

1600 E. Murdock Wichita, KS 67214

For Maintenance or Recalibration call:  
Phone: (866) 384-3010  
Fax: (316) 686-3151



# Torque Wrench

## Calibration Report For:

### XTO Energy - Donnie

215 CR 750  
Donnie, TX 75838

Calibration Date:	22 Dec 2011
Calibration Number:	111222.20A.13
Temperature:	Not Available
Humidity:	Not Available

### Test Instrument Identification

Manufacturer:	WESTWARD	Model:	4DA97
Type:	Manual wrench	Serial Number:	SEE ID#
Wrench Type:		Wrench Class:	

Standard Testing Points or Instrument Settings		Instrument "As Found" Readings [1] (FT-LB)						Instrument "As Left" Readings [2] (FT-LB)						Low Limit	High Limit
		1	2	3	4	5	AVG	1	2	3	4	5	AVG	-5%	+5%
50	Reading	49.8	50.8	49.1	50.6	51.8	<b>50.4</b>	49.8	50.8	49.1	50.6	51.8	<b>50.4</b>	47.5	52.5
	Deviation %	-0.40	1.60	-1.80	1.20	3.60	<b>0.84</b>	-0.40	1.60	-1.80	1.20	3.60	<b>0.84</b>		
150	Reading	147.6	148.8	148.3	147.8	149.5	<b>148.4</b>	147.6	148.8	148.3	147.8	149.5	<b>148.4</b>	142.5	157.5
	Deviation %	-1.60	-0.80	-1.14	-1.47	-0.34	<b>-1.07</b>	-1.60	-0.80	-1.14	-1.47	-0.34	<b>-1.07</b>		
250	Reading	239.2	245.4	244.2	245.8	249.2	<b>244.8</b>	239.2	245.4	244.2	245.8	249.2	<b>244.8</b>	237.5	262.5
	Deviation %	-4.32	-1.84	-2.32	-1.68	-0.32	<b>-2.10</b>	-4.32	-1.84	-2.32	-1.68	-0.32	<b>-2.10</b>		

### Remarks

This manual wrench was tested in the absence of any side-loading.  
Readings were taken at 20%, 60%, and 100% settings of the tool's maximum torque scale (if applicable).

- (1) "As Found" Data: *IN TOLERANCE*  
Test Instrument was found within applicable tolerance levels.  
(2) "As Left" Data: *IN TOLERANCE, RESTRICTED WITH CHART*  
Test Instrument was left within applicable tolerance levels.

Technician Comments:

  
Jon Bucki, Calibration Technician

### Notes

- A. This accredited organization maintains both A2LA accreditation to ISO/IEC 17025 for the specific tests/calibrations listed in A2LA Certificate #3040.01, and ISO 6789.  
B. Environmental conditions were held within MobileCal's standards of 60 to 88 degrees Fahrenheit and below 90% relative humidity.  
C. All readings have an expanded uncertainty of .83% for up to 50 ft-lb, .20% for up to 500 ft-lb and .15% for up to 2,000 ft-lb (k=2).  
D. Procedures for this calibration method are outlined in the MobileCal Quality Management Procedure Manual Version 3.0.  
E. All standards and associated equipment used to calibrate this instrument have been calibrated and are traceable to A2LA accreditation and the National Institute of Standards and Technology (NIST).  
F. Customer acknowledges and agrees that MobileCal's standard sales terms and conditions are incorporated herein by reference and made a part of this calibration report.  
G. This document relates only to the test instrument listed on this certificate and cannot be reproduced, except in full, without written approval of MobileCal.  
H. Calibration performed and valid for Clockwise Direction only.  
I. This calibration document is followed by a Calibration Schedule page.



## Calibration Laboratory Location #2: Certification Schedule

CAPACITY	ITEM	S/N	MODEL	CAL DUE DATE
THERMOMETER	EXTECH	NONE	445703	10/24/2013
2,000 FTLB	AKO	2933 28704	TSD 2011	10/24/2013
20,000 FTLB	AKO	2452 28097	TDS 20011	10/24/2013
1,000 FTLB	AKO	2453 28704	TDS 1011	10/24/2013
50 FTLB	AKO	4507	TDS111/050	10/24/2013
10,000 PSI	DRUCK	3151587	DPI104	10/24/2013
5,000 PSI	DRUCK	2827279	DPI104	10/24/2013
300 PSI	DRUCK	2784730	DPI104	10/24/2013
250 FTLB	CDI	509064812	2503-F-MT	10/24/2013
600 FTLB	CDI	78580025	6004-F-MT	10/24/2013
1500 FTLB	CDI	120850041	15005-F-MT	10/24/2013
Indicator	AKO	28704	TSD 6000-2	10/24/2013
Indicator	AKO	28097	TSD 6000-1	10/24/2013