CALSER CORPORATION

302 N. Belt East, Swansea, IL 62226 (618) 277-0329

TESTING MACHINE CALIBRATION DATA AND REPORT

Report #: **VN# 4717**

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'stomer	University of Arkansas
ation	Civil Engineering
	Fayetteville, AR 72701
Machine	Forney 400,000lbf Model QC-400F-LC1
Serial No.	95037
Auxillary Equipment:	w/ LC-1 Digital R/O #M9404103

Date of Service	03/03/09
Cust Order No.	Post Card
Order Date	01/21/09
Temp.	64° F
Date Last Done	02/05/08

Applied Force	*	Indicated Force	Error	%	*	Indicated Force	Error	%	*	Indicated Force	Error	%
Run #1		Run #1	"As Found" Condition			Run #2	"As Left" Condition			Run #3	"As Left" Condition	
400,000lbf Range	*	10lbf / DIV			*				*			
0	6C	0	0	0.00	6C	0	0	0.00	6C	0	0	0.00
5,000	6C	4,980	-20	0.40	6C	5,000	0	0.00	6C	5,000	0	0.00
10,000	7	9,930	-70	0.70	7	10,000	0	0.00	7	10,000	0	0.00
20,000	7	19,900	-100	0.50	7	20,010	10	0.05	7	20,020	20	0.10
40,000	7	39,860	-140	0.35	7	40,150	150	0.38	7	40,110	110	0.28
60,000	7	59,890	-110	0.18	7	60,250	250	0.42	7	60,230	230	0.38
80,000	7	79,740	-260	0.33	7	80,300	300	0.38	7	80,310	310	0.39
100,000	8	99,660	-340	0.34	8	100,330	330	0.33	8	100,310	310	0.31
150,000	8	150,430	430	0.29	8	150,360	360	0.24	8	150,320	320	0.21
200,000	8	201,070	1,070	0.54	8	200,540	540	0.27	8	200,410	410	0.21
250,000	8	251,090	1,090	0.44	8	250,370	370	0.15	8	250,380	380	0.15
300,000	8	301,410	1,410	0.47	8	300,490	490	0.16	8	300,450	450	0.15
350,000	8	351,400	1,400	0.40	8	350,560	560	0.16	8	350,540	540	0.15
400,000	8	401,340	1,340	0.34	8	400,710	710	0.18	8	400,670	670	0.17
0	8	0	40	0.00	8	0	30	0.00	8	0	20	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 Test'ing (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	0.70 %
Run 2		
400,000lbf Range	5,000 - 400,000	0.42 %
Run 3		
400,000lbf Range	5,000 - 400,000	0.39 %

VERIFICATION EQUIPMENT

Manufacturer & Serial #	* L/C	Class A Range (in LBs) and Uncertainty (LBF)	Agency & Date
Strainsense	6C	828.19 -10,000 lbf	Morehouse
901120B		2.070 lbf	09/28/07
Strainsense	7	9,856.43 - 100,000 lbf	Morehouse
990918		24.641 lbf	10/02/08
Strainsense	8	97,789.24 -1,000,000 lbf	Morehouse
870815A		244.473 lbf	10/02/08

Calibration Technician Jerry Parker

CALSER CORPORATION 302 N. BELT EAST SWANSEA, IL 62226 (618)277-0329

TESTING MACHINE CERTIFICATE OF CALIBRATION

Owner : University of Arkansas
Location : Civil Engineering
Fayetteville, AR 72701
Machine : Forney 400,000lbf Model QC-400F-LC1
Serial No. : 95037
w/ LC-1 Digital R/O #M9404103

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Date of Service 03/03/09

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	0.70 %
Run 2 400,000lbf Range	5,000 - 400,000	0.42 %
Run 3 400,000lbf Range	5,000 - 400,000	0.39 %

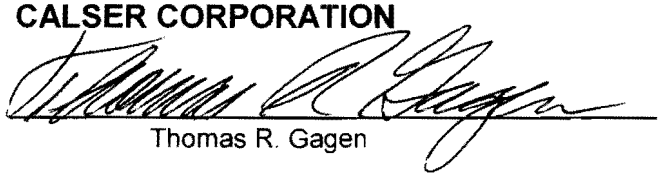
Verification Equipment Used:

(1,000,000 Load Cell Set)
Admet Gage Buster Digital Readout, Serial # GB-9911092,
and Load Cell(s) Listed Below:

Serial #	Class A Load Range (LB)	Verification Date	Uncertainity (LBF)
901120B	828.19 -10,000 lbf	09/28/2007	2.070 lbf
990918	9,856.43 - 100,000 lbf	10/02/2008	24.641 lbf
870815A	97,789.24 -1,000,000 lbf	10/02/2008	244.473 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 reporoduced except in full, without the written approval of Calser Corporation.

CALSER CORPORATION

Quality Control Director 
Thomas R. Gagen

Form # 104-01-Rev 3