Company Murfin Drilling Company — Lease & Well No. Burmeister #1-14

Elevation 2018 Kelly Bushing — Formation Kinderhook — Effective Pay ---- Ft. — Ticket No. 6150

Date 7/28/80 — Sec. 14 — Twp. 24S — Range 15W — County Stafford — State Kansas

Test Approved by George R. Dent — Western Representative Rod Tritt

Formation Test No. 1 — Interval Tested from 4055 ft. to 4160 ft. — Total Depth 4160 ft.

Packer Depth 4050 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4055 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4058 ft. — Recorder Number 2606 — Cap. 4150

Bottom Recorder Depth (Outside) 4061 ft. — Recorder Number 4332 — Cap. 4200

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

Drilling Contractor Murfin Drilling — Drill Collar Length - — I. D. - in.

Mud Type starch — Viscosity 45 — Weight Pipe Length - — I. D. - in.

Weight 9.6 — Water Loss 11.2 cc. — Drill Pipe Length 4097 — I. D. 3.8 in.

Chlorides 16,000 P.P.M. — Test Tool Length 20 ft. — Tool Size 5½OD in.

Jars: Make No — Serial Number -- — Anchor Length 43 + 62 D.P. ft. — Size 5½OD 4½OD 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: Very weak;died in twenty minutes on initial flow period. No blow on final flow.

Recovered 20 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:40 ~~A.M.~~ P.M. — Time Started Off Bottom 9:40 ~~A.M.~~ P.M. — Maximum Temperature 118°

Initial Hydrostatic Pressure			(A) 2504	P.S.I.		
Initial Flow Period	Minutes 30	(B) 112	P.S.I. to	(C) 68	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 60	P.S.I.			
Final Flow Period	Minutes 30	(E) 60	P.S.I. to	(F) 58	P.S.I.	
Final Closed In Period	Minutes 27	(G) 72	P.S.I.			
Final Hydrostatic Pressure			(H) 2487	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 7/28/80 Test Ticket No. 6150

Recorder No. 2606 Capacity 4150 Location 4058 Ft.

Clock No. - Elevation 2018 Kelly Bushing Well Temperature 118 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2504	P.S.I.	Open Tool	7:40P	M		
B	First Initial Flow Pressure	112	P.S.I.	First Flow Pressure	30	Mins.	30	Mins.
C	First Final Flow Pressure	68	P.S.I.	Initial Closed-in Pressure	30	Mins.	30	Mins.
D	Initial Closed-in Pressure	60	P.S.I.	Second Flow Pressure	30	Mins.	30	Mins.
E	Second Initial Flow Pressure	60	P.S.I.	Final Closed-in Pressure	30	Mins.	27	Mins.
F	Second Final Flow Pressure	58	P.S.I.					
G	Final Closed-in Pressure	72	P.S.I.					
H	Final Hydrostatic Mud	2487	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	112
P 2	5	100
P 3	10	85
P 4	15	80
P 5	20	73
P 6	25	70
P 7	30	68
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	68
3	68
6	67
9	66
12	65
15	65
18	64
21	63
24	62
27	61
30	60

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

Point Minutes	Press.
0	60
5	60
10	59
15	58
20	58
25	58
30	58

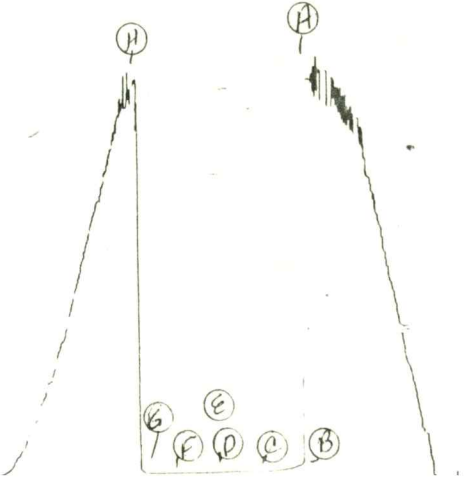
Final Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	58
3	58
6	58
9	58
12	58
15	58
18	56
21	55
24	63
27	72

2606 VST #1

JKF #6150

I



Company Murfin Drilling Company — Lease & Well No. Burmeister #1-14

Elevation 2018 Kelly Bushing — Formation Simpson — Effective Pay --- Ft. — Ticket No. 6322

Date 7/29/80 — Sec. 14 — Twp. 24S — Range 15W — County Stafford — State Kansas

Test Approved by George R. Dent — Western Representative Roger Mounts

Formation Test No. 2 — Interval Tested from 4204 ft. to 4310 ft. — Total Depth 4310 ft.

Packer Depth 4259 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4264 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4266 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4269 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Murfin Drilling Rig #19 — Drill Collar Length - — I. D. 2.2 in.

Mud Type starch — Viscosity 39 — Weight Pipe Length - — I. D. - in.

Weight 9.2 — Water Loss 13.3 cc. — Drill Pipe Length 4243 — I. D. 3.8 in.

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

Jars: Make No — Serial Number - — Anchor Length 46 ft. — Size 5½OD 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:

Recovered ft. of

Recovered ft. of

Recovered ft. of MISRUN

Recovered ft. of

Recovered ft. of

Remarks: TOOL STOPPED AT FIVE HUNDRED SEVENTY FIVE FEET OFF BOTTOM. COME OUT AND LAID TOOL DOWN AND CONDITIONED HOLE.

NO PRESSURES AVAILABLE

Time Set Packer(s) A.M. P.M. — Time Started Off Bottom A.M. P.M. — Maximum Temperature

Initial Hydrostatic Pressure ..... (A) 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.

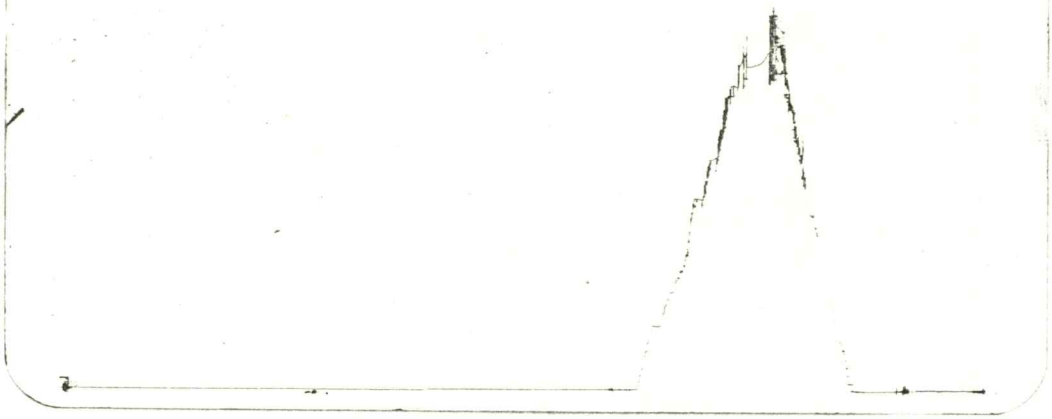
Final Closed In Period ..... Minutes (G) P.S.I.

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

1566

JKL# 6322

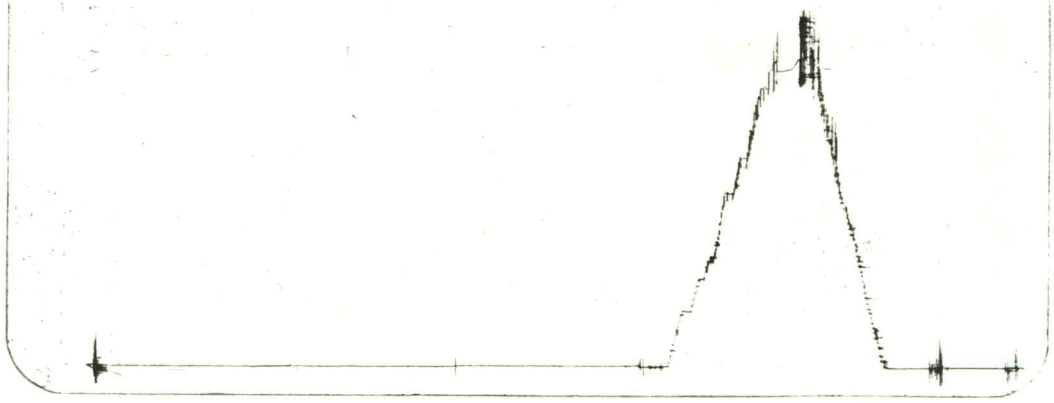
I



3086

JKL # 6322

O



Company Murfin Drilling Company — Lease & Well No. Burmeister #1-14

Elevation 2018 Kelly Bushing — Formation Simpson — Effective Pay ---- Ft. — Ticket No. 6323

Date 7/30/80 — Sec. 14 — Twp. 24S — Range 15W — County Stafford — State Kansas

Test Approved by George R. Dent — Western Representative Roger Mounts

Formation Test No. 3 — Interval Tested from 4264 ft. to 4310 ft. — Total Depth 4310 ft.

Packer Depth 4259 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4264 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4266 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4269 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Murfin Drilling Rig #19 — Drill Collar Length - — I. D. - in.

Mud Type starch — Viscosity 53 — Weight Pipe Length - — I. D. - in.

Weight 9.5 — Water Loss 11.8 cc. — Drill Pipe Length 4243 — I. D. 3.8 in.

Chlorides 17,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make No — Serial Number No - — Anchor Length 46 ft. — Size 5½OD in.

Did Well Flow? - — 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: Good building blow off bottom in twenty-six minutes initial flow period. Same blow final flow priod.

Recovered 380 ft. of muddy water

Recovered 90 ft. of sulfurous muddy water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:16 ~~A.M.~~ ~~P.M.~~ — Time Started Off Bottom 2:46 ~~A.M.~~ ~~P.M.~~ — Maximum Temperature 118°

Initial Hydrostatic Pressure		(A) 2130 P.S.I.		
Initial Flow Period	Minutes 45	(B) 71 P.S.I.	to (C) 91	P.S.I.
Initial Closed In Period	Minutes 45	(D) 1362 P.S.I.		
Final Flow Period	Minutes 60	(E) 123 P.S.I.	to (F) 179	P.S.I.
Final Closed In Period	Minutes 60	(G) 1339 P.S.I.		
Final Hydrostatic Pressure		(H) 2097 P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 7-30-80 Test Ticket No. 6323

Recorder No. 1566 Capacity 4300 Location 4266 Ft.

Clock No. ------ Elevation 2018 Kelly Bushing Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2130 P.S.I.		Open Tool	11:16 AM	
B	First Initial Flow Pressure	71 P.S.I.		First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	91 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1362 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	123 P.S.I.		Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	179 P.S.I.				
G	Final Closed-in Pressure	1339 P.S.I.				
H	Final Hydrostatic Mud	2097 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	71
P 2	5	60
P 3	10	59
P 4	15	59
P 5	20	59
P 6	25	59
P 7	30	65
P 8	35	76
P 9	40	82
P10	45	91
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	91
3	836
6	1120
9	1190
12	1229
15	1259
18	1280
21	1298
24	1311
27	1322
30	1330
33	1338
36	1345
39	1349
42	1354
45	1362

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

Point Minutes	Press.
0	123
5	120
10	123
15	127
20	132
25	138
30	140
35	141
40	149
45	153
50	162
55	173
60	179

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

Point Minutes	Press.
0	179
3	946
6	1094
9	1174
12	1188
15	1216
18	1233
21	1250
24	1266
27	1276
30	1285
33	1294
36	1302
39	1308
42	1315
45	1320
48	1324
51	1328
54	1332
57	1336
60	1339

JH #6323

I