

GW 1958
sent to BOB 5800
Greeves

START

Rev 002
12 17

ENGINEERS INTERNATIONAL INC

Joint Creep Test Data Sheet

Client Rockwell International Job No. 1072

Project Joint Creeps Location of Project Richland, WA

Boring No. DC-2-A1 Sample No. 14 (Test No. 9)

Brief Description of Material Medicine Gray Uranium Resalt

Test Interval 3057.6 - 3058.8

Initial Date of Testing 7/29/82

Last Date of Testing 7/30/82

Ambient Temperature 200°C

Confining Pressure 10MPa (1450 psi)

Axial Load 19000 lbs

Joint Dipping Angle 30° with core axis

Thickness of Joint Filling Material 0.5 μm

Description of Joint Filling Material Quartz

Sample Length 4.56 in Sample Diameter 1.875 in

Remarks: Failure occurred prematurely even before the expected axial load (23,400 lbs) was reached.

WM DOCKET CENTER CONTROL

2150282051

Prepared By Mark J Ma Date 7/30/82

Reviewed By _____ Date _____

Audited By _____ Date _____

Inspected By _____ Date _____

WM Record File 101 WM Project 10

Docket No. _____

8509030020 820730
PDR WASTE
WM-10 PDR

Permanent Record

AUG 23 1982
Initial kab

Distribution: GREEVES

(Return to WM, 623-SS)

(F)(H)
86110076

for Cook
to proceed

EI Form No. RML-010-01

23
1513

Will
Mull
Abstract
Order

DO NOT use this form as a RECORD of approvals, concurrences, disposes, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

Phone No.

5041-102

*U.S.GPO:1985-0-461-274/20024

OPTIONAL FORM 41 (Rev. 7-78)

Prescribed by GSA
FPMR (41 CFR) 101-11.206

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1/82 Rev. 001
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Joint Creep Test Data Sheet

Client Rockwell Int'l Job No. 1072

Project Joint Creep Location of Project Pickland, WA

Boring No. DE2A1 Sample No. 4 (Test No. 6)

Brief Description of Material Umtanum Basalt

Test Interval 3071' - 3072'

Initial Date of Testing 6/11/82

Last Date of Testing 7/16/82

Ambient Temperature 200°C

Confining Pressure 10 MPa (1450 psi)

Axial Load 14,910 lbs / 18,640 lbs / 36,000 lbs

Joint Dipping Angle 35° with core axis

Thickness of Joint Filling Material Hairline

Description of Joint Filling Material Quartz

Sample Length 4.58 in Sample Diameter 1.875 in.

Remarks: Actual date of testing was initiated on 6/13/82 and had been keeping hydrostatically until the problem of power surge was solved.

Prepared By Ma Date 7/17/82

Reviewed By _____ Date _____

Audited By _____ Date _____

Inspected By _____ Date _____ No. _____

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Joint Creep Test Data Sheet

Client ROCKWELL INTERNATIONAL Job No. 1072

Project JOINT CREEP Location of Project RICHLAND, WA

Boring No. DC2A1 Sample No. 1 (Test No. 1)

Brief Description of Material DARK GRAY UMTANUM BASALT

Test Interval 3069.0' - 3070.2'

Initial Date of Testing 7/1/82

Last Date of Testing 7/9/82

Ambient Temperature 200°C

Confining Pressure 10 MPa (1450 psi)

Axial Load 14880 lbs

Joint Dipping Angle 10° - 35° w/ CORE AXIS

Thickness of Joint Filling Material HAIRLINE

Description of Joint Filling Material ZEOLITES

Sample Length 4.567 in Sample Diameter 1.873 in

Remarks: The sample was broken when the power of temperature controlled by

Prepared By Mark S. M Date 7/10/82

Reviewed By _____ Date _____

Audited By _____ Date _____

Inspected By _____ Date _____ No. _____

1033820515

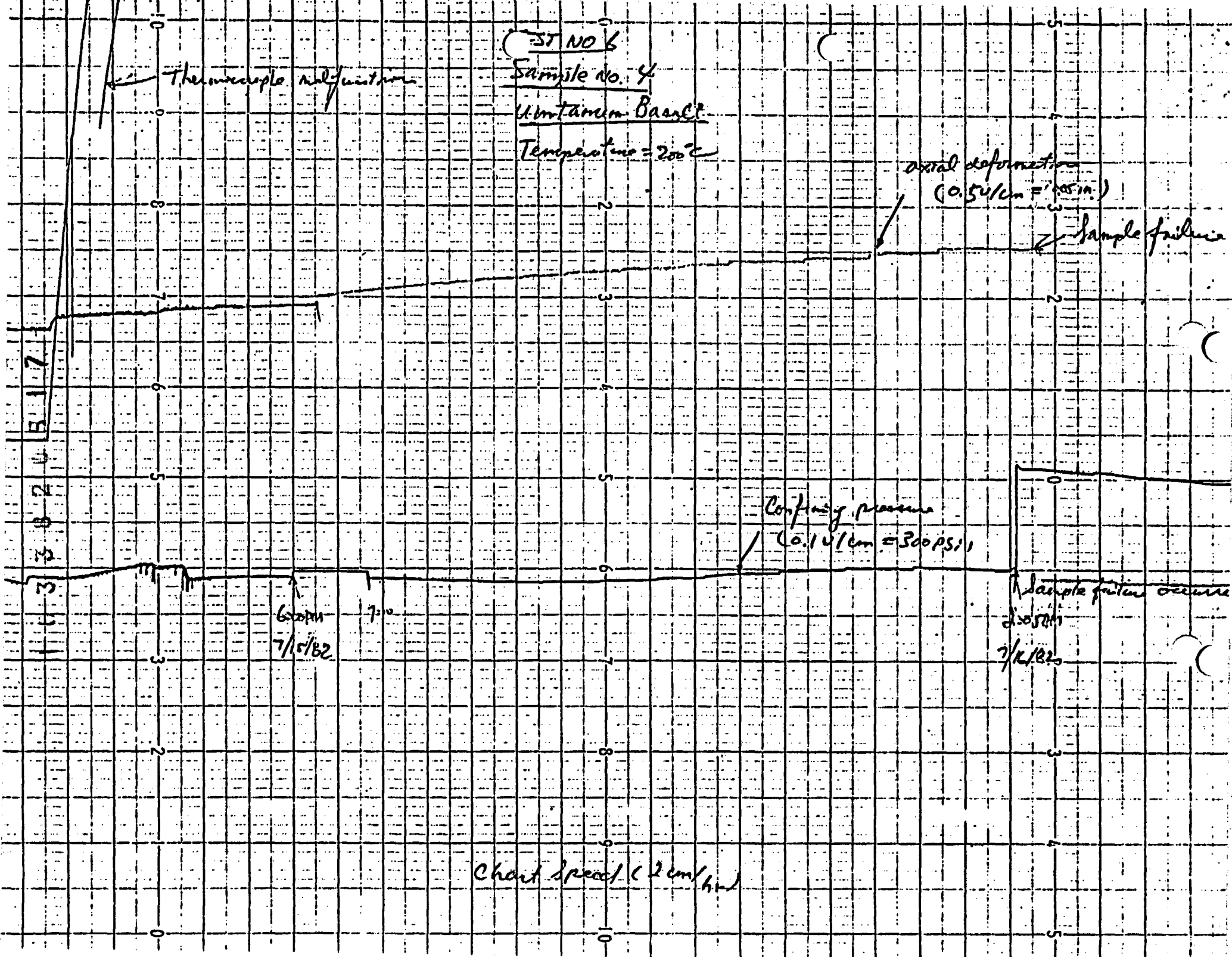
ENGINEERS INTERNATIONAL, INC.

Joint Creep Test Data Sheet

Client Rockwell International Job No. 1072
Project Joint Creep Location of Project Richland, WA
Boring No. _____ Sample No. 27 (Test No. 8)
Brief Description of Material Unitanum Basalt
Test Interval 3065.5 - 3066.5'
Initial Date of Testing 7/15/82
Last Date of Testing 7/17/82
Ambient Temperature 200°C
Confining Pressure 10MPa (1450 psi)
Axial Load 35,500 lbs.
Joint Dipping Angle 30° with core axis
Thickness of Joint Filling Material 1 μm
Description of Joint Filling Material Quartz
Sample Length 4.35" Sample Diameter 1.87"
Remarks: The failure occurred when the full axial load was applied for 5 hours.

Prepared By Mark S. Ma Date 7/18/82
Reviewed By _____ Date _____
Audited By _____ Date _____
Inspected By _____ Date _____ No. _____

1651502026



TEST No. 7
Sample no. 1
Ustinau Basalt

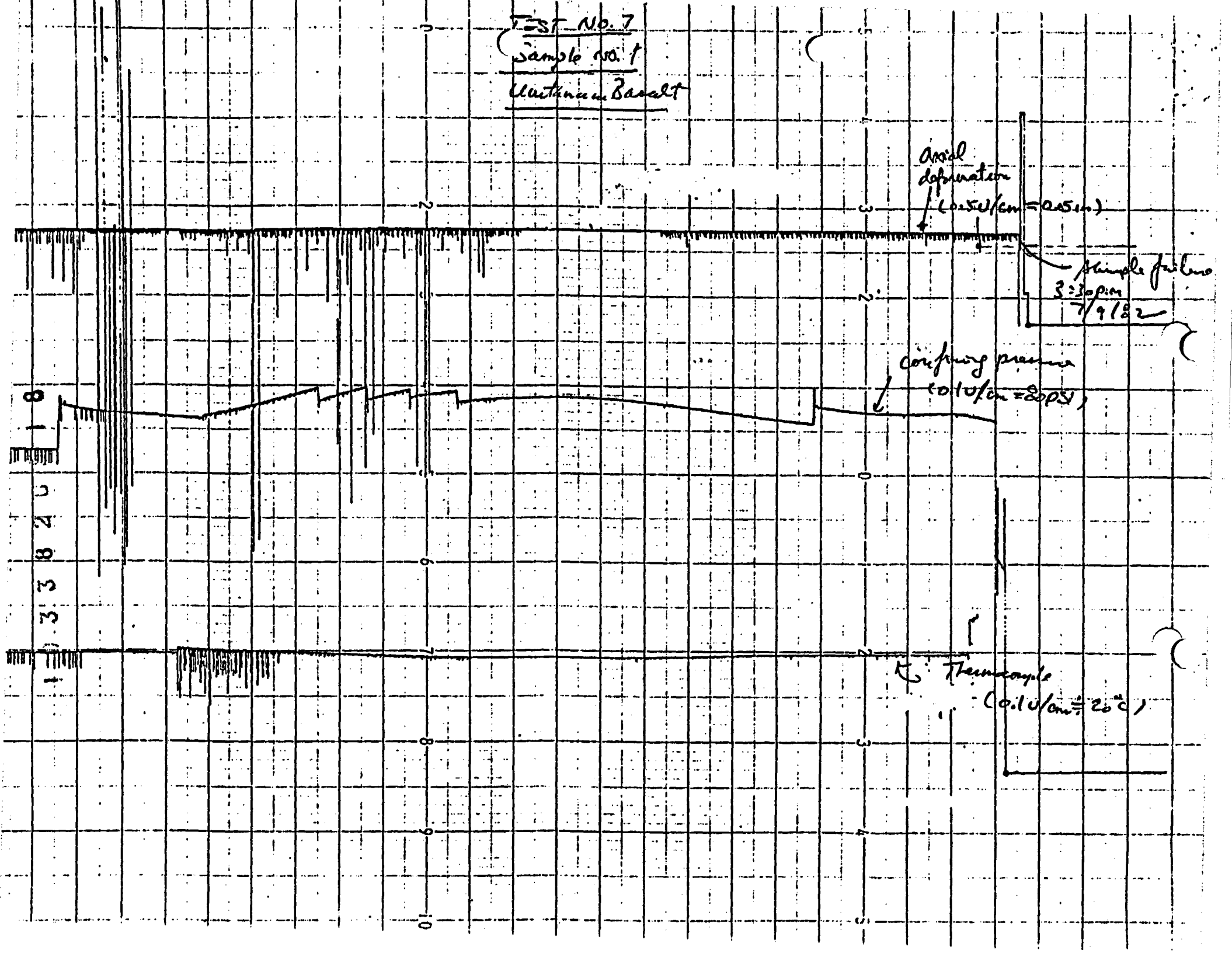
axial deformation
(0.50/cm = 0.25 in)

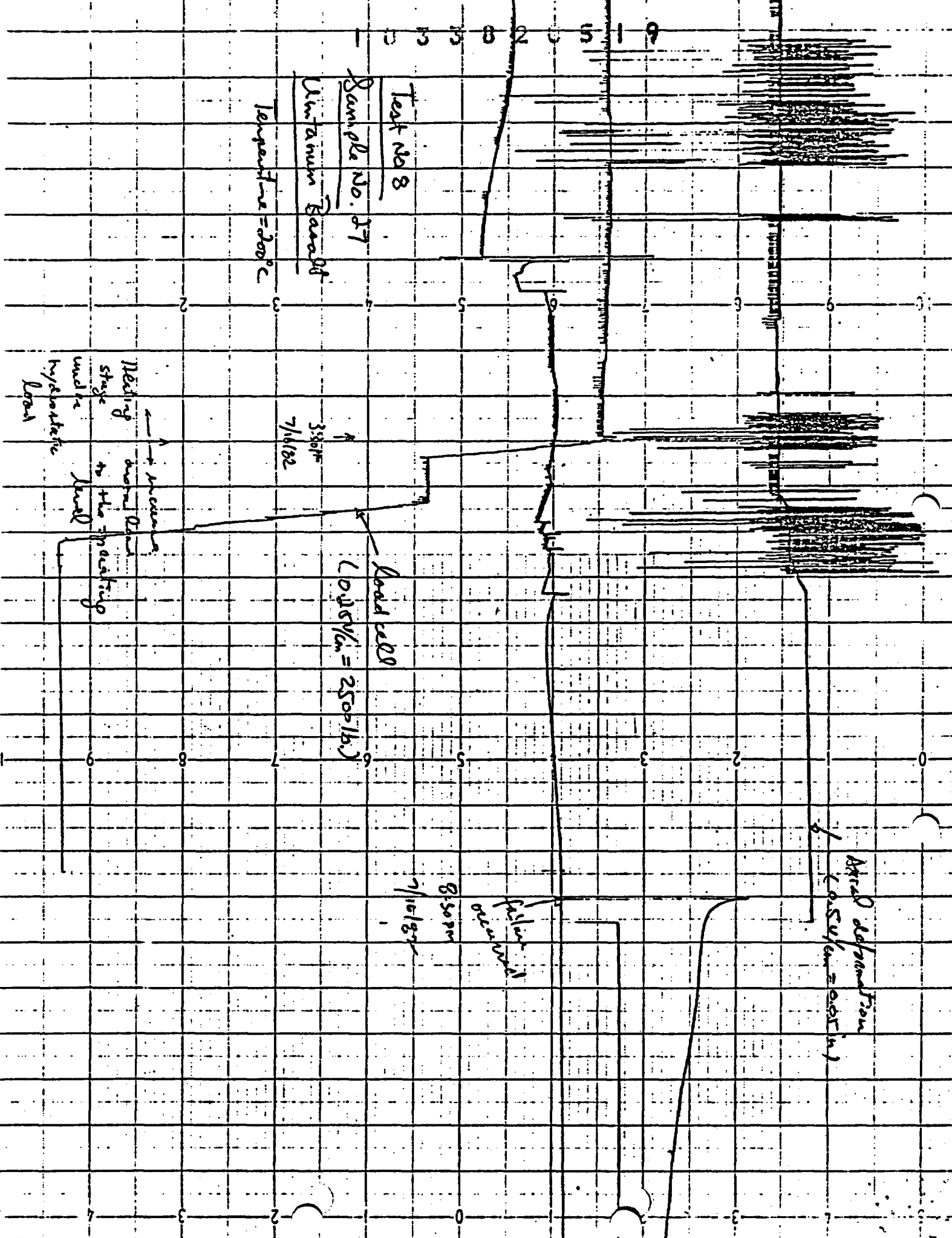
Sample failure
3:30 p.m.
7/9/82

confining pressure
(0.10/cm = 20 PSI)

Ther sample
(0.10/cm = 20°C)

8
1
6
2
0
8
3
3
1





Test No 8

Sample No. 27

Uranium Based

Temperature = 200°C

3.50pm
7/16/82

Load cell
(0.015% = 250 lb.)

8.50pm
7/16/82

Failure of
specimen

Actual deformation
(0.55% = 0.01 in)

→ increase
→ decrease
Nesting
stage
under
hydrostatic
load
to the packing
level

1 0 3 4 8 2 0 5 2 0

Test No. 9

Sample No. 20

Manufacturer: Bussell

Temperature = 200°C

Load cell (0.25 v/cm = 2500 lb)

Axial deformation (0.5 v/cm = 0.05 in.)

Temperature
stage

Sample holder

8:40 PM
7/30/82

Confining pressure
(0.25 v/cm = 2500 psi)

Sample holder (1450 psi)

Clear space (dry air)

