



ORIGINAL

CONFIDENTIAL

KCC

DIAMOND TESTING

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(316) 653-7550

15-109-20664

RELEASED

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MAR 05 2000

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CONFIDENTIAL

FROM CONFIDENTIAL

Company Slawson Exploration Company, Inc. Lease & Well No. Dumler No. 2-6

Elevation 3169 KB Formation Lansing/Kansas City "K" Effective Pay Ft. Ticket No. 1074

Date 1-17-98 Sec. 6 Twp. 11S Range 33W County Logan State Kansas

Test Approved By Stephen J. Miller Diamond Representative Roger D. Friedly

Formation Test No. 3 Interval Tested from 4,329 ft. to 4,352 ft. Total Depth 4,352 ft.

Packer Depth 4,324 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4,329 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 4,317 ft. Recorder Number 13386 Cap. 3,875 psi

Bottom Recorder Depth (Outside) 4,349 ft. Recorder Number 13556 Cap. 5,475 psi

Below Straddle Recorder Depth ft. Recorder Number Cap. psi

Drilling Contractor Mallard JV, Inc. Drill Collar Length 248 ft. I.D. 2 1/4 in.

Mud Type Chemical Viscosity 50 Weight Pipe Length ft. I.D. in.

Weight 9.4 Water Loss 9.6 cc. Drill Pipe Length 4,057 ft. I.D. 3 1/2 in.

Chlorides 6,000 P.P.M. Test Tool Length 24 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 23 ft. Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Strong blow. Off bottom of bucket in 3 mins. Strong blow back off bottom of bucket during shut-in.

2nd Open: Strong blow. Off bottom of bucket in 5 mins. Strong blow back off bottom of bucket during shut-in.

Recovered 1,580 ft. of gas in pipe

Recovered 651 ft. of clean oil = 6.01183 bbls. (Gravity: 40 @ 60°)

Recovered 125 ft. of gas cut muddy oil = 1.48625 bbls. (Grind out: 5%-gas; 23%-mud; 72%-oil)

Recovered 62 ft. of gas cut muddy oil = .73718 bbls. (Grind out: 12%-gas; 24%-mud; 64%-oil)

Recovered 62 ft. of mud cut gassy oil = .73718 bbls. (Grind out: 25%-mud; 36%-gas; 39%-oil)

Recovered 900 ft. of TOTAL FLUID = 8.97244 bbls.

Remarks Tool Sample Grind out: 4%-mud; 96%-oil.

Time Set Packer(s) 3:35 ~~PM~~ ^{A.M.} Time Started Off Bottom 7:05 ~~PM~~ ^{A.M.} Maximum Temperature 117°

Initial Hydrostatic Pressure (A) 2186 P.S.I.

Initial Flow Period Minutes 30 (B) 131 P.S.I. to (C) 232 P.S.I.

Initial Closed In Period Minutes 45 (D) 669 P.S.I.

Final Flow Period Minutes 45 (E) 301 P.S.I. to (F) 369 P.S.I.

Final Closed In Period Minutes 90 (G) 669 P.S.I.

Final Hydrostatic Pressure (H) 2172 P.S.I.

DIAMOND TESTING
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: SLAWSON EXPL. CO., INC.
LEASE: DUMLER # 2-6 DST #3
LOCATION: 6-11S-33W FORMATION: LKC "K"
COUNTY: LOGAN, KS ELEVATION: 3169 KB
GAUGE DEPTH: 4349 DATUM: -1180

*****TEST PARAMETERS*****

TEST INTERVAL: 4329 - 4352	POROSITY FRACTION:	.15
INTERVAL TESTED: 23	VISCOSITY:	2.4 CP
EST PAY: 10	OIL GRAVITY:	40 @60 DEG.
TIME INTERVAL: 30 - 45 - 45 - 90		
INITIAL FLOW PRESS: 129.8- 235.0	TOTAL FT RECOVERY:	900 FT
FINAL FLOW PRESS: 306.0- 371.6	D.C. CAPACITY:	0.00492
	D.C. LENGTH:	248 FT
SHUT-IN PRESS(I-F): 673.5- 666.7	W.P. CAPACITY:	0.00000
	W.P. LENGTH:	0 FT
BOTTOM HOLE TEMP.: 117 DEG F	D.P. CAPACITY:	0.01422
HOLE SIZE: 7.875	BBLs RECOVERY:	810.49056

*****EXTRAPOLATED PRESSURE*****

EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 754
SLOPE (PSI-CYCLE): 247 POINTS USED: 8

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 754
SLOPE (PSI-CYCLE): 161 POINTS USED: 10

*****CALCULATIONS*****

PRODUCTION POTENTIAL (B/D)	:	201.42
TRANSMISSIBILITY (MD-FT/CP)	:	203.42
FLOW CAPACITY (MD.-FT.)	:	488.21
EFFECTIVE PERMEABILITY (MD)	:	48.82
PRODUCTIVITY INDEX (B/D/PSI)	:	0.5267
DAMAGE RATIO	:	0.435
SKIN FACTOR (S)	:	-2.5
PRESSURE DROP DUE TO SKIN (PSI)	:	-354.0
APPROXIMATE RADIUS OF INVESTIGATION (FT)	:	60.5
DRAWDOWN FACTOR (%)	:	0.000
POTENTIOMETRIC SURFACE (FT)	:	568.5

01-17-1998 SLAWSON EXPL. CO., INC.

DUMLER # 2-6
INITIAL & FINAL SHUT-IN

DST #3

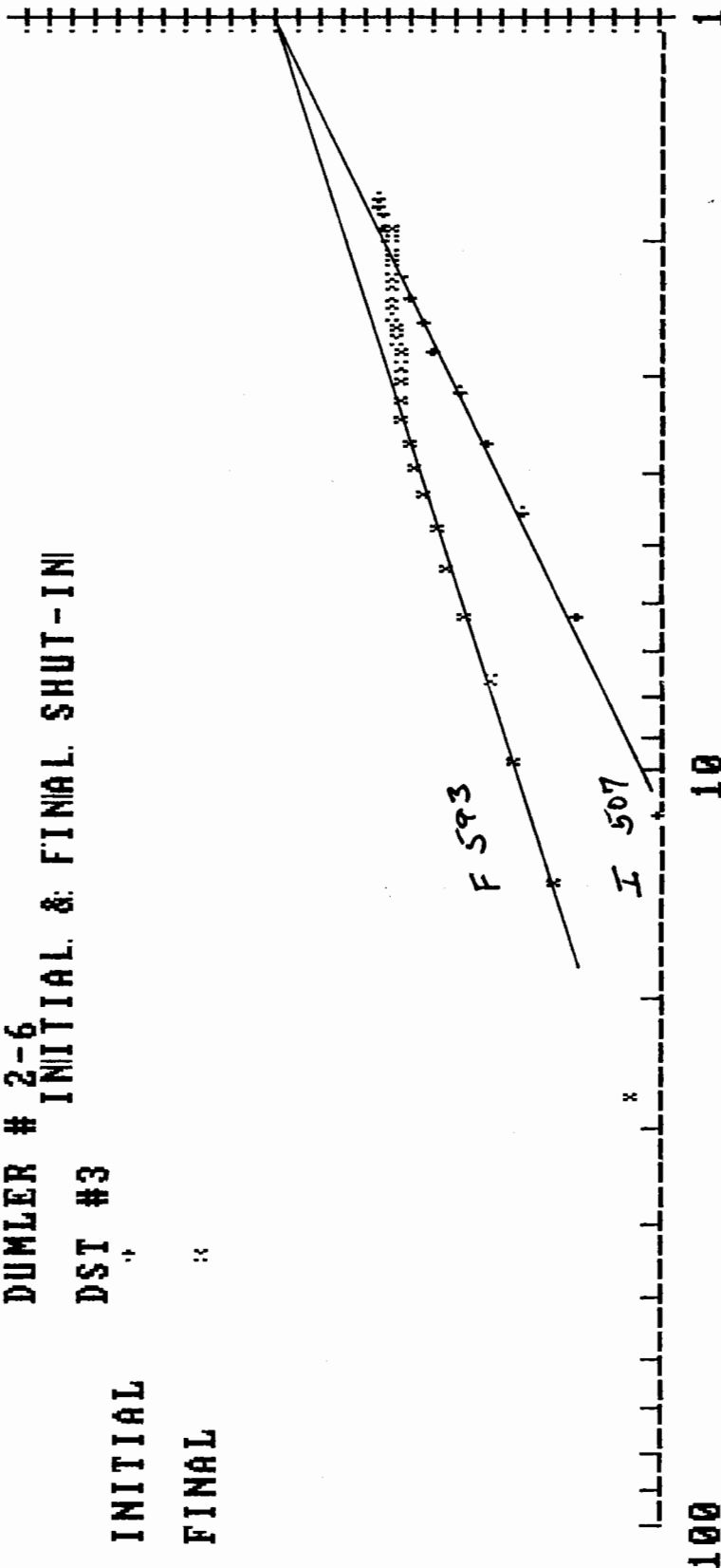
INITIAL

FINAL

918

I 754
F 754

500



10
(t+dt/dt)

100

LEASE:DUMLER # 2-6
DST #:3
INITIAL SHUT-IN

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RECORDER NO: 13556 DEPTH: 4349 FT.
INITIAL FLOW TIME: T = 30 MIN.

DT(MIN)	T+DT/DT	LOG((T+DT)/DT)	PRESS(P SIG)
3	11.0000	1.041	502.7
6	6.0000	0.778	551.9
9	4.3333	0.637	584.7
12	3.5000	0.544	606.6
15	3.0000	0.477	623.0
18	2.6667	0.426	639.3
21	2.4286	0.385	644.8
24	2.2500	0.352	653.0
27	2.1111	0.325	658.5
30	2.0000	0.301	662.6
33	1.9091	0.281	666.7
36	1.8333	0.263	669.4
39	1.7692	0.248	670.8
42	1.7143	0.234	672.1
45	1.6667	0.222	673.5

LEASE:DUMLER # 2-6
DST #:3
FINAL SHUT-IN

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RECORDER NO: 13556 DEPTH: 4349 FT.
TOTAL FLOW TIME: T = 75 MIN.

DT(MIN)	T+DT/DT	LOG((T+DT)/DT)	PRESS(P SIG)
3	26.0000	1.415	521.9
6	13.5000	1.130	566.9
9	9.3333	0.970	592.9
12	7.2500	0.860	606.6
15	6.0000	0.778	623.0
18	5.1667	0.713	632.5
21	4.5714	0.660	639.3
24	4.1250	0.615	647.5
27	3.7778	0.577	651.6
30	3.5000	0.544	655.7
33	3.2727	0.515	659.8
36	3.0833	0.489	661.2
39	2.9231	0.466	661.2
42	2.7857	0.445	661.2
45	2.6667	0.426	661.2
48	2.5625	0.409	662.6
51	2.4706	0.393	663.9
54	2.3889	0.378	665.3
57	2.3158	0.365	665.3
60	2.2500	0.352	665.3
63	2.1905	0.341	665.3
66	2.1364	0.330	665.3
69	2.0870	0.320	666.7
72	2.0417	0.310	666.7
75	2.0000	0.301	666.7
78	1.9615	0.293	666.7
81	1.9259	0.285	666.7
84	1.8929	0.277	666.7
87	1.8621	0.270	666.7
90	1.8333	0.263	666.7

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SLAWSON EXPL. CO., INC
LEASE: DUMLER # 2-6
INITIAL FLOW
DST #:3

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RECORDER NO: 13556 DEPTH: 4349 FT.
INITIAL FLOW TIME: T = 30 MIN.

DT(MIN)	PRESSURE(PSIG)
=====	
0	129.8
3	131.1
6	143.4
9	153.0
12	162.6
15	176.2
18	185.8
21	199.5
24	211.7
27	222.7
30	235.0

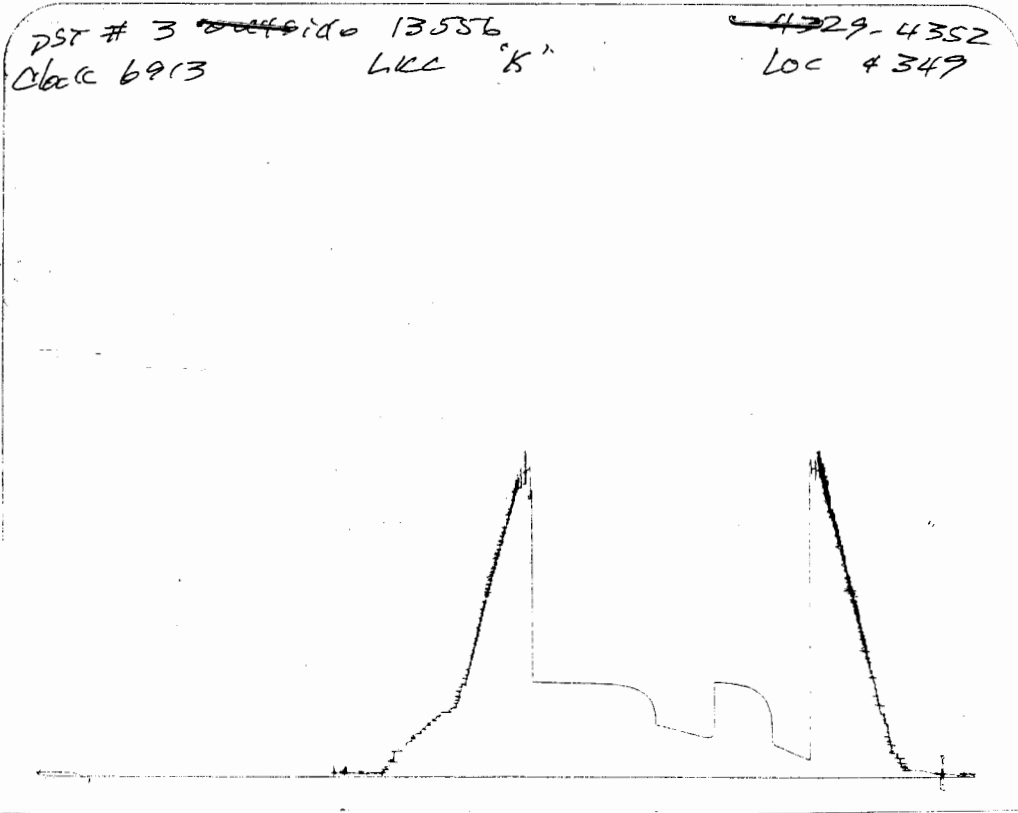
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SLAWSON EXPL. CO., INC
LEASE: DUMLER # 2-6
FINAL FLOW
DST #:3

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RECORDER NO: 13556 DEPTH: 4349 FT.
FINAL FLOW TIME: T = 45 MIN.

DT(MIN)	PRESSURE(PSIG)
=====	
0	306.0
3	285.5
6	281.4
9	286.9
12	293.7
15	300.5
18	306.0
21	314.2
24	321.0
27	327.9
30	337.4
33	344.3
36	349.7
39	357.9
42	364.8
45	371.6



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2186	2189	PSI
(B) First Initial Flow Pressure.....	131	130	PSI
(C) First Final Flow Pressure	232	235	PSI
(D) Initial Closed-in Pressure	669	674	PSI
(E) Second Initial Flow Pressure	301	306	PSI
(F) Second Final Flow Pressure.....	369	372	PSI
(G) Final Closed-in Pressure.....	669	667	PSI
(H) Final Hydrostatic Mud	2172	2178	PSI

COMPANY:
 OPERATOR:
 LEASE AND WELL NO.:
 WELL NO.: 2-0
 SEC.: 0
 TWP.: 11S
 RGE.:
 DATE: 1-1-20