

1600 E. Murdock Wichita, KS 67214

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



Torque Wrench

Calibration Report For:

East Tennessee Gas - Nora

State Route 654
Nora Compressor Station 3401
McClure, VA 24269

Calibration Date:	04 Apr 2012
Calibration Number:	120404.23A.9
Temperature:	Not Available
Humidity:	Not Available

Test Instrument Identification

Manufacturer:	PROTO	Model:	6020-1
Type:	Manual wrench	Serial Number:	UNKNOWN
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%
100	Reading	96.0	97.2	96.0	96.0	96.0	96.2	104.2	105.8	104.2	104.2	106.2	104.9	95.0	105.0
	Deviation %	-4.00	-2.80	-4.00	-4.00	-4.00	-3.76	4.20	5.80	4.20	4.20	6.20	4.92		
300	Reading	302.0	297.8	291.4	289.8	296.0	295.4	309.2	301.4	307.6	300.8	302.2	304.2	285.0	315.0
	Deviation %	0.66	-0.74	-2.87	-3.40	-1.34	-1.54	3.06	0.46	2.53	0.26	0.73	1.41		
500	Reading	465.8	465.7	465.6	472.0	465.8	467.0	522.2	519.6	518.8	520.4	520.8	520.4	475.0	525.0
	Deviation %	-6.84	-6.86	-6.88	-5.60	-6.84	-6.61	4.44	3.92	3.76	4.08	4.16	4.07		

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: OUT OF TOLERANCE

Test Instrument is not within manufacturer's standards or is not linear or predictable. See "As Left" remark below for recommended action.

(2) "As Left" Data: IN TOLERANCE, RESTRICTED WITH CHART

Test Instrument was left within applicable tolerance levels.

Technician Comments:



Russ Stagner, Calibration Technician

Notes

- 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.
- Environmental conditions were held within MobileCal's standards of 60 to 88 degrees Fahrenheit and below 90% relative humidity.
- 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).
- Procedures for this calibration method are outlined in the MobileCal Quality Management Procedure Manual Version 3.0.
- 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).
- 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.
- This document relates only to the test instrument listed on this certificate and cannot be reproduced, except in full, without written approval of MobileCal.
- Calibration performed and valid for Clockwise Direction only.
- This calibration document is followed by a Calibration Schedule page.



Calibration Laboratory Location #4: Certification Schedule

COMPACITY	ITEM	S/N	MODEL	CAL DUE DATE
THERMOMETER	EXTECH	NONE	445703	2/18/2014
2,000 FTLB	AKO	4509	TSD2011	2/15/2014
20,000 FTLB	AKO	4510	TDS20011	2/15/2014
500 FTLB	AKO	4508	TDS5111	2/15/2014
50 FTLB	AKO	4507	TDS111/050	2/15/2014
10,000 PSI	DRUCK	3388040	DPI104	2/4/2014
5,000 PSI	DRUCK	287285	DPI104	2/4/2014
300 PSI	DRUCK	2875169	DPI104	2/4/2014
250 FTLB	CDI	1209006590	2503-F-MT	2/20/2014
600 FTLB	CDI	708580024	6004-F-MT	2/20/2014
1500 FTLB	CDI	1109012822	15005-F-MT	2/20/2014