APPLICATION FOR REGISTRATION AS A REGISTERED SERVICE COMPANY

Public Service Commission
SFN 51277 (2/2014)

RECEIVED
FEB - 8 2016
ND Public Service Commission

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

Name of Company	Email Address	Application Date	
Westmor Industries	Dispatches@westmor-ind.com	2/4/16	
Mailing Address	**City**	**State**	**Zip Code**
PO Box 683	Morris	MN	56267
Telephone Number	**Cell Phone Number**	**Fax Number**	
320-589-2100		320-589-2206	

Select below all device types your company will certify:

Scales (include maximum capacity, if applicable)	**Liquid** (include maximum flow rate, if applicable)
☐ 1. Rail	☒ 1. Retail Fuel (less than 20 gal. per minute)
☐ 2. Truck	☒ 2. High Flow Retail Fuel (20 gal. per minute or greater)
☐ 3. Livestock	☒ 3. Vehicle Tank: Max. Flow Rate: 80
☐ 4. Hopper: Max. Capacity: _____	☐ 4. Stationary Bulk (fuel or oil): Max. Flow Rate: _____
☐ 5. Belt	☒ 5. LPG
☐ 6. Over 30 lbs.: Max. Capacity: _____	☐ 6. Stationary LPG
☐ 7. 30 lbs. or less	☐ 7. Fertilizer: Max. Flow Rate: _____
☐ 8. Class II **(indicate on your calibration report which weight kit is Class II certified)**	☐ 8. Chemical
☐ 9. Other: Please List:	☐ 9. Anhydrous
	☐ 10. Loading Rack
	☐ 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*
	Please see attached	

Continued on Page 2

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

1-250g Refined fuel - shop	
1-100gal Refined fuel - shop	
1-100gal LP - shop	
1-200gal LP - shop	
2-100gal refined fuel - Mobile	
1-50gal refined fuel - Mobile	
1-5gal DEF only can	
14-5gal cans	

Additional Application Items (initial where appropriate):

Standardized Test Report	____ Copy enclosed X No change in report filed previously
Tested and Approved Sticker	X Copy enclosed ____ No change in sticker filed previously
Photocopy of Crimped Lead Wire Seal	____ Copy enclosed X 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 Kristin McNeill, 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.

Kristin McNeill
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

ND Permit #	Tech Name	Seal 1	Seal #2	Device Types (all Liquid)
1665	Doug Tipler	WM	264	1, 2
1698	Zach Arnold	WM	728	1, 2
1700	Chris Tolifson	WM	790	1, 2
1732	Reed Fox	WM	RF	1, 2
1760	Dustin Keyes	WM	1047	1, 2
1765	Darin Bouressa	WM	1024	1, 2, 3, 5
* coming	Cory Schroeder	WM	1025	1, 2
1683	Jeff Stallman	WM	730	1, 2, 3, 5
1690	Rick Anderson	WM	761	3, 5
1682	Dan Murphy	WM	270	3, 5
1681	Jim Hippen	WM	731	3, 5
1504	Fred Lembcke	WM	463	3, 5
1708	Cole Swenson	WM	808	3, 5
1709	Chris Kepner	WM	812	3, 5

*Note Cory Schroeder took the 3 required tests for ND Certification on January 18, 2016. We are just waiting for his certification # to arrive.

Bauske, Shelly A.

From: Kristin McNeill <kristin.mcneill@westmor-ind.com>
Sent: Thursday, February 18, 2016 1:01 PM
To: Bauske, Shelly A.
Subject: Fwd: Registered Service Person Question

Welcome back!

Please see the message from Stuart below (he is David and Brandon's supervisor).

Kristin McNeill
Westmor Industries
1-800-992-8981 ext 7236

---------- Forwarded message ----------
From: **Stuart Strege** <stuart.strege@westmor-ind.com>
Date: Thu, Feb 18, 2016 at 12:44 PM
Subject: Re: Registered Service Person Question
To: Kristin McNeill <kristin.mcneill@westmor-ind.com>

Yes they do, I am sorry they just got added late last year. Can we still get them registered.?

Stuart Strege
Service Manager Truck & Trailer Division
Westmor Industries
PH: 320-589-7246
FAX: 320-589-2706
Email: stuart.strege@westmor-ind.com

On Thu, Feb 18, 2016 at 12:04 PM, Kristin McNeill <kristin.mcneill@westmor-ind.com> wrote:
Help please?

Kristin McNeill
Westmor Industries
1-800-992-8981 ext 7236

---------- Forwarded message ----------
From: **Bauske, Shelly A.** <sbauske@nd.gov>
Date: Thu, Feb 18, 2016 at 12:01 PM
Subject: Registered Service Person Question
To: Kristin McNeill <kristin.mcneill@westmor-ind.com>

Good Afternoon Kristin

I'm in the process of reviewing your Application for Registration as a Registered Service Company and just have a question regarding a couple of registered service persons. Does David Gass and Brandon Tambornino still work for Westmor? I noticed their names were not on your list of registered service persons.

Thank you!

Shelly Bauske

Public Service Commission

600 E Boulevard Ave Dept 408

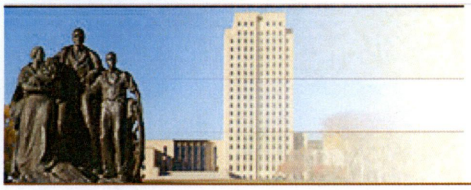
Bismarck ND 58505-0480

701-328-4070

701-328-2410 (fax)

sbauske@nd.gov

North Dakota nd.gov Official Portal for North Dakota State Government



SECRETARY OF STATE
NORTH DAKOTA

Home | Business Records Search

WESTMOR INDUSTRIES, LLC

Corporation Details

System ID: 17312000
Type: FOREIGN LIMITED LIABILITY COMPANY
Status: Active & Good Standing
Original File Date: 08/31/2001
State of Origin: Minnesota

Phone: (800) 992-8981
Effective Date: 08/31/2001

Nature of Business

SERVICING/SALES/INSTALLATION OF GAS PUMPING EQUIPMENT

Principal Office

3 DEVELOPMENT DR PO BOX 683 MORRIS, MN 56267-0683

Registered Agent

STUART STREGE
109 FRANCIS DR
HANKINSON, ND 58041-4112
Established Date: Feb 08, 2016

Generate an Annual Report To File

To Generate a Annual Report form to be filed with the Secretary of State, select the appropriate year of the report you intend to file. This report does not contain details of a report previously filed with the Secretary of State. The annual report years reflected are an indication of the various report forms available in this site and is not an indication that an entity needs to file reports for all years. Missing years indicate that the forms for the missing year have not yet been deployed to the website, or have already been removed, and can be obtained by contacting the Secretary of State.

2015 (generates a forms-fillable pdf in a new pop-up window)

Return to Search Results

MN Stop - Refined

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

14305 SOUTHCROSS DRIVE #150
BURNSVILLE, MN 55306-7008
MN.GOV/COMMERCE/
651.539.1555 FAX 651.539.1553
AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	December 18, 2015	State Test No.:	335243
Test Date:	December 22, 2015	Serial No.:	414574568
Report Date:	December 22, 2015	Barcode:	202640

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	33
Technician ID:	19

Item(s) Submitted:	250 Gallon Prover
Manufacturer:	Westmor
Material:	Stainless Steel (304)
Description:	Dry Bottom
Condition:	Good/Other**
Temperature:	19.1 °C
Pressure:	729.3 mmHg
Relative Humidity:	36.5 %
Standard H_2O Temp.:	11.6 °C
Artifact H_2O Temp.:	11.3 °C

Nominal Volume (gal)		Tested Volume (gal)	Error (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
250	As Found	249.996	-0.9	7.2	0.0000288
	As Left	249.996	-0.9	7.2	

Neck Calibration: No neck calibration was done at this time.
** Valve stop was bent and prevented full closure of drain.

This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow and at a reference temperature of 60 °F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MN Shop - refined

MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date:	December 14, 2015	State Test No.:	335219
Test Date:	December 14, 2015	Serial No.:	0414571571-1
Report Date:	December 14, 2015	Barcode:	202639

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	33
Technician ID:	19

Item(s) Submitted:	100 Gallon Prover
Manufacturer:	Westmor
Material:	Stainless Steel (304)
Description:	Dry Bottom
Condition:	Good
Temperature:	18.2 °C
Pressure:	720.9 mmHg
Relative Humidity:	46.5 %
Standard H_2O Temp.:	11.8 °C
Artifact H_2O Temp.:	11.8 °C

Nominal Volume (gal)		Tested Volume (gal)	Error (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
100	As Found	99.992	-1.8	2.4	0.0000288
	As Left	99.992	-1.8	2.4	

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow and at a reference temperature of 60 °F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MN Sleep - LP

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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Receipt Date:	December 18, 2015	State Test No.:	335242
Test Date:	December 23, 2015	Serial No.:	LPNH-5
Report Date:	December 23, 2015	Barcode:	017111

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	34
Technician ID:	11

Item(s) Submitted:	100 Gallon LPG Prover
Manufacturer:	Kleespie
Material:	Mild Steel
Description:	Wet Bottom
Condition:	Good
Temperature:	18.6 °C
Pressure:	721.2 mmHg
Relative Humidity:	40. %
Standard H_2O Temp.:	11.1 °C
Artifact H_2O Temp.:	11.6 °C

Nominal Volume (gal)	Error As Found (in^3)	Error As Left (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
100	-8.6	-8.6	5.3	0.0000186

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel at a reference temperature of 60 °F and a reference pressure of 100 psig.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Results apply to item identified in this report only.

Pete Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF
COMMERCE
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Receipt Date:	December 18, 2015	State Test No.:	335242
Test Date:	December 23, 2015	Serial No.:	LPNH-5
Report Date:	December 23, 2015	Barcode:	17111

Pressure Correction Chart

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	34
Technician ID:	11

Item(s) Submitted:	100 Gallon LPG Prover
Manufacturer:	Kleespie
Material:	Mild Steel
Description:	Wet Bottom
Condition:	Good
Temperature:	18.6°C
Pressure:	721.2 mmHg
Relative Humidity:	40. %

Pressure Gauge Reading (PSIG)	Volume Correction (gal)
0	-0.169
10	-0.153
20	-0.137
30	-0.120
40	-0.104
50	-0.087
60	-0.077
70	-0.067
80	-0.057
90	-0.047
100	-0.037
110	-0.025
120	-0.013
130	-0.001
140	0.011
150	0.023
160	0.028
170	0.034
180	0.039
190	0.044
200	0.049

Pete Whebbe

Peter J Whebbe

Metrologist

MN Shop - LP

MINNESOTA DEPARTMENT OF COMMERCE
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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	December 14, 2015	State Test No.:	335220
Test Date:	December 16, 2015	Serial No.:	45765
Report Date:	December 16, 2015	Barcode:	202718

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	34
Technician ID:	19

Item(s) Submitted:	200 Gallon LPG Prover
Manufacturer:	Arrow Tank
Material:	Mild Steel
Description:	Wet Bottom
Condition:	Excellent
Temperature:	18.2 °C
Pressure:	718.8 mmHg
Relative Humidity:	42. %
Standard H_2O Temp.:	11.6 °C
Artifact H_2O Temp.:	11.9 °C

Nominal Volume (gal)	Error As Found (in^3)	Error As Left (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
200	4	4	11	0.0000186

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel at a reference temperature of 60 °F and a reference pressure of 100 psig.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Results apply to item identified in this report only.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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Receipt Date:	December 14, 2015	State Test No.:	335220
Test Date:	December 16, 2015	Serial No.:	45765
Report Date:	December 16, 2015	Barcode:	202718

Pressure Correction Chart

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	34
Technician ID:	19

Item(s) Submitted:	200 Gallon LPG Prover
Manufacturer:	Arrow Tank
Material:	Mild Steel
Description:	Wet Bottom
Condition:	Excellent
Temperature:	18.2°C
Pressure:	718.8 mmHg
Relative Humidity:	42. %

Pressure Gauge Reading (PSIG)	Volume Correction (gal)
0	-0.227
10	-0.201
20	-0.175
30	-0.149
40	-0.123
50	-0.097
60	-0.074
70	-0.051
80	-0.028
90	-0.005
100	0.018
110	0.038
120	0.057
130	0.077
140	0.096
150	0.116
160	0.133
170	0.151
180	0.168
190	0.186
200	0.203

Erik Alfvin
Metrologist

Mobile

MINNESOTA DEPARTMENT OF COMMERCE
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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	January 6, 2016	State Test No.:	335305
Test Date:	January 6, 2016	Serial No.:	11-52086-01
Report Date:	January 5, 2016	Barcode:	201814

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	33
Technician ID:	19

Item(s) Submitted:	100 Gallon Prover
Manufacturer:	Seraphin
Material:	Stainless Steel
Description:	Dry Bottom
Condition:	Good
Temperature:	18.3 °C
Pressure:	736.9 mmHg
Relative Humidity:	35.2 %
Standard H_2O Temp.:	9.7 °C
Artifact H_2O Temp.:	9.8 °C

Nominal Volume (gal)		Tested Volume (gal)	Error (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
100	As Found	100.017	3.9	2.4	0.0000265
	As Left	100.017	3.9	2.4	

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow and at a reference temperature of 60 °F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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NVLAP LAB CODE 105003-0

Mobile

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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651.539.1555 FAX 952.435.4040
AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	January 13, 2016	State Test No.:	335342
Test Date:	January 13, 2016	Serial No.:	111164
Report Date:	January 13, 2016	Barcode:	201112

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	33
Technician ID:	19

Item(s) Submitted:	100 Gallon Prover
Manufacturer:	Kleespie
Material:	Mild Steel
Description:	Dry Bottom
Condition:	Good
Temperature:	19.2 °C
Pressure:	730.3 mmHg
Relative Humidity:	25.4 %
Standard H_2O Temp.:	9.9 °C
Artifact H_2O Temp.:	10.1 °C

Nominal Volume (gal)		Tested Volume (gal)	Error (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
100	As Found	100.007	1.7	2.4	0.0000186
	As Left	100.007	1.7	2.4	

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow and at a reference temperature of 60 °F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

Mobile

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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BURNSVILLE, MN 55306-7008
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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	January 7, 2016	State Test No.:	335314
Test Date:	January 8, 2016	Serial No.:	061111194-0101
Report Date:	January 8, 2016	Barcode:	202680

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	33
Technician ID:	19

Item(s) Submitted:	50 Gallon Prover
Manufacturer:	Determan Brownie
Material:	Stainless Steel (304)
Description:	Dry Bottom
Condition:	Good
Temperature:	19.1 °C
Pressure:	732.5 mmHg
Relative Humidity:	38.3 %
Standard H_2O Temp.:	9.6 °C
Artifact H_2O Temp.:	9.8 °C

Nominal Volume (gal)		Tested Volume (gal)	Error (in^3)	Uncertainty (in^3)	Coefficient of Expansion(/°F)
50	As Found	49.996	-0.9	3.3	0.0000288
	As Left	49.996	-0.9	3.3	

Neck Calibration: No neck calibration was done at this time.

This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow and at a reference temperature of 60 °F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	December 7, 2015	State Test No.:	335184
Test Date:	December 14, 2015	Serial No.:	11-89347
Report Date:	December 14, 2015	Barcode:	201917

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	32
Technician ID:	11

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Good
Temperature:	18.4 °C
Pressure:	721.2 mmHg
Relative Humidity:	46.7 %
Standard H_2O Temp.:	15.1 °C
Artifact H_2O Temp.:	15.3 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	-0.16	4.9993	0.24	0.0000265
	As Left	-0.16	4.9993	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Pete Whebbe
Peter J Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Mark Andrew Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

14305 SOUTHCROSS DRIVE #150
BURNSVILLE, MN 55306-7008
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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	December 30, 2015	State Test No.:	335283
Test Date:	January 5, 2016	Serial No.:	ID #R1003
Report Date:	January 5, 2016	Barcode:	018411

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Mild Steel
Equipment Number:	None
Condition:	Fair
Temperature:	18.0 °C
Pressure:	739.8 mmHg
Relative Humidity:	33.4 %
Standard H_2O Temp.:	17.1 °C
Artifact H_2O Temp.:	17.1 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.25	5.0011	0.24	0.0000186
	As Left	-0.09	4.9996	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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Receipt Date: December 30, 2015
Test Date: January 5, 2016
Report Date: January 5, 2016

State Test No.: 335279
Serial No.: ID #R1002/29748
Barcode: 200384

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: Kristin McNeill
Phone: 800-992-8981
PO Number: None
SOP: 32
Technician ID: 19

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Ellisco
Material: Mild Steel
Equipment Number: None
Condition: Fair
Temperature: 18.0 °C
Pressure: 739.8 mmHg
Relative Humidity: 33.4 %
Standard H_2O Temp.: 14.2 °C
Artifact H_2O Temp.: 14.3 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.89	5.0038	0.24	0.0000186
	As Left	-0.07	4.9997	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date:	January 6, 2016
Test Date:	January 7, 2016
Report Date:	January 7, 2016

State Test No.:	335311
Serial No.:	R 1004
Barcode:	200812

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Mild Steel
Equipment Number:	None
Condition:	Good
Temperature:	18.8 °C
Pressure:	736.5 mmHg
Relative Humidity:	40.1 %
Standard H_2O Temp.:	12.6 °C
Artifact H_2O Temp.:	12.7 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	-0.10	4.9996	0.24	0.0000186
	As Left	-0.10	4.9996	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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Receipt Date: January 6, 2016
Test Date: January 7, 2016
Report Date: January 7, 2016

State Test No.: 335309
Serial No.: 05-01101
Barcode: 200809

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: Kristin McNeill
Phone: 800-992-8981
PO Number: None
SOP: 32
Technician ID: 19

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin
Material: Stainless Steel
Equipment Number: None
Condition: Good
Temperature: 18.8 °C
Pressure: 736.5 mmHg
Relative Humidity: 40.1 %
Standard H_2O Temp.: 12.7 °C
Artifact H_2O Temp.: 12.7 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	-0.01	5.0000	0.24	0.0000265
	As Left	-0.01	5.0000	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date: December 7, 2015
Test Date: December 14, 2015
Report Date: December 14, 2015

State Test No.: 335181
Serial No.: 09-04013/S5005
Barcode: 013189

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: KRISTIN MCNEILL
Phone: 800-992-8981
PO Number: NONE
SOP: 32
Technician ID: 11

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin
Material: Stainless Steel
Equipment Number: None
Condition: Good
Temperature: 18.4 °C
Pressure: 721.2 mmHg
Relative Humidity: 46.7 %
Standard H_2O Temp.: 12.8 °C
Artifact H_2O Temp.: 13.1 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.33	5.0014	0.24	0.0000265
	As Left	-0.05	4.9998	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Pete Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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Receipt Date:	December 7, 2015	State Test No.:	335180
Test Date:	December 14, 2015	Serial No.:	47071
Report Date:	December 14, 2015	Barcode:	017974

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	32
Technician ID:	11

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Mild Steel
Equipment Number:	None
Condition:	Good/Dirty
Temperature:	18.4 °C
Pressure:	721.2 mmHg
Relative Humidity:	46.7 %
Standard H_2O Temp.:	13.1 °C
Artifact H_2O Temp.:	13.3 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.11	5.0005	0.24	0.0000186
	As Left	0.11	5.0005	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Pete Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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Receipt Date:	November 4, 2015	State Test No.:	335042
Test Date:	November 16, 2015	Serial No.:	13-91602
Report Date:	November 17, 2015	Barcode:	202628

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Excellent
Temperature:	18.3 °C
Pressure:	731.6 mmHg
Relative Humidity:	55.3 %
Standard H_2O Temp.:	16.3 °C
Artifact H_2O Temp.:	16.3 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.54	5.0023	0.62	0.0000265
	As Left	-0.01	4.9999	0.62	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date:	December 7, 2015	State Test No.:	335182
Test Date:	December 14, 2015	Serial No.:	49830
Report Date:	December 14, 2015	Barcode:	018057

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	32
Technician ID:	11

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Mild Steel
Equipment Number:	None
Condition:	Good
Temperature:	18.4 °C
Pressure:	721.2 mmHg
Relative Humidity:	46.7 %
Standard H_2O Temp.:	12.8 °C
Artifact H_2O Temp.:	13.1 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.72	5.0031	0.24	0.0000186
	As Left	-0.14	4.9994	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Pete Whebbe
Peter J Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Mark Andrew Nicollet
Quality Manager

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MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date:	December 14, 2015	State Test No.:	335239
Test Date:	December 22, 2015	Serial No.:	Tipler
Report Date:	December 22, 2015	Barcode:	200564

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	KRISTIN MCNEILL
Phone:	800-992-8981
PO Number:	NONE
SOP:	32
Technician ID:	11

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Good
Temperature:	19.7 °C
Pressure:	730. mmHg
Relative Humidity:	33.4 %
Standard H_2O Temp.:	15.6 °C
Artifact H_2O Temp.:	15.8 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	-0.09	4.9996	0.24	0.0000265
	As Left	-0.09	4.9996	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Pete Whebbe
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	November 4, 2015	State Test No.:	335044
Test Date:	November 16, 2015	Serial No.:	14-92086
Report Date:	November 17, 2015	Barcode:	202631

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Excellent
Temperature:	18.3 °C
Pressure:	731.6 mmHg
Relative Humidity:	55.3 %
Standard H_2O Temp.:	17.5 °C
Artifact H_2O Temp.:	17.5 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.40	5.0017	0.62	0.0000265
	As Left	-0.01	4.9999	0.62	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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Receipt Date:	November 4, 2015	State Test No.:	335046
Test Date:	November 16, 2015	Serial No.:	14-92099
Report Date:	November 17, 2015	Barcode:	202633

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Excellent
Temperature:	18.3 °C
Pressure:	731.6 mmHg
Relative Humidity:	55.3 %
Standard H_2O Temp.:	16.5 °C
Artifact H_2O Temp.:	16.6 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.44	5.0019	0.62	0.0000265
	As Left	-0.05	4.9998	0.62	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
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Receipt Date:	January 6, 2016	State Test No.:	335310
Test Date:	January 7, 2016	Serial No.:	09-06216
Report Date:	January 7, 2016	Barcode:	200733

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Good
Temperature:	18.8 °C
Pressure:	736.5 mmHg
Relative Humidity:	40.1 %
Standard H_2O Temp.:	12.8 °C
Artifact H_2O Temp.:	12.8 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.66	5.0029	0.24	0.0000265
	As Left	-0.06	4.9997	0.24	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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Receipt Date: November 4, 2015
Test Date: November 16, 2015
Report Date: November 17, 2015

State Test No.: 335041
Serial No.: 14-92090
Barcode: 202632

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: Kristin McNeill
Phone: 800-992-8981
PO Number: None
SOP: 32
Technician ID: 19

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin
Material: Stainless Steel
Equipment Number: None
Condition: Excellent
Temperature: 18.3 °C
Pressure: 731.6 mmHg
Relative Humidity: 55.3 %
Standard H_2O Temp.: 16.5 °C
Artifact H_2O Temp.: 16.5 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.24	5.0011	0.62	0.0000265
	As Left	-0.06	4.9997	0.62	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

MINNESOTA DEPARTMENT OF COMMERCE
WEIGHTS & MEASURES DIVISION

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AN EQUAL OPPORTUNITY EMPLOYER

Receipt Date:	November 4, 2015
Test Date:	November 16, 2015
Report Date:	November 17, 2015

State Test No.:	335043
Serial No.:	14-92082
Barcode:	202630

Calibration Report

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact:	Kristin McNeill
Phone:	800-992-8981
PO Number:	None
SOP:	32
Technician ID:	19

Item(s) Submitted:	5 Gallon Measure
Manufacturer:	Seraphin
Material:	Stainless Steel
Equipment Number:	None
Condition:	Excellent
Temperature:	18.3 °C
Pressure:	731.6 mmHg
Relative Humidity:	55.3 %
Standard H_2O Temp.:	16.2 °C
Artifact H_2O Temp.:	16.3 °C

Nominal Volume (gal)		Error (in^3)	Volume at Zero Line (gal)	Uncertainty (in^3)	Coefficient of Expansion (/°F)
5	As Found	0.54	5.0023	0.62	0.0000265
	As Left	0.00	5.0000	0.62	

Neck Calibration: No neck calibration was done at this time.

This measure or prover has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds, a drain time of 10 seconds after cessation of full flow and at a reference temperature of 60 °F.

The measure or prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were sealed in place.

The reported uncertainty conforms to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The confidence interval is 95%.

Erik Alfvin
Metrologist

Reviewed by:
Mark Nicollet
Quality Manager

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.

2015

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

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

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

(Rev.: March 2013)

United States Department of Commerce

National Institute of Standards and Technology

Certificate of Metrological Traceability For:

Minnesota

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110 000 lb to 80 000 lb

Volume Gravimetric, I
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100 gal to 0.25 qt

Volume Transfer, II
1500 gal to 5 gal
100 gal to 25 gal LPG

2016 to 2017

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

Effective Dates: 2016-01-01 to 2017-12-31

(Rev.: March 2013)