



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 Westmor Industries	Email Address dispatches@westmor-ind.com	Application Date 12/27/17	
Mailing Address PO Box 683	City MOM'S	State MN	Zip Code 56267
Telephone Number 320-589-2100 800-992-8981	Cell Phone Number	Fax Number 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)
<input type="checkbox"/> 1. Rail <input type="checkbox"/> 2. Truck <input type="checkbox"/> 3. Livestock <input type="checkbox"/> 4. Hopper: Max. Capacity: _____ <input type="checkbox"/> 5. Belt <input type="checkbox"/> 6. Over 30 lbs.: Max. Capacity: _____ <input 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 checked="" type="checkbox"/> 1. Retail Fuel (less than 20 gal. per minute) <input checked="" type="checkbox"/> 2. High Flow Retail Fuel (20 gal. per minute or greater) <input checked="" type="checkbox"/> 3. Vehicle Tank: Max. Flow Rate: <u>80</u> <input checked="" type="checkbox"/> 4. Stationary Bulk (fuel or oil): Max. Flow Rate: _____ <input checked="" 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
	Please see attached	

Application for Registration as a Registered Service Company
Page 2

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

29 - 5gal pavers	
1 - shared 5gal Det only	
Shop: 100gal refined fuel	Units were calibrated by the Minnesota Metrology Lab the weeks of December 4-15. Still awaiting paperwork. I will forward it as soon as I have it.
100gal LPG	
200gal LPG	
250gal refined fuel	
Mobil: 100gal refined fuel	Units are scheduled for calibration at the Minnesota Metrology Lab the week of Jan 2, 2018. I will forward updated calibration sheets as soon as I have them.
50gal refined fuel	
+ 50gal refined fuel (to be added)	

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 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)
1504	Fred Lembcke	WM	463	3, 5
1665	Doug Tipler	WM	264	1, 2
1681	Jim Hippen	WM	731	3, 5
1682	Don Murphy	WM	270	3, 5
1690	Rick Anderson	WM	761	3, 5
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
1764	David Gass	WM	1054	3, 5
1765	Darin Bouressa	WM	1024	1, 2, 3, 5
1774	Brandon Tambornino	WM	1053	3, 5
1778	Cory Schroeder	WM	1025	1, 2
1793	Shawn Knutson	WM	1108	3, 5

cancel

cancel

cancel

cancel



SECRETARY OF STATE NORTH DAKOTA

[Home](#) | [Business Records Search](#)

WESTMOR INDUSTRIES, LLC

Corporation Details

System ID: 17312000**Phone:** (800) 992-8981**Type:** FOREIGN LIMITED LIABILITY COMPANY**Status:** Active & Good Standing**Original File Date:** 08/31/2001**Effective Date:** 08/31/2001**State of Origin:** Minnesota

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

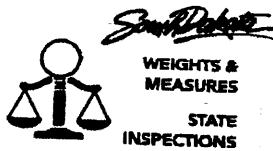
To Generate a Annual Report form to be filed with the Secretary of State, select the appropriate year of the report you intend to file. This report does not contain details of a report previously filed with the Secretary of State. The annual report years reflected are an indication of the various report 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.

[2017](#) (generates a forms-fillable pdf in a new pop-up window)[Return to Search Results](#)[Contact Us](#)[Disclaimer](#) | [Privacy Policy](#)

 We use Secure Sockets Layer (SSL) encryption technology to ensure your information is secure and protected.

 Will open a new window (pop-up).

W3C WAI AA, CSS, XHTML Compliant | Copyright 2006. All Rights Reserved. The State of North Dakota.



DEPARTMENT OF PUBLIC SAFETY

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab

Lab: 1500 N Garfield - E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

CALIBRATION REPORT

Submitted by: Westmor Industries, LLC
Mailing Address: 3 Development Drive
City, State, Zip: Morris, MN 56267

Report Number: MP3735
Date Received: 11/09/17
Date tested: 11/13/17
Temperature (°C): 21.6
Humidity: 49.5
Pressure (mm/Hg): 714.8%
Water Temperature(°C): 14.4-14.9

Equipment Used: 5 Gal Slicker SN 7178/ Fluke 1560 Probe Thermometer

Condition of artifacts: GOOD

5 Gallon Test Measure

Manufacturer	SN	Nominal Volume (gal)	Volume as Found (in ³ at 60 °F)	Volume as Found (gal at 60 °F)	Volume as Left (in ³ at 60 °F)	Volume as Left (gal at 60 °F)	Unc (in ³)	k Factor	Adjusted
Seraphin	09-06215	5	1155.02	5.000	1155.02	5.000	0.30	2.02	NO
Seraphin	09-06218	5	1154.69	4.999	1154.96	5.000	0.30	2.02	YES
Seraphin	09-06860	5	1154.71	4.999	1155.03	5.000	0.30	2.02	YES
Seraphin	11-89347	5	1154.16	4.996	1155.06	5.000	0.30	2.02	YES
Seraphin	14-92090	5	1155.01	5.000	1155.01	5.000	0.30	2.02	NO
Seraphin	16-94419	5	1154.95	5.000	1154.95	5.000	0.30	2.02	NO
Seraphin	16-94914	5	1155.20	5.001	1154.97	5.000	0.30	2.02	YES

DEF only

Treatment of artifacts prior to calibration: Artifacts were stored in the Metrology lab at the test area.

Procedure used: NISTIR 7383, SOP 19, Standard Operation Procedure for Calibration of Graduated Neck Type Metal Provers (Volume Transfer Method) Jan 2016. Water was used as the test medium.

Supplemental information:
No Neck Scale verification test was completed.

The values reported relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

Note: Test measure 09-06215 was missing the top sight glass plug. Plug was replaced prior to calibration.

Ron Peterson
Ron Peterson, Metrologist

End of Report

11/13/2017
Date of Report



**South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab**

Lab: 1500 N Garfield - E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

DEPARTMENT OF PUBLIC SAFETY

CALIBRATION REPORT

Submitted by: Westmor Industries, LLC
Mailing Address: 3 Development Drive
City, State, Zip: Morris, MN 56267

Report Number: MP3738
Date Received: 11/21/17
Date tested: 11/21/17
Temperature (°C): 21.6
Humidity: 45.8
Pressure (mm/Hg): 723.2%
Water Temperature(°C): 13.2-13.5

Equipment Used: 5 Gal Slicker SN 7178/ Fluke 1560 Probe Thermometer

Condition of artifacts: GOOD

5 Gallon Test Measure

Manufacturer	SN	Nominal Volume (gal)	Volume as Found (in ³ at 60 °F)	Volume as Found (gal at 60 °F)	Volume as Left (in ³ at 60 °F)	Volume as Left (gal at 60 °F)	Unc (in ³)	k Factor	Adjusted
Seraphin	05-02098	5	1154.92	5.000	1154.92	5.000	0.30	2.02	NO
Seraphin	16-94908	5	1155.20	5.001	1155.01	5.000	0.30	2.02	YES
Seraphin	13-91602	5	1153.80	4.995	1154.97	5.000	0.30	2.02	YES
Seraphin	14-92099	5	Repaired	Repaired	1155.00	5.000	0.30	2.02	YES
Seraphin	16-94119	5	1155.35	5.001	1155.00	5.000	0.30	2.02	YES
Seraphin	14-92082	5	1154.79	4.999	1154.99	5.000	0.30	2.02	YES
Seraphin	16-94120	5	1155.90	5.004	1154.94	5.000	0.30	2.02	YES
Seraphin	47071	5	1155.00	5.000	1155.00	5.000	0.40	2.02	NO

Treatment of artifacts prior to calibration: Artifacts were stored in the Metrology lab at the test area.

Procedure used: NISTIR 7383, SOP 19, Standard Operation Procedure for Calibration of Graduated Neck Type Metal Provers (Volume Transfer Method) Jan 2016. Water was used as the test medium.

Supplemental information:
No Neck Scale verification test was completed.

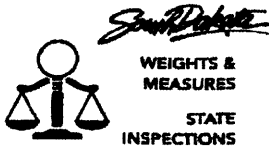
The values reported relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

Note: Test measure 14-92099 had a broken sight glass and the top bracket was broken off the test measure. Bracket was silver soldered in place and the sight glass was replaced with new o-rings before calibration.


Ron Peterson, Metrologist

End of Report

11/13/2017
Date of Report



**South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab**

Lab: 1500 N Garfield – E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

DEPARTMENT OF PUBLIC SAFETY

CALIBRATION REPORT

Submitted by: Westmor Industries, LLC
Mailing Address: 3 Development Drive
City, State, Zip: Morris, MN 56267

Report Number: MP3742
Date Received: 12/05/17
Date tested: 12/06/17
Temperature (°c): 21.1
Humidity: 46%
Pressure (mm/Hg): 720.8
Water Temperature(°c): 12.2 - 12.5

Equipment Used: 5 Gal Slicker SN 7178/ Fluke 1560 Probe Thermometer

Condition of artifacts: GOOD

5 Gallon Test Measure

Manufacturer	SN	Nominal Volume (gal)	Volume as Found (in ³ at 60 °F)	Volume as Found (gal at 60 °F)	Volume as Left (in ³ at 60 °F)	Volume as Left (gal at 60 °F)	Unc (in ³)	k Factor	Adjusted
Seraphin	49830	5	1155.18	5.001	1155.02	5.000	0.40	2.02	YES
Seraphin	05-01111	5	1155.18	5.001	1155.04	5.000	0.30	2.02	YES
Seraphin	09-04013	5	1155.40	5.002	1155.05	5.000	0.30	2.02	YES
Seraphin	09-04029	5	1154.96	5.000	1154.96	5.000	0.30	2.02	NO
Seraphin	14-91988	5	1154.65	4.998	1155.05	5.000	0.30	2.02	YES
Seraphin	R1002	5	1154.97	5.000	1154.97	5.000	0.40	2.02	NO
Seraphin	R1004	5	1155.03	5.000	1155.03	5.000	0.40	2.02	NO
Seraphin	R1006	5	1155.21	5.001	1155.01	5.000	0.40	2.02	YES

Treatment of artifacts prior to calibration: Artifacts were stored in the Metrology lab at the test area.

Procedure used: NISTIR 7383, SOP 19, Standard Operation Procedure for Calibration of Graduated Neck Type Metal Provers (Volume Transfer Method) Jan 2016. Water was used as the test medium.

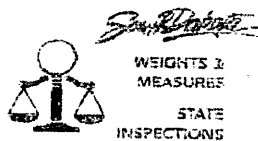
Supplemental information:
No Neck Scale verification test was completed.

The values reported relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

End of Report


Ron Peterson, Metrologist

12/06/2017
Date of Report



South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab

Lab: 1500 N. Garland - E. Truck Bypass Phone: 605-773-8170
Office: 118 West Capitol Avenue Phone: 605-773-3597
Pierre SD 57501

Form 10-2016 (Rev. 05/15/16)

CALIBRATION REPORT

Submitted by: Westmor Industries, LLC
Mailing Address: 3 Development Drive
City, State, Zip: Morris, MN 55267

Report Number: MP3749
Date Received: 12/18/17
Date tested: 12/21/17
Temperature (°C): 21.0
Humidity: 52%
Pressure (mm/Hg): 718.7
Water Temperature(°C): 11.2-11.7

Equipment Used: 5 Gal Slicker SN 7178/ Fluke 1560 Probe Thermometer

Condition of artifacts: GOOD

5 Gallon Test Measure

Manufacturer	SN	Nominal Volume (gal)	Volume as Found (in ³ at 60 °F)	Volume as Found (gal at 60 °F)	Volume as Left (in ³ at 60 °F)	Volume as Left (gal at 60 °F)	Unc (in ³)	k Factor	Adjusted
Seraphin	09-04019	5	1154.84	4.999	1155.05	5.000	0.30	2.02	YES
Seraphin	48425	5	1154.99	5.000	1154.99	5.000	0.40	2.02	NO
Seraphin	200408	5	1154.94	5.000	1154.94	5.000	0.40	2.02	NO
Seraphin	09-06213	5	1155.01	5.000	1155.01	5.000	0.30	2.02	NO
Seraphin	NSN	5	1154.92	5.000	1154.92	5.000	0.30	2.02	NO
Seraphin	R1001	5	Rejected	Rejected	Rejected	Rejected	0.30	2.02	
Seraphin	R1003	5	1154.24	4.997	1154.98	5.000	0.40	2.02	YES
Seraphin	S5001	5	1154.95	5.000	1154.95	5.000	0.30	2.02	NO
Seraphin	Tipier	5	Rejected	Rejected	Rejected	Rejected	0.30	2.02	

Treatment of artifacts prior to calibration: Artifacts were stored in the Metrology lab at the test area.

Procedure used: NISTIR 7383, SOP 19, Standard Operation Procedure for Calibration of Graduated Neck Type Metal Provers (Volume Transfer Method) Jan 2016. Water was used as the test medium.

Supplemental information:

No Neck Scale verification test was completed.

The values reported relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

Note: R1001 is rejected for dents, uncleanable inside, internal welds, very poor condition; needs to be replaced.

"Tipier" is rejected because it has the wrong scale plate installed. The scale plate installed is for a 3 in neck whereas this prover has a 4 inch neck.

Ron Peterson, Metrologist

End of Report

12/21/2017
Date of Report

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Metrological Traceability For:

South Dakota

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 III
30 kg to 100 mg
1000 lb to 0.001 lb
8 oz to 0.03125 oz

Weight Carts
4000 lb to 2000 lb

Volume Transfer, II
5 gal



2017

A handwritten signature in cursive script, appearing to read "Georgia L. Harris".

Georgia L. Harris, Acting Chief
NIST Office of Weights and Measures

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

Receipt Date: December 27, 2016
Cal. Date: December 27, 2016
Report Date: December 27, 2016

Report No.: 336997
Serial No.: 061111194-0101
Barcode: 202680

Calibration Certificate

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: KRISTIN MCNEILL
Phone: 800-992-8981
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 50 Gallon Prover
Manufacturer: Determan Brownie
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 18.8 °C
Pressure: 738.1 mmHg
Relative Humidity: 36.3 %
Standard H₂O Temp.: 10.0 °C
Artifact H₂O Temp.: 10.4 °C

Nominal		Calibrated				
Volume (gal)		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
50	As Found	49.996	-0.8	2.11	2.4	0.0000288
	As Left	49.996	-0.8			

Neck Calibration: No neck calibration was performed 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.

The vessel 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.

All tolerances and specifications were evaluated according to NIST Handbook 105-3 (2010). Uncertainty calculations contain the components in NIST SOP 19 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F
Conversion to SI unit: 1 gallon = 231 in³ = 0.00378541 m³.

Mark Nicollet

Mark Nicollet
Quality Manager

Units are scheduled for calibration at the Minnesota Metrology Lab the week of Jan 2, 2018. I will forward updated calibration sheets as soon as I have them.

Reviewed by:

Erik Alfvén

Erik Alfvén
Metrologist

Receipt Date: December 22, 2016
Cal. Date: December 22, 2016
Report Date: December 22, 2016

Report No.: 336977
Serial No.: 11-52086-01
Barcode: 201814

Calibration Certificate

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: KRISTIN MCNEILL
Phone: 800-992-8981
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Seraphin
Material: Stainless Steel
Type: No Bottom Zero
Condition: Good
Temperature: 18.7 °C
Pressure: 741.2 mmHg
Relative Humidity: 43.9 %
Standard H₂O Temp.: 10.3 °C
Artifact H₂O Temp.: 10.4 °C

Nominal		Calibrated				
Volume (gal)		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
100	As Found	99.998	-0.6	2.01	3.3	0.0000265
	As Left	99.998	-0.6			

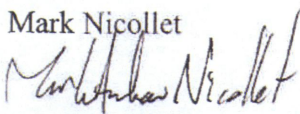
Neck Calibration: No neck calibration was performed at this time.

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.

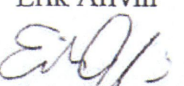
The vessel listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were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

All tolerances and specifications were evaluated according to NIST Handbook 105-3 (2010). Uncertainty calculations contain the components in NIST SOP 19 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F
Conversion to SI unit: 1 gallon = 231 in³ = 0.00378541 m³.

Mark Nicollet

Quality Manager

Units are scheduled for calibration at the Minnesota Metrology Lab the week of Jan 2, 2018. I will forward updated calibration sheets as soon as I have them.

Reviewed by:
Erik Alfvén

Metrologist

Receipt Date: December 8, 2016
Cal. Date: December 9, 2016
Report Date: December 9, 2016

Report No.: 336896
Serial No.: 0414571571-1
Barcode: 202639

Calibration Certificate

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: KRISTIN MCNEILL
Phone: 800-992-8981
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 100 Gallon Prover
Manufacturer: WESTMOR
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good/Dirty
Temperature: 19.3 °C
Pressure: 749.4 mmHg
Relative Humidity: 35.5 %
Standard H₂O Temp.: 12.3 °C
Artifact H₂O Temp.: 12.4 °C

Nominal		Calibrated				
Volume (gal)		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
100	As Found	100.006	1.4	2.01	3.3	0.0000288
	As Left	100.006	1.4			

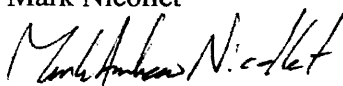
Neck Calibration: No neck calibration was performed at this time.

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.

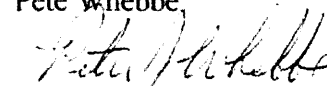
The vessel listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota using water as the calibration medium. The standards are traceable to the SI through NIST. Statistical process control charts indicate standards are currently in control. All gauges were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

All tolerances and specifications were evaluated according to NIST Handbook 105-3 (2010). Uncertainty calculations contain the components in NIST SOP 19 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F
Conversion to SI unit: 1 gallon = 231 in³ = 0.00378541 m³.

Mark Nicollet

Quality Manager

Units were calibrated by the Minnesota Metrology Lab the weeks of December 4-15. Still awaiting paperwork. I will forward it as soon as I have it.

Reviewed by:
Pete Whebbe

Metrologist

Receipt Date: December 5, 2016
Cal. Date: December 6, 2016
Report Date: December 6, 2016

Report No.: 336865
Serial No.: 414574568
Barcode: 202640

Calibration Certificate

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

Item(s) Submitted: 250 Gallon Prover
Manufacturer: Westmor
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 18.3 °C
Pressure: 730.5 mmHg
Relative Humidity: 39.5 %
Standard H₂O Temp.: 13.3 °C
Artifact H₂O Temp.: 13.5 °C

Nominal		Calibrated				
Volume (gal)		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
250	As Found	250.010	2.3	2.01	5.8	0.0000288
	As Left	250.010	2.3			

Neck Calibration: No neck calibration was performed 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.

The vessel 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.

All tolerances and specifications were evaluated according to NIST Handbook 105-3 (2010). Uncertainty calculations contain the components in NIST SOP 19 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F
Conversion to SI unit: 1 gallon = 231 in³ = 0.00378541 m³.

Erik Alfvin
Erik Alfvin
Metrologist

Units were calibrated by the Minnesota Metrology Lab the weeks of December 4-15. Still awaiting paperwork. I will forward it as soon as I have it.

Reviewed by:

Pete Whebbe

Pete Whebbe
Metrologist

Receipt Date: December 5, 2016
Cal. Date: December 7, 2016
Report Date: December 7, 2016

Report No.: 336866
Serial No.: LPNH-5
Barcode: 017111

Calibration Certificate

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600
Contact: Kristin McNeill
Phone: 800-992-8981
PO Number: None
SOP: 21
Technician ID: 19

Item(s) Submitted: 100 Gallon LPG
Manufacturer: Kleespie
Material: Mild Steel
Description: Zero Bottom
Condition: Good
Temperature: 18.1 °C
Pressure: 738.3 mmHg
Relative Humidity: 39.9 %
Standard H₂O Temp. 13.3 °C
Artifact H₂O Temp.: 13.7 °C

Nominal		Calibrated				
Volume (gal)		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
100	As Found (at 100 psig)	99.978	-5.1	2.02	5.3	0.0000186
	As Left (at 100 psig)	99.978	-5.1			

Neck Calibration: No neck calibration was performed 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. 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.

All tolerances and specifications were evaluated according to NIST Handbook 105-4 (2010). Uncertainty calculations contain the components in NIST SOP 21 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F.

Erik Alfvin

Erik Alfvin
Metrologist

Units were calibrated by the Minnesota Metrology Lab the weeks of December 4-15. Still awaiting paperwork. I will forward it as soon as I have it.

Reviewed by:

Pete Whebbe

Pete Whebbe
Metrologist

Receipt Date: December 5, 2016
 Cal. Date: December 7, 2016
 Report Date: December 7, 2016

Report No.: 336866
 Serial No.: LPNH-5
 Barcode: 017111

Pressure Correction Chart

WESTMOR INDUSTRIES
 3 DEVELOPMENT DRIVE
 MORRIS, MN 56267-0600

Contact: Kristin McNeill
 Phone: 800-992-8981
 PO Number: None
 SOP: 21
 Technician ID: 19

Item(s) Submitted: 100 Gallon LPG
 Manufacturer: Kleespie
 Material: Mild Steel
 Description: Zero Bottom
 Condition: Good
 Temperature: 18.1 °C
 Pressure: 738.3 mmHg
 Relative Humidity: 39.9 %

Pressure Gauge Reading (psig)	Corrected Volume (gal)
0	79.478
10	82.078
20	84.678
30	87.278
40	89.878
50	92.478
60	93.978
70	95.478
80	96.978
90	98.478
100	99.978
110	102.078
120	104.178
130	106.278
140	108.378
150	110.478
160	112.178
170	113.878
180	115.578
190	117.278
200	118.978

Erik Alfvin

 Metrologist

Slup



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 8, 2016
Cal. Date: December 14, 2016
Report Date: December 14, 2016
Amend Date: May 10, 2017

Report No.: 336897a
Serial No.: 45765
Barcode: 202718

Amended Calibration Certificate (amendment to report #336897)

WESTMOR INDUSTRIES
3 DEVELOPMENT DRIVE
MORRIS, MN 56267-0600

Contact: Kristin McNeill
Phone: 800-992-8981
PO Number: None
SOP: 21
Technician ID: 19

Item(s) Submitted: 200 Gallon LPG Prover
Manufacturer: Arrow Tank
Material: Mild Steel
Description: Zero Bottom
Condition: Good
Temperature: 18.1 °C
Pressure: 742.2 mmHg
Relative Humidity: 49.5 %
Standard H₂O Temp.: 13.2 °C
Artifact H₂O Temp.: 13.7 °C

Minimal Volume (gal)		Calibrated				
		Volume (gal)	Error (in ³)	<i>k</i>	U (in ³)	CCE (°F)
200	As Found (at 100 psig)	200.040	9.2	2.02	7.5	0.0000186
	As Left (at 100 psig)	200.040	9.2			

Neck Calibration: No neck calibration was performed 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. 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.

All tolerances and specifications were evaluated according to NIST Handbook 105-4 (2010). Uncertainty calculations contain the components in NIST SOP 21 and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Results apply to item identified in this report only.

CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F.

Erik Alfvin

Metrologist

Units were calibrated by the Minnesota Metrology Lab the weeks of December 4-15. Still awaiting paperwork. I will forward it as soon as I have it.

Reviewed by:
Pete Whebbe

Metrologist

Receipt Date: December 8, 2016
 Cal. Date: December 14, 2016
 Report Date: December 14, 2016

Report No.: 336897
 Serial No.: 45765
 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: 21
 Technician ID: 19

Item(s) Submitted: 200 Gallon LPG Prover
 Manufacturer: Arrow Tank
 Material: Mild Steel
 Description: Zero Bottom
 Condition: Good
 Temperature: 18.1 °C
 Pressure: 742.2 mmHg
 Relative Humidity: 49.5 %

Pressure Gauge Reading (psig)	Corrected Volume (gal)
0	199.730
10	199.767
20	199.804
30	199.841
40	199.878
50	199.915
60	199.940
70	199.965
80	199.990
90	200.015
100	200.040
110	200.058
120	200.076
130	200.094
140	200.112
150	200.130
160	200.148
170	200.166
180	200.184
190	200.202
200	200.220

Erik Alfvig

 Metrologist

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.

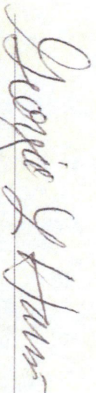
The Office of Weights and Measures Program assesses laboratories to NIST Handbook 143 - Program Handbook for State Weights and Measures Laboratories and ISO/IEC 17025:2005.

Scope

Mass Echelon I	Mass Echelon III	Volume Gravimetric, I
10 kg to 1 mg	50 kg to 1 mg	20 L to 10 mL
Mass Echelon II	5000 lb to 0.001 lb	100 gal to 0.25 qt
50 kg to 1 mg	4 oz to 0.03125 oz	Volume Transfer, II
1000 lb to 0.001 lb	Weight Carts	1500 gal to 5 gal
4 oz to 0.03125 oz	10 000 lb to 2000 lb	100 gal to 25 gal LPG
	Wheel Load Weighers	
	20 000 lb to 2000 lb	
	Railroad Test Cars	
	110 000 lb to 80 000 lb	



2017


Georgia L. Harris, Acting Chief
NIST Office of Weights and Measures

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

Amended: 2016-12-31

Scope modified for 2017.