Company Mull Drilling Company, Inc. Lease & Well No. Fanning #1

Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 12072

Date 8/25/81 Sec. 11 Twp. 34S Range 9W County Harper State Kansas

Test Approved by Vernon C. Schrag Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4553 ft. to 4582 ft. Total Depth 4582 ft.

Packer Depth 4548 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4553 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4572 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4575 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Trans-Pac Drilling Rig #1 Drill Collar Length 467 I. D. 2¼ in.

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

Weight 8.9 Water Loss 12.0 cc. Drill Pipe Length - I. D. 3.8 in.

Chlorides 12,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 29 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 7/8in. Tool Joint Size 4½FH in.

Blow:

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Packer Failure MISRUN

Time Set Packer(s) 12:45 A.M. P.M. Time Started Off Bottom - A.M. P.M. Maximum Temperature -

Initial Hydrostatic Pressure (A) 2293 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.

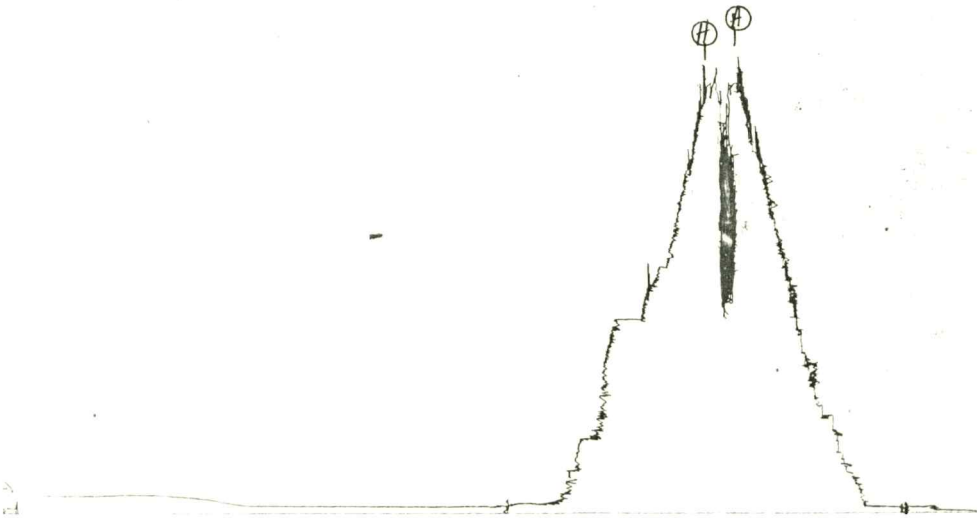
Final Flow Period Minutes - (E) - P.S.I. to (F) - P.S.I.

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

Final Hydrostatic Pressure (H) 2283 P.S.I.

Tkt # 12072

I



Company Mull Drilling Company, Inc. Lease & Well No. Fanning #1

Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 12073

Date 8/26/81 Sec. 11 Twp. 34S Range 9W County Harper State Kansas

Test Approved by Vernon C. Schrag Western Representative Jim Wondra

Formation Test No. 2 Interval Tested from 4519 ft. to 4582 ft. Total Depth 4582 ft.

Packer Depth 4514 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4519 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4540 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4543 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Trans-Pac Drilling Rig #1 Drill Collar Length 436 I. D. 2¼ in.

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

Weight 8.9 Water Loss 12.0 cc. Drill Pipe Length 4062 I. D. 3.8 in.

Chlorides 12,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 63 ft. Size 5½OD in.

Did Well Flow? Yes 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 throughout flow periods. Gas to surface in 25 minutes on initial flow perio
see attached sheet for gas measurements.

Recovered 240 ft. of gas cut mud

Recovered 310 ft. of gas cut mud (slightly oil cut)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:30 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 6:45 ~~A.M.~~ ~~P.M.~~ Maximum Temperature 123

Initial Hydrostatic Pressure (A) 2257 P.S.I.

Initial Flow Period Minutes 30 (B) 264 P.S.I. to (C) 241 P.S.I.

Initial Closed In Period Minutes 48 (D) 1668 P.S.I.

Final Flow Period Minutes 60 (E) 228 P.S.I. to (F) 233 P.S.I.

Final Closed In Period Minutes 69 (G) 1731 P.S.I.

Final Hydrostatic Pressure (H) 2215 P.S.I.

GAS FLOW REPORT

Date 8/26/81 Ticket 12073 Company Mull Drilling Company, Inc.

Well Name and No. Fanning #1 Dst No. 2 Interval Tested 4519-4582

County Harper State Kansas Sec. 11 Twp. 34S Rg. 9W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
	Gas to surface in 25 minutes		**PRE FLOW**			
	30 Min	7" water	3/4" Orifice			37,400 C.F.P.D.
			SECOND FLOW			
	10 Min	11" water	1" Orifice			85,900 C.F.P.D.
	20 Min	9" water	1" Orifice			77,500 C.F.P.D.
	30 Min	9" water	1" Orifice			77,500 C.F.P.D.
	40 Min	10" water	1" Orifice			81,600 C.F.P.D.
	50 Min	10" water	1" Orifice			81,600 C.F.P.D.
	60 Min	10" water	1" Orifice			81,600 C.F.P.D.

GAS BOTTLE

Serial No. - Date Bottle Filled - Date to be Invoiced 8/26/81

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Mull Drilling Company, Inc.

Authorized by Vernon C. Schrag

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 8/26/81 Test Ticket No. 12073

Recorder No. 2607 Capacity 4150 Location 4540 Ft.

Clock No. - Elevation - Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2257 P.S.I.	Open Tool	3:30A M	
B First Initial Flow Pressure	264 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	241 P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Mins.
D Initial Closed-in Pressure	1668 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	228 P.S.I.	Final Closed-in Pressure	60 Mins.	69 Mins.
F Second Final Flow Pressure	233 P.S.I.			
G Final Closed-in Pressure	1731 P.S.I.			
H Final Hydrostatic Mud	2215 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	264
P 2 5	383
P 3 10	292
P 4 15	275
P 5 20	252
P 6 25	246
P 7 30	241
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	241
3	434
6	633
9	829
12	983
15	1102
18	1211
21	1299
24	1382
27	1445
30	1500
33	1542
36	1578
39	1605
42	1630
45	1653
48	1668

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

Point Minutes	Press.
0	228
5	228
10	228
15	228
20	228
25	228
30	228
35	228
40	228
45	229
50	231
55	232
60	233

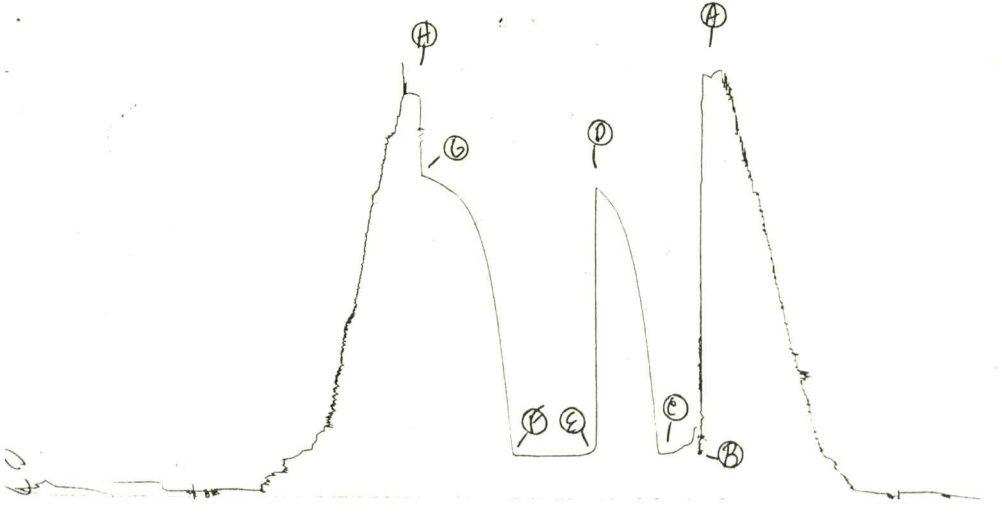
Final Shut-In
Breakdown: 23 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	233
3	398
6	575
9	745
12	910
15	1055
18	1171
21	1272
24	1351
27	1416
30	1471
33	1519
36	1557
39	1590
42	1616
45	1637
48	1651
51	1666
54	1681
57	1693
60	1702
63	1714
66	1723

WTC - 4

TK# 12073

I



Company Mull Drilling Company, Inc. Lease & Well No. Fanning #1

Elevation -- Formation Mississippi Effective Pay - Ft. Ticket No. 12074

Date 8/ 27/81 Sec. 11 Twp. 34S Range 9W County Harper State Kansas

Test Approved by Vernon C. Schrag Western Representative Jim Wondra

Formation Test No. 3 Interval Tested from 4582 ft. to 4592 ft. Total Depth 4592 ft.

Packer Depth 4577 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4582 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4584 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4587 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Trans-Pac Drlg. Rig #1 Drill Collar Length 467 I. D. 2¼ in.

Mud Type premix-monpac Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.1 Water Loss 16.0 cc. Drill Pipe Length 4094 I. D. 3.8 in.

Chlorides 20,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 10 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 first flow period. Weakblow; died in seventy minutes on final flow period.

Recovered 110 ft. of thick drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of MISRUN

Recovered ft. of

Remarks: Slid tool thirteen feet to bottom.

READ OUTSIDE RECORDER

Time Set Packer(s) 5:40 A.M. P.M. Time Started Off Bottom 9:10 A.M. P.M. Maximum Temperature -

Initial Hydrostatic Pressure ..... (A) 2181 P.S.I.

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

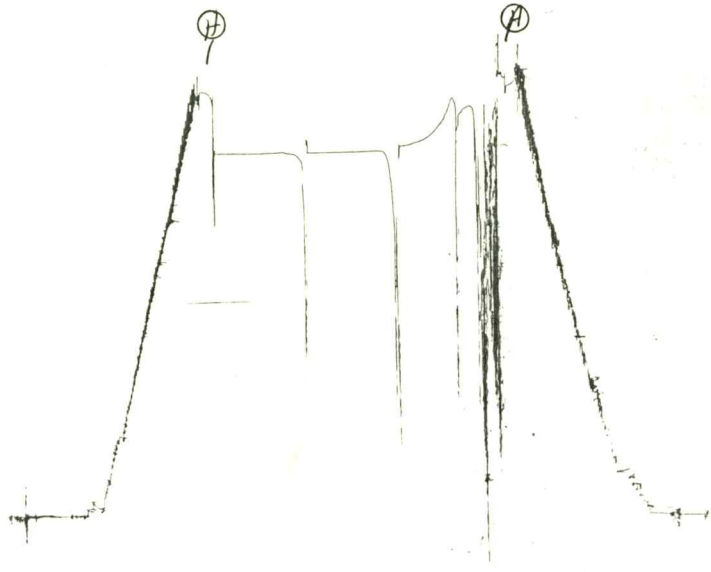
Initial Closed In Period ..... Minutes ____ (D) - P.S.I.

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) 2151 P.S.I.

Tkt # 12074



Company Mull Drilling Company, Inc. Lease & Well No. Fanning #1

Elevation -- Formation Mississippi Effective Pay - Ft. Ticket No. 12075

Date 8/ 28/81 Sec. 11 Twp. 34S Range 9W County Harper State Kansas

Test Approved by Vernon C. Schrag Western Representative Jim Wondra

Formation Test No. 4 Interval Tested from 4582 ft. to 4592 ft. Total Depth 4592 ft.

Packer Depth 4577 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4582 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4584 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4587 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Trans-Pac Drlg. Rig #1 Drill Collar Length 467 I. D. 2¼ in.

Mud Type premix-monpac Viscosity 54 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 4094 I. D. 3.8 in.

Chlorides 23,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 10 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 flow periods.

Recovered 35 ft. of drilling mud (few specks of oil)

Recovered 90 ft. of water (Chlorides 33,000 ppm)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Slid tool five feet to bottom.

Time Set Packer(s) 4:30 A.M. ~~P.M.~~ Time Started Off Bottom 7:45 A.M. ~~P.M.~~ Maximum Temperature 123°

Initial Hydrostatic Pressure			(A) 2373	P.S.I.		
Initial Flow Period	Minutes 30	(B) 116	P.S.I. to	(C) 116	P.S.I.	
Initial Closed In Period	Minutes 45	(D) 1521	P.S.I.			
Final Flow Period	Minutes 60	(E) 144	P.S.I. to	(F) 144	P.S.I.	
Final Closed In Period	Minutes 72	(G) 1515	P.S.I.			
Final Hydrostatic Pressure		(H) 2342	P.S.I.			

WESTERN TESTING CO., INC.
Pressure Data

Date 8/28/81 Test Ticket No. 12075

Recorder No. 2607 Capacity 4150 Location 4584 Ft.

Clock No. - Elevation - Well Temperature 123 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2373 P.S.I.	Open Tool		4:30A M	
B	First Initial Flow Pressure	116 P.S.I.	First Flow Pressure		30 Mins.	30 Mins.
C	First Final Flow Pressure	116 P.S.I.	Initial Closed-in Pressure		45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1521 P.S.I.	Second Flow Pressure		60 Mins.	60 Mins.
E	Second Initial Flow Pressure	144 P.S.I.	Final Closed-in Pressure		60 Mins.	72 Mins.
F	Second Final Flow Pressure	144 P.S.I.				
G	Final Closed-in Pressure	1515 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	116
P 2 5	116
P 3 10	116
P 4 15	116
P 5 20	116
P 6 25	116
P 7 30	116
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	116
3	123
6	362
9	716
12	896
15	1025
18	1123
21	1201
24	1265
27	1316
30	1359
33	1399
36	1437
39	1469
42	1496
45	1521

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

Point Minutes	Press.
0	144
5	144
10	144
15	144
20	144
25	144
30	144
35	144
40	144
45	144
50	144
55	144
60	144

Final Shut-In
Breakdown: 24 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	144
3	148
6	182
9	349
12	569
15	760
18	885
21	977
24	1046
27	1109
30	1161
33	1207
36	1247
39	1280
42	1311
45	1343
48	1366
51	1387
54	1408
57	1427
60	1445

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 8/28/81 Test Ticket No. 12075

Recorder No. 2607 Capacity 4150 Location 4584 Ft.

Clock No. - Elevation - Well Temperature 123 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2373 P.S.I.	Open Tool	4:30A M	
B	First Initial Flow Pressure	116 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	116 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1521 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	144 P.S.I.	Final Closed-in Pressure	60 Mins.	72 Mins.
F	Second Final Flow Pressure	144 P.S.I.			
G	Final Closed-in Pressure	1515 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.

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

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

Final Shut-In
Breakdown: 24 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						63	1464
P 2						66	1483
P 3						69	1500
P 4						72	1515
P 5							
P 6							
P 7							
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 12075

I