Company Kennedy & Mitchell, Inc. Lease & Well No. Leon #41-523

Elevation 1352 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 8161

Date 8/14/81 Sec. 1 Twp. 27S Range 5E County Butler State Kansas

Test Approved by H. W. Gill Western Representative Norman Allen

Formation Test No. 1 Interval Tested from 2762 ft. to 2776 ft. Total Depth 2850 ft.

Packer Depth 2762 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2776 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2765 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 2768 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth 2790 ft. Recorder Number 24 Cap. 4000

Drilling Contractor Aspen Drlg. Rig #3 Drill Collar Length 150 I. D. 2¼ in.

Mud Type chemical Viscosity 52 Weight Pipe Length - I. D. - in.

Weight 9.8 Water Loss 12.8 cc. Drill Pipe Length 2606 I. D. 3.8 in.

Chlorides 1,000 P.P.M. Test Tool Length 45 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 14 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 4½IF in.

Blow: Weak throughout test.

Recovered 160 ft. of salt water 17,000 chlorides ppm

Recovered ft. of .6 Resistivity @ 80°F

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Pressure Recorder #13268

Time Set Packer(s) 3:45 ~~A.M.~~ P.M. Time Started Off Bottom 6:30 ~~A.M.~~ P.M. Maximum Temperature 105°

Initial Hydrostatic Pressure			(A)	1370	P.S.I.	
Initial Flow Period	Minutes	30	(B)	30	P.S.I. to (C)	81* P.S.I.
Initial Closed In Period	Minutes	45	(D)	802	P.S.I.	
Final Flow Period	Minutes	45	(E)	75	P.S.I. to (F)	91 P.S.I.
Final Closed In Period	Minutes	45	(G)	782	P.S.I.	
Final Hydrostatic Pressure			(H)	1360	P.S.I.	

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WESTERN TESTING CO., INC.

Pressure Data

Date 8/14/81 Test Ticket No. 8161

Recorder No. 13268 Capacity 4225 Location 2768 Ft.

Clock No. - Elevation 1352 Kelly Bushing Well Temperature 105 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1370	P.S.I.
B	First Initial Flow Pressure	30	P.S.I.
C	First Final Flow Pressure	81 *	P.S.I.
D	Initial Closed-in Pressure	802	P.S.I.
E	Second Initial Flow Pressure	75	P.S.I.
F	Second Final Flow Pressure	91	P.S.I.
G	Final Closed-in Pressure	782	P.S.I.
H	Final Hydrostatic Mud	1360	P.S.I.

	Time Given		Time Computed	
Open Tool	3:45P	M		
First Flow Pressure	30	Mins.	30	Mins.
Initial Closed-in Pressure	45	Mins.	45	Mins.
Second Flow Pressure	45	Mins.	45	Mins.
Final Closed-in Pressure	45	Mins.	45	Mins.

* PRESSURES QUESTIONABLE DUE TO PLUGGING ACTION.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	30
P 2 5	30
P 3 10	30
P 4 15	30
P 5 20	85 *
P 6 25	118*
P 7 30	81 *
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	81 *
3	523
6	632
9	679
12	706
15	728
18	743
21	753
24	764
27	772
30	779
33	784
36	789
39	796
42	800
45	802

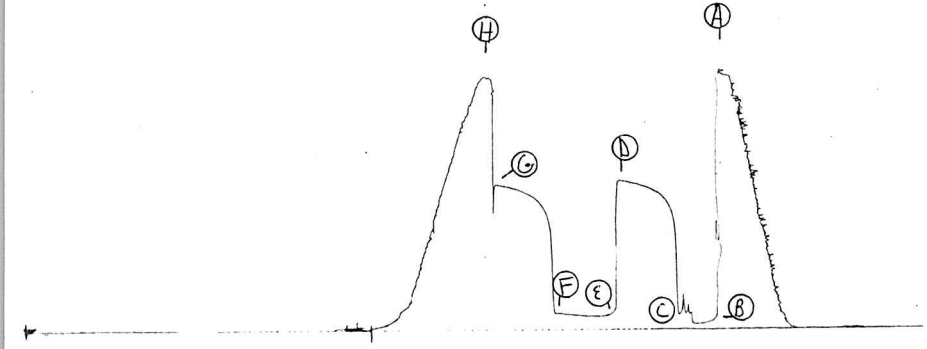
Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	75
5	75
10	75
15	75
20	75
25	77
30	81
35	85
40	89
45	91

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

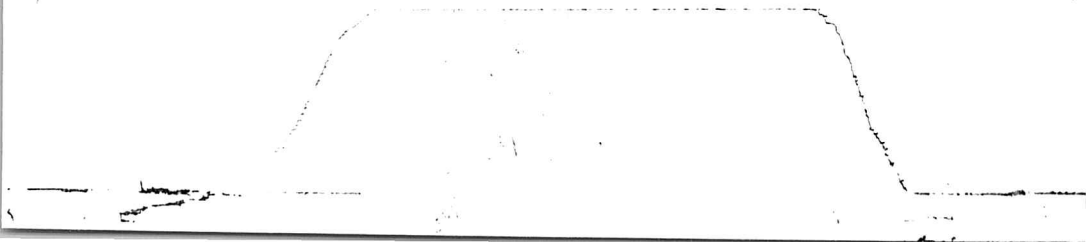
Point Minutes	Press.
0	91
3	513
6	609
9	655
12	683
15	704
18	717
21	730
24	740
27	751
30	760
33	764
36	770
39	774
42	779
45	782

JKT #8161



IKT # 8161

Below Straddle



Company Kennedy & Mitchell, Inc. Lease & Well No. Leon #41-523

Elevation 1352 Kelly Bushing Formation ? Effective Pay - Ft. Ticket No. 8162

Date 8/14/81 Sec. 1 Twp. 27S Range 5E County Butler State Kansas

Test Approved by H. W. Gill Western Representative Norman Allen

Formation Test No. 2 Interval Tested from 2638 ft. to 2664 ft. Total Depth 2850 ft.

Packer Depth 2638 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2664 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2650 ft. Recorder Number 13268 Cap. 4225

Bottom Recorder Depth (Outside) 2647 ft. Recorder Number 1559 Cap. 4200

Below Straddle Recorder Depth 2847 ft. Recorder Number 24 Cap. 4000

Drilling Contractor Aspen Drlg. Rig #3 Drill Collar Length 30 I. D. 2¼ in.

Mud Type chemical Viscosity 52 Weight Pipe Length - I. D. - in.

Weight 9.8 Water Loss 12.8 cc. Drill Pipe Length 2592 I. D. 3.8 in.

Chlorides 1,000 P.P.M. Test Tool Length 228 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 26 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 4½IF in.

Blow: Strong blow dead at forty-five minutes.

Recovered 390 ft. of muddy salt water 24,000 chlorides ppm

Recovered ft. of .52 Resistivity @ 80°F

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 10:00 ~~A.M.~~ P.M. Time Started Off Bottom 12:30 A.M. ~~P.M.~~ Maximum Temperature 103°

Initial Hydrostatic Pressure			(A)	1360	P.S.I.	
Initial Flow Period	Minutes	30	(B)	135	P.S.I. to (C)	160 P.S.I.
Initial Closed In Period	Minutes	42	(D)	1004	P.S.I.	
Final Flow Period	Minutes	30	(E)	197	P.S.I. to (F)	197 P.S.I.
Final Closed In Period	Minutes	45	(G)	972	P.S.I.	
Final Hydrostatic Pressure			(H)	1330	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 8/14/81 Test Ticket No. 8162

Recorder No. 13268 Capacity 4225 Location 2650 Ft.

Clock No. - Elevation 1352 Kelly Bushing Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1360 P.S.I.	Open Tool	10:00P M	
B First Initial Flow Pressure	135 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	160 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mins.
D Initial Closed-in Pressure	1004 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	197 P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F Second Final Flow Pressure	197 P.S.I.			
G Final Closed-in Pressure	972 P.S.I.			
H Final Hydrostatic Mud	1330 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	135
P 2 5	135
P 3 10	135
P 4 15	138
P 5 20	150
P 6 25	158
P 7 30	160
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	160
3	700
6	738
9	789
12	828
15	864
18	887
21	911
24	930
27	949
30	962
33	977
36	989
39	1000
42	1004

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

Point Minutes	Press.
0	197
5	197
10	197
15	197
20	197
25	197
30	197

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

Point Minutes	Press.
0	197
3	736
6	753
9	774
12	802
15	828
18	852
21	870
24	889
27	904
30	922
33	936
36	947
39	957
42	966
45	972

TKT #8162

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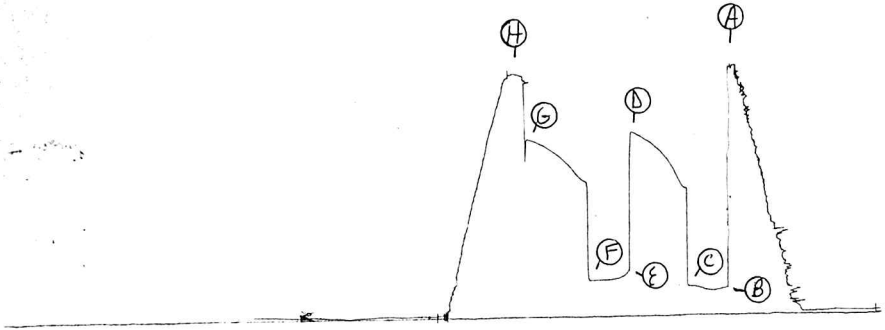

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TKT # 8162

Below Straddle