Calibration Da			Nebraska Standards Laboratory 3721 West Cuming St. Lincoln, NE 68524 (402) 471-2087						P.O. Box 949 Lincoln, NE 68509-49 (402) 471-23
	ate:	9/25/2017			te of Calibra		Certificate	Number:	www.nda.nebraska.gov 2017-027-1
					ume Transfe	<u> </u>			
-			Items Su	bmitted:		Submitted By:			
	Quantity	Nominal Volume	Manu	ufacturer	Туре		1118 Eldorado D Omaha NE, 681		
	2	5 gal	Sei	raphin	Test Measure	POC:	Brian Heskin		
-							402-496-0843		
-				Te	est Results				-
	Nominal Volume	Serial Number	Material	Cubical Coefficient of Expansion (/°F)	As Found Volume Delivered @ 60 °F	As left Volume Delivered @ 60 °F	Uncertainty (U)	(<i>k</i>)	
	5 gal	40702A	SS	0.0000265	4.99774 gal	5.00011 gal	0.00061 gal	2.03	
	5 gal	40702B	SS	0.0000265	5.0012 gal	5.0012 gal	0.00061 gal	2.03	
	Volume delive gal = 231 in ^a gal = 3.785 ·) second pour	and 10 second	drain for test measu	res. For provers and	a 30 second drain ti	me would apply.	
Traceability Statement: The artifact(s) described International System of L ensuring continued accu calibration number to be	Jnits (SI) thr racy and me	ough the National asurement traceal	Institute of S pility within th	tandards and T le level of unce	Fechnology (NIST) rtainty reported by	and are part of a of this laboratory. The	comprehensive me	asurement assu	urance program for
Uncertainty Statement:			<i>.</i>	,			·		,
The combined standard deviations from reference multiplied by a coverage this report is consistent v Type A evaluation, or the	e values whi factor (<i>k</i>), to vith the Guid	ich are less than su o give the expande le to the Expression	urveillance lir d uncertainty n of Uncertai	nits and the sta y, which defines nty in Measure	andard uncertainty s an interval with a ment (2008, revise	for any uncorrecte 95.45 percent leve ed 2012). Some co	d errors. The comb el of confidence. Th omponents of the c	bined standard un	uncertainty is certainty presented i

The artifact(s) listed above have been found and/or left within the maximum permissible error for the specification stated above, except as noted. An artifact is considered incompliance when the correction plus the measurement uncertainty is equal to or less than the maximum permissible error.

Condition of Item(s) Submitted for Calibration:

Minor wear

Treatment of Item(s) before Calibration:

Item(s) were tested as found

Environmental conditions at time of calibration:

Temp °C	22.9	Humidity %	53.2							
Pressure mmHg	763.27									
Date Submitted:	9/22/2017									
gove F 3										
Joel P. Lavicky, Metrologist										

Laboratory Reference Standard Used: 5 gal SP NE 1586

Procedure Used: NISTIR 7383 (2017), SOP 19

Water temperature at time of calibration:

67.97 °F

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9/25/2017

Date:

NEBRASKA Nebraska Standards Laboratory Good Life. Great Roots. 3721 West Cuming St. DEPARTMENT OF AGRICULTURE Lincoln, NE 68524 (402) 471-2087 Calibration Date: 9/26/2017 Certificate of Calibration Certificate Number:							Director of Agriculture Greg Ibach P.O. Box 94947 Lincoln, NE 68509-4947 (402) 471-2341 www.nda.nebraska.gov		
Calibration	Date:	9/26/2017					Certificate	e Number:	2017-027-2
				Of VO	lume Transfe	r			
			Items Sul	omitted:		Submitted By:	FSCP Area 90		
	Quantity	Nominal Volume	Ma	nufacturer	Туре		1118 Eldorado Di Omaha NE, 6815		
	3	5 gal	S	eraphin	"Special" J Prover		Brian Heskin		
							402-496-0843		
				Т	est Results				1
	Nominal Volume	Serial Number	Material	Cubical Coefficient of Expansion (/°F)	As Found Volume Delivered @ 60 °F	As left Volume Delivered @ 60 °F	Uncertainty (U)	(<i>k</i>)	
	5 gal	05-40547-04	SS	0.0000265	4.99945 gal	4.99945 gal	0.00052 gal	2.03	
	5 gal	05-40547-05	SS	0.0000265	4.99902 gal	4.99902 gal	0.00052 gal	2.03	
	5 gal	05-40547-06	SS	0.0000265	4.99925 gal	4.99925 gal	0.00052 gal	2.03	
			The data in	this report only ap	oplies to those items s	pecifically listed on th	is report.		
	Volume deliv	rered at 60°F after a	30 second p	oour and 10 secor	nd drain for test meas	ures. For provers and	a 30 second drain	time would apply.	
Conversion Factors:	1 gal = 231 in 1 gal = 3.785								
Traceability Stateme	<u>nt:</u>								

The artifact(s) described in this report have been compared to the Standards of the State of Nebraska. The Standards of the State of Nebraska are traceable to the International System of Units (SI) through 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 calibration number for this report is the only unique calibration 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 the standard uncertainty for any uncorrected errors. The combined standard uncertainty is multiplied by a coverage factor (k), to give the expanded uncertainty, which defines an interval with a 95.45 percent level of confidence. The expanded uncertainty presented in this report is consistent with the Guide to the Expression of Uncertainty in Measurement (2008, revised 2012). Some components of the calibration can be evaluated through a Type A evaluation, or the method of evaluation of uncertainty by the statistical analysis (standard deviation) from the observations taken.

Pertinent Information:

The artifact(s) listed above have been found and/or left within the maximum permissible error for the specification stated above, except as noted. An artifact is considered incompliance when the correction plus the measurement uncertainty is equal to or less than the maximum permissible error.

Condition of Item(s) Submitted for Calibration:

Minor wear

Treatment of Item(s) before Calibration:

Item(s) were tested as found

Environmental conditions at time of calibration:

	Temp °C	21.1	Humidity %	55.4
	Pressure mmHg	763.27		
Ī	Date Submitted:	9/22/2017		
_	gone	R3		
•	Joel P. Lavicky, Metr	ologist		

Laboratory Reference Standard Used; 5 gal SP NE 1586

Procedure Used: NISTIR 7383 (2017), SOP 19

Water temperature at time of calibration:

68.08 °F

9/26/2017

Date:

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NEBRASKA		Dire	ctor of Agriculture									
NLDRAJAA	Nebraska Standards Labo	pratory	Greg Ibach									
	3721 West Cuming St.		P.O. Box 94947									
Good Life. Great Roots.	Lincoln, NE 68524	Linco	oln, NE 68509-4947									
	(402)-471-2087		(402) 471-2341									
DEPARTMENT OF AGRICULTURE		www.	nda.nebraska.gov									
C	Calibration Certificate of Mass											
Calibration Date: October 2,	2017	Certificate Number: 2	017-027-3									
Submitted By: FSCP Area 90	D	oint of Contact: Brian Heskin										
1118 Eldorado I		Ph. 402-672-202	76									
Omaha, NE		email: brian.heskin@nel	-									
		PO Number:	i concigo i									
		<u> </u>										
Test Item(s): 1-4 kg, 2-15 lb &	20-25 lb weights Artifact(s) Description:	Date Received: So	eptember 22, 2017									
Serial Number(s): See Next Page		ID / Asset Number:	N/A									
Manufacture: Tromner / Rice L	ake	Class Specification:	NIST Class F									
Condition: Good (some wear)	Material:	SS and CI									
Reference Standards Used:	Procedure Used:	Equipmer	nt Used:									
2kgd&2kg	NIST HB 6969, SOP 8	Sartorius CC10000S										
NEBR-STD-10&5	<u>Metrologist:</u>	Mettler KA30-3										
NSL-25-1-25lb	JPL											
Environmental Cond. Temp: 22.		elative Humidity: 52 %										
The artifact(a) listed in this decume	Pertinent Information	avinum pormissible error for the co	ocification stated									
	nt have been found and/or left within the m onsidered in-compliance when the correctio											

than the maximum permissible error. **RED** print indicates an out-of-compliance reading.

• All corrections stated in this report correlate to a "Conventional Mass" (CM), also known as "apparent mass", scale verses 8.0 g/cm³ reference mass density and an air density of 1.2 mg/cm³ at 20 °C.

Traceability Statement

The artifact(s) described in this certificate have been compared to the Standards of the State of Nebraska. The Standards of the State of Nebraska are traceable to the International System of Units (SI) through 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 calibration number for this certificate is the only unique calibration number to be used in referencing measurement traceability for the artifact(s) described in this certificate.

Uncertainty Statement

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Nebraska Standards Laboratory

Good Life. Great Roots.

3721 West Cuming St. Lincoln, NE 68524 (402)-471-2087 Director of Agriculture Greg Ibach P.O. Box 94947 Lincoln, NE 68509-4947 (402) 471-2341 www.nda.nebraska.gov

DEPARTMENT OF AGRICULTURE

Calibra	ation Date:	October 2, 20	17		Certific	ate Numl	ber: 2017	-027-3
			C	alibration Resu	lts			
Nominal Mass	Serial Number / ID	As Found Conventional Mass Correction (g)	Adjusted (Y/N)	As Left Conventional Mass Correction (g)	Uncertainty ± (g)	(k) factor	NIST Class F MPE ± (g)	Assumed Density (g/cm ³)
4 kg	WM-7	0.000	n	0.000	0.048	2	0.4	7.94
15 lb	WM15-7	0.573	n	0.573	0.081	2	0.68	7.2
15 lb	WM15-8	0.254	n	0.254	0.081	2	0.68	7.2
25 lb	WM-D3	2.47	У	0.36	0.14	2	1.1	7.2
25 lb	WM-D4	1.42	У	0.75	0.14	2	1.1	7.2
25 lb	WM-D5	1.63	у	0.38	0.14	2	1.1	7.2
25 lb	WM-D6	1.66	У	0.69	0.14	2	1.1	7.2
25 lb	WM-D7	1.72	У	0.41	0.14	2	1.1	7.2
25 lb	WM-D8	2.04	У	0.69	0.14	2	1.1	7.2
25 lb	WM-D9	1.97	У	0.57	0.14	2	1.1	7.2
25 lb	WM-D10	3.36	У	0.52	0.14	2	1.1	7.2
25 lb	WM-D11	2.56	У	0.71	0.14	2	1.1	7.2
25 lb	WM-d12	2.31	У	0.38	0.14	2	1.1	7.2
25 lb	WM25-45	2.02	У	0.53	0.14	2	1.1	7.2
25 lb	WM25-46	1.58	У	0.46	0.14	2	1.1	7.2
25 lb	WM25-47	2.24	У	0.39	0.14	2	1.1	7.2
25 lb	WM25-88	1.78	У	-0.02	0.14	2	1.1	7.2
25 lb	WM25-89	2.00	У	0.22	0.14	2	1.1	7.2
25 lb	WM25-90	2.83	У	0.22	0.14	2	1.1	7.2
25 lb	WM25-91	1.85	у	0.33	0.14	2	1.1	7.2
25 lb	WM25-92	2.28	У	-0.18	0.14	2	1.1	7.2
25 lb	WM25-93	2.28	У	0.77	0.14	2	1.1	7.2
25 lb	WM25-94	2.18	У	0.41	0.14	2	1.1	7.2

Conversion Factors

1 ounce (avoirdupois) (oz) = 28.349 52 g

1 pound (avoirdupois) (lb) = 453.592 37 g exactly

Joel P. Lavicky Metrologist

10/6/2017 Date of Issue

The results in this certificate only applies to those item specifically listed in this certificate. This certificate cannot be considered complete unless it contains <u>all</u> pages. This document may not be reproduced except in <u>full</u>, without the written consent of the Nebraska Standards Laboratory.

NEDDAC	1/ 1				Dir	ector of Agriculture						
NEBRAS		Nebraska	Standards La	boratory		Greg Ibach						
	_	37	21 West Cuming St	•		P.O. Box 94947						
Good Life. Great	Roots.	I	_incoln, NE 68524		Lind	coln, NE 68509-4947						
-			(402)-471-2087			(402) 471-2341						
DEPARTMENT OF AGRI	CULTURE				www	v.nda.nebraska.gov						
	Calibration Certificate of Mass											
Calibration Date:	September 27	, 2017	-	Certificate Num	nber:	2017-027-4						
Submitted By:	FSCP Area 90			Point of Contact: B	Brian Heskin							
	1118 Eldorado Dr.			P	h. 402-496-08	843						
	Omaha, NE 68514			<u>email:</u> B	Brian.heskin@ne	ebraska.gov						
				PO Number:								
Test Item(s):	31 lb weight kit	A	rtifact(s) Descriptio	n: Dat	e Received:	September 22, 2017						
Serial Number(s):	10-OPI-9/WM-3G95			ID / Ass	set Number:	N/A						
Manufacture:	Tromner/Rice Lake			Class Sp	pecification:	NIST Class F						
Condition:	Good (some wear)				Material:	Stainless Steel						
Reference Standard	<u>s Used:</u>		Procedure Used:		Equipme	ent Used:						
NSL lb standards			NIST HB 6969, SOP 8	S	artorius CCE6	Sartorius CC 1201						
			Metrologist:	N	Nettler AT 106							
			JPL									
Environmental Cond.	Temp: 22.25 °	C Pressure:	771.65 mmHg	Relative Humidity:	49.5 %							
			ertinent Informatio									
				e maximum permissible								
above, except as noted				tion plus the measuren		ty is equal to or less						
1	than the maximu	m dermissible e	rror. KED print indicate	es an out-of-compliance	e reading.							

• All corrections stated in this report correlate to a "Conventional Mass" (CM), also known as "apparent mass", scale verses 8.0 g/cm³ reference mass density and an air density of 1.2 mg/cm³ at 20 °C.

Traceability Statement

The artifact(s) described in this certificate have been compared to the Standards of the State of Nebraska. The Standards of the State of Nebraska are traceable to the International System of Units (SI) through 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 calibration number for this certificate is the only unique calibration number to be used in referencing measurement traceability for the artifact(s) described in this certificate.

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 the standard uncertainty for any uncorrected errors associated with air buoyance corrections. The combined standard uncertainty is multiplied by a coverage factor (*k*), to give the expanded uncertainty, which defines an interval with a 95.45 percent level of confidence. The expanded uncertainty presented in this report is consistent with the *Guide to the Expression of Uncertainty in Measurement (2008, revised 2012)*. Some components of the calibration can be evaluated through a Type A evaluation, or the method of evaluation of uncertainty by the statistical analysis (standard deviation) from the observations taken. Magnetic testing has not been performed, therefore, there are no components for the effects of it in the uncertainty budget.



Nebraska Standards Laboratory

Good Life. Great Roots.

3721 West Cuming St. Lincoln, NE 68524 (402)-471-2087

Director of Agriculture Greg Ibach P.O. Box 94947 Lincoln, NE 68509-4947 (402) 471-2341 www.nda.nebraska.gov

DEPARTMENT OF AGRICULTURE

Calibra	ation Date:	September 27	, 2017	Ĭ	Certific	ate Numl	ber: 2017	-027-4		
	Calibration Results									
Nominal Mass	Serial Number / ID	As Found Conventional Mass Correction (g)	Adjusted (Y/N)	As Left Conventional Mass Correction (g)	Uncertainty ± (g)	(k) factor	NIST Class F MPE ± (g)	Assumed Density (g/cm ³)		
2 lb	1	-0.030	n	-0.030	0.011	2	0.091	7.84		
2 lb	2	-0.020	n	-0.020	0.011	2	0.091	7.84		
2 lb	3	-0.014	n	-0.014	0.011	2	0.091	7.84		
2 lb	4	-0.016	n	-0.016	0.011	2	0.091	7.84		
2 lb	5	0.003	n	0.003	0.011	2	0.091	7.84		
2 lb	6	-0.004	n	-0.004	0.011	2	0.091	7.84		
2 lb	7	0.016	n	0.016	0.011	2	0.091	7.84		
2 lb	8	0.017	n	0.017	0.011	2	0.091	7.84		
2 lb	9	-0.059	n	-0.059	0.011	2	0.091	7.84		
2 lb	10	0.020	n	0.020	0.011	2	0.091	7.84		
2 lb	11	0.030	n	0.030	0.011	2	0.091	7.84		
2 lb	12	0.039	n	0.039	0.011	2	0.091	7.84		
2 lb	13	0.027	n	0.027	0.011	2	0.091	7.84		
2 lb	14	-0.002	n	-0.002	0.011	2	0.091	7.84		
1 lb	15	-0.0114	n	-0.0114	0.0083	2	0.07	7.84		
8 oz	15	-0.0205	n	-0.0205	0.0054	2	0.045	7.84		
4 oz		0.0087	n	0.0087	0.0028	2	0.023	7.84		
2 oz		0.0051	n	0.0051	0.0013	2	0.011	7.84		
1 oz		-0.00413	n	-0.00413	0.00064	2	0.0054	7.84		
1/2 oz		0.00123	n	0.00123	0.00034	2	0.0028	7.84		
1/4 oz		0.00059	n	0.00059	0.00021	2	0.0017	7.84		
1/8 oz		-0.00025	n	-0.00025	0.00016	2	0.0013	7.84		
1/16 oz		0.00078	n	0.00078	0.00013	2	0.0011	7.84		
1/16 oz	*	-0.00042	n	-0.00042	0.00013	2	0.0011	7.84		
0.3 lb		0.0007	n	0.0007	0.0032	2	0.027	7.84		
0.2 lb		0.0041	n	0.0041	0.0022	2	0.018	7.84		
0.1 lb		0.0031	n	0.0031	0.0011	2	0.0091	7.84		
0.05 lb		0.00130	n	0.00130	0.00054	2	0.0045	7.84		
0.03 lb		0.00060	n	0.00060	0.00032	2	0.0027	7.84		
0.02 lb		0.00053	n	0.00053	0.00022	2	0.0018	7.84		
0.01 lb		0.00031	n	0.00031	0.00018	2	0.0015	7.84		
0.005 lb		0.00078	n	0.00078	0.00015	2	0.0012	2.7		
0.003 lb		0.00059	n	0.00059	0.00012	2	0.00099	2.7		
0.002 lb		0.00066	n	0.00066	0.00011	2	0.00087	2.7		
0.001 lb	-	0.000182	n	0.000182	0.000083	2	0.0007	2.7		
0.001 lb	*	0.000195	n	0.000195	0.000083	2	0.0007	2.7		

Conversion Factors

1 ounce (avoirdupois) (oz) = 28.349 52 g

1 pound (avoirdupois) (lb) = 453.592 37 g exactly

Jone P. Z Joel P. Lavicky Metrologist

10/9/2017 Date of Issue

The results in this certificate only applies to those item specifically listed in this certificate. This certificate cannot be considered complete unless it contains all pages. This document may not be reproduced except in full, without the written consent of the Nebraska Standards Laboratory.

			Director of Agriculture								
NEBRASKA	Nebraska Standards		Greg Ibach								
	3721 West Cumir	-	P.O. Box 94947								
Good Life. Great Roots.	Lincoln, NE 68		Lincoln, NE 68509-4947								
-	(402)-471-208	7	(402) 471-2341								
DEPARTMENT OF AGRICULTURE		N	/ww.nda.nebraska.gov								
Calibration Certificate of Mass											
Calibration Date: October 2, 2	017	Certificate Number:	2017-027-5								
<u>Submitted By</u> : FSCP Area 90 1118 Eldorado D Omaha, NE 6851		Point of Contact: Brian Heski Ph. 402-496 <u>email:</u> Brian.heskin <u>PO Number:</u>	5-0843								
Test Item(s): 20 lb Kit	<u>Artifact(s) Descri</u>	ption: Date Receive	d: September 22, 2017								
Serial Number(s): WM 6D98/17649		ID / Asset Numbe	er: N/A								
Manufacture: Tromner/Rice Lak	e	Class Specificatio	n: NIST Class F								
Condition: Good (some wear)		Materia	al: Stainless Steel								
Reference Standards Used:	Procedure Us	ed: Equip	oment Used:								
NSL lb standards	NIST HB 6969, SO	DP 8 Sartorius CC	E6 Sartorius CC 1201								
	Metrologist		06 Sartorius CC10000S								
	JPL	-									
Environmental Cond. Temp: 22.45	5 ℃ Pressure: 768.603 mmH	g Relative Humidity: 49 %									
	Pertinent Inform										
• The artifact(s) listed in this documen above, except as noted. An artifact is co than the maxim	nsidered in-compliance when the c	•	•								
• All corrections stated in this report of refe	correlate to a "Conventional Mass" rence mass density and an air densi		cale verses 8.0 g/cm³								
	Traceability State	ement									
The artifact(s) described in this certification	ate have been compared to the Star	ndards of the State of Nebraska. The Sta	andards of the State of								

Nebraska are traceable to the International System of Units (SI) through 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 calibration number for this certificate is the only unique calibration number to be used in referencing measurement traceability for the artifact(s) described in this certificate.

Uncertainty Statement

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Nebraska Standards Laboratory

Good Life. Great Roots.

3721 West Cuming St. Lincoln, NE 68524 (402)-471-2087

Director of Agriculture Greg Ibach P.O. Box 94947 Lincoln, NE 68509-4947 (402) 471-2341 www.nda.nebraska.gov

DEPARTMENT OF AGRICULTURE

Calibra	ation Date:	October 2, 20	17		Certific	ate Num	ber: 2017	-027-5	
Calibration Results									
Nominal Mass	Serial Number / ID	As Found Conventional Mass Correction (g)	Adjusted (Y/N)	As Left Conventional Mass Correction (g)	Uncertainty ± (g)	(k) factor	NIST Class F MPE ± (g)	Assumed Density (g/cm ³)	
10 lb	1	0.174	n	0.174	0.054	2	0.45	7.84	
5 lb	2	0.076	n	0.076	0.028	2	0.23	7.84	
2 lb	3	0.042	n	0.042	0.011	2	0.091	7.84	
2 lb	4	0.034	n	0.034	0.011	2	0.091	7.84	
1 lb	5	0.0210	n	0.0210	0.0083	2	0.07	7.84	
0.5 lb	6	0.0179	n	0.0179	0.0054	2	0.045	7.84	
8 oz	17	0.0106	n	0.0106	0.0054	2	0.045	7.84	
4 oz	18	0.0014	n	0.0014	0.0028	2	0.023	7.84	
2 oz		-0.0044	n	-0.0044	0.0013	2	0.011	7.84	
1 oz		0.00217	n	0.00217	0.00064	2	0.0054	7.84	
1/2 oz		0.00099	n	0.00099	0.00034	2	0.0028	7.84	
1/4 oz		-0.00029	n	-0.00029	0.00021	2	0.0017	7.84	
1/8 oz		-0.00052	n	-0.00052	0.00016	2	0.0013	7.84	
1/16 oz		0.00000	n	0.00000	0.00013	2	0.0011	7.84	
1/16 oz	*	-0.00052	n	-0.00052	0.00013	2	0.0011	7.84	
0.2 lb		0.0084	n	0.0084	0.0022	2	0.018	7.84	
0.2 lb	*	0.0088	n	0.0088	0.0022	2	0.018	7.84	
0.1 lb		0.0041	n	0.0041	0.0011	2	0.0091	7.84	
0.05 lb		0.00175	n	0.00175	0.00054	2	0.0045	7.84	
0.02 lb		0.00068	n	0.00068	0.00022	2	0.0018	7.84	
0.02 lb	*	0.00035	n	0.00035	0.00022	2	0.0018	7.84	
0.01 lb		0.00046	n	0.00046	0.00018	2	0.0015	7.84	
0.005 lb		0.00013	n	0.00013	0.00015	2	0.0012	2.7	
0.002 lb		0.00000	n	0.00000	0.00011	2	0.00087	2.7	
0.002 lb	*	-0.00012	n	-0.00012	0.00011	2	0.00087	2.7	
0.001 lb		0.000093	n	0.000093	0.000083	2	0.0007	2.7	

Conversion Factors

1 ounce (avoirdupois) (oz) = 28.349 52 g

1 pound (avoirdupois) (lb) = 453.592 37 g exactly

e P. 3 Joel P. Lavicky Metrologist

10/9/2017

Date of Issue

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