ERRATUM

Table 1 on page 367 of the September 1995 issue of GTJ contained errors in the fourth column. This table is in the paper entitled "Strain Rate Effects on Shear Modulus and Damping of Normally Consolidated Clay" by Satoru Shibuya, Toshiyuka Mitachi, Fumihiko Fukuda, and Takahiro Degoshi. The original column is shown below on the left, and the corrected column is shown below on the right.

		[original]	[corrected]
Tests		e_0	e_0
KY1	....	0.810	0.687
KY2	....	0.801	0.731
KY3	....	0.796	0.709
KY4	....	0.853	0.683
KY5	....	0.834	0.709
KY6	....	0.828	0.705
K1	....	1.326	1.099
K2	....	1.323	1.119
K3	....	1.326	1.099
K4	....	1.320	1.117
K5	....	1.336	1.140

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Howard Pincus
Technical Editor

1. FIELD EXPLORATION

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1.3 Remote Sensing
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1.11 Sample Transport and Storage
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4.2 Sampling and Specimen Preparation, Transportation, and Storage

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4.12 Thermal Property Tests
4.13 Microscopic Analysis
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8.5 Fluid Flow through Soil and Rock
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9.4 Ruggedness in Testing
9.5 Interlaboratory Testing; Repeatability and Reproducibility
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9.7 Automated Control of Testing
9.8 Data Acquisition, Reduction and Management
9.9 Probabilistic Methods
9.10 Numerical Modelling
9.11 Laboratory Accreditation
9.12 Education and Training
9.13 Terminology, Definitions, and Notation
9.14 Other ____________
9.15 Other ____________

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ASTM Task Group on Data Automation
Questionnaire for Geotechnical Laboratories

1. Name______________________ Position ______________________________
   Company ______________________ Address ______________________________
   Type of Organization: University________ Government________ Consulting__________ Industry______________
   List testing or standards organizations in which you participate ______________________________

2. With regard to the general laboratory: Number of staff devoted to lab_____ Floor area in sq. ft.____________
   Which do you have on staff? __Machinist __Mechanical engineer __Electronic specialist __Instrumentation Specialist __Software engineer
   Which of the following do you have? __Temperature Control __Dust Control __Emergency Power

3a. Please complete the following table for soil tests performed in your facility:

Soil Tests	Gradation (D422)	Limits (D4318)	Consolidation (D2435)	UC (D2166)	UU (Q) (D2850)	CU (R) (D4785)	CD (S) (D4785)	Direct Shear (D3080, D5321)	Permeability (D2434, D5084)	Other*
Number of tests per year										
Check if you automatically record data										
Check if you use computer for data reduction										
Check if you use computer for graphs or tables										
Estimated cost savings per test from automation										

* describe other test______________________

4. Please complete the following table for rock tests performed in your facility:

Rock Tests	Strength (D2664, D2936, D2938, D3967)	Elastic Modulus (D2845, D3148, D5407)	Permeability (D4525)	Creep (D4341, D4405, D4406)	Sonic (D2845)	Thermal (D4535, D4611, D4612, D5334, D5335)	Other* (D4644, D5240, D5312, D5313)
Number of tests per year							
Check if you automatically record data							
Check if you use computer for data reduction							
Check if you use computer for graphs or tables							
Estimated cost savings per test from automation							

* describe other test______________________

ASTM Task Group on Data Automation
Questionnaire for Geotechnical Laboratories

5. If you have a data acquisition system, please answer the following questions (use a separate copy for each system)
   Type______________________Number of Input Channels ___________ Number of tests you monitor at once____
   Maximum Number of Readings per second you use___ Total Cost of hardware, excluding sensors_______
   Total cost of sensors_______How are data stored?__printed __tape __floppy disk __ hard disk __ other
   Describe what you use the system for ____
   Does the system control the test __ Describe how ________________________________
   How much time required to train a new user_____ Frequency of breakdown ____ Describe reliability __________________
   Did supplier offer service contract __ Did you take it __ Cost of service contract as percent of original system purchase price____
   Describe experience with service ____
   Is system rugged __ Give examples ____
   Has system been cost effective? __ Give example ______________________________
   Are you considering additional equipment __ If yes please answer #7.
   How do you charge your clients for use of the system ___________________________
   Would you buy the same system again __ Why __________________________________

6. If your data acquisition system uses software to collect and reduce data, please answer the following:
   Function of software: __collect data __sort data for test from master data file __reduce data __plot results __show real-time graphs of test __control test __place data in master data base __perform statistical and/or engineering evaluations of data
   Programming language used________Operating system used_________
   How much time to train new user ___ Who corrects deficiencies _______
   Can you modify software ________ Is software flexible enough for your needs ____
   Describe software problems you have had ______________________________________
   Would you buy same system again __ Why _______________________________________
   Is your software available to others __________________

7. If you have no data acquisition equipment or are considering expansion of your present system
   Do you plan further automation in the near future?__ Why_______________________________
   Which tests do you plan to automate? _______________________________________
   Which parts will you automate? __collect data __reduce data after test __plot results for report __provide real-time graph as test runs __control test__other ______
   Will you __purchase software __develop software in-house
   What information is most helpful in selecting a new system (please rank by importance with 1 as highest) __manufacturer's literature __specs __example results __reliability of system __experience of another with system __ other (specify _______)

8. Does your company use data acquisition equipment in field applications? __ Describe ___________________________

9. What standards would be helpful to you in regard to using your data acquisition equipment?__________________________

10. Please comment on your experiences with data acquisition systems, positive and negative.

Thank you for your time and help. Please mail the completed questionnaire to: D18.95 Data Automation Survey, c/o Bob Morgan, ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. Phone any questions to Dr. Marr at (508) 635-0012.

Additional Information for Authors

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E 380

E 380 SELECTED CONVERSION FACTORS

To convert from	to	multiply by
atmosphere (760 mm Hg)	pascal (Pa)	1.013 25 x 10^{5}
board foot	cubic metre (m^{3})	2.359 737 x 10^{-3}
Btu (International Table)	joule (J)	1.055 056 x 10^{3}
Btu (International Table)/h	watt (W)	2.930 711 x 10^{-1}
Btu (International Table)•in./s•ft^{2}• °F (*k*, thermal conductivity)	watt per metre kelvin [W/(m•K)]	5.192 204 x 10^{2}
calorie (International Table)	joule (J)	4.186 800*
centipose	pascal second (Pa•s)	1.000 000* x 10^{-3}
centistokes	square metre per second (m^{2}/s)	1.000 000* 10^{-6}
circular mil	square metre (m^{2})	5.067 075 x 10^{-10}
degree Farenheit	degree Celsius	t°C = (t°F - 32)/1.8
foot	metre (m)	3.048 000* x 10^{-1}
ft^{2}	square metre (m^{2})	9.290 304* 10^{-2}
ft^{3}	cubic metre (m^{3})	2.831 685 x 10^{-2}
ft•lbf	joule (J)	1.355 818
ft•lbf/min	watt (W)	2.259 697 x 10^{-2}
ft/s^{2}	metre per second squared (m/s^{2})	3.048 000* x 10^{-1}
gallon (U.S. liquid)	cubic metre (m^{3})	3.785 412 x 10^{-3}
horsepower (electric)	watt (W)	7.460 000* x 10^{+2}
inch	metre (m)	2.540 000* x 10^{-2}
in.^{2}	square metre (m^{2})	6.451 600* x 10^{-4}
in.^{3}	cubic metre (m^{3})	1.683 706 x 10^{-5}
inch of mercury (60°F)	pascal (Pa)	3.376 85 x 10^{3}
inch of water (60°F)	pascal (Pa)	2.488 4 x 10^{2}
kgf/cm^{2}	pascal (Pa)	9.806 650* x 10^{4}
kip (1000 lbf)	newton (N)	4.448 222 x 10^{3}
kip/in.^{2} (ksi)	pascal (Pa)	6.894 757 x 10^{6}
ounce (U.S. fluid)	cubic metre (m^{3})	2.957 353 x 10^{-5}
ounce-force	newton (N)	2.780 139 x 10^{-1}
ounce (avoirdupois)	kilogram (kg)	2.834 952 x 10^{-2}
oz (avoirdupois)/ft^{2}	kilogram per square metre (kg/m^{2})	3.051 517 x 10^{-1}
oz (avoirdupois)/yd^{2}	kilogram per square metre (kg/m^{2})	3.390 575 x 10^{-2}
oz (avoirdupois)/gal (U.S. liquid)	kilogram per cubic metre (kg/m^{3})	7.489 152
pint (U.S. liquid)	cubic metre (m^{3})	4.731 765 x 10^{-4}
pound-fource (lbf)	newton (N)	4.448 222
pound (lb avoirdupois)	kilogram (kg)	4.535 924 x 10^{-1}
lbf/in^{2} (psi)	pascal (Pa)	6.894 757 x 10^{3}
lb/in^{3}	kilogram per cubic metre (kg/m^{3})	2.767 990 x 10^{4}
lb/ft^{3}	kilogram per cubic metre (kg/m^{3})	1.601 846 x 10
quart (U.S. liquid)	cubic metre (m^{3})	9.463 529 x 10^{-4}
ton (short, 2000lb)	kilogram (kg)	9.071 847 x 10^{2}
torr (mm Hg, 0°C)	pascal (Pa)	1.333 22 x 10^{2}
W•h	joule (J)	3.600 000* x 10^{3}
yard	metre (m)	9.144 000* x 10^{-1}
yd^{2}	square metre (m^{2})	8.361 274 x 10^{-1}
yd^{3}	cubic metre (m^{3})	7.645 549 x 10^{-1}

*Exact

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