APPLICATION FOR REGISTRATION AS A REGISTERED SERVICE COMPANY

Public Service Commission
SFN 51277 (2/2014)

RECEIVED
JUL 2 2015
ND Public Service Commission

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

Name of Company	Email Address	Application Date	
T&T Measurements Inc.	travist@ruggedwest	6-30-15	
Mailing Address	**City**	**State**	**Zip Code**
10671 43rd St. NW	Newtown	ND	58763
Telephone Number	**Cell Phone Number**	**Fax Number**	
701-675-2373	701-421-1352	701-675-2372	

Select below all device types your company will certify:

Scales (include maximum capacity, if applicable)	**Liquid** (include maximum flow rate, if applicable)
☐ 1. Rail	☒ 1. Retail Fuel (less than 20 gal. per minute)
☐ 2. Truck	☒ 2. High Flow Retail Fuel (20 gal. per minute or greater)
☐ 3. Livestock	☒ 3. Vehicle Tank: Max. Flow Rate: 500gpm
☐ 4. Hopper: Max. Capacity: _____	☒ 4. Stationary Bulk (fuel or oil): Max. Flow Rate: _____
☐ 5. Belt	☒ 5. LPG
☐ 6. Over 30 lbs.: Max. Capacity: _____	☒ 6. Stationary LPG
☐ 7. 30 lbs. or less	☒ 7. Fertilizer: Max. Flow Rate: _____
☐ 8. Class II **(indicate on your calibration report which weight kit is Class II certified)**	☒ 8. Chemical
☐ 9. Other: Please List:	☐ 9. Anhydrous
	☐ 10. Loading Rack
	☐ 11. Other: Please List:

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

Permit No.	Employee	Device Types Registered to Certify (list using device type numbers from above)
e.g. 1001	*e.g. John Doe*	*e.g. Scales – 2, 3, 6, 8; e.g. Liquid – 1, 2, 6*
1607	TRAVIS Thompson	Liquid 1,2,3,4,5,6,7,8
1712	DEAEK Thompson	Liquid 1,2,3,4,5,6,7,8

Continued on Page 2

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

6 - 50lb. weights	
5 - 5gal. Refined CANS	
2 - 100 gal: Refined CANS	
2 - 100 gal LPG CANS	
1 - 25 gal. LPG CAN	
1 - 500 gal. Refined CAN	

Additional Application Items (initial where appropriate):

Standardized Test Report	✓ Copy enclosed ___ No change in report filed previously
Tested and Approved Sticker	✓ Copy enclosed ___ No change in sticker filed previously
Photocopy of Crimped Lead Wire Seal	___ Copy enclosed ✓ 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 _____, 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.

Craig Thompson
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

WDA Weights and Measures Metrology Laboratory

Report Number: 15048

Calibration Date: June 2, 2015

Artifact(s) Description

Test Item:	100 gal LPG Prover
Serial Number:	2075
Material:	Steel, Pressure Vessel, Low Carbon
Condition:	Good

Date Received:	June 1, 2015
Manufacture:	Gas Service and Supply
Material CCE:	0.000016 / °F
Specification:	NIST HB 105-4

Calibration Information

Job Order #:	N/A
Metrologist:	Robert Weidler
Procedure:	NISTIR 7383, SOP 21

Temperature:	21.2 °C
Humidity:	54.6 % RH
Water Temperature:	21.8 °C

Laboratory Reference Standards Used

Description	Serial Number	Cert. Number	Cal Date	Cal Due
100 gallon Slicker Plate	11-53192	NC1203-117-GV	3/23/2012	3/23/2022

Traceability Statement

The artifact(s) described in this report have been compared to the Standards of the State of Wyoming. The Standards of the State of Wyoming are traceable to the National Institute of Standards and Technology (NIST) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. The International System of Units (SI) for volume is the cubic meter (m^3) (see Conversion Factors on page 3). The report number for this report is the only unique report number to be used in referencing measurement traceability for the artifact(s) described in this report.

Uncertainty Statement

The combined standard uncertainty includes uncertainties reported for the standard, uncertainties associated with the measurement process, uncertainties for any observed deviations from reference values which are less than surveillance limits, and other uncertainties associated with the particular artifact (i.e., material cubical coefficient of expansion, reading meniscus, etc.). The combined standard uncertainty is multiplied by k, a coverage factor of 2, to give the expanded uncertainty (which defines an interval with an approximate 95 percent level of confidence). The expanded uncertainty presented in this report is consistent with NIST Technical Note 1297.

WDA Weights and Measures Metrology Laboratory

Report Number: 15048

Calibration Date: June 2, 2015

Calibration Results

Nominal Volume (at zero mark on gauge)	Prover Volume As Found @ 60 °F and 100 psig (gal)	Prover Volume As Left @ 60 °F and 100 psig (gal)	NIST HB 105-4 Specification Tolerance ± (gal)	Uncertainty k=2 ± (gal)
100 gal	99.995	99.995	0.200	0.023

Table 1 - LPG Prover Corrections @ 60 °F

psig	Prover Scale Reading (gal)	Pressure Correction (Pcorr) (gal)[2]	Prover Error (gal)	Prover Volume (gal)
0	0.125	-0.074196283	-0.078928577	99.92107142
10	0.11	-0.061776655	-0.066508948	99.93349105
20	0.095	-0.049357027	-0.05408932	99.94591068
30	0.08	-0.036937398	-0.041669692	99.95833031
40	0.065	-0.02451777	-0.029250063	99.97074994
50	0.05	-0.012098142	-0.016830435	99.98316957
60	0.045	-0.009678513	-0.014410807	99.98558919
70	0.04	-0.007258885	-0.011991178	99.98800882
80	0.035	-0.004839257	-0.00957155	99.99042845
90	0.03	-0.002419628	-0.007151922	99.99284808
100	0.025	0	-0.004732293	99.99526771
110	0.015	0.007419628	0.002687335	100.0026873
120	0.005	0.014839257	0.010106963	100.010107
130	-0.005	0.022258885	0.017526592	100.0175266
140	-0.015	0.029678513	0.02494622	100.0249462
150	-0.025	0.037098142	0.032365848	100.0323658
160	-0.035	0.04451777	0.039785477	100.0397855
170	-0.045	0.051937398	0.047205105	100.0472051
180	-0.055	0.059357027	0.054624733	100.0546247
190	-0.065	0.066776655	0.062044362	100.0620444
200	-0.075	0.074196283	0.06946399	100.069464

[1]Gauge scale was adjusted for nominal volume at 100 psig.

[2]Gauge scale could not be adjusted or did not need to be adjusted.

Department of Labor & Industry ♦ Weights and Measures Program
Metrology Laboratory
2801 North Cooke Street ♦ Helena ♦ Montana ♦ 59601
Office (406) 449-2582 ♦ Fax (406) 841-2060 ♦ e-mail: kreimund@mt.gov

Report of Calibration #: 2015-V037

Calibration Date: June 23, 2015 *Calibration Due Date: June 23, 2017*

Artifact

Test Item.....: 25 Gallon LPG Prover
Volume.....: 25 gal
Serial Number: 2105
Date Received: June 22, 2015

Manufacture.: Gas Services Supply
Material.....: Steel, Pressure Vessel, Low Carbon
Specification.: NIST HB 105-4

Submitted By

Travis Thompson
T & T Measurements
10621 43rd Street Northwest
Newtown, ND 58763

Purchase Order #:
Point of Contact..: Travis Thompson
Phone #.....: (701) 675-2373

Artifact Calibration Results

Nominal Volume (at zero mark on gauge)	Prover Volume As Found @ 60 °F and 100 psig (gal)	Prover Volume As Left @ 60 °F and 100 psig (gal)	Specification Tolerance ± (gal)	Uncertainty k=2 ± (gal)
25 gal	**25.004**	**25.004**	0.013	0.031

Table 1 - LPG Prover Corrections @ 60 °F

psig	Prover Scale Reading (gal)	Pressure Correction (Pcorr) (gal)**	Prover Error (gal)	Prover Volume (gal)
0	0.320	-0.323	-0.319	24.681
10	0.268	-0.272	-0.268	24.732
20	0.216	-0.220	-0.217	24.783
30	0.164	-0.169	-0.165	24.835
40	0.112	-0.118	-0.114	24.886
50	0.060	-0.067	-0.063	24.937
60	0.046	-0.053	-0.050	24.950
70	0.032	-0.040	-0.036	24.964
80	0.018	-0.027	-0.023	24.977
90	0.004	-0.013	-0.010	24.990
100	-0.010	0.000	0.004	25.004

Department of Labor & Industry ♦ Weights and Measures Program
Metrology Laboratory
2801 North Cooke Street ♦ Helena ♦ Montana ♦ 59601
Office (406) 449-2582 ♦ Fax (406) 841-2060 ♦ e-mail: kreimund@mt.gov

Report of Calibration #: 2015-V036

Calibration Date: June 23, 2015 *Calibration Due Date: June 23, 2017*

Artifact

Test Item.....: LPG testing pressure vessel
Volume.....: 100 gal
Serial Number: 2096
Date Received: June 22, 2015

Manufacture.: Gas Services Supply
Material.....: Steel, Pressure Vessel, Low Carbon
Specification.: NIST HB 105-4

Submitted By

Travis Thompson
T & T Measurements
10621 43rd Street Northwest
Newtown, ND 58763

Purchase Order #:
Point of Contact..: Travis Thompson
Phone #.....: (701) 675-2373

Artifact Calibration Results

Nominal Volume (at zero mark on gauge)	Prover Volume As Found @ 60 °F and 100 psig (gal)	Prover Volume As Left @ 60 °F and 100 psig (gal)	Specification Tolerance ± (gal)	Uncertainty k=2 ± (gal)
100 gal	**100.018**	**100.018**	0.050	0.037

Table 1 - LPG Prover Corrections @ 60 °F

psig	Prover Scale Reading (gal)	Pressure Correction (Pcorr) (gal)**	Prover Error (gal)	Prover Volume (gal)
0	0.050	-0.102	-0.084	99.916
10	0.042	-0.097	-0.079	99.921
20	0.034	-0.092	-0.074	99.926
30	0.026	-0.086	-0.068	99.932
40	0.018	-0.081	-0.063	99.937
50	0.010	-0.076	-0.058	99.942
60	-0.008	-0.061	-0.043	99.957
70	-0.026	-0.046	-0.028	99.972
80	-0.044	-0.030	-0.012	99.988
90	-0.062	-0.015	0.003	100.003
100	-0.080	0.000	0.018	100.018

Certificate of Volume Calibration

Montana Department of Labor & Industry Metrology Laboratory
2801 N Cooke St. Helena, Montana 59601
(406)449-2582 FAX (406)443-8163

Company Name & Address:	**Date of Test:**	**Test Number:**
Travis Thompson	6/23/2015	2015-V035
T & T Measurements		
10621 43rd Street Northwest	Prover #: 34768-2	
Newtown, ND 58763	MT Cal Report #: 060405001	

All results contained within this report only relate to the item(s) listed in this report. This calibration report must not be used to claim product endorsement by the State of Montana or any other government agency.

Date these weights were received: 6/22/2015

Description and condition of artifacts received: Item was in good shape and clean.

Environmental Conditions at Time of Test:

Temperature °C	Relative Humidity %
23.89	26.8

Final Volume at 60 °F: Material: ***Stainless Steel*** CCE of Test Measure: ***0.000 0186***

Nominal	Serial No.	As Found (gallons)	As Left (gallons)	Uncertainty ± (gallons)	NIST 105-3 Tolerance ± (gallons)	*k factor*
100 gallon	12872105-2	99.975	99.975	0.010	0.05	2.00

Standards and Procedures used for testing:

The Standards used for this comparison are continuously monitored by a measurement control program for ensuring continued accuracy and traceability within the level of uncertainty reported. These standards were calibrated by a nationally accredited laboratory on 10/2009 (Reports on File) and are traceable to the SI. The test number listed above is traceable to National Standards through an unbroken chain of comparison each having stated uncertainties. This information is on file and available upon request.

Procedure Used: SOP-19 (To Deliver)

All procedures used in this laboratory are in accordance to National Institute of Standards and Technology Intermediate Report (NISTIR) 6969, issue February 2012, and the *Quality Assurance of Metrological Measurements*.

Traceability Statement:

The equipment in this report has been compared to the standards of the State of Montana. The States equipment complies with the specifications and tolerances listed in NIST 105-3. The standards of the State of Montana are traceable to the SI through the National Institute of Standards and Technology.

Uncertainty Statement:

The expanded uncertainty presented in this report is consistent with the 1993 *ISO Guide to Expression of Uncertainty in Measurement* and follows *NISTIR 6969,* issue February 2012, SOP-29. The reported uncertainty is calculated by combining the uncertainty of the standard used, with the uncertainty of the measurement process in a root sum square formula using a calculated *k* factor, for a confidence level of 95.45%.

State Metrologist: ***Dave Fraser***

David Fraser

Email: dafraser@mt.gov

Certificate of Volume Calibration

Montana Department of Labor & Industry Metrology Laboratory
2801 N Cooke St. Helena, Montana 59601
(406)449-2582 FAX (406)443-8163

Company Name & Address:

Travis Thompson
T & T Measurements
10621 43rd Street Northwest
Newtown, ND 58763

Date of Test: 6/24/2015

Test Number: 2015-V034

Slicker Plate: 179363
MT Cal Report #: 060405001

All results contained within this report only relate to the item(s) listed in this report. This calibration report must not be used to claim product endorsement by the State of Montana or any other government agency.

Date these weights were received: 6/22/2015

Description and condition of artifacts received: Items were in good condition.

Environmental Conditions at Time of Test:

Temperature °C	Relative Humidity %
23	28

Final Volume at 60 °F: Material: ***Stainless Steel*** CCE of Test Measure: ***0.000 0265***

Nominal	Serial No.	As Found (gallons)	As Left (gallons)	Uncertainty ± (gallons)	NIST 105-3 Tolerance ± (gallons)	*k* factor
5 gal	1427	5.0048	5.0004	0.0013	0.0025	2.00
5 gal	1428	5.0000	5.0000	0.0013	0.0025	2.00
5 gal	1429	5.0043	5.0000	0.0013	0.0025	2.00

Standards and Procedures used for testing:

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State Metrologist: ***Dave Fraser***

David Fraser

Email: dafraser@mt.gov

Wyoming Department of Agriculture
Weights and Measures Laboratory
6607 Campstool Road
Cheyenne, WY 82002
(307)777-7556

Wyoming Agriculture

Calibration Certificate

For

One-500 gallon Stainless Steel Prover,
One-100 gallon Carbon Steel Provers,
and
Two-5 gallon Test Measures

Manufacturer: Listed on Following Table
Serial No.: Listed on Following Table

Submitted by
T&T Measurements Inc.
10671 23rd St Northwest
Newtown, ND 58763
(701)421-1352

Manufacturer	Model Number	Serial Number	Nominal (gal)	Prover Volume (gal)	Prover Error (gal)	Expanded Uncertainty (gal)
Gas Service and Supply	GSB500	1430	500	499.993*	-0.007	0.041
Gas Service and Supply	100USG	12872105-2	100	100.0124*	0.0124	0.0053
Ellisco	FS282-5D	16970	5	4.9998**	-0.0002	0.0012
Seraphin	E3	11-88455	5	4.9999**	-0.0001	0.0012
The data in this table applies only to those items specifically listed on this report.						

** Prover Volume is Volume to Deliver after the cessation of flow and 30 second drain time at a reference temperature of 60° F.*
***Prover Volume is Volume to Deliver after a 30 second pour and 10 second drain time at a reference temperature of 60° F.*

Wyoming Department of Agriculture
Weights and Measures Laboratory
6607 Campstool Rd
Cheyenne, WY 82002
(307)777-7556

Wyoming Agriculture

Calibration Certificate
For

Six – 50 lb Class F Test Weights

Manufacturer: Various
Serial No.: Listed on Following Table

Submitted by
T&T Measurements Inc.
10671 23rd St Northwest
Newtown, ND 58763
(701)421-1352

Serial Number	Nominal (lb)	Conventional Mass Correction (mg)		Tolerance (g)	Expanded Uncertainty (g)
		As Found	As Left		
1	50	-0.56	-0.56	2.3	0.20
2	50	-0.44	-0.44	2.3	0.20
3	50	-0.66	-0.66	2.3	0.20
4	50	-0.29	-0.29	2.3	0.20
5	50	-0.75	-0.75	2.3	0.20
6	50	-0.99	-0.99	2.3	0.20

The data in this table applies only to those items specifically listed on this report.