PHONE
316 / 624-7340

DEAN'S TESTERS INC.

P. O. BOX 1182
LIBERAL, Ks. 67901

Formation Lansing Type Test Bottom Hole W/ Sample Date April 3, 1986

Anchor Length and Size 17' X 4 1/2" Total Depth 3468'

Packer Depths 3446' & 3451' Below Straddle Choke Size Bottom 5/8" Surface 1/4"

Equipment Run Two Packers, Jars, Safety Joint, Circulating Sub, Sample Chamber

Lengths: Tool 55' D. P. 2801' ID 3.8" Wt. P. ID D. C. 626' ID 2.25"

Mud Type Chemical Vis. 38 Wt. 9.1 Wtr. Loss 12.8 Cl. 900 ppm

Recorders:

Depth 3439' Make Kuster Cap. 6500 Ser. No. 10269 Inside

Depth 3466' Make Kuster Cap. 6450 Ser. No. 10268 Outside

Depth Make Cap. Ser. No. Below Straddle

Pressures:

Tool on Bottom @ 3:25 A M. Initial Hydrostatic 1673 psi

Initial Flow 30 Min. IFP 43 psi to 48 psi

Initial Shut-In 59 Min. ISIP 569 psi

Final Flow 45 Min. FFP 61 psi to 70 psi

Final Shut-In 89 Min. FSIP 562 psi

Tool off Bottom @ 7:10 A M. Final Hydrostatic 1651 psi Temp. 105

Blow: Initial Flow Period: Weak

Final Flow Period: Weak Dying at 35 Minutes into Final Flow

Recovery: 80' Mud Mud Chlorides: 2800 PPM

Gas Flow:

Sampler Data:

Pressure 60 PSI

Gas 0.0 cu. ft.

Total Fluid 1800 cc

Oil ---- cc

Water 1800 Muddy Water cc

Mud ---- cc

Oil Gravity @ °F.

Gas/Oil Ratio

Remarks:

Chlorides: 8900 PPM

Tester R L Young Witnessed by: Stan Brady

DT-10 Liberal Office Machines

SEC. 28 TWP. 32S RGE. 42W COUNTY Morton STATE Kansas

OPERATOR

WELL NAME & NO.

TEST #

TEST INTERVAL

TICKET NO. 2977

Pressure Break Down

Test ticket no. 2977 Recorder no. 10269 Capacity 6500 Rec. Depth. 3439'

Initial Flow pressure 43 to 48

Initial Closed in pressure 569

Final Flow pressure 61 to 70

Final Closed-in pressure 562

Time	Given	Computed
	30	30
	60	59
	45	45
	90	89

Initial Hydrostatic pressure 1673 Final Hydrostatic press. 1651 Temp 105

Initial Flow Press.

Minutes	Press
0	--
5	--
10	43
15	43
20	45
25	46
30	48
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	

Initial Closed in Press.

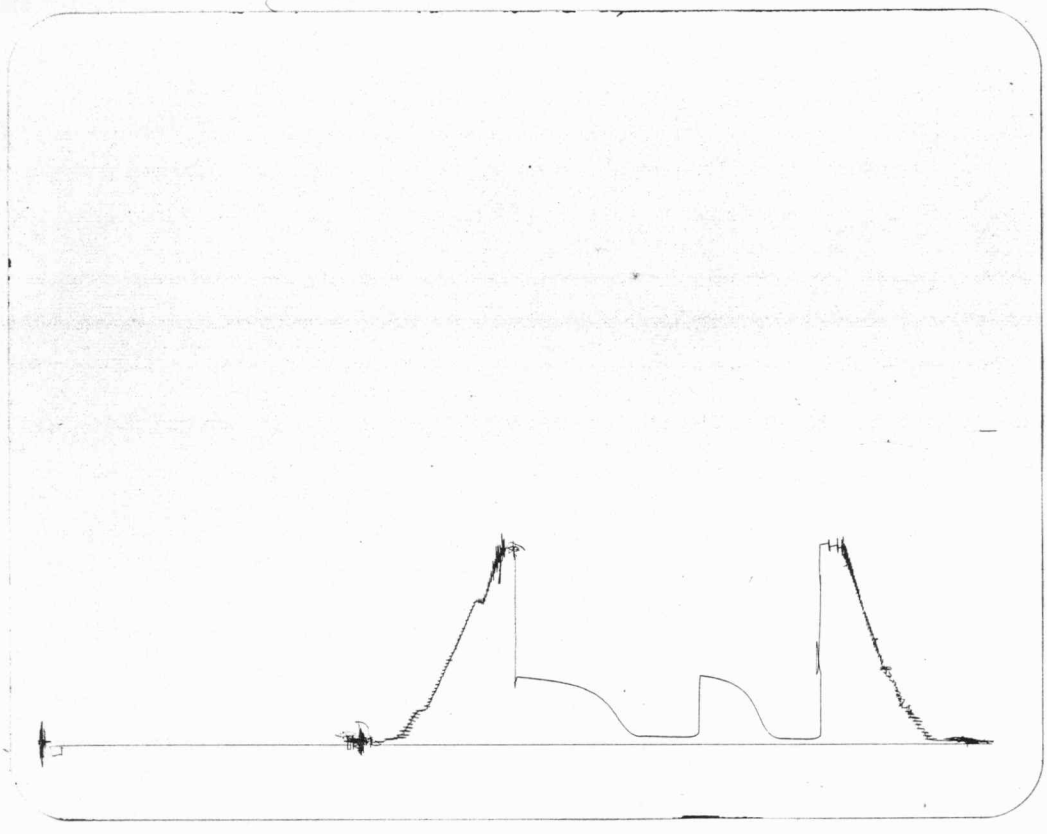
Minutes	Press
0	48
3	56
6	74
9	108
12	161
15	237
18	309
21	369
24	412
27	443
30	470
33	491
36	508
39	522
42	532
45	541
48	551
51	558
54	564
57	567
59 XX	569
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

Final Flow Press

Minutes	Press
0	--
5	--
10	61
15	62
20	64
25	64
30	66
35	67
40	69
45	70
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	
125	
130	
135	
140	
145	
150	
155	
160	
165	
170	
175	
180	

Final Closed in Press.

Minutes	Press
0	70
3	75
6	95
9	122
12	159
15	204
18	259
21	306
24	346
27	379
30	404
33	425
36	443
39	461
42	474
45	485
48	495
51	504
54	511
57	517
60	524
63	529
66	533
69	538
72	543
75	546
78	551
81	553
84	558
87	561
89 XX	562
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	



Initial Hydrostatic 1673 psi

IFP 43 psi to 48 psi

ISIP 569 psi

FFP 61 psi to 70 psi

FSIP 562 psi

Final Hydrostatic 1651 psi

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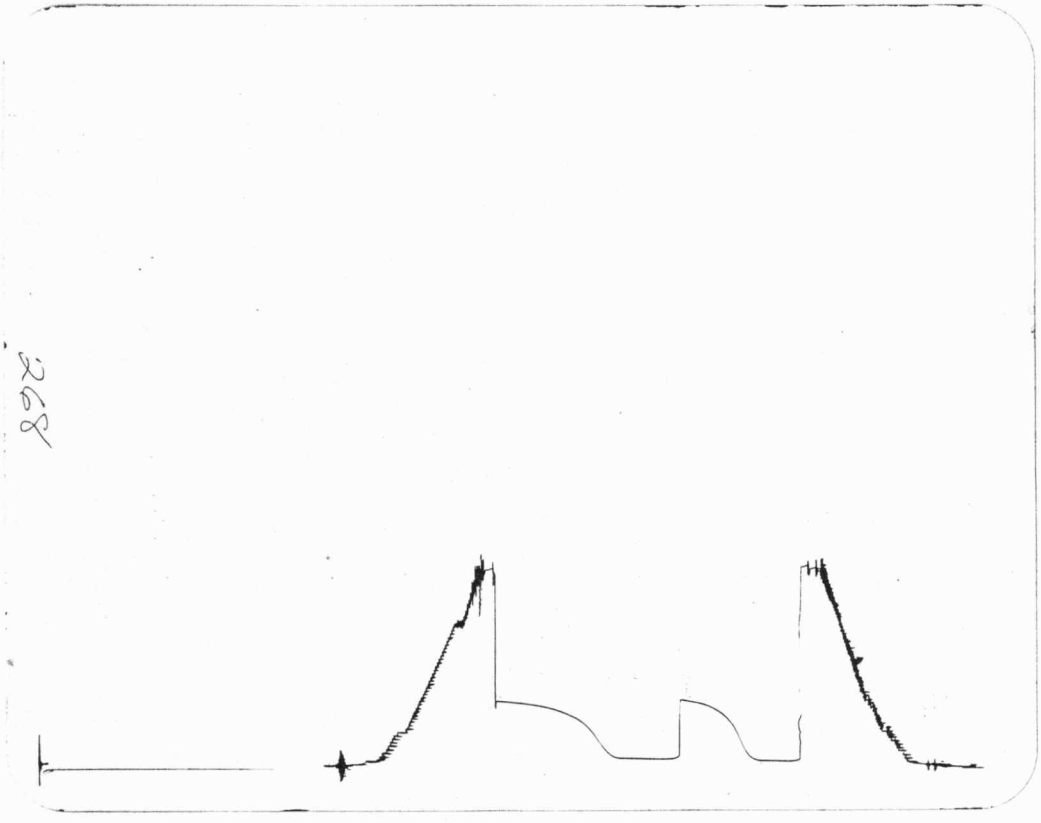


PHONE
316 / 624-7340

DEAN'S TESTERS INC.

P. O. BOX 1182
LIBERAL, Ks. 67901

Formation Morrow Type Test Bottom Hole W/Sampler Date April 7, 1986

Anchor Length and Size 75'- 60' X 6¼" & 15' X 4½" Total Depth 4980'

Packer Depths 4900' & 4905' Below Straddle _____ Choke Size Bottom 5/8" Surface 1"

Equipment Run Two Packers, Jars, Safety Joint, Circulating Sub, Sample Chamber

Lengths: Tool 115' D. P. 4319' ID 3.8" Wt. P. _____ ID _____ D. C. 566' ID 2.25"

Mud Type Chemical Vis. 40 Wt. 9.0 Wtr. Loss 8.0 Cl. 600 ppm

Recorders:

Depth 4893' Make Kuster Cap. 6500 Ser. No. 10269 Inside

Depth 4916' Make Kuster Cap. 6450 Ser. No. 10268 Outside

Depth _____ Make _____ Cap. _____ Ser. No. _____ Below Straddle

Pressures:

Tool on Bottom @ 9:00 P M. Initial Hydrostatic 2327 psi

Initial Flow 29 Min. IFP 448 psi to 412 psi

Initial Shut-in 59 Min. ISIP 1069 psi

Final Flow 44 Min. FFP 430 psi to 403 psi

Final Shut-in 117 Min. FSIP 1061 psi

Tool off Bottom @ 1:15 A M. Final Hydrostatic 2319 psi Temp. 136

Blow: Strong Throughout: Gas to Surface in 2 Minutes of Initial Flow Period.

Recovery: 75' Slightly Oil Cut Mud

Gas Flow: Gauged at 1,764 MCF/D, Through an 1 1/4" Orifice, Stabilizing at 30 Minutes into Final Flow Period.

Sampler Data:

Pressure 420 PSI

Gas 2.35 cu. ft.

Total Fluid 100 cc

Oil --- cc

Water --- cc

Mud 100 cc Slightly Oil Cut cc

Oil Gravity _____ @ _____ °F.

Gas / Oil Ratio _____

Remarks:

Tester R L Young Witnessed by: Stan Brady

DT-10 Liberal Office Machines

SEC. 28 TWP. 32S RGE. 42W COUNTY Morton STATE Kansas TICKET NO. 2980

OPERATOR Hawkins Oil & Gas Inc

WELL NAME & NO. Hawkins #1-28

TEST # _____

TEST INTERVAL _____

Ph. 316/624-7340 Mobile — 316/624-6247
Unit #935

DEAN'S TESTERS

P.O. Box 1182 Liberal, Kansas 67901

Company Hawkins Oil & Gas Inc **Well** Pankratz # 1-28

Test # #2 **Interval** 4905'- 4980'

Method of Gauge Merla 2'' Quick-Change Orifice Well Tester

Time	Gauge	Orifice Size	Gas Volume MCF/D
INITIAL FLOW:	PSI:		
10 Minutes	30 PSI	1 1/4"	1612
20 Minutes	33 PSI	1 1/4"	1729
30 Minutes	33 PSI	1 1/4"	1729
FINAL FLOW:			
10 Minutes	36 PSI	1 1/4"	1836
20 Minutes	35 PSI	1 1/4"	1797
30 Minutes	34 PSI	1 1/4"	1764
40 Minutes	34 PSI	1 1/4"	1764
45 Minutes	34 PSI	1 1/4"	1764

Surface Choke 1" **Bottom Choke** 5/8"

Remarks: Gas to Surface in 2 Minutes

Pressure Break Down

Test ticket no. 2980 Recorder no. 10269 Capacity 6500 Rec. Depth. 4893'

			Given	Computed
Initial Flow pressure	448 to 412	Time	30	29
Initial Closed in pressure	1069		60	59
Final Flow pressure	430 to 403		45	44
Final Closed-in pressure	1061		120	117

Initial Hydrostatic pressure 2327 Final Hydrostatic press. 2319 Temp 136

Initial Flow Press.

Minutes	Press
0	---
5	448
10	432
15	424
20	417
25	414
29 ~~30~~ XX	412
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	

Initial Closed in Press.

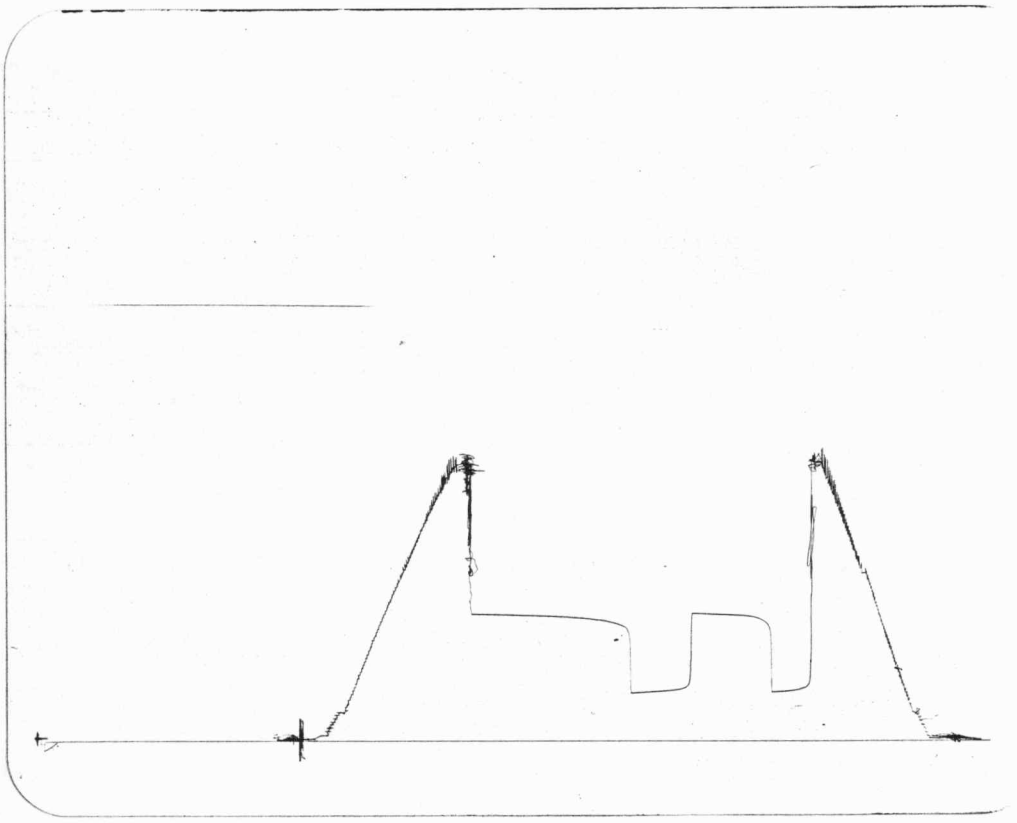
Minutes	Press
0	412
3	967
6	1004
9	1022
12	1035
15	1043
18	1048
21	1053
24	1053
27	1054
30	1056
33	1057
36	1059
39	1059
42	1061
45	1062
48	1064
51	1065
54	1067
57	1069
59 ~~60~~ XX	1069
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

Final Flow Press

Minutes	Press
0	---
5	---
10	430
15	424
20	419
25	414
30	411
35	408
40	406
44 ~~45~~ XX	403
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	
125	
130	
135	
140	
145	
150	
155	
160	
165	
170	
175	
180	

Final Closed in Press.

Minutes	Press
0	403
3	935
6	961
9	977
12	988
15	998
18	1004
21	1011
24	1016
27	1019
30	1024
33	1027
36	1030
39	1032
42	1035
45	1038
48	1040
51	1041
54	1043
57	1045
60	1046
63	1048
66	1048
69	1049
72	1051
75	1053
78	1053
81	1054
84	1054
87	1056
90	1056
93	1057
96	1057
99	1059
102	1059
105	1061
108	1061
111	1061
114	1061
117	1061
120	



Initial Hydrostatic 2327 psi

IFP 448 psi to 412 psi

ISIP 1069 psi

FFP 430 psi to 403 psi

FSIP 1061 psi

Final Hydrostatic 2319 psi

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