



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

State Test No.: 335087
Serial No.: 051271555-0103
Barcode: 202102

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 763-502-9613
PO Number: None
SOP: 33
Technician ID: 19

Item(s) Submitted: 100 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Description: Dry Bottom
Condition: Excellent
Temperature: 20.1 °C
Pressure: 715.6 mmHg
Relative Humidity: 56.3 %
Standard H₂O Temp.: 15.1 °C
Artifact H₂O Temp.: 15.1 °C

Nominal Volume (gal)		Tested		Uncertainty (in ³)	Coefficient of Expansion(/°F)
		Volume (gal)	Error (in ³)		
100	As Found	100.003	0.8	3.0	0.0000288
	As Left	100.003	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 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: November 16, 2015
Test Date: November 17, 2015
Report Date: November 17, 2015

State Test No.: 335088
Serial No.: 031271251-0101
Barcode: 202101

Calibration Report

WESTMOR FLUID SOLUTIONS LLC
14044 W. FREEWAY DRIVE
COLUMBUS, MN 55038
Contact: Ryan Hartin
Phone: 763-502-9613
PO Number: None
SOP: 33
Technician ID: 19

Item(s) Submitted: 500 Gallon Prover
Manufacturer: Determan Brownie Inc
Material: Stainless Steel (304)
Description: Dry Bottom
Condition: Excellent
Temperature: 18.6 °C
Pressure: 726.2 mmHg
Relative Humidity: 56.4 %
Standard H₂O Temp.: 14.0 °C
Artifact H₂O Temp.: 13.8 °C

Nominal Volume (gal)		Tested		Uncertainty (in ³)	Coefficient of Expansion(/°F)
		Volume (gal)	Error (in ³)		
500	As Found	499.961	-9	14	0.0000288
	As Left	499.961	-9	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 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