CALSER CORPORATION

P.O. Box 24121, Belleville, IL 62223 (618) 277-0329

TESTING MACHINE CALIBRATION DATA AND REPORT

Report #: **VN# 3916**

Customer	University of Arkansas		
Location	Civil Engineering	Date of Service	02/05/08
	Fayetteville, AR 72701	Customer Order No	Verbal
Machine	Forney 400,000lbf Model QC-400F-LCI	Order Date	01/08/08
Serial No.	95037	Temp.	70 degf
Auxiliary Equipment:	w/ LC-1 Digital R/O #M9404103	Date Last Done	02/13/07
	w/ PT 130 10M		

Applied Force	*	Indicated Force	Error	%	Applied Force	*	Indicated Force	Error	%
Run #1		"As Found" Condition			Run #2		"As Left" Condition		
400,000lbf Range	*	10lbf / DIV			400,000lbf Range	*	10lbf / DIV		
0	2C	0	0	0.00	0	2C	0	0	0.00
5,000	2C	5,010	10	0.20	5,000	2C	5,010	10	0.20
10,000	3	10,020	20	0.20	10,000	3	10,030	30	0.30
20,000	3	20,040	40	0.20	20,000	3	20,050	50	0.25
40,000	4	40,040	40	0.10	40,000	4	40,060	60	0.15
60,000	4	60,110	110	0.18	60,000	4	60,120	120	0.20
80,000	4	80,140	140	0.18	80,000	4	80,180	180	0.23
100,000	4	100,160	160	0.16	100,000	4	100,200	200	0.20
150,000	4	150,370	370	0.25	150,000	4	150,430	430	0.29
200,000	4	200,740	740	0.37	200,000	4	200,690	690	0.35
250,000	4	251,110	1110	0.44	250,000	4	250,810	810	0.32
300,000	4	301,570	1570	0.52	300,000	4	301,220	1220	0.41
350,000	4	352,140	2140	0.61	350,000	4	351,790	1790	0.51
400,000	4	402,320	2320	0.58	400,000	4	401,890	1890	0.47
0	4	0	0	0.00	0	4	0	0	0.00

Notes:

Calibration in accordance with ASTM E4-07, and Calser Corporation Procedure # 1-01, Rev 1.

***CALIBRATION EQUIPMENT**

All verification equipment-including dead weights, proving rings, load cells, etc. is calibrated and traceable to the latest procedures stipulated by the National Institute of Standards and Testing (NIST) and ASTM E74-02. All equipment is traceable under guidelines set forth in ISO/IEC 17025. All instrument readings have been corrected for temperature where necessary.

ACCURACY SUMMARY

Capacity Range	Loading Range	Max. Error
Run 1		
400,000lbf Range	5,000 - 400,000	0.61 %
Run 2		
400,000lbf Range	5,000 - 400,000	0.51 %

Verification Equipment

Manufacturer and Serial #	* I/C	Range and uncertainty	Verification Agency and Date
Interface	2 C	312.06 - 10,000 lbf	Morehouse
106798A C		0.780 lbf	12/26/07
Strainsense	3	9,491.22-100,000lbf	Morehouse
070115		23,728lbf	12/26/07
Strainsense	4	29,499-400,000lbf	Morehouse
910509D		73,499 lbf	01/17/07

Calibration Technician Luanne Holper

CALSER CORPORATION P.O. BOX 24121 BELLEVILLE, IL 62223 (618)277-0329

TESTING MACHINE CERTIFICATE OF CALIBRATION

Owner : University of Arkansas
Location : Civil Engineering
Fayetteville, AR 72701

Report # : VN# 3915
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Date of Service: 02/05/08

Machine : Forney 400,000lbf Model QC-400F-I CI
Serial No. : 95037
w/ LC-1 Digital R/O #M9404103
w/ PT 130-10M

This is to certify that the testing machine listed above has been calibrated by Calser Corporation personnel.
The method of verification and listed data are in accordance with ASTM E 4-07.
Accuracy of all calibration devices is traceable to the National Institute of Standards and Testing (NIST)
and all calculations have been corrected for temperature where applicable.

Capacity Range	Loading Range	Max. Error
Run 1		
400,000lbf Range	5,000 - 400,000	0.61 %
Run 2		
400,000lbf Range	5,000 - 400,000	0.51 %

Verification Equipment Used:

(400,000 Load Cell Set)
Admet Cage Buster Digital Readout, Serial # GB-9911093
and Load Cell(s) Listed Below:

Serial #	Range	Calib. Date	Uncertainty
106798A-C	312.06-10,000 lbf	12/26/2007	0.780 lbf
070115	9,491.22-100,000 lbf	12/26/2007	23.728 lbf
910509D	36,240-400,000 lbf	12/13/2005	90.6 lbf

This certificate is issued as a statement of the fact that on the above date the listed testing machine has an accuracy as indicated. It should not be construed or regarded as a Guarantee or Warranty of any kind (in favor of the client, the client's customers, or the public at large) that the testing machine will continue to retain the same percentage (%) of accuracy or efficiency as determined on the date when the calibration, and adjustments if required, was performed and reported by "Calser Corporation" since the calibrator has absolutely no control over the future operation, damage, maintenance, repairs, and overall condition of the testing machine and hereby expressly disclaims any and all liability for damage or loss sustained by all parties arising or resulting from the deterioration, obsolescence, malfunction or substandard performance of said testing machine; which shall remain the sole responsibility of the machine's regular custodian, owner, and/or user. This certificate shall not be reproduced except in full, without the written approval of Calser Corporation.

CALSER CORPORATION

Quality Control Director _____
Thomas R. Gagen

Form# 102-01-Rev 3