Company Mull Drilling Company, Inc. Lease & Well No. Einsel "J" #2

Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 13068

Date 10/22/81 Sec. 5 Twp. 27S Range 20W County Kiowa State Kansas

Test Approved by M Kidwell Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4796 ft. to 4852 ft. Total Depth 4852 ft.

Packer Depth 4791 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4796 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4811 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4814 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Blue Goose Rig #1 Drill Collar Length 277 I. D. 2¼ in.

Mud Type Premix Viscosity 47 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 6.8 cc. Drill Pipe Length 4495 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 24 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 56 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: Weak blow throughout initial flow period. No blow on final flow period.

Recovered 75 ft. of drilling mud - few specks of oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:40 ~~A.M.~~ P.M. Time Started Off Bottom 3:45 ~~A.M.~~ P.M. Maximum Temperature 127

Initial Hydrostatic Pressure			(A)	2407	P.S.I.	
Initial Flow Period	Minutes	30	(B)	88	P.S.I. to (C)	88 P.S.I.
Initial Closed In Period	Minutes	45	(D)	94	P.S.I.	
Final Flow Period	Minutes	50	(E)	90	P.S.I. to (F)	147 P.S.I.
Final Closed In Period	Minutes	60	(G)	120	P.S.I.	
Final Hydrostatic Pressure			(H)	2399	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 10/22/81 Test Ticket No. 13068

Recorder No. 2607 Capacity 4150 Location 4811 Ft.

Clock No. - Elevation - Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2407 P.S.I.	Open Tool	12:40P M	
B First Initial Flow Pressure	88 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	88 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	94 P.S.I.	Second Flow Pressure	50 Mins.	50 Mins.
E Second Initial Flow Pressure	90 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	147 P.S.I.			
G Final Closed-in Pressure	120 P.S.I.			
H Final Hydrostatic Mud	2399 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	88
P 2 5	88
P 3 10	88
P 4 15	88
P 5 20	88
P 6 25	88
P 7 30	88
P 8	
P 9	
P10	
P11	
P12	
P13	
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	88
3	88
6	88
9	88
12	88
15	89
18	89
21	89
24	89
27	89
30	90
33	91
36	92
39	93
42	94
45	94

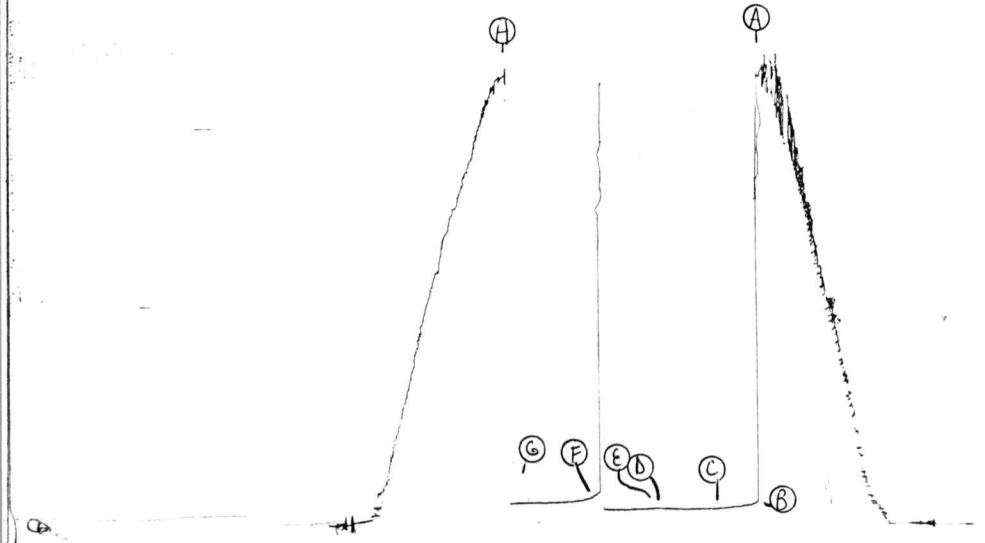
Second Flow Pressure
Breakdown: 10 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	90
5	90
10	90
15	90
20	89
25	88
30	87
35	87
40	Flushed Tool
45	166
50	147

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	147
3	142
6	136
9	134
12	131
15	130
18	129
21	128
24	127
27	126
30	125
33	124
36	124
39	124
42	124
45	124
48	123
51	122
54	121
57	120
60	120

TKT # 13068



Company Mull Drilling Company, Inc. Lease & Well No. Einsel "J" #2

Elevation 2386 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 13069

Date 10/23/81 Sec. 5 Twp. 27S Range 20W County Kiowa State Kansas

Test Approved by M. Kidwell Western Representative Jim Wondra

Formation Test No. 2 Interval Tested from 4851 ft. to 4862 ft. Total Depth 4862 ft.

Packer Depth 4846 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4851 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4854 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4857 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Blue Goose Rig #1 Drill Collar Length 277 I. D. 2¼ in.

Mud Type Premix Viscosity 60 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 8.4 cc. Drill Pipe Length 4539 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 24 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 11 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: Strong blow decreased to fair blow on initial flow period. Fair decreased to weak blow on final flow period.

Recovered 540 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Slid tool 4 ft. to bottom. - Lost mud in hole. Tool Plugged. MISRUN

Time Set Packer(s) 6:45 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 10:00 ~~A.M.~~ ~~P.M.~~ Maximum Temperature -

Initial Hydrostatic Pressure (A) 2422 P.S.I.

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

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

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

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

Final Hydrostatic Pressure (H) 2346 P.S.I.

WTC-1

TKT # 13069

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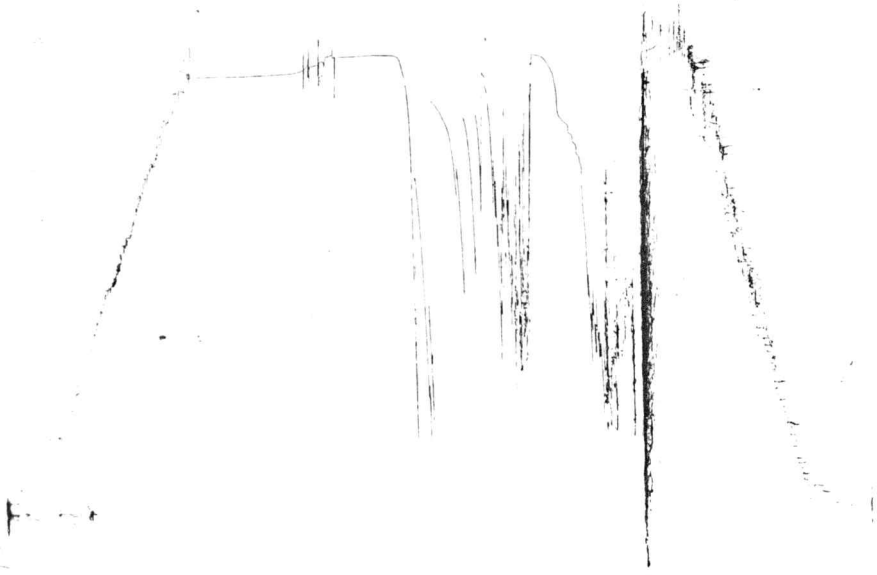

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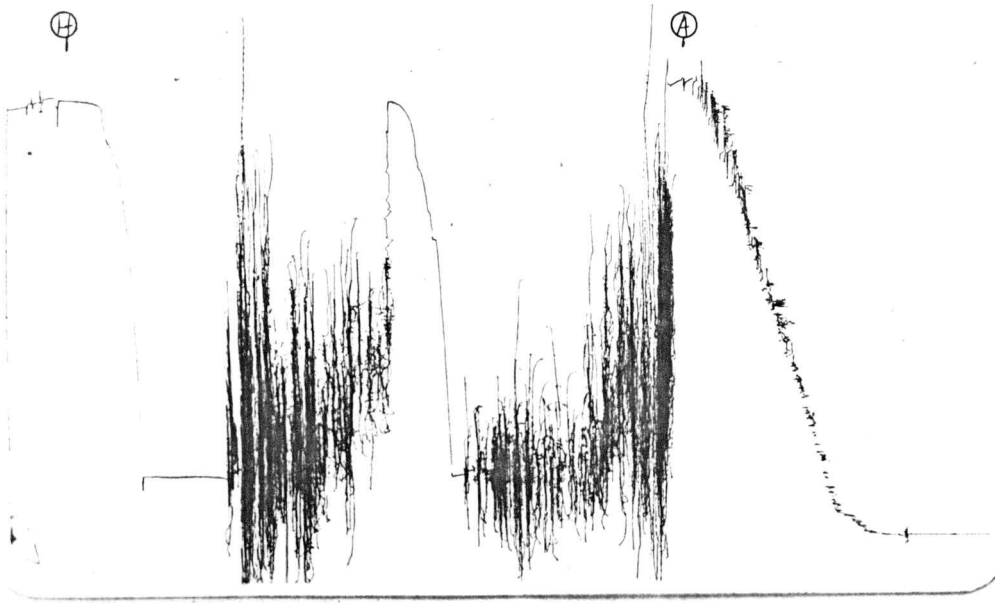

Company Mull Drilling Company, Inc. Lease & Well No. Einsel "J" #2

Elevation 2386 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 13070

Date 10/24/81 Sec. 5 Twp. 27S Range 20W County Kiowa State Kansas

Test Approved by M. Kidwell Western Representative Jim Wondra

Formation Test No. 3 Interval Tested from 4851 ft. to 4862 ft. Total Depth 4862 ft.

Packer Depth 4846 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4851 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4854 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4857 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Blue Goose Rig #1 Drill Collar Length 308 I. D. 2¼ in.

Mud Type Premix Viscosity 55 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 9.6 cc. Drill Pipe Length 4519 I. D. 3.8 in.

Chlorides 15,000 P.P.M. Test Tool Length 24 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 11 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: Fair blow throughout initial flow period. Weak blow throughout final flow period.

Recovered 420 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Plugged Tool MISRUN

Time Set Packer(s) 5:20 A.M. ~~P.M.~~ Time Started Off Bottom 9:05 A.M. ~~P.M.~~ Maximum Temperature 127

Initial Hydrostatic Pressure (A) 2415 P.S.I.

Initial Flow Period Minutes 30 (B) 328 P.S.I. to (C) 283 P.S.I.

Initial Closed In Period Minutes 45 (D) 1024 P.S.I.

Final Flow Period Minutes 90 (E) 280 P.S.I. to (F) 338 P.S.I.

Final Closed In Period Minutes 60 (G) 598 P.S.I.

Final Hydrostatic Pressure (H) 2371 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/24/81 Test Ticket No. 13070

Recorder No. 2607 Capacity 4150 Location 4854 Ft.

Clock No. - Elevation 2386 Kelly Bushing Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2415 P.S.I.	Open Tool	5:20A M	
B First Initial Flow Pressure	328 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	283 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1024 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	280 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	338 P.S.I.			
G Final Closed-in Pressure	598 P.S.I.			
H Final Hydrostatic Mud	2371 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	328
P 2 5	328
P 3 10	328
P 4 15	306
P 5 20	298
P 6 25	288
P 7 30	283
P 8	
P 9	
P10	
P11	
P12	
P13	
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	283
3	1079
6	929
9	1111
12	1100
15	1056
18	1036
21	1022
24	1017
27	1015
30	1014
33	1014
36	1016
39	1022
42	1023
45	1024

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

Point Minutes	Press.
0	280
5	280
10	280
15	280
20	280
25	280
30	280
35	280
40	323
45	318
50	362
55	341
60	328
65	353
70	376
75	360
80	348
85	341
90	338

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	338
3	347
6	360
9	373
12	388
15	405
18	422
21	443
24	459
27	474
30	488
33	503
36	517
39	527
42	541
45	555
48	568
51	578
54	588
57	596
60	598

TKT # 13070

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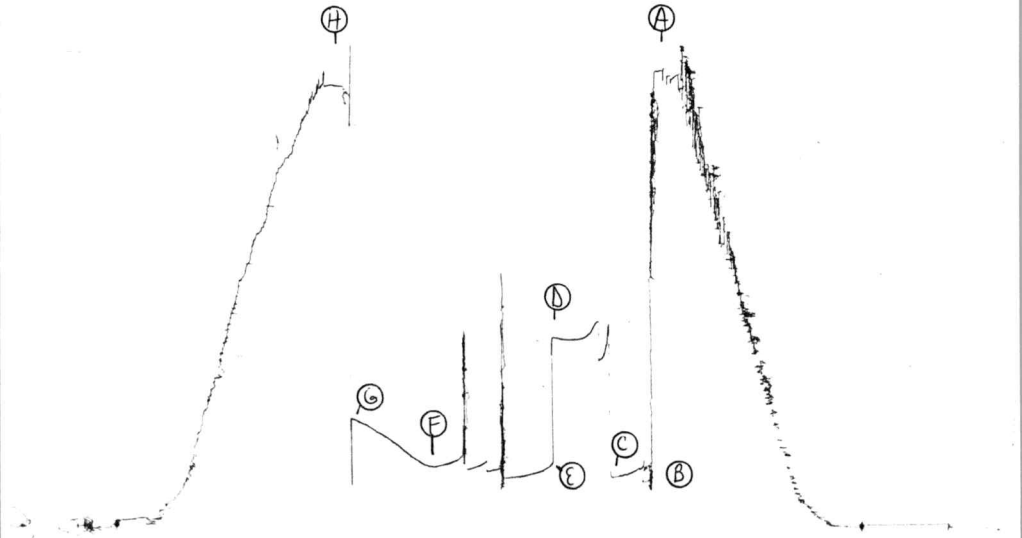

Company Mull Drilling Company, Inc. Lease & Well No. Einsel "J"#2

Elevation 2386 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 13071

Date 10/25/81 Sec. 5 Twp. 27S Range 20W County Kiowa State Kansas

Test Approved by M. R. Kidwell Western Representative Jim Wondra

Formation Test No. 4 Interval Tested from 4748 ft. to 4862 ft. Total Depth 4862 ft.

Packer Depth 4743 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4748 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4759 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4762 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Blue Goose Drlg. Rig #1 Drill Collar Length 122 I. D. 2¼ in.

Mud Type premix Viscosity 67 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 16.4 cc. Drill Pipe Length 4602 I. D. 3.8 in.

Chlorides 25,000 P.P.M. Test Tool Length 24 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 114 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: Weak blow thorughout initial flow period. Weak blow; died in ten minutes on final flow period.

Recovered 65 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:35 ~~A.M.~~ P.M. Time Started Off Bottom 5:20 ~~A.M.~~ P.M. Maximum Temperature 127°

Initial Hydrostatic Pressure			(A) 2424	P.S.I.		
Initial Flow Period	Minutes 30	(B) 95	P.S.I. to	(C) 95	P.S.I.	
Initial Closed In Period	Minutes 45	(D) 95	P.S.I.			
Final Flow Period	Minutes 30	(E) 95	P.S.I. to	(F) 96	P.S.I.	
Final Closed In Period	Minutes 66	(G) 97	P.S.I.			
Final Hydrostatic Pressure			(H) 2342	P.S.I.		

WESTERN TESTING CO., INC.

Pressure Data

Date 10/25/81 Test Ticket No. 13071

Recorder No. 2607 Capacity 4150 Location 4759 Ft.

Clock No. -- Elevation 2386 Kelly Bushing Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2424 P.S.I.	Open Tool	2:35P M	
B First Initial Flow Pressure	95 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	95 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	95 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	95 P.S.I.	Final Closed-in Pressure	60 Mins.	66 Mins.
F Second Final Flow Pressure	96 P.S.I.			
G Final Closed-in Pressure	97 P.S.I.			
H Final Hydrostatic Mud	2342 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	95
P 2 5	95
P 3 10	95
P 4 15	95
P 5 20	95
P 6 25	95
P 7 30	95
P 8	
P 9	
P10	
P11	
P12	
P13	
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	95
3	94
6	94
9	94
12	94
15	94
18	94
21	94
24	95
27	95
30	95
33	95
36	95
39	95
42	95
45	95

Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	95
5	97
10	94
15	94
20	95
25	96
30	96

Final Shut-In
Breakdown: 22 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	96
3	96
6	96
9	96
12	96
15	96
18	96
21	96
24	96
27	96
30	96
33	96
36	96
39	96
42	96
45	96
48	96
51	96
54	96
57	96
60	97
63	97
66	97

TK# 13071

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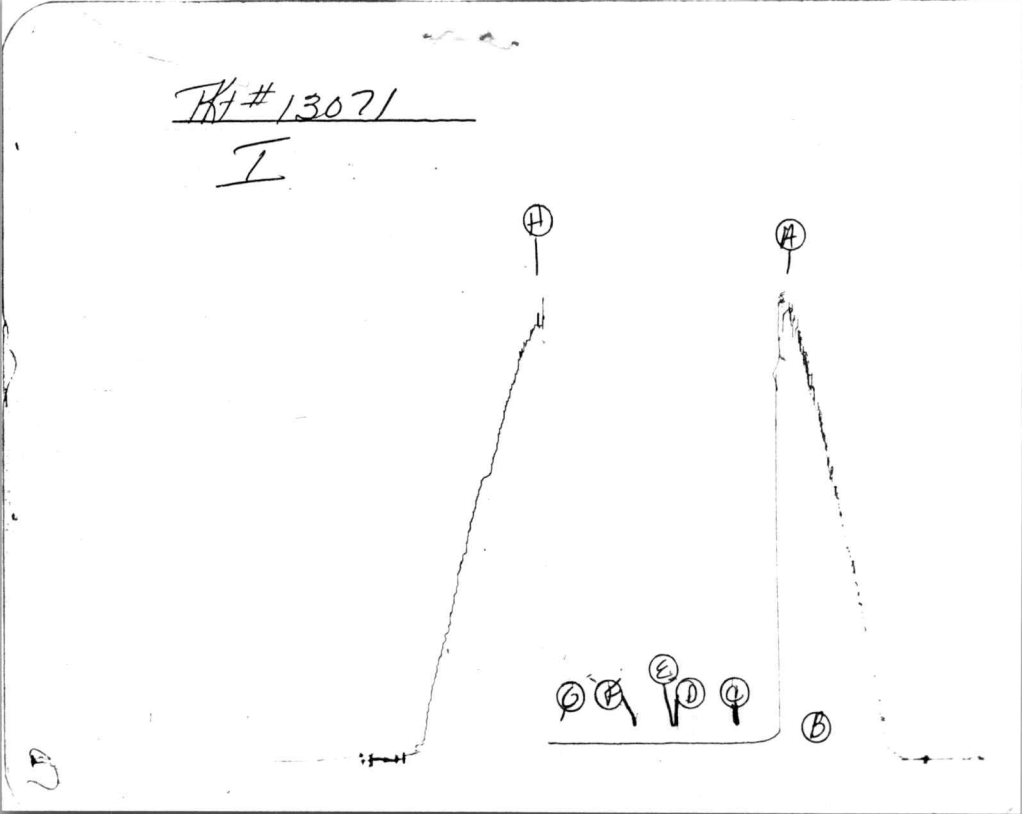

Company Mull Drilling Company, Inc. Lease & Well No. Einsel "J"#2

Elevation ----- Formation Mississippi Effective Pay - Ft. Ticket No. 13822

Date 10/26/81 Sec. 5 Twp. 27S Range 20W County Kiowa State Kansas

Test Approved by M. Kidwell Western Representative Jeff Piotrowski

Formation Test No. 5 Interval Tested from 4747 ft. to 4887 ft. Total Depth 4887 ft.

Packer Depth 4742 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4747 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4750 ft. Recorder Number 5673 Cap. 5400

Bottom Recorder Depth (Outside) 4753 ft. Recorder Number 1565 Cap. 4900

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

Drilling Contractor BlueGoose Drlg. Rig #1 Drill Collar Length 180 I. D. 2.2 in.

Mud Type monpac Viscosity 51 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 16.4 cc. Drill Pipe Length 4547 I. D. 3.8 in.

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

Jars: Make - Serial Number - Anchor Length DC 120-20 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 4½XH in.

Blow: Weak and decreasing blow on initial flow period. No blow on final flow period.

Recovered 130 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:40 A.M. P.M. Time Started Off Bottom 5:25 A.M. P.M. Maximum Temperature 134°

Initial Hydrostatic Pressure			(A)	2302	P.S.I.	
Initial Flow Period	Minutes	30	(B)	54 P.S.I. to (C)	65	P.S.I.
Initial Closed In Period	Minutes	45	(D)	1075	P.S.I.	
Final Flow Period	Minutes	30	(E)	93 P.S.I. to (F)	103	P.S.I.
Final Closed In Period	Minutes	57	(G)	1119	P.S.I.	
Final Hydrostatic Pressure			(H)	2280	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 10/26/81 Test Ticket No. 13822

Recorder No. 5673 Capacity 5400 Location 4750 Ft.

Clock No. - Elevation -- Well Temperature 134 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2302 P.S.I.	Open Tool	2:40P M	
B First Initial Flow Pressure	54 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	65 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1075 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	93 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	103 P.S.I.			
G Final Closed-in Pressure	1119 P.S.I.			
H Final Hydrostatic Mud	2280 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	54
P 2 5	54
P 3 10	55
P 4 15	57
P 5 20	59
P 6 25	62
P 7 30	65
P 8	
P 9	
P10	
P11	
P12	
P13	
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	65
3	65
6	83
9	137
12	202
15	295
18	407
21	527
24	637
27	732
30	817
33	888
36	943
39	997
42	1037
45	1075

Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	93
5	93
10	93
15	93
20	96
25	99
30	103

Final Shut-In
Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	103
3	108
6	145
9	197
12	270
15	355
18	445
21	530
24	620
27	694
30	762
33	827
36	880
39	926
42	972
45	1008
48	1041
51	1070
54	1092
57	1119

5673
Det "5

Rt #13822
I