50 lb	614-461	-270	-270	F	F	110
50 lb	614-462	-1080	-1080	F	F	110
50 lb	614-469	-2530	160	*	F	110
50 lb	614-476	-1640	-1640	F	F	110
50 lb	614-480	810	810	F	F	110
50 lb	614-484	-2010	-2010	F	F	110
50 lb	614-489	920	920	F	F	110
50 lb	614-492	-3390	0	*	F	110
50 lb	614-494	-920	-920	F	F	110
50 lb	614-499	1460	1460	F	F	110
50 lb	614-500	-30	-30	F	F	110
50 lb	614-504	1270	1270	F	F	110
50 lb	614-505	830	830	F	F	110

* Weight(s) as found exceed NIST HB 105-1 Class F tolerance.

When used as a set these weights meet NIST HB 105-1 class F tolerances.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. All of the tolerances and specifications were evaluated according to NIST Handbook 105-1 (1990). Uncertainty calculations contain the components in NIST SOP 8 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). Results apply to items identified in this report only.

Pete Whebbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager

Receipt Date: November 16, 2015
 Test Date: November 17, 2015
 Report Date: November 18, 2015

State Test No.: 335085
 Set Serial No.: 614-724
 Barcode: 017427

Calibration Report

FAIRBANKS
 2500 CLEVELAND AVENUE NORTH
 ROSEVILLE, MN 55113-2728
 Contact: Ron Louderback
 Phone: 651-815-9000
 PO Number: None
 SOP: 12
 Technician ID: 19

Item(s) Submitted: 30 lb Kit - F
 Manufacturer: Rice Lake
 ASTM E617 Type: I & II
 Equipment ID#: None
 Condition: Good
 Temperature: 20.4 °C
 Pressure: 725.5 mmHg
 Relative Humidity: 54.0 %



Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Uncertainty (mg) (k = 2)
		As Found	As Left	As Found	As Left	
5 . lb		-58	-58	F	F	10.
5 .. lb		-42	-42	F	F	10.
5 ... lb		3	3	F	F	10.
5 lb		-38	-38	F	F	10.
5 lb		47	47	F	F	10.
1 . lb		-0.5	-0.5	F	F	6.0
1 .. lb		14.6	14.6	F	F	6.0
1 ... lb		-0.6	-0.6	F	F	6.0
1 lb		-8.3	-8.3	F	F	6.0
1 lb		14.4	14.4	F	F	6.0
8 oz		-1.9	-1.9	F	F	6.0
4 ... oz		11.630	11.630	F	F	0.070
2 oz		2.340	2.340	F	F	0.070
1 oz		-0.110	-0.110	F	F	0.070
1/2 oz		1.310	1.310	F	F	0.070
1/4 oz		-0.050	-0.050	F	F	0.070
1/8 oz		0.590	0.590	F	F	0.070
1/16 oz		0.280	0.280	F	F	0.070
1/32 oz		0.260	0.260	F	F	0.070
0.2 . lb		5.230	5.230	F	F	0.070
0.2 .. lb		2.050	2.050	F	F	0.070
0.1 lb		2.210	2.210	F	F	0.070
0.05 lb		1.950	1.950	F	F	0.070
0.02 lb		0.690	0.690	F	F	0.070
0.02 . lb		0.750	0.750	F	F	0.070
0.01 lb		0.590	0.590	F	F	0.070

Receipt Date: November 16, 2015
 Test Date: November 17, 2015
 Report Date: November 18, 2015

State Test No.: 335085
 Set Serial No.: 614-724
 Barcode: 017427

Continued,

Calibration Report

FAIRBANKS
 2500 CLEVELAND AVENUE NORTH
 ROSEVILLE, MN 55113-2728
 Contact: Ron Louderback
 Phone: 651-815-9000
 PO Number: None
 SOP: 12
 Technician ID: 19

Item(s) Submitted: 30 lb Kit - F
 Manufacturer: Rice Lake
 ASTM E617 Type: I & II
 Equipment ID#: None
 Condition: Good
 Temperature: 20.4°C
 Pressure: 725.5 mmHg
 Relative Humidity: 54.0 %



Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Uncertainty (mg) (k = 2)
		As Found	As Left	As Found	As Left	
0.005 lb		0.710	0.710	F	F	0.070
0.002 lb		0.150	0.150	F	F	0.070
0.002 lb		-0.080	-0.080	F	F	0.070
0.001 lb		0.490	0.490	F	F	0.070

When used as a set these weights meet NIST HB105-1 Class F Tolerance.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. All of the tolerances and specifications were evaluated according to NIST Handbook 105-1 (1990). Uncertainty calculations contain the components in NIST SOP 8 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). Results apply to items identified in this report only.

Erik Alfvín

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager

Receipt Date: November 16, 2015
 Test Date: November 17, 2015
 Report Date: November 18, 2015

State Test No.: 335086
 Set Serial No.: None
 Barcode: 202156

Calibration Report

FAIRBANKS
 2500 CLEVELAND AVENUE NORTH
 ROSEVILLE, MN 55113-2728

Contact: Ron Louderback
 Phone: 651-815-9000
 PO Number: None
 SOP: 12
 Technician ID: 19

Item(s) Submitted: 8 oz Fuel Sub Weights
 Manufacturer: Rice Lake
 ASTM E617 Type: II
 Equipment ID#: None
 Condition: Excellent
 Temperature: 20.5 °C
 Pressure: 727.3 mmHg
 Relative Humidity: 46.7 %



Nominal Value	Serial No.	Correction (mg)		NIST HB105-1 Class		Uncertainty (mg) (k = 2)
		As Found	As Left	As Found	As Left	
8 OZ		16.4	16.4	F	F	6.0
8 OZ		25.1	25.1	F	F	6.0
8 OZ		20.4	20.4	F	F	6.0
8 OZ		20.6	20.6	F	F	6.0
8 OZ		20.0	20.0	F	F	6.0
8 OZ		26.8	26.8	F	F	6.0
8 OZ		23.8	23.8	F	F	6.0
8 OZ		18.0	18.0	F	F	6.0
8 OZ		18.6	18.6	F	F	6.0

When used as a set these weights meet NIST HB 105-1 class F tolerances.

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm³ density and an air density of 1.2 mg/cm³. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the SI through NIST. Calibration processes were monitored and found to be in control. All of the tolerances and specifications were evaluated according to NIST Handbook 105-1 (1990). Uncertainty calculations contain the components in NIST SOP 8 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). Results apply to items identified in this report only.

Erik Alfvín

Reviewed by:

Mark Nicollet

Metrologist

Page 1 of 1

Quality Manager



NVLAP LAB CODE 105003-0

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United States Department of Commerce

National Institute of Standards and Technology

Certificate of Metrological Traceability For:

Minnesota

This laboratory has demonstrated evidence of an unbroken chain of metrological traceability of its standards to the international system of units (SI), documented measurement uncertainties, uses documented measurement procedures, successfully completed training and proficiency tests, documented calibration intervals, submitted a quality management system, and demonstrated suitable measurement assurance for the Scope listed on this certificate.

The Office of Weights and Measures Program assesses laboratories to NIST Handbook 143 - Program Handbook for State Weights and Measures Laboratories and ISO/IEC 17025:2005.

Scope

Mass Echelon II

50 kg to 1 mg
1000 lb to 0.001 lb
4 oz to 0.03125 oz

Mass Echelon III

50 kg to 1 mg
5000 lb to 0.001 lb
4 oz to 0.03125 oz

Weight Carts

10 000 lb to 2000 lb

Wheel Load Weighers
20 000 lb to 2000 lb

Railroad Test Cars

110 000 lb to 80 000 lb

Volume Gravimetric, I

20 L to 1 mL
100 gal to 0.25 qt

Volume Transfer, II

1500 gal to 5 gal
100 gal to 25 gal LPG



2015

*Carol T. Hockert, Chief
NIST Office of Weights and Measures*

Effective Dates: 2015-01-01 to 2015-12-31



SERVICE FOR YOUR WORLD

November 20, 2015



Public Service Commission
Attn: Shelly Bauske
600 E Boulevard Ave Dept 408
Bismarck ND 58505-0480

RE: Registered Service Company Annual Permit Application – Fairbanks Scales, St Paul MN

Shelly,

Last week when we submitted our Annual Permit Application the weights for Scott Wolf's truck were not yet certified. Subsequently, we have had them tested by the State of Minnesota. Enclosed are the calibration reports for the remainder of our weights.

Please contact me if you have any questions.

Sincerely,
Fairbanks Scales

Ron Louderback
Area Service Manager