WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Graves Drilling Co., Inc. Lease & Well No. Newell-Staples #1

Elevation 1470 Kelly Bushing Formation Kansas City Effective Pay ---- Ft. Ticket No. 6592

Date 8-23-80 Sec. 16 Twp. 31 S Range 6 W County Harper State KS

Test Approved by Harold Steincamp Western Representative Rod Tritt

Formation Test No. 1 Interval Tested from 3691 ft. to 3709 ft. Total Depth 3709 ft.

Packer Depth 3686 ft. Size 6 3/4 in. Packer Depth ---- ft. Size ---- in.

Packer Depth 3691 ft. Size 6 3/4 in. Packer Depth ---- ft. Size ----- in.

Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3695 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 3698 ft. Recorder Number 4332 Cap. 4200

Below Straddle Recorder Depth ---- ft. Recorder Number ------ Cap. -----

Drilling Contractor Graves Drilling Co. Drill Collar Length 88 I. D. 2¼ in.

Mud Type Chemical Viscosity 48 Weight Pipe Length ----- I. D. ---- in.

Weight 9.3 Water Loss 44.8 cc. Drill Pipe Length 3583 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½ OD in.

Jars: Make NO Serial Number ----- Anchor Length 18 ft. Size 5½ OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ FH in.

Blow: Very weak blow on initial flow period. Died in 20 minutes.
No blow on final flow period.

Recovered 75 ft. of Drilling mud.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 4:35 ~~A.M.~~ P.M. Time Started Off Bottom 6:35 ~~A.M.~~ P.M. Maximum Temperature 124° F.

Initial Hydrostatic Pressure ..... (A) 1928 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 54 P.S.I. to (C) 54 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 965 P.S.I.

Final Flow Period ..... Minutes 30 (E) 114 P.S.I. to (F) 92 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 910 P.S.I.

Final Hydrostatic Pressure ..... (H) 1857 P.S.I.

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 8-23-80 Test Ticket No. 6592

Recorder No. 2606 Capacity 4150 Location 3695 Ft.

Clock No. ------ Elevation 1470 Kelly Bushing Well Temperature 124 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1928 P.S.I.		Open Tool	4:35 P M	
B	First Initial Flow Pressure	54 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	54 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	965 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	114 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	92 P.S.I.				
G	Final Closed-in Pressure	910 P.S.I.				
H	Final Hydrostatic Mud	1857 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 10 Inc.		Breakdown: 6 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	54	0	54	0	114	0	92
P 2 5	54	3	423	5	102	3	391
P 3 10	54	6	597	10	96	6	566
P 4 15	54	9	707	15	94	9	672
P 5 20	54	12	786	20	92	12	734
P 6 25	54	15	838	25	92	15	794
P 7 30	54	18	875	30	92	18	826
P 8		21	904			21	852
P 9		24	923			24	875
P10		27	942			27	891
P11		30	965			30	910
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

4332 DST #1

JK # 6592

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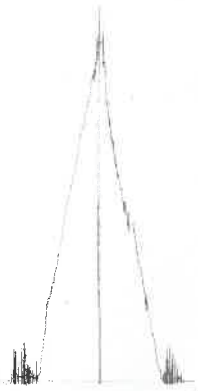

2606 DST #1

JK # 6592

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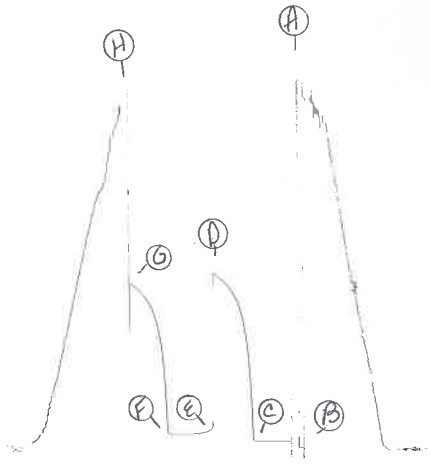
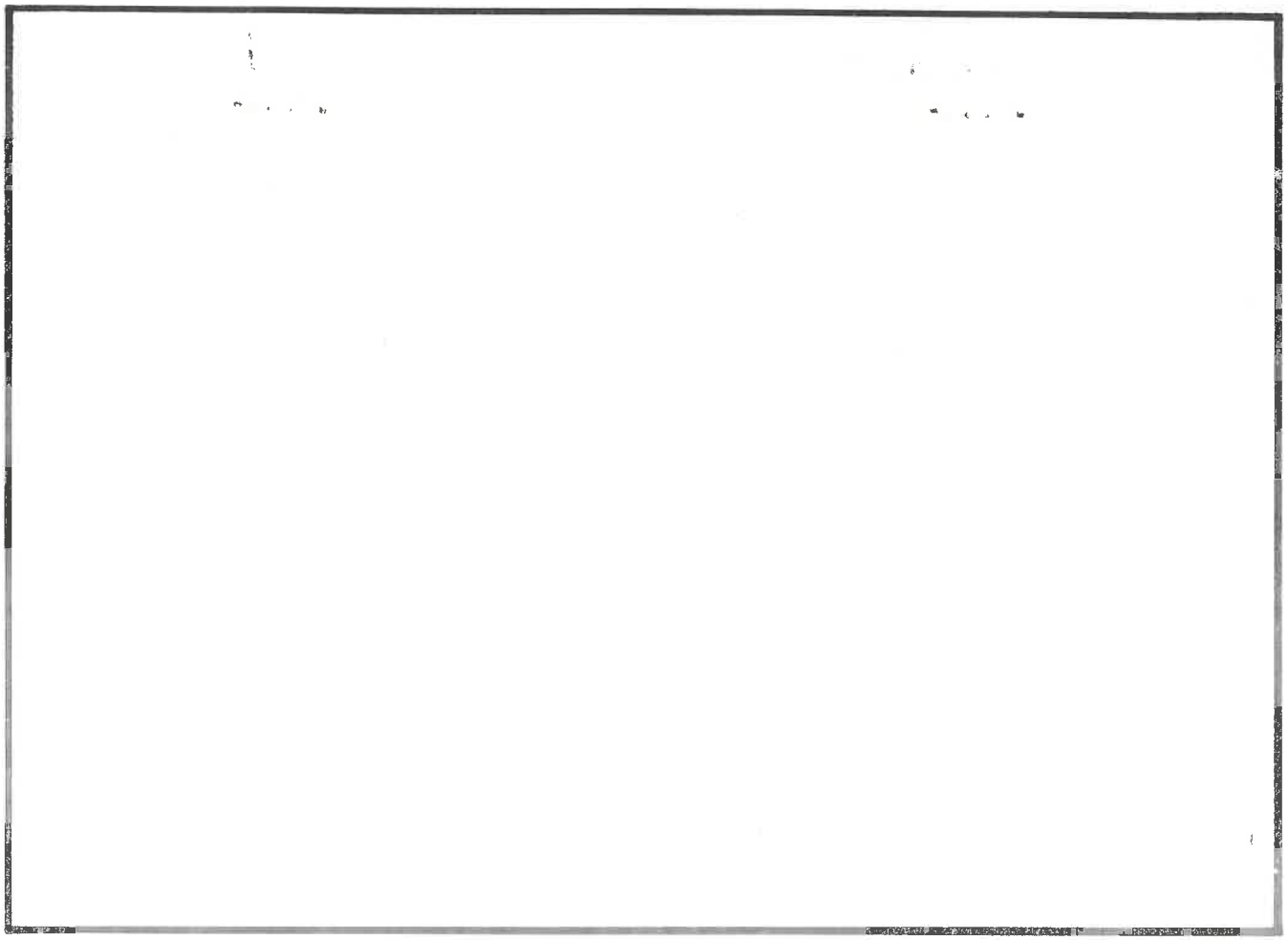


COMPANY Graves Drilling Co., Inc. LEASE AND WELL NO. Newell-Staples #1 SEC. 16 W 31 G 6W 1 DATE 8-23



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1905	1928	PSI
(B)	First Initial Flow Pressure	52	54	PSI
(C)	First Final Flow Pressure	52	54	PSI
(D)	Initial Closed-in Pressure	966	965	PSI
(E)	Second Initial Flow Pressure	124	114	PSI
(F)	Second Final Flow Pressure	93	92	PSI
(G)	Final Closed-in Pressure	904	910	PSI
(H)	Final Hydrostatic Mud	1873	1857	PSI

Home Office: Wichita, Kansas 67201
P.O. Box 1599 (316) 262-5861

Company Graves Drilling Co.,Inc. Lease & Well No. Newell Staples #1

Elevation 1470 Kelly Bushing Formation Mississippi Effective Pay ------ Ft. Ticket No. 6838

Date 8-25-80 Sec. 16 Twp. 31 S Range 6 W County Harper State KS

Test Approved by Harold Steincamp Western Representative Jeff Piotrowski

Formation Test No. 2 Interval Tested from 4298 ft. to 4318 ft. Total Depth 4318 ft.

Packer Depth 4293 ft. Size 6 3/4 in. Packer Depth ---- ft. Size ---- in.

Packer Depth 4298 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.

Depth of Selective Zone Set -------

Top Recorder Depth (Inside) 4301 ft. Recorder Number 5673 Cap. 5400

Bottom Recorder Depth (Outside) 4304 ft. Recorder Number 1565 Cap. 4900

Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. ----

Drilling Contractor Graves Drilling Rig #1 Drill Collar Length 90 I. D. 2.2 in.

Mud Type Chemical Viscosity 48 Weight Pipe Length ---- I. D. ---- in.

Weight 9.5 Water Loss 20.8 cc. Drill Pipe Length 4188 I. D. 3.8 in.

Chlorides 10,500 P.P.M. Test Tool Length 20 ft. Tool Size 5½ OD in.

Jars: Make ---- Serial Number ----- Anchor Length 20 ft. Size 5½ OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ FH in.

Blow: Strong blow throughout both flow periods.

Recovered 75 ft. of Gassy oil cut mud.

Recovered 120 ft. of Gas cut water.

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Remarks:

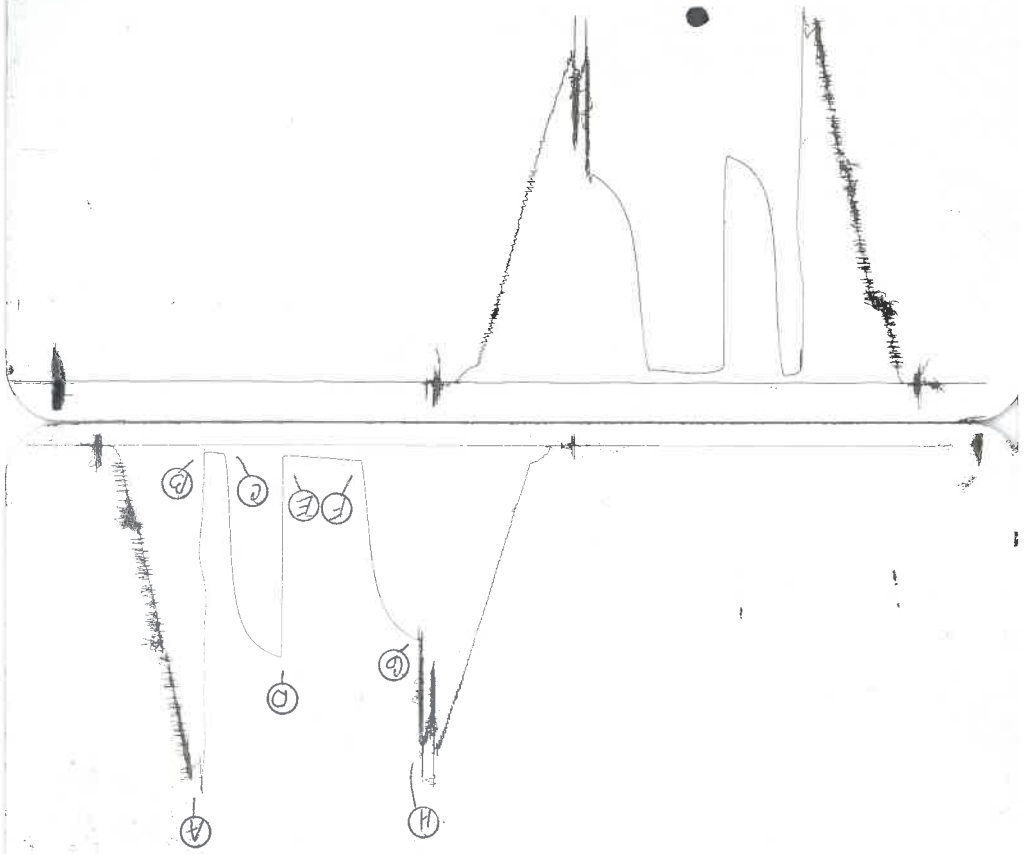
Time Set Packer(s) 8:43 A.M. P.M. Time Started Off Bottom 11:28 A.M. P.M. Maximum Temperature 108° F.

Initial Hydrostatic Pressure			(A)	2248	P.S.I.	
Initial Flow Period	Minutes	15	(B)	51	P.S.I. to (C)	65 P.S.I.
Initial Closed In Period	Minutes	45	(D)	1505	P.S.I.	
Final Flow Period	Minutes	60	(E)	79	P.S.I. to (F)	111 P.S.I.
Final Closed In Period	Minutes	45	(G)	1381	P.S.I.	
Final Hydrostatic Pressure			(H)	2113	P.S.I.	

WTC-

1565
DST#2

Bt #6838



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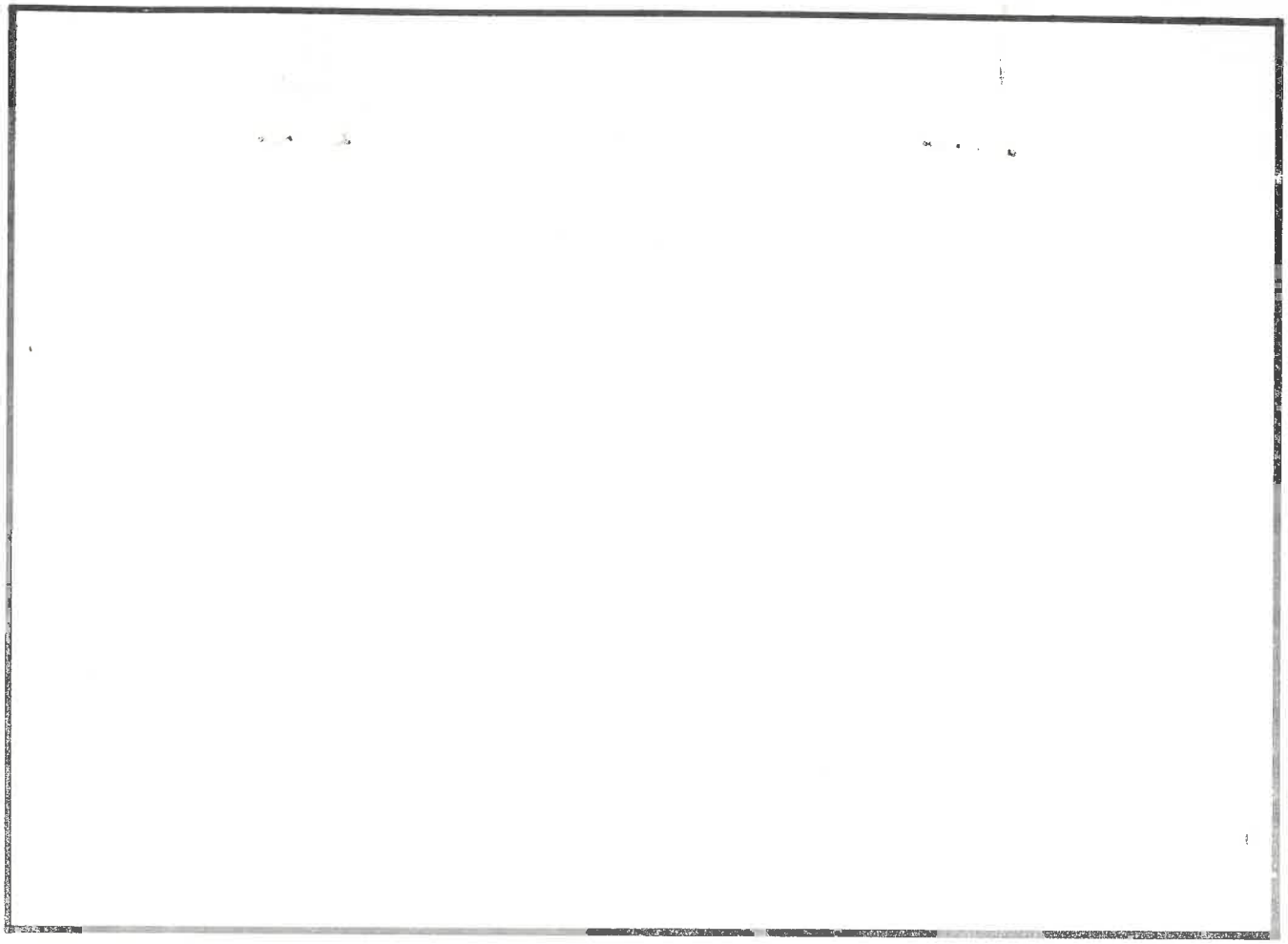
Bt #6838

1565
DST#2

COMPANY GRAVES DRILLING COMPANY, INC. LEASE AND WELL NO. NEWELL STAPLES #1 SEC. 16 TWP. 31S RGE. 6W TEST NO. 2 DATE 8



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2258	2248	PSI
(B)	First Initial Flow Pressure	40	51	PSI
(C)	First Final Flow Pressure	54	65	PSI
(D)	Initial Closed-in Pressure	1498	1505	PSI
(E)	Second Initial Flow Pressure	81	79	PSI
(F)	Second Final Flow Pressure	109	111	PSI
(G)	Final Closed-in Pressure	1363	1381	PSI
(H)	Final Hydrostatic Mud	2081	2113	PSI