



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 Fluid Solutions, LLC. | Email Address ryan.hartin@westmor-ind.com | Application Date 11/29/2016 | |
| Mailing Address 14044 W Freeway Drive | City Columbus | State MN | Zip Code 55038-9705 |
| Telephone Number 763-571-8110 | Cell Phone Number 651-842-2551 | Fax Number 763-571-1789 | |

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>600</u> <input checked="" type="checkbox"/> 4. Stationary Bulk (fuel or oil): Max. Flow Rate: <u>600</u> <input checked="" type="checkbox"/> 5. LPG <input checked="" type="checkbox"/> 6. Stationary LPG <input checked="" type="checkbox"/> 7. Fertilizer: Max. Flow Rate: <u>600</u> <input type="checkbox"/> 8. Chemical <input type="checkbox"/> 9. Anhydrous <input checked="" 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) |
|-------------------|----------------------|---|
| <i>e.g. 1001</i> | <i>e.g. John Doe</i> | <i>e.g. Scales - 2, 3, 6, 8; e.g. Liquid - 1, 2, 6</i> |
| 1511 | Scott Fish | 1,2,3,4,5,6,7 & 10 |
| 1550 | Terry Freeman | 1,2,3,4,5,6,7 & 10 |
| 1517 | Brent Gilbertson | 1,2,3,4,5,6,7, & 10 |
| 1485 | Steve Pishler | 1,2,3,4,5,6,7 & 10 |
| 1663 | Cliff Swanson | 1,2,3,4,5,6,7 & 10 |
| | | |
| | | |

Continued on Page 2



Application for Registration as a Registered Service Company
Page 2

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

| | |
|---------------------------------------|--|
| 5,50,100,500,1000,1500 Gallon Provers | |
| Small Volume Prover | |
| | |
| | |
| | |
| | |
| | |
| | |

Additional Application Items (initial where appropriate):

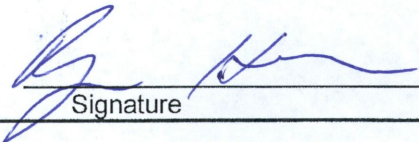
| | |
|-------------------------------------|--|
| Standardized Test Report | <input type="checkbox"/> Copy enclosed |
| | <input checked="" type="checkbox"/> No change in report filed previously |
| Tested and Approved Sticker | <input type="checkbox"/> Copy enclosed |
| | <input checked="" type="checkbox"/> No change in sticker filed previously |
| Photocopy of Crimped Lead Wire Seal | <input 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 Ryan Hartin, 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

Bauske, Shelly A.

From: Ryan Hartin <ryan.hartin@westmor-ind.com>
Sent: Wednesday, February 15, 2017 9:58 AM
To: Bauske, Shelly A.
Subject: Re: Another Question

CAUTION: This email originated from an outside source. Do not click links or open attachments unless you know they are safe.

Hi Shelly,

He is still our employee, do you need me to do anything to get him back on the list?

I know I've asked before, can you send me the service person renewal forms so I can get them signed and returned to you. It's hard to track the guys licenses because half of the guys let me know they renewed and I never hear a word from the other half.

**Thank you,
Ryan Hartin**

Westmor Industries, LLC
14044 W Freeway Drive
Columbus, MN 55038
United States

D: (651) 842-2551
P: (763) 571-8110
E: ryan.hartin@westmor-ind.com



On Wed, Feb 15, 2017 at 9:48 AM, Bauske, Shelly A. <sbauske@nd.gov> wrote:

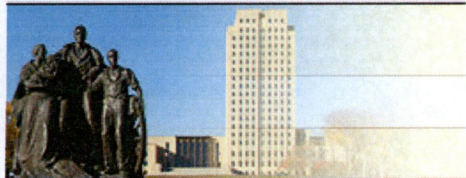
Hi Ryan

I'm reviewing your Application for Registration as a Registered Service Company. Michael Woessner is not included on your list of employees; however, he renewed his Registered Service Permit for 2017. His permit only covers high flow pumps and vehicle tank meters. Is he still one of your employees?

Thank you for your help!

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North Dakota

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SECRETARY OF STATE NORTH DAKOTA

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WESTMOR FLUID SOLUTIONS, LLC

Corporation Details

System ID: 33198400**Phone:** (800) 835-6074**Type:** FOREIGN LIMITED LIABILITY COMPANY**Status:** Active & Good Standing**Original File Date:** 01/03/2013**Effective Date:** 01/03/2013**State of Origin:** Minnesota

Nature of Business

SERVICE/SELL PARTS & MANUFACTURE EQUIP FOR FLUID MOVEMENT

Principal Office

14044 FREEWAY DR W HUGO, MN 55038-9705

Registered Agent

SEARCH COMPANY OF NORTH DAKOTA LLC

1709 N 19TH ST STE 3

BISMARCK, ND 58501-2121

Established Date: Jan 03, 2013

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.

[2016](#) (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.



Receipt Date: October 31, 2016
Cal. Date: November 2, 2016
Report Date: November 2, 2016

Report No.: 336690
Serial No.: 46801
Barcode: 200668

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 11

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin
Material: Mild Steel
Type: Measure
Condition: Good
Temperature: 20.9 °C
Pressure: 741.9 mmHg
Relative Humidity: 47.2 %
Standard H₂O Temp.: 18.3 °C
Artifact H₂O Temp.: 18.4 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 5 | As Found | 4.9977 | -0.53 | 2.06 | 0.24 | 0.0000186 |
| | As Left | 5.0004 | 0.09 | | | |

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

This measure has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds followed by a drain time of 10 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.

Pete Whebbe

Metrologist

Reviewed by:

Erik Alfvin

Metrologist



Receipt Date: October 31, 2016
Cal. Date: November 2, 2016
Report Date: November 2, 2016

Report No.: 336689
Serial No.: 07-05341
Barcode: 200667

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 11

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin SS
Material: Stainless Steel
Type: Measure
Condition: Good
Temperature: 20.9 °C
Pressure: 741.9 mmHg
Relative Humidity: 47.2 %
Standard H₂O Temp.: 18.2 °C
Artifact H₂O Temp.: 18.3 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 5 | As Found | 4.9992 | -0.19 | 2.06 | 0.24 | 0.0000265 |
| | As Left | 4.9992 | -0.19 | | | |

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

This measure has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds followed by a drain time of 10 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.

Pete Whebbe

Metrologist

Reviewed by:

Erik Alfvin

Metrologist



Receipt Date: October 31, 2016
Cal. Date: November 2, 2016
Report Date: November 2, 2016

Report No.: 336688
Serial No.: 7312 B
Barcode: 200758

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 11

Item(s) Submitted: 5 Gallon Measure
Manufacturer: Seraphin
Material: Mild Steel
Type: Measure
Condition: Good
Temperature: 20.9 °C
Pressure: 741.9 mmHg
Relative Humidity: 47.2 %
Standard H₂O Temp.: 18.0 °C
Artifact H₂O Temp.: 18.1 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 5 | As Found | 4.9970 | -0.70 | 2.06 | 0.24 | 0.0000186 |
| | As Left | 5.0000 | 0.00 | | | |

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

This measure has been calibrated as a "to contain after wet down" vessel with a pour time of 30 seconds followed by a drain time of 10 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.

Pete Whebbe

Peter J. Whebbe
Metrologist

Reviewed by:

Erik Alfvén

Erik Alfvén
Metrologist



Receipt Date: May 9, 2016
Cal. Date: May 11, 2016
Report Date: May 11, 2016

Report No.: 335928
Serial No.: 060810915-0201
Barcode: 200748

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 20.4 °C
Pressure: 737.2 mmHg
Relative Humidity: 52.7 %
Standard H₂O Temp.: 11.2 °C
Artifact H₂O Temp.: 11.3 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found | 100.013 | 3.0 | 2.01 | 3.3 | 0.0000288 |
| | As Left | 100.013 | 3.0 | | | |

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 105-3 (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

Erik Alfvín

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: July 29, 2016
Cal. Date: August 4, 2016
Report Date: August 4, 2016

Report No.: 336305
Serial No.: 051320997-0102
Barcode: 202342

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Determan Brownie, Inc
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 25.8 °C
Pressure: 732.7 mmHg
Relative Humidity: 45.2 %
Standard H₂O Temp.: 17.7 °C
Artifact H₂O Temp.: 17.8 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found | 99.986 | -3.2 | 2.01 | 3.3 | 0.0000288 |
| | As Left | 99.986 | -3.2 | | | |

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 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

Mark Nicollet

Mark Nicollet
Quality Manager

Reviewed by:

Erik Alfvin

Erik Alfvin
Metrologist



Receipt Date: February 18, 2016
Test Date: February 19, 2016
Report Date: February 19, 2016

State Test No.: 335561
Serial No.: 0615785533-2
Barcode: 202963

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 33
Technician ID: 11

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Westmor Fluid Solutions
Material: Stainless Steel (304)
Description: Dry Bottom
Condition: New
Temperature: 19.1 °C
Pressure: 718.4 mmHg
Relative Humidity: 41.4 %
Standard H₂O Temp.: 7.6 °C
Artifact H₂O Temp.: 7.7 °C

| Nominal Volume (gal) | | Tested Volume (gal) | Error (in ³) | Uncertainty (in ³) | Coefficient of Expansion(°F) |
|-------------------------|----------|------------------------|--------------------------|--------------------------------|---------------------------------|
| 100 | As Found | 100.063 | 14.5 | 2.4 | 0.0000288 |
| | As Left | 100.002 | 0.4 | 2.4 | |

Neck Calibration: Neck calibration performed, meets NIST Handbook 105-3 specifications.

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 %.

Pete Whebbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: October 4, 2016
Cal. Date: October 5, 2016
Report Date: October 5, 2016

Report No.: 336602
Serial No.: 031111168-0103
Barcode: 201898

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 100 Gallon Prover
Manufacturer: DETERMAN BROWNIE, INC.
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 22.9 °C
Pressure: 731.5 mmHg
Relative Humidity: 51.6 %
Standard H₂O Temp.: 17.0 °C
Artifact H₂O Temp.: 17.1 °C

| Nominal Volume (gal) | | Calibrated Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
|-------------------------|----------|----------------------------|--------------------------|----------|----------------------|-----------|
| 100 | As Found | 99.988 | -2.7 | 2.01 | 3.3 | 0.0000288 |
| | As Left | 99.988 | -2.7 | | | |

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

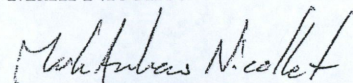
This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of full flow.

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.

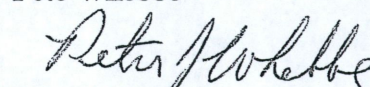
CCE is the cubical coefficient of thermal expansion, and the reference temperature is 60 °F
Conversion to SI unit: 1 gallon = 231 in³ = 0.00378541 m³.

Mark Nicollet


Quality Manager

Reviewed by:

Pete Whebbe


Metrologist



Receipt Date: May 23, 2016
Cal. Date: May 25, 2016
Report Date: May 25, 2016

Report No.: 335993
Serial No.: 314542120
Barcode: 202504

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Westmor
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 23.0 °C
Pressure: 734.3 mmHg
Relative Humidity: 57.0 %
Standard H₂O Temp.: 12.4 °C
Artifact H₂O Temp.: 12.6 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 100 | As Found | 99.991 | -2.2 | 2.01 | 3.3 | 0.0000288 |
| | As Left | 99.991 | -2.2 | | | |

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 105-3 (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

Erik Alfvín

Metrologist

Reviewed by:

Mark Nicolle

Quality Manager



Receipt Date: June 2, 2016
Cal. Date: June 6, 2016
Report Date: June 6/8, 2016

Report No.: 336037
Serial No.: 1214688350-2
Barcode: 202754

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Westmor
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 23.1 °C
Pressure: 732.2 mmHg
Relative Humidity: 46.3 %
Standard H₂O Temp.: 14.1 °C
Artifact H₂O Temp.: 14.2 °C

| Nominal | Calibrated | | | | |
|--------------|--------------|--------------------------|----------|----------------------|---------------|
| Volume (gal) | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 100 | As Found | 99.999 | -0.2 | 2.01 | 3.3 0.0000288 |
| | As Left | 99.999 | -0.2 | | |

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 105-3 (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

Erik Alfvin

Metrologist

Reviewed by:

Benjamin FitzPatrick

Deputy Director



Receipt Date: August 26, 2016
Cal. Date: August 26, 2016
Report Date: August 26, 2016

Report No.: 336431
Serial No.: 1214688351-2
Barcode: 202839

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
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: Excellent
Temperature: 25.6 °C
Pressure: 741.2 mmHg
Relative Humidity: 41.8 %
Standard H₂O Temp.: 19.0 °C
Artifact H₂O Temp.: 19.1 °C

| Nominal | Calibrated | | | | |
|--------------|--------------|--------------------------|----------|----------------------|---------------|
| Volume (gal) | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found | 99.975 | -5.7 | 2.01 | 3.3 0.0000288 |
| | As Left | 100.001 | 0.3 | | |

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

Mark Nicollet

Quality Manager

Reviewed by:

Pete Whebbe

Metrologist



Receipt Date: November 14, 2016
Cal. Date: November 14, 2016
Report Date: November 14, 2016

Report No.: 336762
Serial No.: 051271555-0103
Barcode: 202102

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 11

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 19.8 °C
Pressure: 735.8 mmHg
Relative Humidity: 48.3 %
Standard H₂O Temp.: 14.3 °C
Artifact H₂O Temp.: 14.4 °C

| Nominal | Calibrated | | | | |
|--------------|--------------|--------------------------|----------|----------------------|---------------|
| Volume (gal) | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 100 | As Found | 99.992 | -1.7 | 2.01 | 3.3 0.0000288 |
| | As Left | 99.992 | -1.7 | | |

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.

Pete Whebbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: October 31, 2016
Cal. Date: November 4, 2016
Report Date: November 4, 2016

Report No.: 336687
Serial No.: 3978131-4
Barcode: 018636

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Brownie
Material: Stainless Steel
Type: No Bottom Zero
Condition: Good
Temperature: 20.3 °C
Pressure: 745.7 mmHg
Relative Humidity: 47.4 %
Standard H₂O Temp.: 16.4 °C
Artifact H₂O Temp.: 16.6 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found | 100.005 | 1.2 | 2.01 | 3.3 | 0.0000265 |
| | As Left | 100.005 | 1.2 | | | |

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 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

Metrologist

Reviewed by:

Pete Whebbe

Metrologist



Receipt Date: July 25, 2016
Cal. Date: July 25, 2016
Report Date: July 25, 2016

Report No.: 336295
Serial No.: 3610-02
Barcode: 200685

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Brownie
Material: Mild Steel
Type: No Bottom Zero
Condition: Good
Temperature: 26.2 °C
Pressure: 738.5 mmHg
Relative Humidity: 46.6 %
Standard H₂O Temp.: 17.9 °C
Artifact H₂O Temp.: 18.0 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 100 | As Found | 99.984 | -3.7 | 2.01 | 3.3 | 0.0000186 |
| | As Left | 99.984 | -3.7 | | | |

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

Erik Alfvín

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: March 31, 2016
Cal. Date: April 1, 2016
Report Date: April 1, 2016

Report No.: 335769
Serial No.: 888231104
Barcode: 019269

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 100 Gallon Pover
Manufacturer: Brownie
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Leaks/Good*
Temperature: 19.4 °C
Pressure: 733.9 mmHg
Relative Humidity: 36.1 %
Standard H₂O Temp.: 8.2 °C
Artifact H₂O Temp.: 8.4 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found | 100.046 | 10.5 | 2.01 | 3.3 | 0.0000288 |
| | As Left | 99.999 | -0.2 | | | |

Neck Calibration: No neck calibration was performed at this time.
*Calibration ball-valve leaked and was replaced.

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 105-3 (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 items identified in this report only.

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

Erik Alfvin

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: April 26, 2016
Cal. Date: April 27, 2016
Report Date: April 27, 2016

Report No.: 335884
Serial No.: 5956670-01
Barcode: 019278

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 500 Gallon Prover
Manufacturer: Brownie
Material: Mild Steel
Type: No Bottom Zero
Condition: Good
Temperature: 18.3 °C
Pressure: 734.2 mmHg
Relative Humidity: 35.1 %
Standard H₂O Temp.: 10.7 °C
Artifact H₂O Temp.: 11.0 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 500 | As Found | 500.02 | 4 | 2.02 | 12 | 0.0000186 |
| | As Left | 500.02 | 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 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 105-3 (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

Erik Alfvin

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: November 14, 2016
Cal. Date: November 14, 2016
Report Date: November 14, 2016

Report No.: 336761
Serial No.: 031271251-0101
Barcode: 202101

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 11

Item(s) Submitted: 500 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 19.5 °C
Pressure: 735.9 mmHg
Relative Humidity: 43.1 %
Standard H₂O Temp.: 14.1 °C
Artifact H₂O Temp.: 14.3 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 500 | As Found | 499.988 | -3 | 2.02 | 12 | 0.0000288 |
| | As Left | 499.988 | -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.

Pete Whebbe

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: June 2, 2016
Cal. Date: June 7, 2016
Report Date: June 7, 2016

Report No.: 336036
Serial No.: 1214688350-1
Barcode: 202753

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 1000 Gallon Prover
Manufacturer: Westmor Fluid Solutions
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 20.6 °C
Pressure: 736.7 mmHg
Relative Humidity: 43.8 %
Standard H₂O Temp.: 13.4 °C
Artifact H₂O Temp.: 13.5 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 1000 | As Found | 999.89 | -25 | 2.02 | 24 | 0.0000288 |
| | As Left | 999.89 | -25 | | | |

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 105-3 (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

Erik Alfvin

Metrologist

Reviewed by:

Benjamin FitzPatrick

Deputy Director



Receipt Date: August 26, 2016
Cal. Date: August 26, 2016
Report Date: August 26, 2016

Report No.: 336430
Serial No.: 1214688351-1
Barcode: 202838

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 1000 Gallon Prover
Manufacturer: WESTMOR
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 25.6 °C
Pressure: 740.8 mmHg
Relative Humidity: 43.8 %
Standard H₂O Temp.: 17.3 °C
Artifact H₂O Temp.: 17.8 °C

| Nominal Volume (gal) | Calibrated | | | <i>k</i> | U (in ³) | CCE (°F) |
|-------------------------|------------|--------------|--------------------------|----------|----------------------|-----------|
| | As Found | Volume (gal) | Error (in ³) | | | |
| 1000 | As Found | 999.911 | -21 | 2.02 | 24 | 0.0000288 |
| | As Left | 999.911 | -21 | | | |

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

Mark Nicollet

Quality Manager

Reviewed by:

Erik Alfvín

Metrologist



Receipt Date: October 4, 2016
Cal. Date: October 5, 2016
Report Date: October 5, 2016

Report No.: 336601
Serial No.: 090610694-0101
Barcode: 201203

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 1000 Gallon Prover
Manufacturer: Determan Brownie
Material: Stainless Steel
Type: No Bottom Zero
Condition: Excellent
Temperature: 22.8 °C
Pressure: 731.5 mmHg
Relative Humidity: 51.6 %
Standard H₂O Temp.: 17.1 °C
Artifact H₂O Temp.: 17.2 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 1000 | As Found | 999.978 | -5 | 2.02 | 24 | 0.0000265 |
| | As Left | 999.978 | -5 | | | |

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

Reviewed by:

Pete Whobbe

Metrologist



Receipt Date: May 23, 2016
 Cal. Date: May 24/25, 2016
 Report Date: May 25, 2016

Report No.: 335994
 Serial No.: 114527708
 Barcode: 202505

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
 14044 W. FREEWAY DRIVE
 COLUMBUS, MN 55038
 Contact: Ryan Hartin
 Phone: 651-842-2551
 PO Number: None
 SOP: 19
 Technician ID: 19

Item(s) Submitted: 1000 Gallon Prover
 Manufacturer: Westmor
 Material: Stainless Steel (304)
 Type: No Bottom Zero
 Condition: Excellent
 Temperature: (23.1/22.7) °C
 Pressure: (734.31/734.28) mmHg
 Relative Humidity: (60.3/54.9) %
 Standard H₂O Temp.: 14.2 °C
 Artifact H₂O Temp.: 12.7 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 1000 | As Found | 1000.00 | -1 | 2.02 | 24 | 0.0000288 |
| | As Left | 1000.00 | -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 105-3 (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

Erik Alfvin

 Metrologist

Reviewed by:
 Mark Nicollet

 Quality Manager



Receipt Date: July 29, 2016
Cal. Date: August 5, 2016
Report Date: August 4 & 5, 2016

Report No.: 336306
Serial No.: 11978368-1
Barcode: 202358

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 19
Technician ID: 07

Item(s) Submitted: 1000 Gallon Prover
Manufacturer: Determan Brownie, Inc.
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Excellent
Temperature: 26.2 °C
Pressure: 737.5 mmHg
Relative Humidity: 46.6 %
Standard H₂O Temp.: 17.9 °C
Artifact H₂O Temp.: 17.2 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 1000 | As Found | 1000.014 | 3 | 2.02 | 24 | 0.0000288 |
| | As Left | 1000.014 | 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

Mark Nicollet

Quality Manager

Reviewed by:

Erik Alfvin

Metrologist



Receipt Date: February 18, 2016
 Test Date: February 18/19 2016
 Report Date: February 19, 2016

State Test No.: 335562
 Serial No.: 0615785533-1
 Barcode: 202964

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
 14044 W. FREEWAY DRIVE
 COLUMBUS, MN 55038
 Contact: Ryan Hartin
 Phone: 651-842-2551
 PO Number: None
 SOP: 33
 Technician ID: 19

Item(s) Submitted: 1000 Gallon Prover
 Manufacturer: Westmor Fluid Solutions
 Material: Stainless Steel (304)
 Description: Dry Bottom
 Condition: New
 Temperature: 18.2 °C
 Pressure: 730.5 mmHg
 Relative Humidity: 35.2 %
 Standard H₂O Temp.: 9.0 °C
 Artifact H₂O Temp.: 7.4 °C

| Nominal Volume (gal) | | Tested Volume (gal) | Error (in ³) | Uncertainty (in ³) | Coefficient of Expansion(/°F) |
|-------------------------|----------|------------------------|--------------------------|--------------------------------|----------------------------------|
| 1000 | As Found | 1000.090 | 21 | 24 | 0.0000288 |
| | As Left | 1000.090 | 21 | 24 | |

Neck Calibration: Neck calibration performed, meets NIST Handbook 105-3 specifications.

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



Receipt Date: May 9, 2016
Cal. Date: May 10, 2016
Report Date: May 10, 2016

Report No.: 335929
Serial No.: 060810915-0101
Barcode: 200749

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 1000 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 20.3 °C
Pressure: 735.2 mmHg
Relative Humidity: 56.8 %
Standard H₂O Temp.: 12.1 °C
Artifact H₂O Temp.: 11.6 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 1000 | As Found | 1000.08 | 18 | 2.02 | 24 | 0.0000288 |
| | As Left | 1000.08 | 18 | | | |

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 105-3 (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

Erik Alfvin

Metrologist

Reviewed by:
Mark Nicollet

Quality Manager



Receipt Date: May 31, 2016
Cal. Date: June 1, 2016
Report Date: June 1, 2016

Report No.: 336012
Serial No.: 090610694-0201
Barcode: 200498

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: None
SOP: 19
Technician ID: 19

Item(s) Submitted: 1500 Gallon Prover
Manufacturer: Determan Brownie
Material: Stainless Steel (304)
Type: No Bottom Zero
Condition: Good
Temperature: 21.0 °C
Pressure: 734.4 mmHg
Relative Humidity: 49.6 %
Standard H₂O Temp.: 14.0 °C
Artifact H₂O Temp.: 13.5 °C

| Nominal | | Calibrated | | | | |
|--------------|----------|--------------|--------------------------|----------|----------------------|------------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (1/°F) |
| 1500 | As Found | 1500.03 | 7 | 2.02 | 35 | 0.0000288 |
| | As Left | 1500.03 | 7 | | | |

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 105-3 (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

Erik Alfvin

Metrologist

Reviewed by:

Mark Nicollet

Quality Manager



Receipt Date: June 14, 2016
Cal. Date: June 16, 2016
Report Date: June 16, 2016

Report No.: 336084
Serial No.: 24360
Barcode: 201188

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 34
Technician ID: 07

Item(s) Submitted: 25 Gallon LPG Prover
Manufacturer: Arrow
Material: Mild Steel
Description: Zero Bottom
Condition: Good
Temperature: 23.7 °C
Pressure: 736.5 mmHg
Relative Humidity: 56.8 %
Standard H₂O Temp. 15.8 °C
Artifact H₂O Temp.: 16.3 °C

| Nominal | | Calibrated | | | | |
|--------------|------------------------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 25 | As Found (at 100 psig) | 24.980 | -4.7 | 2.17 | 1.5 | 0.0000186 |
| | As Left (at 100 psig) | 24.980 | -4.7 | | | |

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.

Mark Nicollet

Quality Manager

Reviewed by:

Benjamin FitzPatrick

Deputy Director



Receipt Date: June 14, 2016
 Cal. Date: June 16, 2016
 Report Date: June 16, 2016

Report No.: 336084
 Serial No.: 24360
 Barcode: 201188

Pressure Correction Chart

WESTMOR FLUID SOLUTIONS LLC
 14044 W. FREEWAY DRIVE
 COLUMBUS, MN 55038
 Contact: Ryan Hartin
 Phone: 651-842-2551
 PO Number: NONE
 SOP: 34
 Technician ID: 7

Item(s) Submitted: 25 Gallon LPG Prover
 Manufacturer: Arrow
 Material: Mild Steel
 Description: Zero Bottom
 Condition: Good
 Temperature: 23.7 °C
 Pressure: 736.5 mmHg
 Relative Humidity: 56.8 %

| Pressure Gauge Reading (psig) | Corrected Volume (gal) |
|----------------------------------|---------------------------|
| 0 | 24.912 |
| 10 | 24.921 |
| 20 | 24.931 |
| 30 | 24.941 |
| 40 | 24.951 |
| 50 | 24.961 |
| 60 | 24.964 |
| 70 | 24.968 |
| 80 | 24.972 |
| 90 | 24.976 |
| 100 | 24.980 |
| 110 | 24.982 |
| 120 | 24.984 |
| 130 | 24.986 |
| 140 | 24.988 |
| 150 | 24.990 |
| 160 | 24.992 |
| 170 | 24.995 |
| 180 | 24.997 |
| 190 | 24.999 |
| 200 | 25.002 |

Mark Nicollet

Mark Nicollet
 Quality Manager



Receipt Date: June 14, 2016
 Cal. Date: June 15, 2016
 Report Date: June 15, 2016

Report No.: 336085
 Serial No.: 28816
 Barcode: 019785

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
 14044 W. FREEWAY DRIVE
 COLUMBUS, MN 55038
 Contact: Ryan Hartin
 Phone: 651-842-2551
 PO Number: NONE
 SOP: 34
 Technician ID: 07

Item(s) Submitted: 100 Gallon LPG Prover
 Manufacturer: ARROW
 Material: Mild Steel
 Description: Zero Bottom
 Condition: Good
 Temperature: 24.5 °C
 Pressure: 731.1 mmHg
 Relative Humidity: 58.9 %
 Standard H₂O Temp. 15.1 °C
 Artifact H₂O Temp.: 15.6 °C

| Nominal | | Calibrated | | | | |
|--------------|------------------------|--------------|--------------------------|----------|----------------------|-----------|
| Volume (gal) | | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found (at 100 psig) | 99.852 | -34.3 | 2.02 | 5.3 | 0.0000186 |
| | As Left* (at 100 psig) | 99.852 | -34.3 | | | |

* Adjustment mechanism was too corroded to adjust prover into tolerance.

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.

Mark Nicollet

Quality Manager

Reviewed by:

Benjamin FitzPatrick

Deputy Director



Receipt Date: June 14, 2016
 Cal. Date: June 15, 2016
 Report Date: June 15, 2016

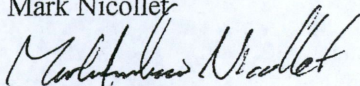
Report No.: 336085
 Serial No.: 28816
 Barcode: 019785

Pressure Correction Chart

WESTMOR FLUID SOLUTIONS LLC
 14044 W. FREEWAY DRIVE
 COLUMBUS, MN 55038
 Contact: Ryan Hartin
 Phone: 651-842-2551
 PO Number: NONE
 SOP: 34
 Technician ID: 7

Item(s) Submitted: 100 Gallon LPG Prover
 Manufacturer: ARROW
 Material: Mild Steel
 Description: Zero Bottom
 Condition: Good
 Temperature: 24.5 °C
 Pressure: 731.1 mmHg
 Relative Humidity: 58.9 %

| Pressure Gauge Reading (psig) | Corrected Volume (gal) |
|----------------------------------|---------------------------|
| 0 | 99.669 |
| 10 | 99.696 |
| 20 | 99.723 |
| 30 | 99.751 |
| 40 | 99.778 |
| 50 | 99.805 |
| 60 | 99.814 |
| 70 | 99.824 |
| 80 | 99.833 |
| 90 | 99.842 |
| 100 | 99.852 |
| 110 | 99.861 |
| 120 | 99.870 |
| 130 | 99.880 |
| 140 | 99.889 |
| 150 | 99.898 |
| 160 | 99.907 |
| 170 | 99.915 |
| 180 | 99.924 |
| 190 | 99.933 |
| 200 | 99.941 |

Mark Nicollet

 Quality Manager



Receipt Date: November 17, 2016
Cal. Date: November 17, 2016
Report Date: November 17, 2016

Report No.: 336796
Serial No.: 2063
Barcode: 201332

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 21
Technician ID: 07

Item(s) Submitted: 100 Gallon LPG Prover
Manufacturer: Gas Service & Supply
Material: Mild Steel
Description: Zero Bottom
Condition: Good*
Temperature: 19.6 °C
Pressure: 727.5 mmHg
Relative Humidity: 48.3 %
Standard H₂O Temp. 15.2 °C
Artifact H₂O Temp.: 15.4 °C

| Nominal | Calibrated | | | | |
|--------------|------------------------|--------------------------|----------|----------------------|---------------|
| Volume (gal) | Volume (gal) | Error (in ³) | <i>k</i> | U (in ³) | CCE (°F) |
| 100 | As Found (at 100 psig) | 100.047 | 10.8 | 2.02 | 5.3 0.0000186 |
| | As Left (at 100 psig) | 100.047 | 10.8 | | |

* Levels are not accurate and could not be adjusted. Level to the prover neck.

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

Mark Nicollet

Quality Manager

Reviewed by:

Erik Alfvin

Metrologist



MICHIGAN DEPARTMENT OF AGRICULTURE
& RURAL DEVELOPMENT

LABORATORY DIVISION

NVLAP[®]

NVLAP Lab Code 200408-0

940 Venture Lane
Williamston, Michigan 48895
517/655-8202
517/655-8303 (Fax)

This report shall not be reproduced, except in full, without the written approval of the Laboratory Division.

DEC -5 2016

ND Public Service

Commission

Calibration Report

TEST NO: MI-11-16-12950

TEST DATE: 11/2/2016

Page 1 of 2

CALIBRATED FOR:

Westmor Fluid Solutions
14044 West Freeway Drive
Columbus, MN 55038

CALIBRATED BY:

Michigan Dept. of Agriculture
E.C. Heffron Metrology Laboratory
940 Venture Lane
Williamston, MI 48895

CONTACT: Scott Fish

PHONE: (763) 571-8110

FAX: (763) 502-9862

S/N: 000045

MODEL NO: H44025
(LR)IA251AAWWE

MFG: Flow MD

TEST ITEM: One 20-Gallon Small Volume Prover.

DATE OF ARRIVAL: 11/1/2016

TEST ITEM CONDITION ON ARRIVAL: Good

TEST METHOD: NISTIR 7383 SOP 26, For Gravimetric Calibration of Dynamic Volume Systems
Used as Standards

This prover has been compared to the Standards of the State of Michigan which are traceable to the National Institute of Standards and Technology. NIST test numbers are on file.

The prover was calibrated to determine the volume of water delivered at 60 °F from one run of the piston between two optical switches.

The volume for the item in this report is as found or as left at the time of calibration. The result applies only to the item calibrated.

The process used for calibrating this item meets the requirements of ANSI/NCSL Z540-1.

The prover was not adjusted.

Calibration processes were monitored and found to be in control. The expanded uncertainty presented in this report is consistent with the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008). The combined standard uncertainty is multiplied by a coverage factor of $k = 2$ to report the expanded uncertainty, which defines an interval with a confidence level of approximately 95 %.

The environmental conditions in the laboratory are maintained at:
Temperature: 18 °C to 27 °C; Maximum changes: ± 5 °C/12 hr and ± 3 °C/hr
Relative Humidity: 40 % to 60% ± 20 %/4 hr

CALIBRATED FOR:
 Westmor Fluid Solutions
 14044 West Freeway Drive
 Columbus, MN 55038



TEST NO: MI-11-16-12950

S/N: 000045

TEST DATE: 11/2/2016

This report shall not be used to claim endorsement by NIST, WMD, NVLAP, or any agency of the U.S. Government or the State of Michigan.

Prover Constants:

| | |
|---------------------------------------|--|
| Area Thermal Expansion Coef. (Ga) | $1.92 \times 10^{-5} / ^\circ\text{F}$ |
| Detector Thermal Expansion Coef. (G1) | $9.60 \times 10^{-6} / ^\circ\text{F}$ |
| Modulus of Elasticity (E) | 2.8×10^7 psi |
| Inside Diameter (ID) | 17 in |
| Wall Thickness (WT) | 0.582 in |

The following volume was determined:

| NOMINAL VALUE | VOLUME | UNCERTAINTY \pm (k=2) |
|---------------|-------------|-------------------------|
| 20 gal | 20.0112 gal | 0.0036 gal |
| 5 gal | 4.98786 gal | 0.00065 gal |

Signed:

Nicholas A. Santos

11/4/2016

[Signature]

11/4/2016

Calibrating Metrologist

Date Approved Signatory

Date

Receipt Date: December 8, 2016
Cal. Date: December 20, 2016
Report Date: December 20, 2016

Report No.: 336932
Set Serial No.: None
Barcode: 201189

Calibration Certificate

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 651-842-2551
PO Number: NONE
SOP: 8
Technician ID: 11

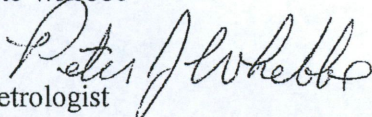
Item(s) Submitted: Cast Hand Weights
Manufacturer: Rice Lake
Weight Type: II
Equipment ID: None
Condition: Good
Temperature: 19.4 °C
Pressure: 737.1 mmHg
Relative Humidity: 50.1 %



| Nominal Value | Serial No. | CM Correction (mg) | | NIST HB105-1 Class | | k | U (mg) |
|---------------|------------|--------------------|---------|--------------------|---------|------|--------|
| | | As Found | As Left | As Found | As Left | | |
| 25 lb | | 419 | 419 | F | F | 2.01 | 67 |
| 25 lb | | 809 | 809 | F | F | 2.01 | 67 |
| 25 lb | | -41 | -41 | F | F | 2.01 | 67 |
| 25 lb | | 89 | 89 | F | F | 2.01 | 67 |
| 25 lb | | 409 | 409 | F | F | 2.01 | 67 |
| 25 lb | | 429 | 429 | F | F | 2.01 | 67 |
| 25 lb | | 109 | 109 | F | F | 2.01 | 67 |
| 25 lb | | -81 | -81 | F | F | 2.01 | 67 |
| 25 lb | | -91 | -91 | F | F | 2.01 | 67 |
| 25 lb | | 149 | 149 | F | F | 2.01 | 67 |
| 25 lb | | 399 | 399 | F | F | 2.01 | 67 |
| 25 lb | | 489 | 489 | F | F | 2.01 | 67 |
| 25 lb | | -21 | -21 | F | F | 2.01 | 67 |
| 25 lb | | -491 | -491 | F | F | 2.01 | 67 |
| 25 lb | | 79 | 79 | F | F | 2.01 | 67 |
| 25 lb | | -321 | -321 | F | F | 2.01 | 67 |
| 25 lb | | -351 | -351 | F | F | 2.01 | 67 |
| 25 lb | | -471 | -471 | F | F | 2.01 | 67 |
| 25 lb | | -341 | -341 | F | F | 2.01 | 67 |
| 25 lb | | -121 | -121 | F | F | 2.01 | 67 |

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 at 20 °C. The items listed above have been calibrated using 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), including coverage factors (k) calculated at the approximate 95.45 % confidence level. Results apply to items identified in this report only.

Pete Whebbe


Metrologist

Reviewed by:

Erik Alfvin


Metrologist

Bauske, Shelly A.

From: Ryan Hartin <ryan.hartin@westmor-ind.com>
Sent: Thursday, February 16, 2017 11:40 AM
To: Bauske, Shelly A.
Subject: Re: One More Question
Attachments: 20170216113732188.pdf

CAUTION: This email originated from an outside source. Do not click links or open attachments unless you know they are safe.

Hi Shelly,
Attached is the new cert for the weights.

You can take the 100 and 500 off your books, those are our test stand provers that we use in-house and are not used for placing in service meters.

**Thank you,
Ryan Hartin**

Westmor Industries, LLC
14044 W Freeway Drive
Columbus, MN 55038
United States

D: (651) 842-2551
P: (763) 571-8110
E: ryan.hartin@westmor-ind.com



On Thu, Feb 16, 2017 at 11:23 AM, Bauske, Shelly A. <sbauske@nd.gov> wrote:

Hi Ryan

I'm reviewing the calibration reports you submitted with your application. The following standards are overdue for certification:

100 Gallon Prover; S/N 10903211-8; Last Test Date: 5/6/2014

500 Gallon Prover; S/N 100110260-0101; Last Test Date: 5/21/2014

25 lb Cast Hand Weights; Last Test Date: 6/16/2015

Do you still have these standards? If you do, please submit updated calibration reports.

Thank you!

Shelly Bauske

Public Service Commission

600 E Boulevard Ave Dept 408

Bismarck ND 58505-0480

[701-328-4070](tel:701-328-4070)

[701-328-2410](tel:701-328-2410) (fax)

sbauske@nd.gov

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Receipt Date: May 5, 2014
Test Date: May 6, 2014
Report Date: May 6, 2014

State Test No.: 332500
Serial No.: 10903211-8
Bar Code: 017845

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
7220 CENTRAL AVE NE
MINNEAPOLIS, MN 55432
Contact: Ryan Hartin
Phone: 763-502-9613
PO Number: None
SOP: 33
Technician ID: 08

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Brownie
Material: ss
Description: Dry Bottom
Condition: Good
Temperature: 19.6°C
Pressure: 735.1 mmHg
Relative Humidity: 41. %

| Nominal Volume | | Volume (gallons) | Error (in ³) | Uncertainty (in ³) | Coefficient of Expansion(°F) |
|----------------|----------|------------------|--------------------------|--------------------------------|------------------------------|
| 100 gal | As Found | 99.996 | -0.8 | 3.0 | 0.0000265 |
| | As Left | 99.996 | -0.8 | 3.0 | |

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

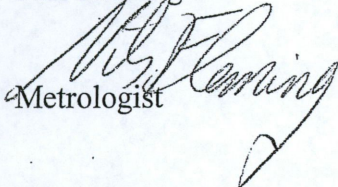
This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of flow and at a reference temperature of 60°F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota. 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 NIST Technical Note 1297. The confidence interval is 95%.

Results apply to item identified in this report only.

Nils Fleming

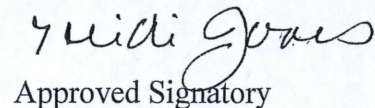


Metrologist

Not Current

Reviewed by:

Heidi Jones



Approved Signatory



Receipt Date: May 19, 2014
Test Date: May 21, 2014
Report Date: May 21, 2014

State Test No.: 332553
Serial No.: 100110260-0101
Bar Code: 200071

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
7220 CENTRAL AVE NE
MINNEAPOLIS, MN 55432
Contact: Ryan Hartin
Phone: 763-502-9613
PO Number: None
SOP: 33
Technician ID: 08

Item(s) Submitted: 500 Gallon Prover
Manufacturer: Determan Brownie Inc.
Material: ss
Description: Dry Bottom
Condition: Good
Temperature: 21.2°C
Pressure: 737.4 mmHg
Relative Humidity: 53. %

| Nominal Volume | | Volume (gallons) | Error (in ³) | Uncertainty (in ³) | Coefficient of Expansion(/°F) |
|----------------|----------|------------------|--------------------------|--------------------------------|-------------------------------|
| 500 gal | As Found | 500.045 | 10 | 14 | 0.0000265 |
| | As Left | 500.002 | 0 | 14 | |

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

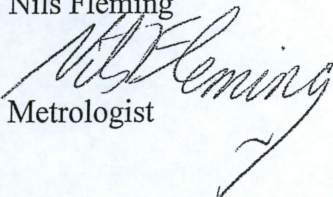
This prover has been calibrated as a "to contain after wet down" vessel with a drain time of 30 seconds after cessation of flow and at a reference temperature of 60°F.

The prover listed above has been compared by volumetric transfer methods to the standards of the State of Minnesota. 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 NIST Technical Note 1297. The confidence interval is 95%.

Results apply to item identified in this report only.

Nils Fleming

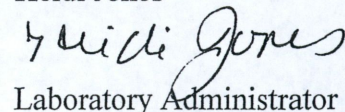


Metrologist

Not Current

Reviewed by:

Heidi Jones



Laboratory Administrator

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



2016 to 2017

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

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