WESTERN TEST SERVICE

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation = K.C. Ticket Number 6025

Date Feb. 1. 965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

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Formation Test No. 1 O.K. X Misrun ____ Interval Tested From 3500' to 3545' Total Depth 3545'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3500 Ft. Size 6 3/4 Packer Depth 3495 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5½ OD Tool Jt. Size 4½ FH Anchor Length 45 Ft. Size 5½ OD

RECORDERS Depth 3508 Ft Clock No. 6866 Depth 3510 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

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Time Set Packer 1:18 P M

Tool Open I.F.P. From 1:21P M to 1:26 M Hr. 5 Min. From (B) 40 P.S.I. To (C) 40 P.S.I.

Tool Closed I.C.I.P. From 1:26 M. to 1:56 M. Hr. 30 Min. (D) 818 P.S.I.

Tool Open F.F.P. From 1:56P M. to 2:56 M. Hr. 60 Min. From (E) 41 P.S.I. To (F) 44 P.S.I.

Tool Closed F.C.I.P. From 2:56 M. to 3:26 M. Hr. 30 Min. (G) 153 P.S.I.

Inital Hydrostatic Pressure (A) 1912 P.S.I. Final Hydrostatic Pressure (H) 1889 P.S.I.

	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
SURFACE INFORMATION	3/8 In.		M.	
			M.	
			M.	

BLOW Weak blow five minutes. Flushed tool. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes X No Recovery Total Ft. 20' mud

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 42 Weight 10 Maximum Temp. 105 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub. plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 2890 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 65 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 1, 1965 Test Ticket No. 6025

Recorder No. 1564 Capacity 3150 Location 3508 Ft.

Clock No. 6866 Elevation 2152 KellyBushings Well Temperature 105 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1912 P.S.I.	Opened Tool	1:18 PM	
B First Initial Flow Pressure	40 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C First Final Flow Pressure	40 P.S.I.	Initial Closed-in Pressure	30 Mins.	29 Mins.
D Initial Closed-in Pressure	818 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	41 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	44 P.S.I.			
G Final Closed-in Pressure	153 P.S.I.			
H Final Hydrostatic Mud	1889 P.S.I.			

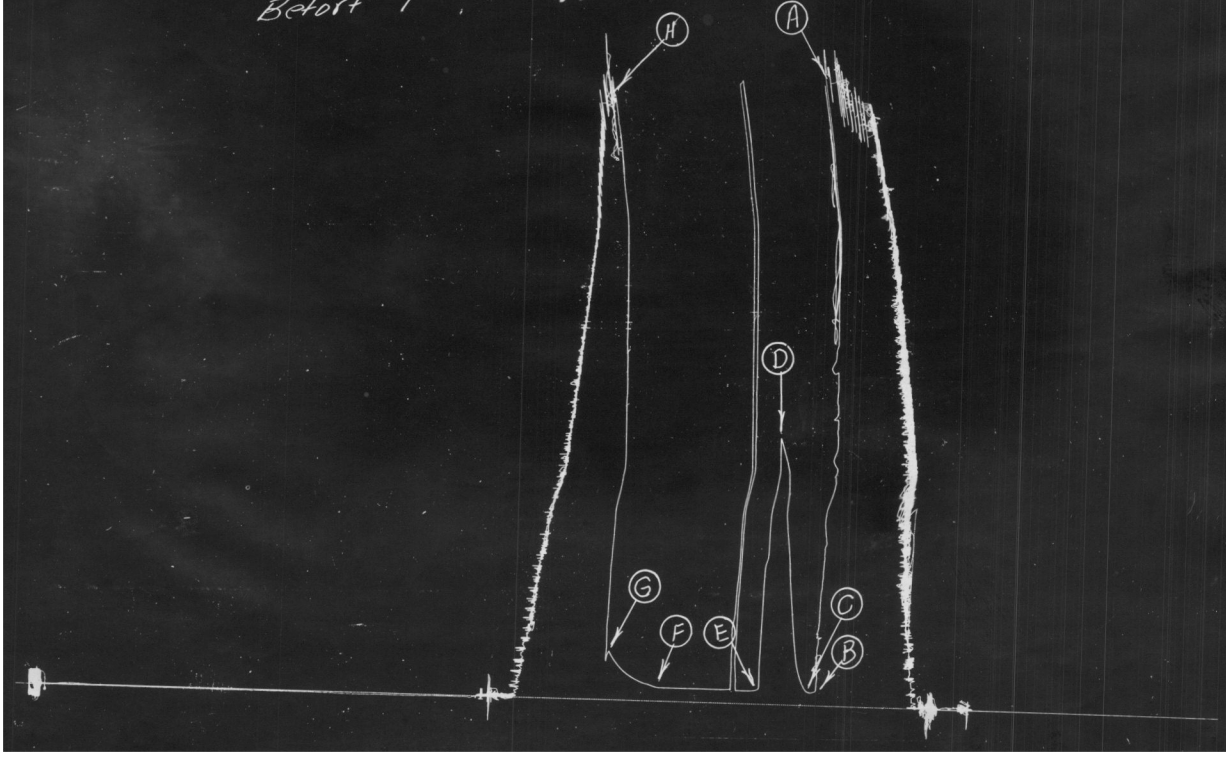
PRESSURE BREAKDOWN

First Flow Press.	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 1 Inc.	Breakdown: 9 Inc.	Breakdown: 12 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 2 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	40	0	40	0	41	0	44
5 P 2	40	3	65	5	41	3	49
P 3		6	111	10	41	6	54
P 4		9	188	15	41	9	58
P 5		12	312	20	44	12	65
P 6		15	428	25	44	15	74
P 7		18	565	30	44	18	83
P 8		21	659	35	44	21	97
P 9		24	737	40	44	24	111
P10		27	794	45	44	27	133
P11		29	818	50	44	30	153
P12				55	44		
P13				60	44		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Graves Drlg. Co. Inc.
Beford #1

Test # 1
TKT # 6025



Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation=K.C. Ticket Number 8051

Date Feb.2,1965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

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Formation Test No. 2 O.K. X Misrun ____ Interval Tested From 3616' to 3657' Total Depth 3657'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3616 Ft. Size 6 3/4 Packer Depth 3611 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size ~~XXXXX~~ 5 1/2 OD Tool Jt. Size ~~XXXX~~ 4 1/2FH Anchor Length 41 Ft. Size ~~XXXX~~ 5 1/2 OD

RECORDERS Depth 3624 Ft Clock No. 6866 Depth 3626 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

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Time Set Packer 3:18 P M

Tool Open I.F.P. From 3:21P M to 3:26 M Hr. 5 Min. From (B) 32 P.S.I. To (C) 32 P.S.I.

Tool Closed I.C.I.P. From 3:26 M. to 3:56 M. Hr. 30 Min. (D) 855 P.S.I.

Tool Open F.F.P. From 3:56P M. to 4:56 M. Hr. 60 Min. From (E) 34 P.S.I. To (F) 35 P.S.I.

Tool Closed F.C.I.P. From 4:56 M. to 5:26 M. Hr. 30 Min. (G) 54 P.S.I.

Inital Hydrostatic Pressure (A) 1972 P.S.I. Final Hydrostatic Pressure (H) 1944 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
			M.	

BLOW Weak blow five minutes. Flushed tool. Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes X No Recovery Total Ft. 10' mud

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 41 Weight 9.8 Maximum Temp. 108 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3006 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 61 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 2, 1965 — Test Ticket No. 8051

Recorder No. 1564 — Capacity 3150 — Location 3624 Ft.

Clock No. 6866 — Elevation 2152 Kelly Bushings — Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1972 P.S.I.	Opened Tool	3:18 P M	
B First Initial Flow Pressure	32 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C First Final Flow Pressure	32 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	855 P.S.I.	Second Flow Pressure	60 Mins.	59 Mins.
E Second Initial Flow Pressure	34 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	35 P.S.I.			
G Final Closed-in Pressure	54 P.S.I.			
H Final Hydrostatic Mud	1944 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

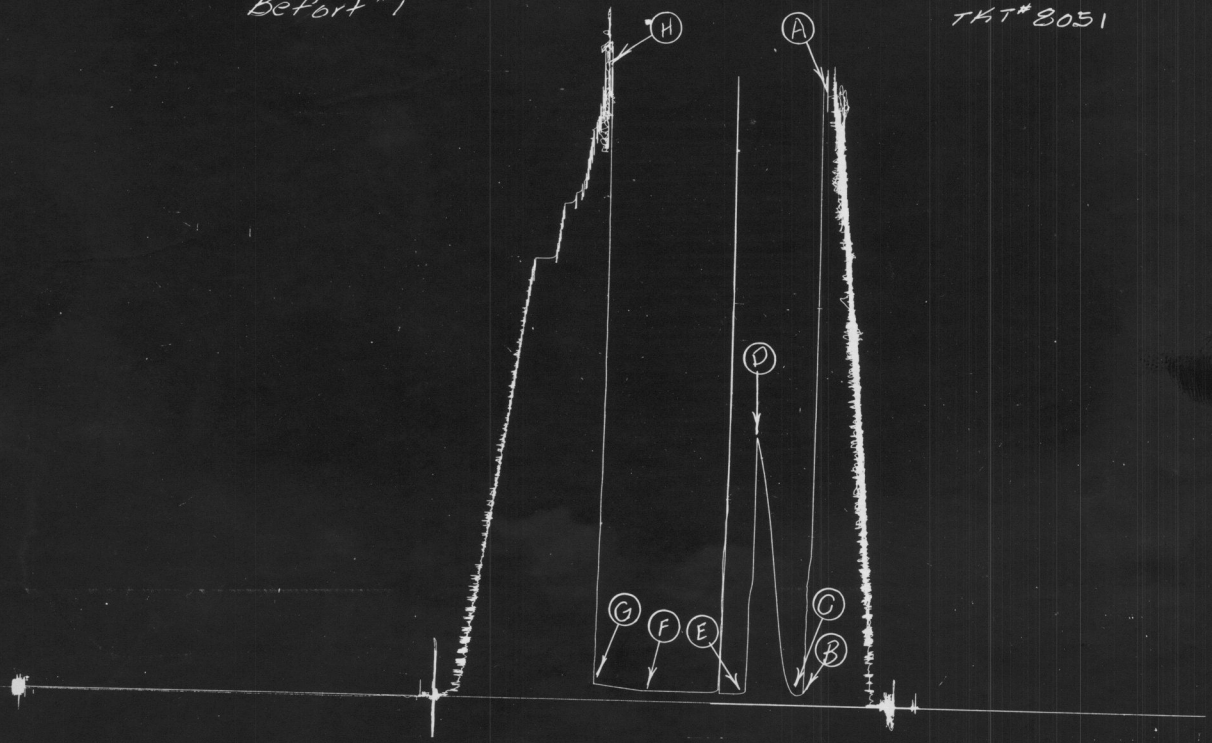
Second Flow Pressure
Breakdown: 11 Inc.
of 5 mins. and a
final inc. of 4 Min.

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	32	0	32	0	34	0	35
P 2 5	32	3	48	5	34	3	37
P 3		6	94	10	34	6	39
P 4		9	156	15	34	9	41
P 5		12	254	20	35	12	43
P 6		15	403	25	35	15	44
P 7		18	621	30	35	18	46
P 8		21	656	35	35	21	48
P 9		24	748	40	35	24	51
P10		27	826	45	35	27	52
P11		30	855	50	35	30	54
P12				55	35		
P13				59	35		
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Graves Drlg. Co. Inc.
Befort #1

Test # 2
TKT # 8051



Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation-Arb. Ticket Number 8052

Date Feb.;3,1965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

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Formation Test No. 3 O.K. X Misrun ____ Interval Tested From 3776' to 3782' Total Depth 3782'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3776 Ft. Size 6 3/4 Packer Depth 3771 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2FH Anchor Length 6 Ft. Size 5 1/2 OD

RECORDERS Depth 3764 Ft Clock No. 6866 Depth 3779 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

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Time Set Packer 3:13 P M

Tool Open I.F.P. From 3:16 M to 3:21 M Hr. 5 Min. From (B) 23 P.S.I. To (C) 23 P.S.I.

Tool Closed I.C.I.P. From 3:21 M. to 3:51 M. Hr. 30 Min. (D) 1112 P.S.I.

Tool Open F.F.P. From 3:51P M. to 5:21 M. Hr. 90 Min. From (E) 37 P.S.I. To (F) 67 P.S.I.

Tool Closed F.C.I.P. From 5:21 M. to 6:06 M. Hr. 45 Min. (G) 754 P.S.I.

Inital Hydrostatic Pressure (A) 2078 P.S.I. Final Hydrostatic Pressure (H) 2048 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Weak blow throughout test. Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes X No Recovery Total Ft. 60' gas in pipe - 115' muddy oil

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Mud

Reversed Out ____ Yes X No Mud Type Starch Viscosity 49 Weight 9.9 Maximum Temp. 113 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3161 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 31 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 3, 1965 — Test Ticket No. 8052

Recorder No. 1564 — Capacity 3150 — Location 3764 Ft.

Clock No. 6866 — Elevation 2152 Kelly Bushings — Well Temperature 113 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2078 P.S.I.	Opened Tool	3:13P M	
B First Initial Flow Pressure	23 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C First Final Flow Pressure	23 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	1112 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	37 P.S.I.	Final Closed-in Pressure	45 Mins.	42 Mins.
F Second Final Flow Pressure	67 P.S.I.			
G Final Closed-in Pressure	754 P.S.I.			
H Final Hydrostatic Mud	2048 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	23
P 2 5	23
P 3	
P 4	
P 5	
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

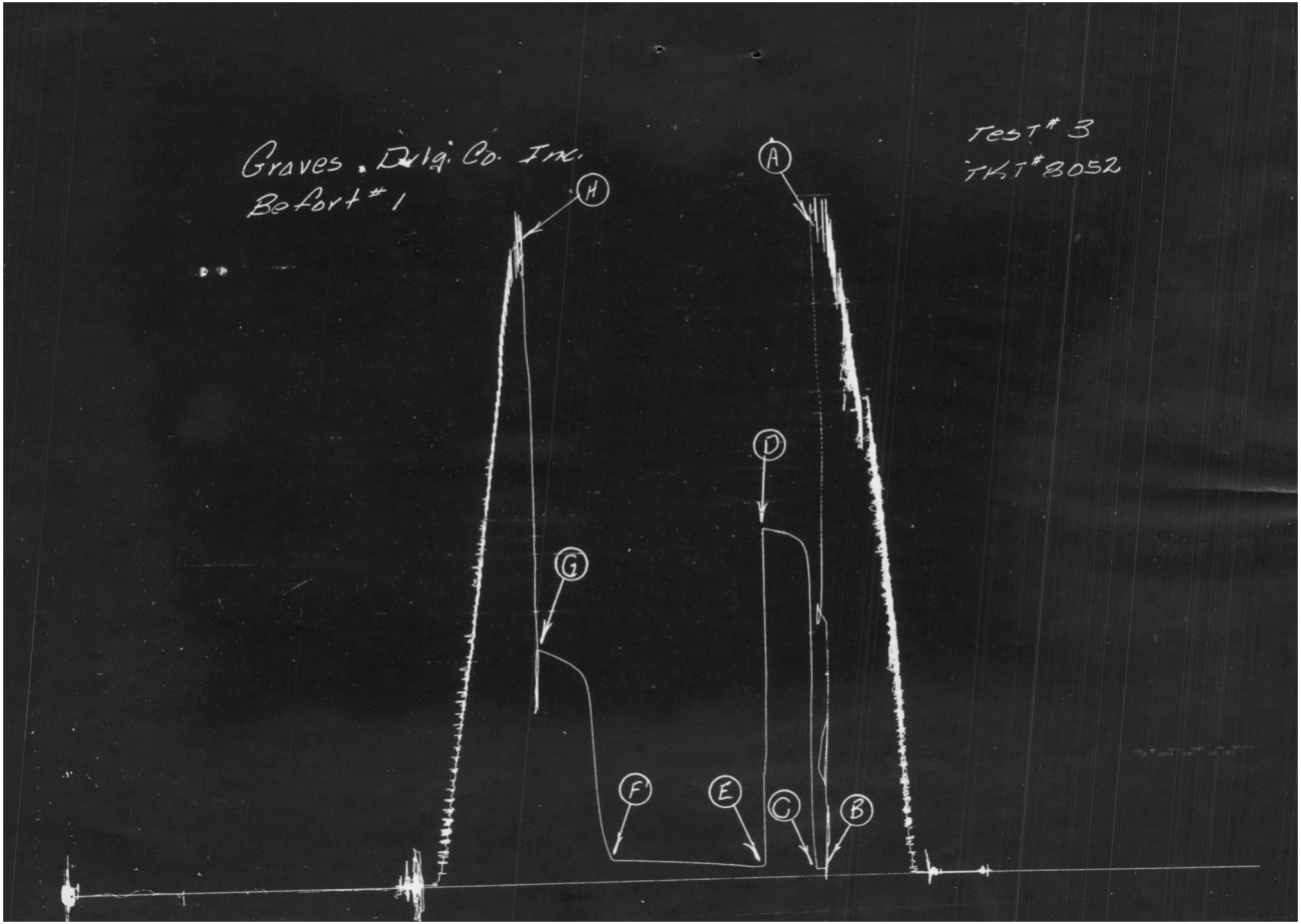
Point Minutes	Press.
0	23
3	450
6	1042
9	1072
12	1085
15	1093
18	1097
21	1101
24	1107
27	1110
30	1112

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	37
5	38
10	39
15	41
20	43
25	45
30	48
35	51
40	53
45	55
50	57
55	59
60	60
65	62
70	64
75	65
80	66
85	67
90	67

Final Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	67
3	113
6	191
9	376
12	582
15	657
18	680
21	698
24	709
27	718
30	724
33	734
36	740
39	746
42	754


Graves Drlg. Co. Inc.
Befort #1
Test # 3
T.K.T # 8052
A
B
C
D
E
F
G
H

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation-Arb. Ticket Number 8053

Date Feb. 4,1965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

Formation Test No. 4 O.K. X Misrun ____ Interval Tested From 3776' to 3787' Total Depth 3787'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes ____ No X Conv. ____ B.T. X Damaged ____ Yes ____ No X

Packer Depth 3776 Ft. Size 6 3/4 Packer Depth 3771 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2 FH Anchor Length 11 Ft. Size 5 1/2 OD

RECORDERS Depth 3780 Ft Clock No. 6866 Depth 3782 Ft. Clock No. 127

Top Make Amerada Cap. XXXXX No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

Time Set Packer 3:18 A M

Tool Open I.F.P. From 3:21A M to 3:26 M Hr. 5 Min. From (B) 34 P.S.I. To (C) 34 P.S.I.

Tool Closed I.C.I.P. From 3:26 M. to 3:56 M. Hr. 30 Min. (D) 838 P.S.I.

Tool Open F.F.P. From 3:56A M. to 5:26A M. Hr. 90 Min. From (E) 48 P.S.I. To (F) 102 P.S.I.

Tool Closed F.C.I.P. From 5:26A M. to 6:11A M. Hr. 45 Min. (G) 307 P.S.I.

Inital Hydrostatic Pressure (A) 2061 P.S.I. Final Hydrostatic Pressure (H) 2040 P.S.I.

	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
SURFACE INFORMATION	3/8 In.		M.	
			M.	
			M.	

BLOW Weak blow throughout test. Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes X No Recovery Total Ft. 60' gas. - 25' clean oil - 180' muddy oil

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 49 Weight 9.9 Maximum Temp. 115 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3166 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 31 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 4, 1965 Test Ticket No. 8053

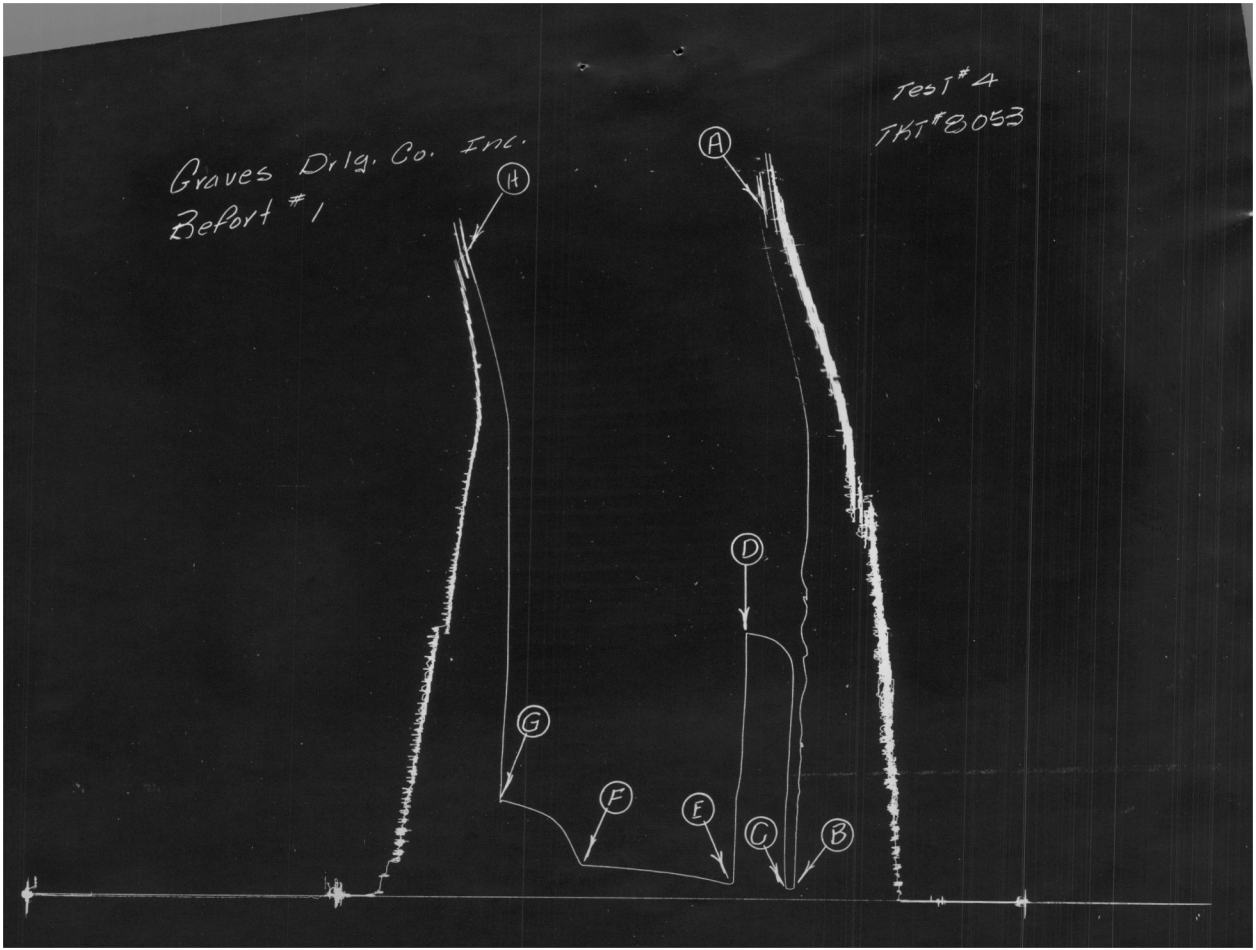
Recorder No. 1564 Capacity 3150 Location 3780 Ft.

Clock No. 6866 Elevation 2152 Kelly Bushings Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2061 P.S.I.	Opened Tool	3:18A M	
B First Initial Flow Pressure	34 P.S.I.	First Flow Pressure	5 Mins.	5 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	838 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	48 P.S.I.	Final Closed-in Pressure	45 Mins.	48 Mins.
F Second Final Flow Pressure	102 P.S.I.			
G Final Closed-in Pressure	307 P.S.I.			
H Final Hydrostatic Mud	2040 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 1 Inc.		Breakdown: 10 Inc.		Breakdown: 18 Inc.		Breakdown: 16 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	34	0	34	0	48	0	102
P 2 5	34	3	428	5	51	3	134
P 3		6	762	10	58	6	170
P 4		9	790	15	63	9	194
P 5		12	804	20	68	12	219
P 6		15	815	25	72	15	237
P 7		18	822	30	77	18	248
P 8		21	829	35	80	21	259
P 9		24	832	40	83	24	267
P10		27	835	45	86	27	273
P11		30	838	50	89	30	281
P12				55	91	33	286
P13				60	94	36	290
P14				65	96	39	295
P15				70	97	42	300
P16				75	99	45	305
P17				80	100	48	307
P18				85	101		
P19				90	102		
P20							


Graves Drlg. Co. Inc.
Befort #1
Test #4
IKI #8053
A
B
C
D
E
F
G
H

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation - Arb. Ticket Number 8054

Date Feb.4,1965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

Formation Test No. 5 O.K. X Misrun ____ Interval Tested From 3785' to 3791' Total Depth 3791'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3785 Ft. Size 6 3/4 Packer Depth 3780 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2FH Anchor Length 6 Ft. Size 5 1/2 OD

RECORDERS Depth 3773 Ft Clock No. 6866 Depth 3788 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside =~~Outside~~ Bottom Make Westemn Cap. 4000 No. 17 =~~Inside~~ Outside

Below Straddle: Depth ____ Clock No ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

Time Set Packer 4:28 P M

Tool Open I.F.P. From 4:31 P M to 4:37 M Hr. 6 Min. From (B) 31 P.S.I. To (C) 31 P.S.I.

Tool Closed I.C.I.P. From 4:37 M. to 5:07 M. Hr. 30 Min. (D) 604 P.S.I.

Tool Open F.F.P. From 5:07P M. to 6:37P M. Hr. 90 Min. From (E) 41 P.S.I. To (F) 73 P.S.I.

Tool Closed F.C.I.P. From 6:37P M. to 7:22P M. Hr. 45 Min. (G) 269 P.S.I.

Inital Hydrostatic Pressure (A) 2069 P.S.I. Final Hydrostatic Pressure (H) 2049 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
			M.	

BLOW Weak blow throughout test. Bottom Choke Size 3/4 In.

Did Well Flow ____ Yes X No Recovery Total Ft. 75 clean gassy oil. 60' heavily oil cut thin mud.

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 49 Weight 9.6 Maximum Temp. 115 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3170 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 31 ft.

Remarks

WHELAN PRINTERS

WESTERN TESTING CO., INC.
Pressure Data

Date February 4,1965 — Test Ticket No. 8054

Recorder No. 1564 — Capacity 3150 — Location 3773 Ft.

Clock No. 6866 — Elevation 2152 Ke-ly Bushings — Well Temperature 115 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2069	P.S.I.
B	First Initial Flow Pressure	31	P.S.I.
C	First Final Flow Pressure	31	P.S.I.
D	Initial Closed-in Pressure	604	P.S.I.
E	Second Initial Flow Pressure	41	P.S.I.
F	Second Final Flow Pressure	73	P.S.I.
G	Final Closed-in Pressure	269	P.S.I.
H	Final Hydrostatic Mud	2049	P.S.I.

	Time Given	Time Computed
Opened Tool	4:28P M	
First Flow Pressure	6 Mins.	5 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	90 Mins.	90 Mins.
Final Closed-in Pressure	45 Mins.	45 Mins.

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	31
P 2 5	31
P 3	
P 4	
P 5	
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0, Min.

Point Minutes	Press.
0	31
3	529
6	574
9	582
12	588
15	592
18	596
21	598
24	600
27	602
30	604

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

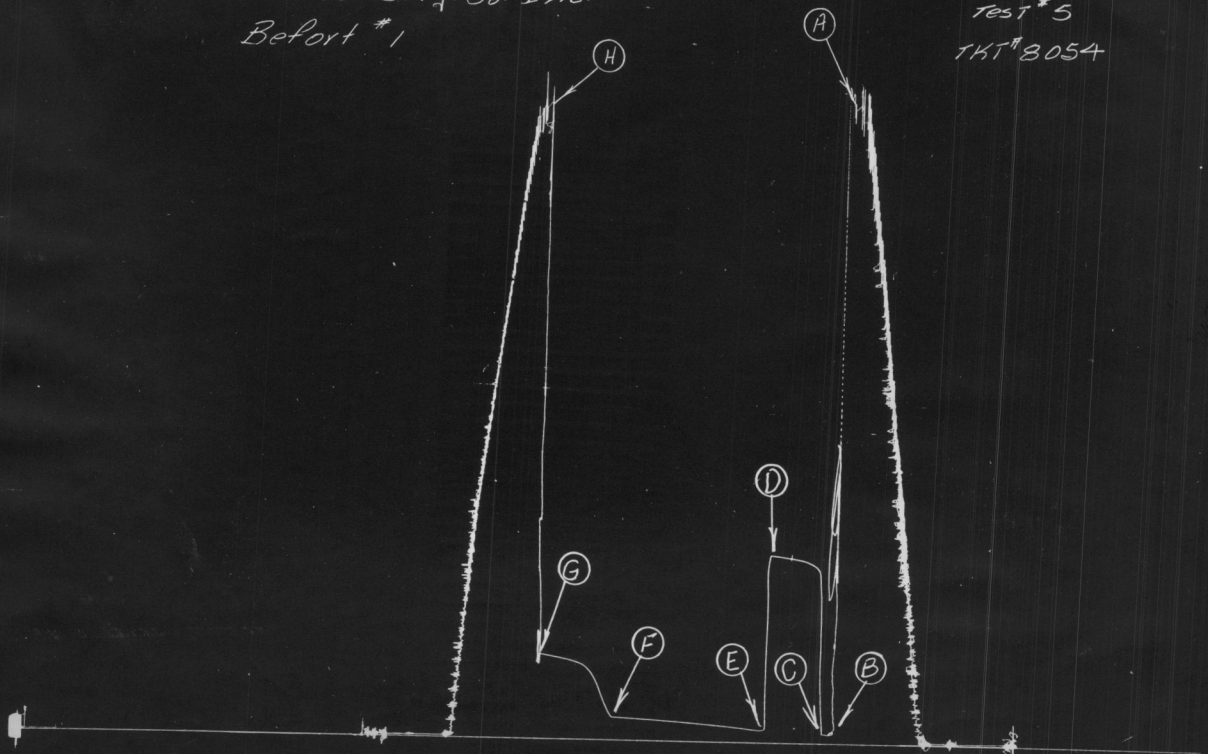
Point Minutes	Press.
0	41
5	42
10	45
15	48
20	50
25	53
30	55
35	58
40	60
45	62
50	64
55	65
60	66
65	67
70	69
75	71
80	72
85	73
90	73

Final Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	73
3	102
6	138
9	178
12	209
15	228
18	239
21	247
24	251
27	255
30	258
33	261
36	262
39	264
42	266
45	269

Graves Drlg. Co. Inc.
Befort #1

Test #5
TKT# 8054



Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings Formation - Arb. Ticket Number 8055

Date Feb. 5, 1965 Sec. 23 Twp. 14s Range 19w County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

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Formation Test No. 6 O.K. X Misrun ____ Interval Tested From 3790' to 3796' Total Depth 3796'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3790 Ft. Size 6 3/4 Packer Depth 3785 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5 1/20D Tool Jt. Size 41/2 FH Anchor Length 6 Ft. Size 5 1/2 OD

RECORDERS Depth 3778 Ft Clock No. 6866 Depth 3793 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

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Time Set Packer 4:23 A M

Tool Open I.F.P. From 4:26A M to 4:33 M Hr. 7 Min. From (B) 24 P.S.I. To (C) 25 P.S.I.

Tool Closed I.C.I.P. From 4:33A M. to 5:03A M. Hr. 30 Min. (D) 500 P.S.I.

Tool Open F.F.P. From 5:03A M. to 6:33A M. Hr. 90 Min. From (E) 34 P.S.I. To (F) 53 P.S.I.

Tool Closed F.C.I.P. From 6:33A M. to 7:18A M. Hr. 45 Min. (G) 306 P.S.I.

Inital Hydrostatic Pressure (A) 2049 P.S.I. Final Hydrostatic Pressure (H) 2032 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
blow			M.	

BLOW Weak ~~blow~~=throughout test. Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes X No Recovery Total Ft. 30' gassy oil - 60' muddy oil (slightly thin)

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 49 Weight 9.6 Maximum Temp. 109 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size ____ Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3175 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 31 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 5,1965 — Test Ticket No. 8055

Recorder No. 1564 — Capacity 3150 — Location 3778 Ft.

Clock No. 6866 — Elevation 2152 Kelly Bushings — Well Temperature 109 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2049 P.S.I.	Opened Tool	4:23 A M	
B	First Initial Flow Pressure	24 P.S.I.	First Flow Pressure	7 Mins.	7 Mins.
C	First Final Flow Pressure	25 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	500 P.S.I.	Second Flow Pressure	90 Mins.	84 Mins.
E	Second Initial Flow Pressure	34 P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F	Second Final Flow Pressure	53 P.S.I.			
G	Final Closed-in Pressure	306 P.S.I.			
H	Final Hydrostatic Mud	2032 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 2 Min.

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

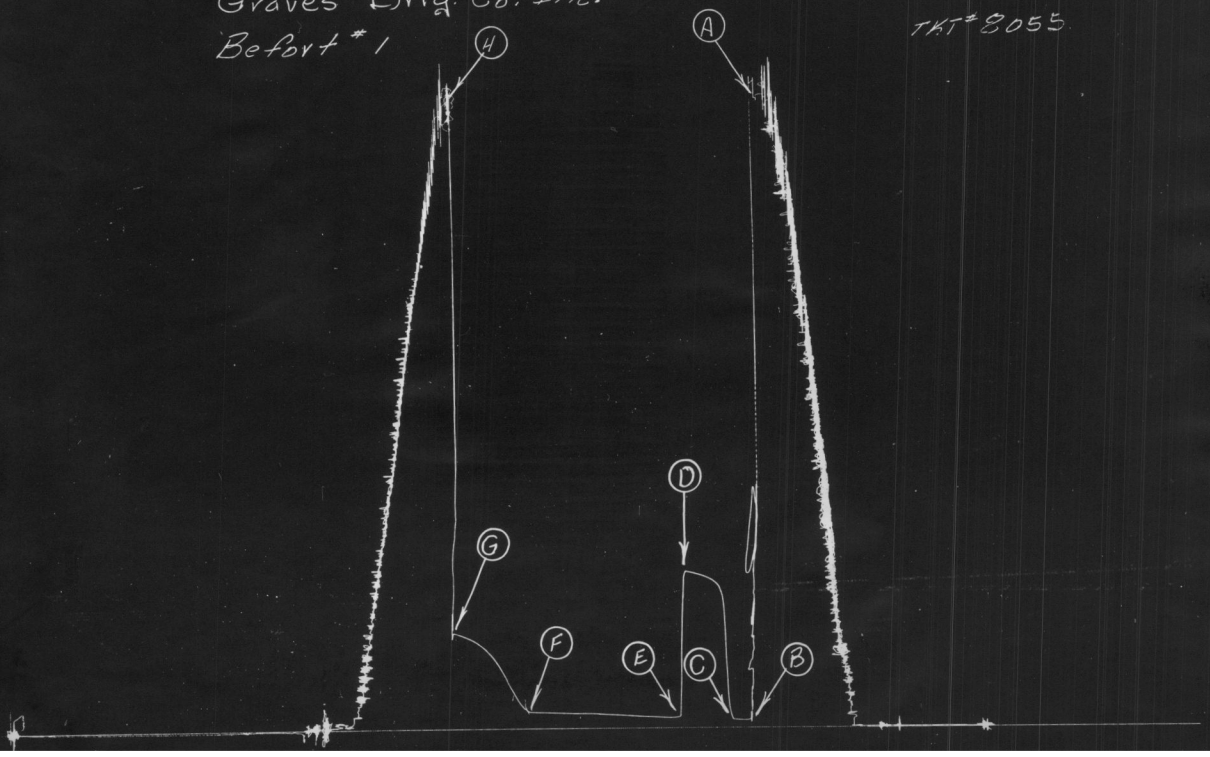
Second Flow Pressure
Breakdown: 17 Inc.
of 5 mins. and a
final inc. of 4 Min.

Final Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	24	0	25	0	34	0	53
P 2 5	24	3	102	5	34	3	71
P 3 ~~10~~ 7	25	6	336	10	35	6	96
P 4		9	437	15	36	9	127
P 5		12	465	20	37	12	156
P 6		15	476	25	38	15	184
P 7		18	484	30	40	18	209
P 8		21	489	35	41	21	230
P 9		24	493	40	42	24	251
P10		27	496	45	44	27	266
P11		30	500	50	45	30	275
P12				55	47	33	284
P13				60	48	36	292
P14				65	49	39	298
P15				70	50	42	303
P16				75	51	45	306
P17				80	51		
P18				85	52		
P19				84	53		
P20							

Graves Drlg. Co. Inc.
Befort #1

Test #6
TKT #8055



WESTERN

Home Office: Great Bend, Kansas

P. O. Box 793 GLadstone 3-7903

Company Graves Drilling Company, Inc. Lease & Well No. Befort #1

Elevation 2152 Kelly Bushings;Formation- Arb. Ticket Number 8056

Date Feb.5,1965 Sec. 23 Twp. 14s Range 19W County Ellis State Kansas

Test Approved by George A. McCaleb Western Representative W. M. Nething

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Formation Test No. 7 O.K. X Misrun ____ Interval Tested From 3795' to 3801' Total Depth 3801'

Size Main Hole 7 7/8 Rat Hole ____ Conv. ____ B.T. X Damaged ____ Yes X No Conv. ____ B.T. X Damaged ____ Yes X No

Packer Depth 3795 Ft. Size 6 3/4 Packer Depth 3790 Ft. Size 6 3/4

Straddle ____ Yes X No ____ Conv. ____ B.T. ____ Damaged ____ Yes ____ No

Packer Depth ____ Ft Size ____

Tool Size 5 1/2 OD Tool Jt. Size 4 1/2FH Anchor Length 6 Ft. Size 6 1/2 OD

RECORDERS Depth 3783 Ft Clock No. 6866 Depth 3798 Ft. Clock No. 127

Top Make Amerada Cap. 3150 No. 1564 Inside ~~Outside~~ Bottom Make Western Cap. 4000 No. 17 ~~Inside~~ Outside

Below Straddle: Depth ____ Clock No. ____ Inside Outside Depth ____ Ft. Clock No. ____ Inside Outside

Top Make ____ Cap. ____ No. ____ Inside Outside Bottom Make ____ Cap. ____ No. ____ Inside Outside

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Time Set Packer 3:03 P M

Tool Open I.F.P. From 3:06P M to 3:16 M Hr. 10 Min. From (B) 34 P.S.I. To (C) 34 P.S.I.

Tool Closed I.C.I.P. From 3:16 M. to 3:46 M. Hr. 30 Min. (D) 537 P.S.I.

Tool Open F.F.P. From 3:46P M. to 5:16 M. Hr. 90 Min. From (E) 38 P.S.I. To (F) 51 P.S.I.

Tool Closed F.C.I.P. From 5:16P M. to 6:01 M. Hr. 45 Min. (G) 411 P.S.I.

Inital Hydrostatic Pressure (A) 2053 P.S.I. Final Hydrostatic Pressure (H) 2028 P.S.I.

SURFACE INFORMATION Size Choke 3/8 In. Max. Press. P.S.I. Time Description of Flow

____ ____ ____ M. ____

____ ____ ____ M. ____

____ ____ ____ M. ____

BLOW Very weak blow throughout test. Bottom Choke Size 3/4 in.

Did Well Flow ____ Yes X No Recovery Total Ft. 30' muddy oil - 60' ~~slightly~~ oily mud

Mud

Reversed Out ____ Yes X No Mud Type starch Viscosity 42 Weight 9.8 Maximum Temp. 110 °F

EXTRA EQUIPMENT: Dual Packers dual Safety Joint no Jars: Size no Make ____ Ser. No. ____

Type Circ. Sub plug Did Tool Plug? no Where? ____ Did Packer Hold? yes

Length Drill Pipe 3180 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 590 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars ____ ft.

I. D. Drill Collars ____ in. Length D. S. T. Tool 31 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date February 5, 1965 — Test Ticket No. 8056

Recorder No. 1564 — Capacity 3150 — Location 3783 Ft.

Clock No. 6866 — Elevation 2152 Kelly Bushings — Well Temperature 110 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2053 P.S.I.	Opened Tool	3:03P M	
B First Initial Flow Pressure	34 P.S.I.	First Flow Pressure	10 Mins.	10 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	537 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	38 P.S.I.	Final Closed-in Pressure	45 Mins.	42 Mins.
F Second Final Flow Pressure	51 P.S.I.			
G Final Closed-in Pressure	411 P.S.I.			
H Final Hydrostatic Mud	2028 P.S.I.			

PRESSURE BREAKDOWN

First Flow Press.
Breakdown: 2 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	34
P 2 5	34
P 3 10	34
P 4	
P 5	
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. 0 of Min.

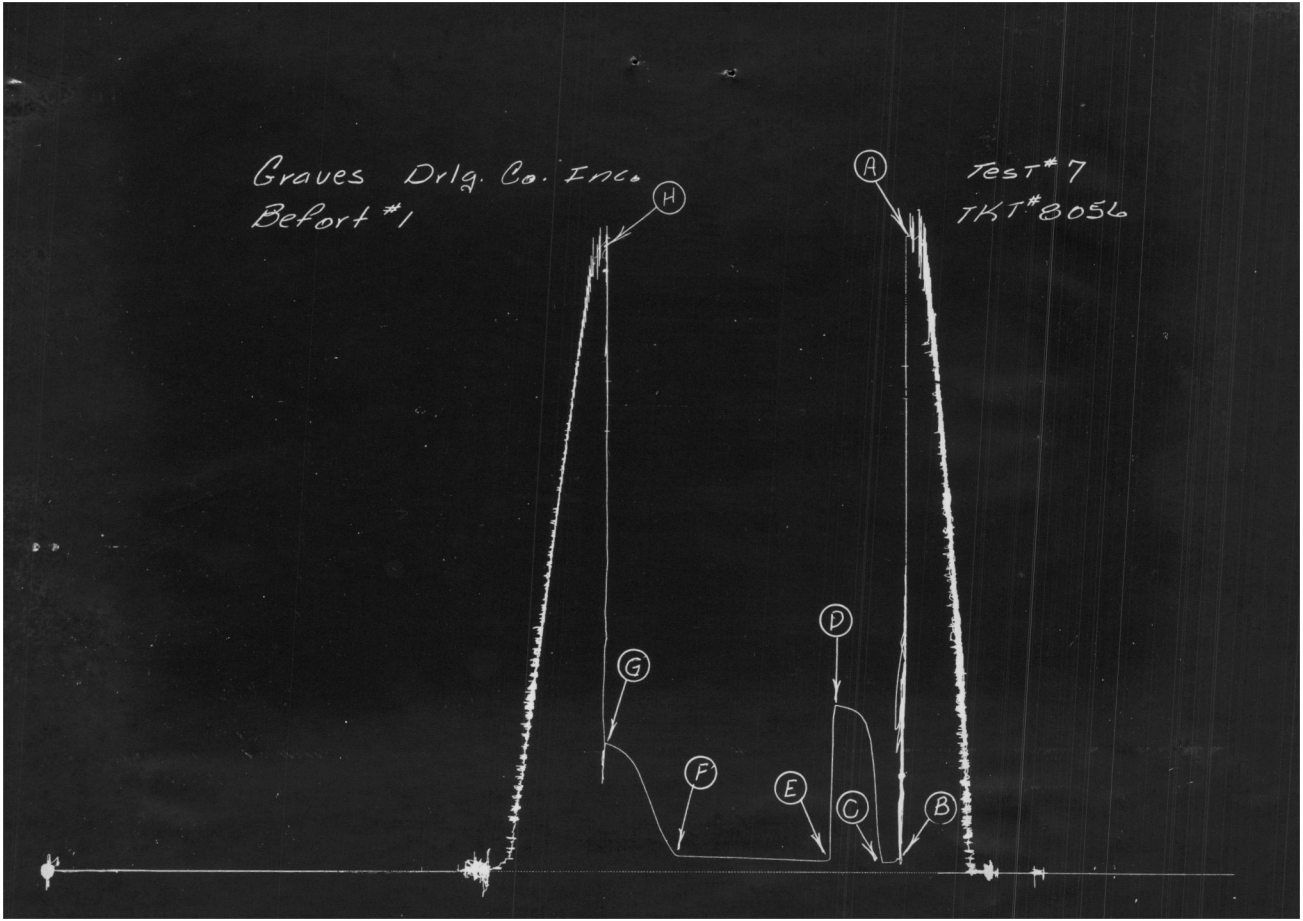
Point Minutes	Press.
0	34
3	128
6	295
9	414
12	479
15	503
18	517
21	524
24	529
27	532
30	537

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	38
5	38
10	39
15	39
20	40
25	40
30	41
35	42
40	43
45	44
50	45
55	46
60	47
65	47
70	48
75	49
80	50
85	51
90	51

Final Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	51
3	75
6	103
9	134
12	173
15	222
18	262
21	301
24	331
27	559
30	375
33	389
36	397
39	406
42	411


Graves Drlg. Co. Inc.
Befort #1
Test #7
TKT #8056
A
B
C
D
E
F
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