P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 1120

Elevation _____ Formation Miss Eff. Pay — Ft.

District Pratt Date 10/31/78 Customer Order No. —

COMPANY NAME Graves

ADDRESS 910 Union Center Wichita, Ks 67202

LEASE AND WELL NO. Chain Ranch #1 COUNTY Barber STATE Ks Sec. 30 Twp. 31 Rge. 11

Mail Invoice To Same (Co. Name) (Address) No. Copies Requested 5

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 1 Interval Tested from 4275 ft. to 4333 ft. Total Depth 4333 ft.

Packer Depth 4275 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4275 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4323 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4326 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Graves Drlg #1

Mud Type Premix-Drispac Viscosity 43

Weight 9.2 Water Loss 9.8 cc.

Chlorides 9,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? No Reversed Out No

Drill Collar Length 116 I. D. 2 1/4 in.

Weight Pipe Length 210 I. D. 2.7 in.

Drill Pipe Length 3928 I. D. 3.8 in.

Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Anchor Length 58 ft. Size 5 1/2 OD in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very Weak blow throughout Flowperiods

Recovered 125 ft. of Drlg Mud

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Remarks:

Time Set Packer(s) 7:30 A.M. Time Started Off Bottom 10:45 A.M. Maximum Temperature 118

Initial Hydrostatic Pressure		(A) 2162	P.S.I.	
Initial Flow Period	Minutes 15	(B) 73	P.S.I. to (C)	73 P.S.I.
Initial Closed In Period	Minutes 45	(D) 137	P.S.I.	
Final Flow Period	Minutes 90	(E) 116	P.S.I. to (F)	126 P.S.I.
Final Closed In Period	Minutes 45	(G) 137	P.S.I.	
Final Hydrostatic Pressure		(H) 2141	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Fredrick W Stump
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test	$ 440.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Extra Charts	$
TOTAL	$ 440.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-31-78 Test Ticket No. 1120

Recorder No. 2607 Capacity 4150 Location 4323 Ft.

Clock No. — Elevation — Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2192 P.S.I.	Open Tool	7:30 A M	
B First Initial Flow Pressure	84 P.S.I.	First Flow Pressure	15 Mins.	15 Mins.
C First Final Flow Pressure	72 P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Mins.
D Initial Closed-in Pressure	140 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	131 P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F Second Final Flow Pressure	131 P.S.I.			
G Final Closed-in Pressure	148 P.S.I.			
H Final Hydrostatic Mud	2139 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 3 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	84
P 2	5	72
P 3	10	72
P 4	15	72
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

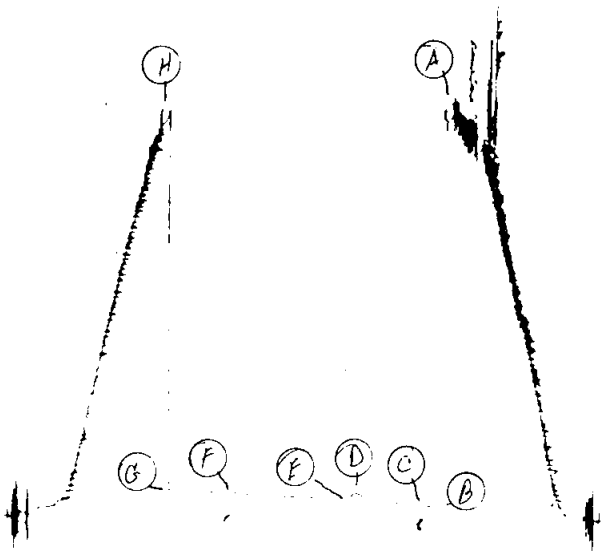
Point Minutes	Press.
0	72
3	72
6	72
9	79
12	84
15	94
18	95
21	101
24	104
27	104
30	106
33	116
36	123
39	123
42	123
45	133
48	140
51	
54	
57	
60	

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

Point Minutes	Press.
0	140
5	114
10	112
15	108
20	
25	
30	
35	
40	108
45	114
50	114
55	114
60	119
65	119
70	125
75	125
80	131
85	133
90	131

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

Point Minutes	Press.
0	131
3	133
6	135
9	135
12	
15	
18	
21	
24	
27	
30	
33	
36	135
39	142
42	146
45	148
48	
51	
54	
57	
60	


H
A
G
F
F
D
C
B

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

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

Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 1120

Date 10/31/78 Sec. 30 Twp. 31S Range 11W County Barber State Kansas

Test Approved by Frederick W. Stump Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4275' ft. to 4333' ft. Total Depth 4333' ft.

Packer Depth 4275 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4275 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4323 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4326 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Graves Drilling #1 Drill Collar Length 116 I. D. 2¼ in.

Mud Type premix-drispac Viscosity 43 Weight Pipe Length 210 I. D. 2.7 in.

Weight 9.2 Water Loss 9.8 cc. Drill Pipe Length 3928 I. D. 3.8 in.

Chlorides 9,000 P.P.M. Test Tool Length 21 ft in. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 58 ft. Size 5½OD 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 4½FH in.

Blow: Very weak blow throughout flow periods.

Recovered 125 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:30 A.M. P.M. Time Started Off Bottom 10:45 A.M. P.M. Maximum Temperature 118

Initial Hydrostatic Pressure (A) 2192 P.S.I.

Initial Flow Period Minutes 15 (B) 84 P.S.I. to (C) 72 P.S.I.

Initial Closed In Period Minutes 45 (D) 140 P.S.I.

Final Flow Period Minutes 90 (E) 131 P.S.I. to (F) 131 P.S.I.

Final Closed In Period Minutes 45 (G) 148 P.S.I.

Final Hydrostatic Pressure (H) 2139 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 10/31/78 Test Ticket No. 1120

Recorder No. 2607 Capacity 4150 Location 4323 F

Clock No. -- Elevation -- Well Temperature 118°

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2192	P.S.I.	Open Tool	7:30 A M	
B	First Initial Flow Pressure	84	P.S.I.	First Flow Pressure	15 Mins.	15 Min
C	First Final Flow Pressure	72	P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Min
D	Initial Closed-in Pressure	140	P.S.I.	Second Flow Pressure	90 Mins.	90 Min
E	Second Initial Flow Pressure	131	P.S.I.	Final Closed-in Pressure	45 Mins.	45 Min
F	Second Final Flow Pressure	131	P.S.I.			
G	Final Closed-in Pressure	148	P.S.I.			
H	Final Hydrostatic Mud	2139	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 3 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	84
P 2	5	72
P 3	10	72
P 4	15	72
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: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	72
3	72
6	72
9	79
12	84
15	84
18	95
21	101
24	104
27	104
30	106
33	116
36	123
39	123
42	123
45	133
48	140

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

Point Minutes	Press.
0	190
5	114
10	112
15	108
20	108
25	108
30	108
35	108
40	108
45	114
50	114
55	114
60	117
65	117
70	123
75	125
80	131
85	133
90	131

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

Point Minutes	Press.
0	131
3	133
6	135
9	135
12	135
15	135
18	135
21	135
24	135
27	135
30	135
33	135
36	135
39	142
42	146
45	148

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 1121

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation ____ Formation Miss Eff. Pay — Ft.

District Pratt Date 11/1/78 Customer Order No. —

COMPANY NAME Graves

ADDRESS 910 Union Center Wichita, Ks 67202

LEASE AND WELL NO. Chain Ranch #1 COUNTY Barber STATE Ks Sec. 30 Twp. 31 Rge. 11

Mail Invoice To Same (Co. Name) (Address) No. Copies Requested 5

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 2 Interval Tested from 4335 ft. to 4366 ft. Total Depth 4366 ft.

Packer Depth 4330 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4335 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4356 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4359 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Graves Drlg #1

Mud Type Premix-Drispac Viscosity 43

Weight 9.2 Water Loss 9.8 cc.

Chlorides 9,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? No Reversed Out No

Drill Collar Length 116 I. D. 2 1/4 in.

Weight Pipe Length 210 I. D. 2.7 in.

Drill Pipe Length 3988 I. D. 3.8 in.

Test Tool Length 21ft in. Tool Size 5 1/2 OD in.

Anchor Length 31 ft. Size 5 1/2 OD in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very Weak blow throughout first flow period
Very Weak blow died in 54 min on second flow period

Recovered 20 ft. of Drlg Mud

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Remarks:

Time Set Packer(s)	2:20 A.M. ~~P.M.~~	Time Started Off Bottom	5:05 A.M. ~~P.M.~~		Maximum Temperature	120°
Initial Hydrostatic Pressure		(A)	2172	P.S.I.		
Initial Flow Period	Minutes 15	(B)	73	P.S.I. to (C)	63	P.S.I.
Initial Closed In Period	Minutes 45	(D)	126	P.S.I.		
Final Flow Period	Minutes 60	(E)	73	P.S.I. to (F)	73	P.S.I.
Final Closed In Period	Minutes 45	(G)	116	P.S.I.		
Final Hydrostatic Pressure		(H)	2151	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Frederick W Stump
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test	$ 440 00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Extra Charts	$
TOTAL	$ 440 00

WESTERN TESTING CO., INC.
Pressure Data

Date 11-1-78 Test Ticket No. 1121

Recorder No. 2607 Capacity 4150 Location 4356 Ft

Clock No. — Elevation — Well Temperature 120 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2175	P.S.I.	Open Tool	2:20 A M	
B	First Initial Flow Pressure	84	P.S.I.	First Flow Pressure	15 Mins.	15 Mins
C	First Final Flow Pressure	~~84~~ 57	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins
D	Initial Closed-in Pressure	133	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins
E	Second Initial Flow Pressure	89	P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins
F	Second Final Flow Pressure	72	P.S.I.			
G	Final Closed-in Pressure	106	P.S.I.			
H	Final Hydrostatic Mud	2143	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: ~~3~~ Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	84
P 2 5	65
P 3 10	57
P 4 15	57
P 5 20	~~57~~
P 6 25	~~65~~
P 7 30	~~84~~
P 8 35	
P 9 40	
P10 45	
P11 50	
P12 55	
P13 60	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	57 ~~84~~
3	57
6	65
9	74
12	84
15	91
18	101
21	115
24	123
27	127
30	
33	
36	
39	127
42	131
45	133
~~48~~	
~~51~~	
~~54~~	
~~57~~	
60	

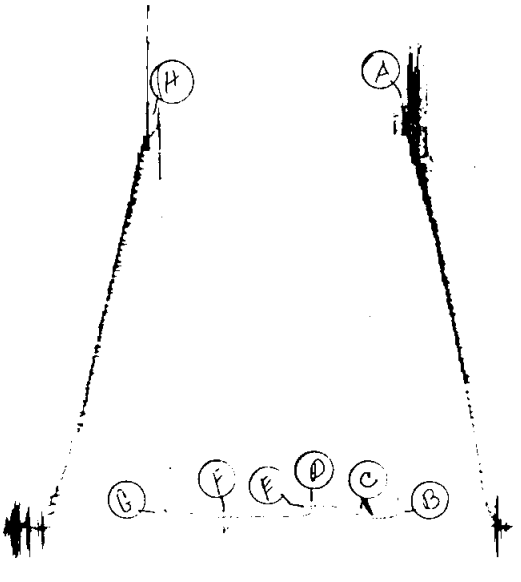
Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	89
5	76
10	72
15	
20	
25	
30	
35	
40	
45	
50	
55	
60	72
~~65~~	
70	
~~75~~	
~~80~~	
~~85~~	
90	

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

Point Minutes	Press.
0	72
3	72
6	72
9	74
12	78
15	82
18	85
21	91
24	95
27	97
30	101
33	101
36	102
39	103
42	104
45	106
~~48~~	
~~51~~	
~~54~~	
~~57~~	
60	

TKE # 1121
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P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

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

Elevation -- Formation Mississippi Effective Pay --- Ft. Ticket No. 1121

Date 11/1/78 Sec. 30 Twp. 31S Range 11W County Barber State Kansas

Test Approved by Frederick W. Stump Western Representative Jim Wondra

Formation Test No. 2 Interval Tested from 4335' ft. to 4366' ft. Total Depth 4366' ft.

Packer Depth 4330 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4335 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 4356 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4359 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Graves Drilling #1 Drill Collar Length 116 I. D. 2¼ in.

Mud Type premix-drispac Viscosity 43 Weight Pipe Length 210 I. D. 2.7 in.

Weight 9.2 Water Loss 9.8 cc. Drill Pipe Length 3988 I. D. 3.8 in.

Chlorides 9,000 P.P.M. Test Tool Length 21Ft. in. Tool Size 5½OD in.

Jars: Make -- Serial Number -- Anchor Length 31 ft. Size 5½OD 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 4½FH in.

Blow: Very weak blow throughout first flow period. Very weak blow, died in 54 minutes on second flow period.

Recovered 20 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:20 A.M. ~~P.M.~~ Time Started Off Bottom 5:05 A.M. ~~P.M.~~ Maximum Temperature 120

Initial Hydrostatic Pressure (A) 2175 P.S.I.

Initial Flow Period Minutes 15 (B) 84 P.S.I. to (C) 57 P.S.I.

Initial Closed In Period Minutes 45 (D) 133 P.S.I.

Final Flow Period Minutes 60 (E) 89 P.S.I. to (F) 72 P.S.I.

Final Closed In Period Minutes 45 (G) 106 P.S.I.

Final Hydrostatic Pressure (H) 2143 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11/1/78 Test Ticket No. 112

Recorder No. 2607 Capacity 4150 Location 4356 Ft.

Clock No. -- Elevation -- Well Temperature 12(°F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2175	P.S.I.	Open Tool	2:20A	M		
B	First Initial Flow Pressure	84	P.S.I.	First Flow Pressure	15	Mins.	15	Mins.
C	First Final Flow Pressure	57	P.S.I.	Initial Closed-in Pressure	45	Mins.	45	Mins.
D	Initial Closed-in Pressure	133	P.S.I.	Second Flow Pressure	60	Mins.	60	Mins.
E	Second Initial Flow Pressure	80	P.S.I.	Final Closed-in Pressure	45	Mins.	45	Mins.
F	Second Final Flow Pressure	7[illegible]	P.S.I.					
G	Final Closed-in Pressure	106	P.S.I.					
H	Final Hydrostatic Mud	2143	P.S.I.					

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 15 Inc.		Breakdown: 12 Inc.		Breakdown: 15 Inc.	
of 5 mins. and a		of [illegible]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	84	0	57	0	89	0	72
P 2 5	65	3	57	5	76	3	72
P 3 10	57	6	65	10	72	6	72
P 4 15	57	9	74	15	72	9	74
P 5		12	84	20	72	12	78
P 6		15	91	25	72	15	82
P 7		18	101	30	72	18	85
P 8		21	112	35	72	21	91
P 9		24	123	40	72	24	95
P10		27	127	45	72	27	97
P11		30	127	50	72	30	101
P12		33	127	55	72	33	101
P13		36	127	60	72	36	102
P14		39	127			39	103
P15		42	131			42	104
P16		45	133			45	106
P17							
P18							
P19							
P20							

WTC - 4

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 1122

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation _____ Formation _____ Eff. Pay _____ Ft.

District Pratt Date 11/1/78 Customer Order No. —

COMPANY NAME Graves

ADDRESS 910 Union Center Wichita, Ks 67202

LEASE AND WELL NO. Chain Ranch #1 COUNTY Barber STATE Ks Sec. 30 Twp. 31 Rge. 11

Mail Invoice To Same (Co. Name) (Address) No. Copies Requested 5

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 3 Interval Tested from 2627 ft. to 2678 ft. Total Depth 4366 ft.

Packer Depth 2621 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 2678 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2660 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 2663 ft. Recorder Number 3351 Cap. 4000

Below Straddle Recorder Depth 4366 ft. Recorder Number _____ Cap. _____

Drilling Contractor Graves Drlg #1

Mud Type Premix-Drispac Viscosity 43

Weight 9.2 Water Loss 9.8 cc.

Chlorides 9,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? No Reversed Out _____

Drill Collar Length 231 I. D. — in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 2426 I. D. 3.8 in.

Test Tool Length 21 in. Tool Size 5 1/2 OD in.

Anchor Length 1688 ft. Size 5 1/2 OD in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Strong blow throughout flow periods

Recovered 2000 ft. of Drlg Mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: Lay down pipe coming out of hole

Time Set Packer(s)	3:00 P.M.	Time Started Off Bottom	5:10 P.M.		Maximum Temperature	99
Initial Hydrostatic Pressure		(A)	1300	P.S.I.		
Initial Flow Period	Minutes 10	(B)	809	P.S.I. to (C)	809	P.S.I.
Initial Closed In Period	Minutes 30	(D)	1238	P.S.I.		
Final Flow Period	Minutes 60	(E)	966	P.S.I. to (F)	1050	P.S.I.
Final Closed In Period	Minutes 30	(G)	1233	P.S.I.		
Final Hydrostatic Pressure		(H)	1280	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Frederick W Stumpf
Signature of Customer or his authorized representative

Western Representative Jim Wonder Thank-You

FIELD INVOICE

Open Hole Test	$ 440.00
Misrun	$ —
Straddle Test	$ 200.00
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Extra Charts	$
TOTAL	$ 640.00

WESTERN TESTING CO., INC.
Pressure Data

Date 11-1-78 Test Ticket No. 1122

Recorder No. 2607 Capacity 4150 Location 2660 Ft.

Clock No. Elevation Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1316 P.S.I.		Open Tool	3:00 PM	
B	First Initial Flow Pressure	839 P.S.I.		First Flow Pressure	10 Mins.	10 Mins.
C	First Final Flow Pressure	900 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1163 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	994 ~~1090~~ P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	1052 P.S.I.				
G	Final Closed-in Pressure	1138 P.S.I.				
H	Final Hydrostatic Mud	1284 P.S.I.				

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	839
P 2	5	837
P 3	10	900
P 4	15	
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

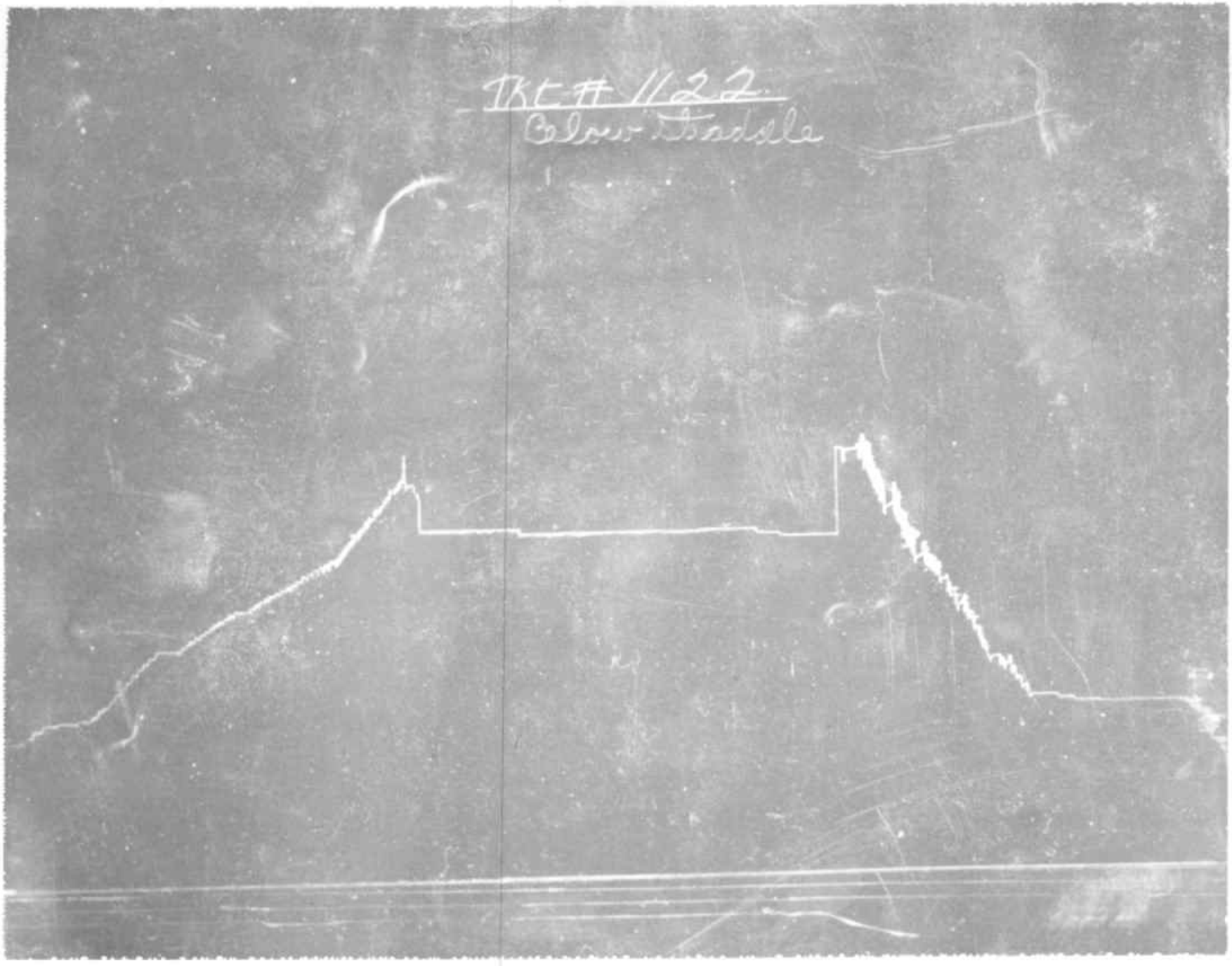
Point	Minutes	Press.
	0	900
	3	941
	6	979
	9	1036
	12	1050
	15	1067
	18	1090
	21	1098
	24	1123
	27	1144
	30	1163
	~~33~~ 36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	994 ~~1090~~
	5	967
	10	985
	15	1006
	20	1017
	25	1023
	30	1033
	35	1036
	40	1038
	45	1052
	50	1052
	55	1052
	60	1052
	~~65~~ 70	
	75	
	~~80~~ 85	
	90	

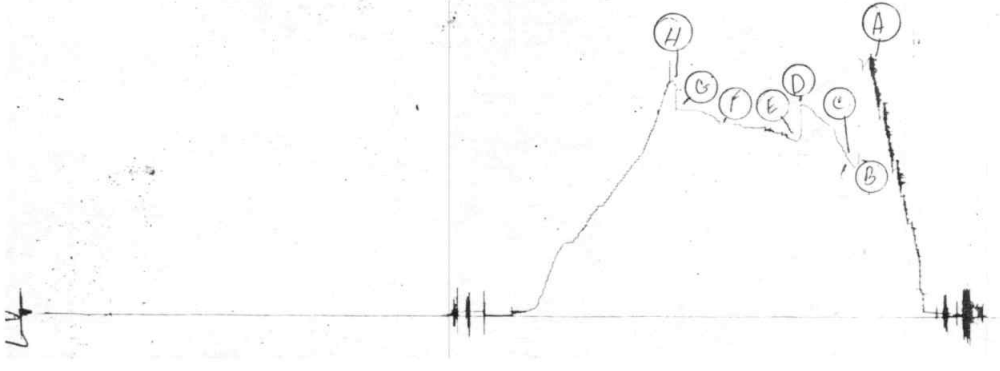
Final Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

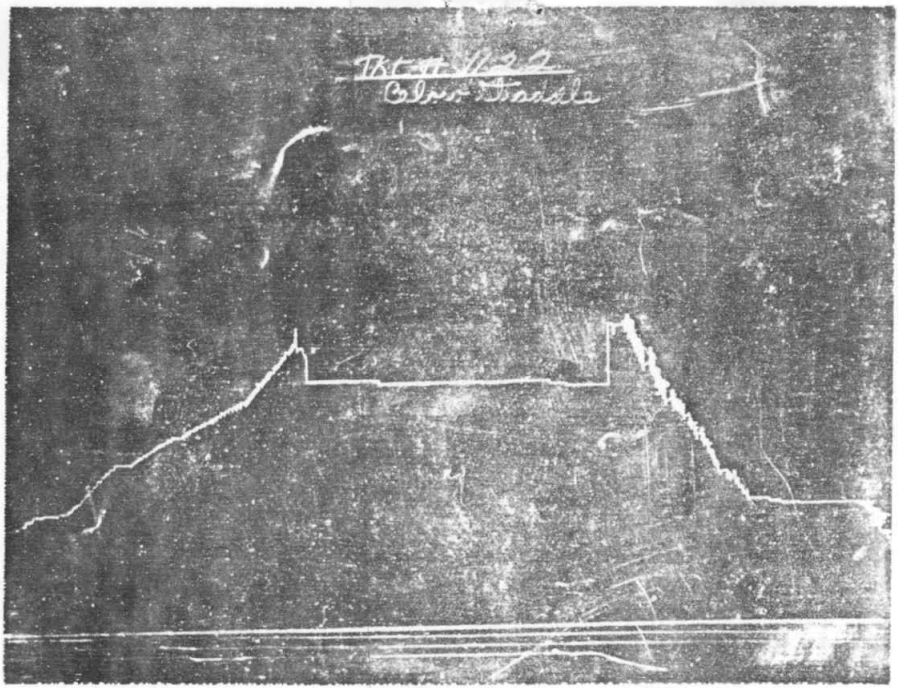
Point	Minutes	Press.
	0	1052
	3	1084
	6	1100
	9	1111
	12	1121
	15	1127
	18	1130
	21	
	24	
	27	1130
	30	1138
	~~33~~ 36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	


DKC # 1122
Clear Saddle

TRT #6 11-22

I





P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

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

Elevation --- Formation -- Effective Pay -- Ft. Ticket No. 1122

Date 11/1/78 Sec. 30 Twp. 31S Range 11W County Barber State Kansas

Test Approved by Frederick W. Stump Western Representative Jim Wondra

Formation Test No. 3 Interval Tested from 2627' ft. to 2678' ft. Total Depth 4366' ft.

Packer Depth 2627 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2678 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 2660 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 2663 ft. Recorder Number 3351 Cap. 4000

Below Straddle Recorder Depth 4366 ft. Recorder Number - Cap. -

Drilling Contractor Graves Drilling #1 Drill Collar Length 231 I. D. - in.

Mud Type premix-drispac Viscosity 43 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 9.8 cc. Drill Pipe Length 2426 I. D. 3.8 in.

Chlorides 9,000 P.P.M. Test Tool Length 21 in. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 1688 ft. Size 5½ in.

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

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

Blow: Strong blow throughout flow periods.

Recovered 2000 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Lay down pipe coming out of hole.

Time Set Packer(s) 3:00 ~~A.M.~~ P.M. Time Started Off Bottom 5:10 ~~A.M.~~ P.M. Maximum Temperature 99

Initial Hydrostatic Pressure (A) 1316 P.S.I.

Initial Flow Period Minutes 10 (B) 839 P.S.I. to (C) 900 P.S.I.

Initial Closed In Period Minutes 30 (D) 1163 P.S.I.

Final Flow Period Minutes 60 (E) 994 P.S.I. to (F) 1052 P.S.I.

Final Closed In Period Minutes 30 (G) 1138 P.S.I.

Final Hydrostatic Pressure (H) 1284 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 11/1/78 Test Ticket No. 1122

Recorder No. 2607 Capacity 4150 Location 2660 Ft

Clock No. - Elevation - Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1316 P.S.I.		Open Tool	3:00P M	
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C	First Final Flow Pressure	900 P.S.I.		Initial Closed-in Pressure	30 Mins	30 Mins
D	Initial Closed-in Pressure	1163 P.S.I.		Second Flow Pressure	60 Mins	60 Mins.
E	Second Initial Flow Pressure	994 P.S.I.		Final Closed-in Pressure	30 Mins	30 Mins.
F	Second Final Flow Pressure	1052 P.S.I.				
G	Final Closed-in Pressure	1138 P.S.I.				
H	Final Hydrostatic Mud	1284 P.S.I.				

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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	900
3	941
6	979
9	1036
12	1050
15	1067
18	1090
21	1098
24	1123
27	1144
30	1163

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	994
5	967
10	985
15	1006
20	1017
25	1023
30	1033
35	1036
40	1038
45	152
50	1052
55	1052
60	1052

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

Point Minutes	Press.
0	1052
3	1084
6	1100
9	1111
12	1122
15	1127
18	1130
21	1130
24	1130
27	1130
30	1138