

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	1
Well Name & Number	Dickey #4	Zone Tested	Topeka
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/13/84
Company Rep.	Bob Jinkins	Tester	Larry Hunt/ Dave Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.		Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 3702 Clock # 25829

(A) Initial Hydrostatic Mud 1950 PSI

(B) First Initial Flow Pressure 50 PSI

(C) First Final Flow Pressure 80 PSI

(D) Initial Shut-in Pressure 1059 PSI

(E) Second Initial Flow Pressure 100 PSI

(F) Second Final Flow Pressure 150 PSI

(G) Final Shut-in Pressure 1030 PSI

(H) Final Hydrostatic Mud 1871 PSI

Temperature 107

Mud Weight 9.2 Viscosity 42

Fluid Loss 9.6

Interval Tested 3690-3705

Anchor Length 15

Top Packer Depth 3685

Bottom Packer Depth 3690

Total Depth 3705

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 261

Recovered 1 Feet Of oil.

Recovered 260 Feet Of mud cut water with scum of oil, 15% mud, 85% water.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 3690 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 11:17 PM

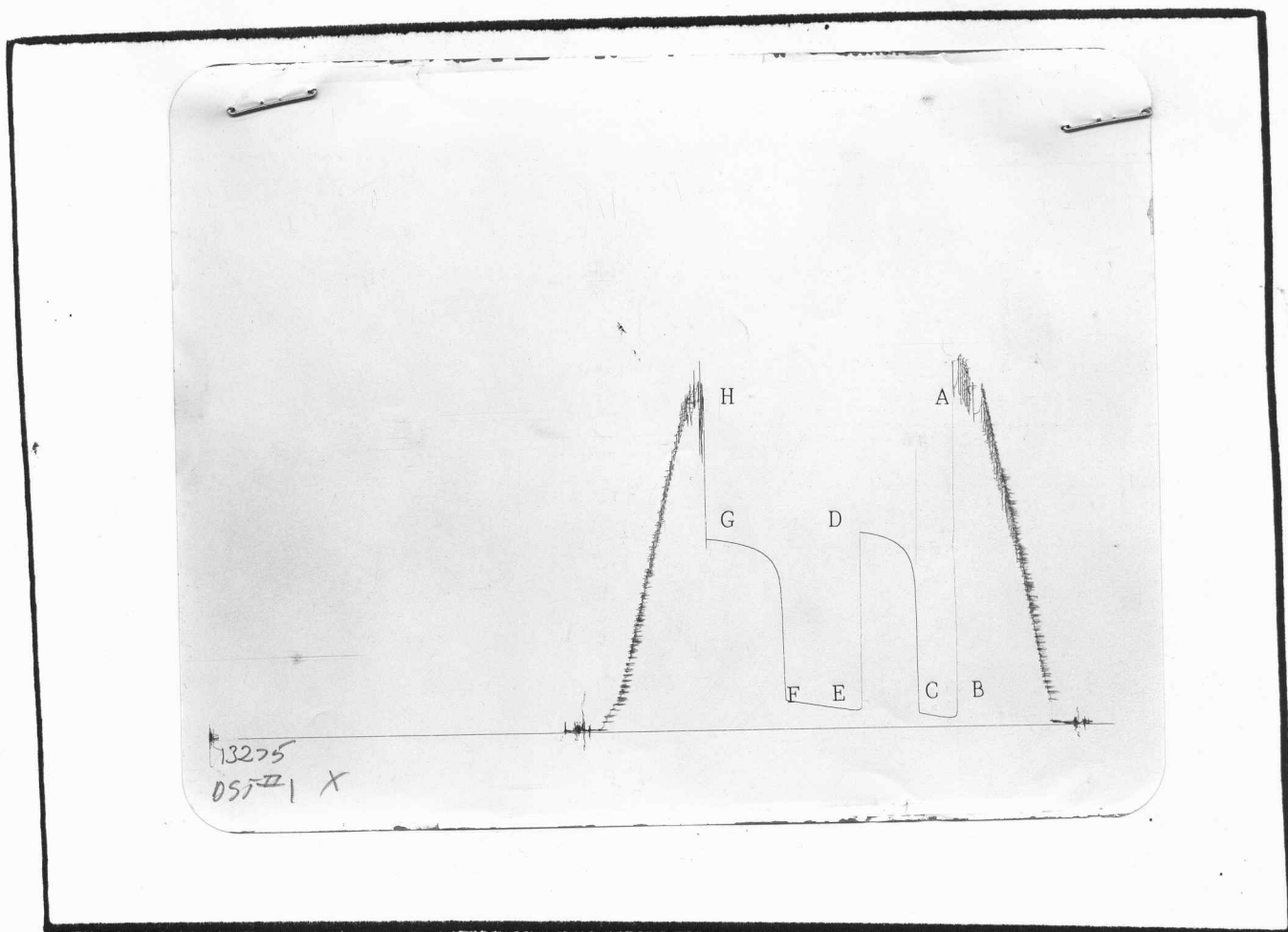
Blow Remarks 1st open: Weak blow, increasing to steady 3" blow.

2nd open: 3" blow increasing to steady 5" blow.

Well chlorides: 6,000 ppm

Recovery Chlorides: 38,000 ppm

Price of Job \$625.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	1950	PSI
(B) First Initial Flow Pressure	50	PSI
(C) First Final Flow Pressure	80	PSI
(D) Initial Closed-in Pressure	1059	PSI
(E) Second Initial Flow Pressure	100	PSI
(F) Second Final Flow Pressure	150	PSI
(G) Final Closed-in Pressure	1030	PSI
(H) Final Hydrostatic Mud	1871	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	2
Well Name & Number	Dickey #4	Zone Tested	Lansing
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/14/84
Company Rep.	Bob Jenkins	Tester	Larry Hunt/Dave Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.	Est. Feet of Pay		

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 3937 Clock # 25829

(A) Initial Hydrostatic Mud 2117 PSI

(B) First Initial Flow Pressure 70 PSI

(C) First Final Flow Pressure 100 PSI

(D) Initial Shut-in Pressure 1157 PSI

(E) Second Initial Flow Pressure 140 PSI

(F) Second Final Flow Pressure 190 PSI

(G) Final Shut-in Pressure 1137 PSI

(H) Final Hydrostatic Mud 2107 PSI

Temperature 109

Mud Weight 9.7 Viscosity 38

Fluid Loss 11.2

Interval Tested 3919-3940

Anchor Length 21

Top Packer Depth 3914

Bottom Packer Depth 3919

Total Depth 3940

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.7 Ft. Run 500

Recovery-Total Feet 370

Recovered 190 Feet Of clean gassy oil, 12% gas, 88% oil. Gravity: 37 API corrected.

Recovered 180 Feet Of slightly mud cut gassy oil, 10% mud, 10% gas, 80% oil.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Price of Job \$625.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 3934 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 9:30 PM

Blow Remarks 1st open: Weak blow, building to strong blow off bottom of bucket in 13 minutes.

2nd open: Strong blow throughout.

Well Chlorides: 7,000 ppm

Mud Chlorides: 13,000 ppm

INITIAL SHUT-IN

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RECORDER NO: 13275 DEPTH: 3940 FT.
INITIAL FLOW TIME (T): 30 MIN.

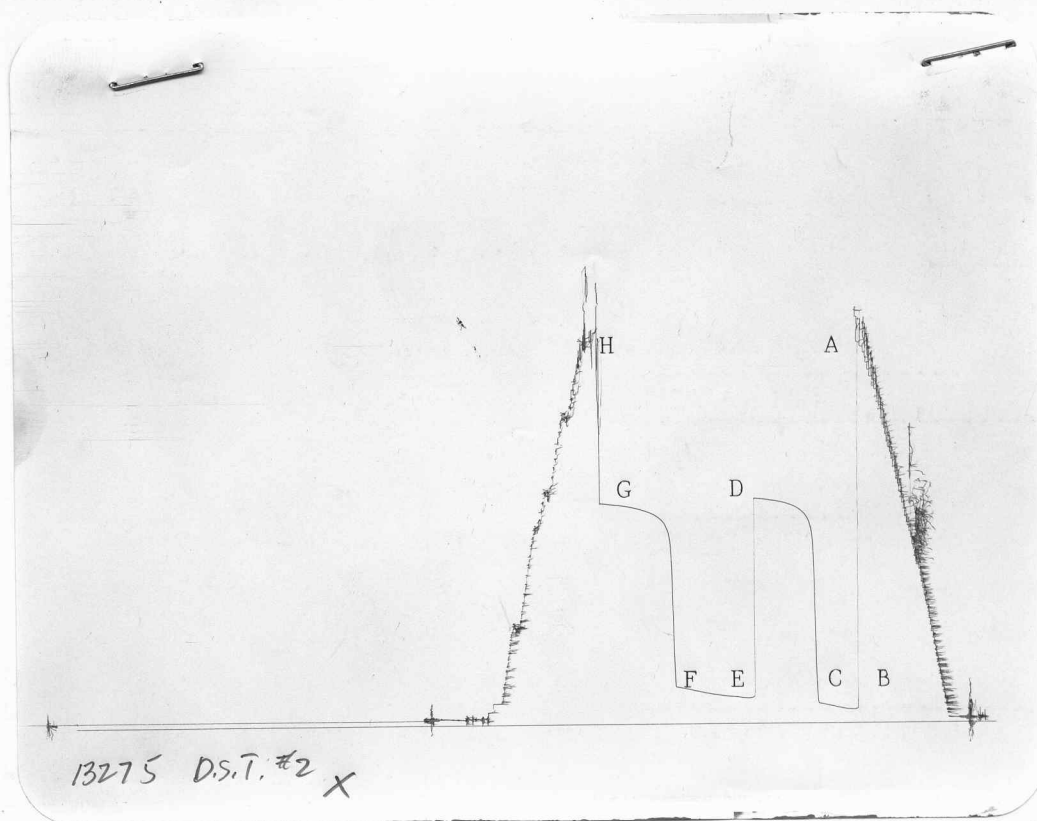
DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	101.1
5	0.845	1032.7
10	0.602	1089.2
15	0.477	1114.9
20	0.398	1130.8
25	0.342	1140.7
30	0.301	1147.6
35	0.269	1153.6
40	0.243	1157.5
45	0.222	1160.5

FINAL SHUT-IN

=====

RECORDER NO: 13275 DEPTH: 3940 FT.
TOTAL FLOW TIME: 90 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	184.3
5	1.279	386.5
10	1.000	985.1
15	0.845	1051.5
20	0.740	1077.3
25	0.663	1093.1
30	0.602	1104.0
35	0.553	1111.9
40	0.512	1119.9
45	0.477	1125.8
50	0.447	1129.8
55	0.421	1133.7
60	0.398	1136.7



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2117	2112
(B) First Initial Flow Pressure	70	74.3
(C) First Final Flow Pressure	100	101.1
(D) Initial Closed-in Pressure	1157	1160.5
(E) Second Initial Flow Pressure	140	132.8
(F) Second Final Flow Pressure	190	184.3
(G) Final Closed-in Pressure	1137	1136.7
(H) Final Hydrostatic Mud	2107	2102

AVERAGE PRODUCTION RATE (BBL/D)
 GRAVITY (SG) (WT/WT)
 PERMEABILITY (MD)
 PRODUCTIVITY INDEX (B/D/PSI)
 DAMAGE INDEX
 AT POSITION (FEET) OF INVESTIGATION (FT)
 DRAGONG 24" FOR (FT)
 IMPERMEABLE SURFACE (FT)

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: OIL CAPITAL CORPORATION
DICKY #4
SEC 25-16S-32W
LANE COUNTY, KANSAS

DST # 2
FORMATION: LANSING
ELEVATION: 2846 KB

TEST PARAMETERS

TEST INTERVAL: 3919 - 3940	EST PAY: 4
TIME INTERVAL: 30 - 45 - 60 - 60	VISCOSITY OF FLUID: 3.5
INITIAL FLOW PRESS: 74.3- 101.1	HOLE SIZE: 7.875
FINAL FLOW PRESS: 132.8- 184.3	D.C. CAPACITY: 0.00492
SHUT-IN PRESS(I-F): 1160.5-1136.7	W.P. CAPACITY: 0.00708
BOTTOM HOLE TEMPERATURE: 109	D.P. CAPACITY: 0.01402
TOTAL FEET OF RECOVERY: 370	TOTAL BARRELS RECOVERY: 2.6189

EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 1200
SLOPE (PSI-CYCLE): 171 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 1193
SLOPE (PSI-CYCLE): 144 POINTS USED: 5

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 41.90
TRANSMISSIBILITY (MD-FT/CP)	: 47.31
PERMEABILITY (MD)	: 41.40
PRODUCTIVITY INDEX (B/D/PSI)	: 0.0351
DAMAGE RATIO	: 1.282
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 61.0
DRAWDOWN FACTOR (%)	: 0.583
POTENTIOMETRIC SURFACE (FT)	: 1672.57

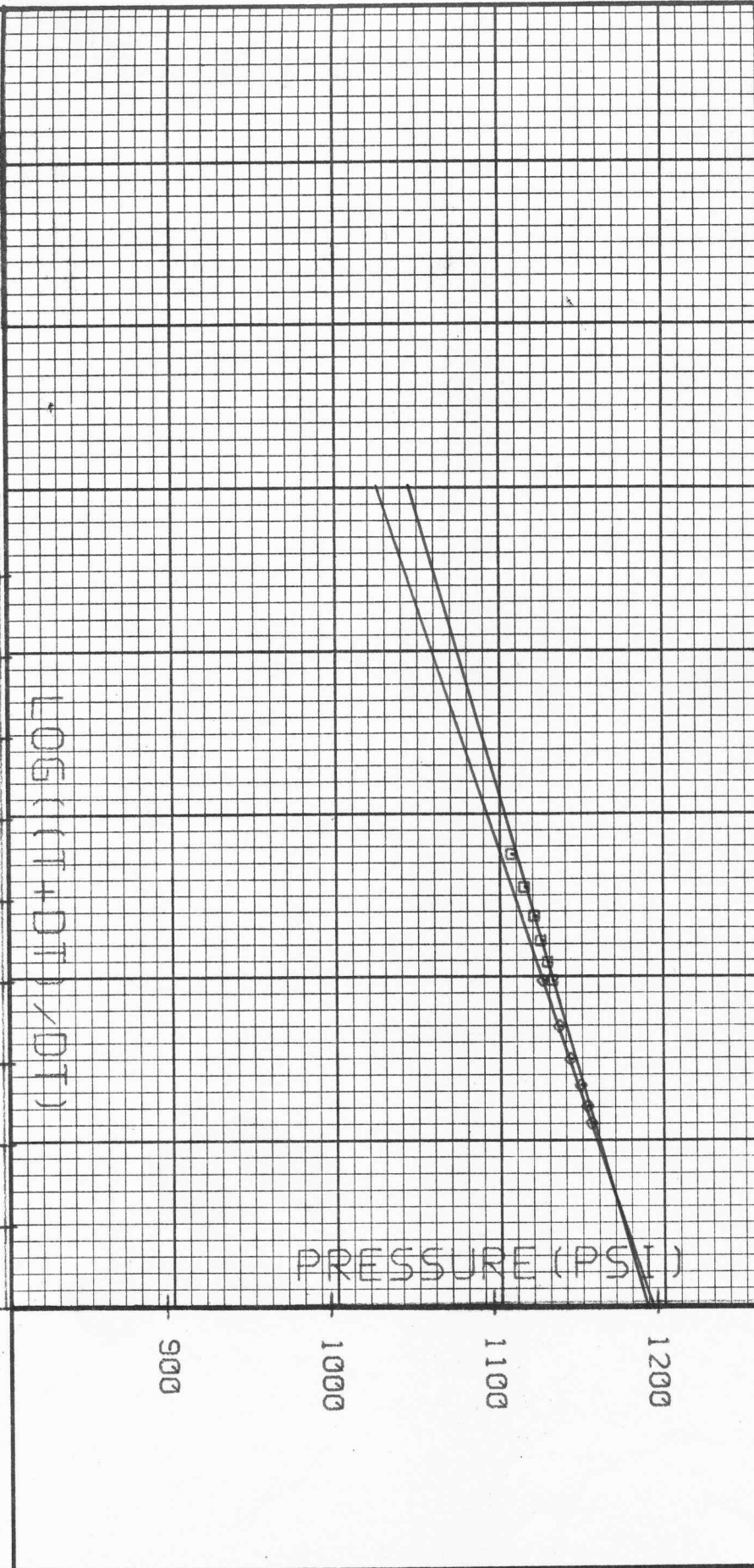
HORNER PLOT
OIL CAPITAL CORPORATION
DICKY #4
DST # 2 DEPTH: 3940
RECORDER NO. 13275
INITIAL SHUT-IN: $\diamond$
FINAL SHUT-IN: $\square$

LOG((T+DT)/DT)

PRESSURE (PSI)

1400
1300
1200
1100
1000
900

1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0



CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	3
Well Name & Number	Dickey #4	Zone Tested	Lansing
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/15/84
Company Rep.	Bob Jenkins	Tester	Larry Hunt/ Dave Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.	Est. Feet of Pay		

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 3972 Clock # 25829

(A) Initial Hydrostatic Mud 2088 PSI

(B) First Initial Flow Pressure 50 PSI

(C) First Final Flow Pressure 90 PSI

(D) Initial Shut-in Pressure 290 PSI

(E) Second Initial Flow Pressure 130 PSI

(F) Second Final Flow Pressure 190 PSI

(G) Final Shut-in Pressure 290 PSI

(H) Final Hydrostatic Mud 2078 PSI

Temperature 110

Mud Weight 9.5 Viscosity 47

Fluid Loss 9.6

Interval Tested 3955-3975

Anchor Length 20

Top Packer Depth 3950

Bottom Packer Depth 3955

Total Depth 3975

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.7 Ft. Run 500

Recovery-Total Feet 450

Recovered 390 Feet Of clean gassy oil, 7% gas, 93% oil. Gravity: 37 API corrected.

Recovered 60 Feet Of slightly mud cut gassy oil, 5% mud, 7% gas, 88% oil.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Price of Job \$625.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 3969 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 12:47 PM

Blow Remarks 1st open: Weak blow, built up blow off bottom bucket in 7 minutes.

2nd open: Strong blow, off bottom of bucket.

Well Chlorides: 7,000 ppm

Recovery Chlorides: 14,500 ppm

INITIAL SHUT-IN

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RECORDER NO: 13275 DEPTH: 3975 FT.
INITIAL FLOW TIME (T): 30 MIN.

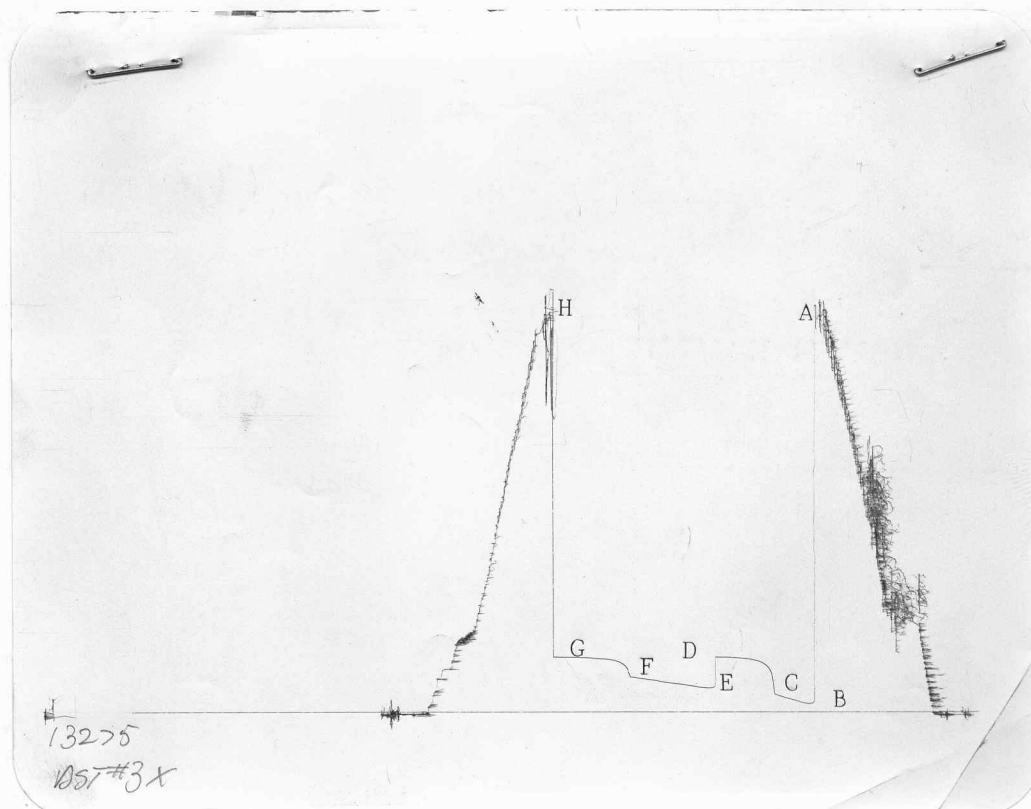
DT (MIN)	LOG((T+DT)/DT)	PRESSURE (PSIG)
0	0.000	85.2
5	0.845	214.1
10	0.602	247.8
15	0.477	261.6
20	0.398	268.6
25	0.342	271.5
30	0.301	274.5
35	0.269	275.5
40	0.243	276.5
45	0.222	277.5

FINAL SHUT-IN

=====

RECORDER NO: 13275 DEPTH: 3975 FT.
TOTAL FLOW TIME: 90 MIN.

DT (MIN)	LOG((T+DT)/DT)	PRESSURE (PSIG)
0	0.000	176.4
5	1.279	221.0
10	1.000	249.7
15	0.845	262.6
20	0.740	267.6
25	0.663	269.6
30	0.602	272.5
35	0.553	275.5
40	0.512	277.5
45	0.477	277.5
50	0.447	277.5
55	0.421	277.5
60	0.398	277.5



This is an actual photograph of recorder chart.

	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2088	2083	PSI
(B) First Initial Flow Pressure	50	41.6	PSI
(C) First Final Flow Pressure	90	85.2	PSI
(D) Initial Closed-In Pressure	290	277.5	PSI
(E) Second Initial Flow Pressure	130	121.9	PSI
(F) Second Final Flow Pressure	190	176.4	PSI
(G) Final Closed-In Pressure	290	277.5	PSI
(H) Final Hydrostatic Mud	2078	2073	PSI

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: OIL CAPITAL CORPORATION
DICKY #4
SEC 25-16S-32W
LANE COUNTY, KANSAS

DST # 3
FORMATION: LANSING
ELEVATION: 2846 KB

TEST PARAMETERS

TEST INTERVAL: 3955 - 3975	EST PAY: 4
TIME INTERVAL: 30 - 45 - 60 - 60	VISCOSITY OF FLUID: 3.5
INITIAL FLOW PRESS: 41.6- 85.2	HOLE SIZE: 7.875
FINAL FLOW PRESS: 121.9- 176.4	D.C. CAPACITY: 0.00492
SHUT-IN PRESS(I-F): 277.5- 277.5	W.P. CAPACITY: 0.00708
BOTTOM HOLE TEMPERATURE: 110	D.P. CAPACITY: 0.01402
TOTAL FEET OF RECOVERY: 450	TOTAL BARRELS RECOVERY: 3.1851

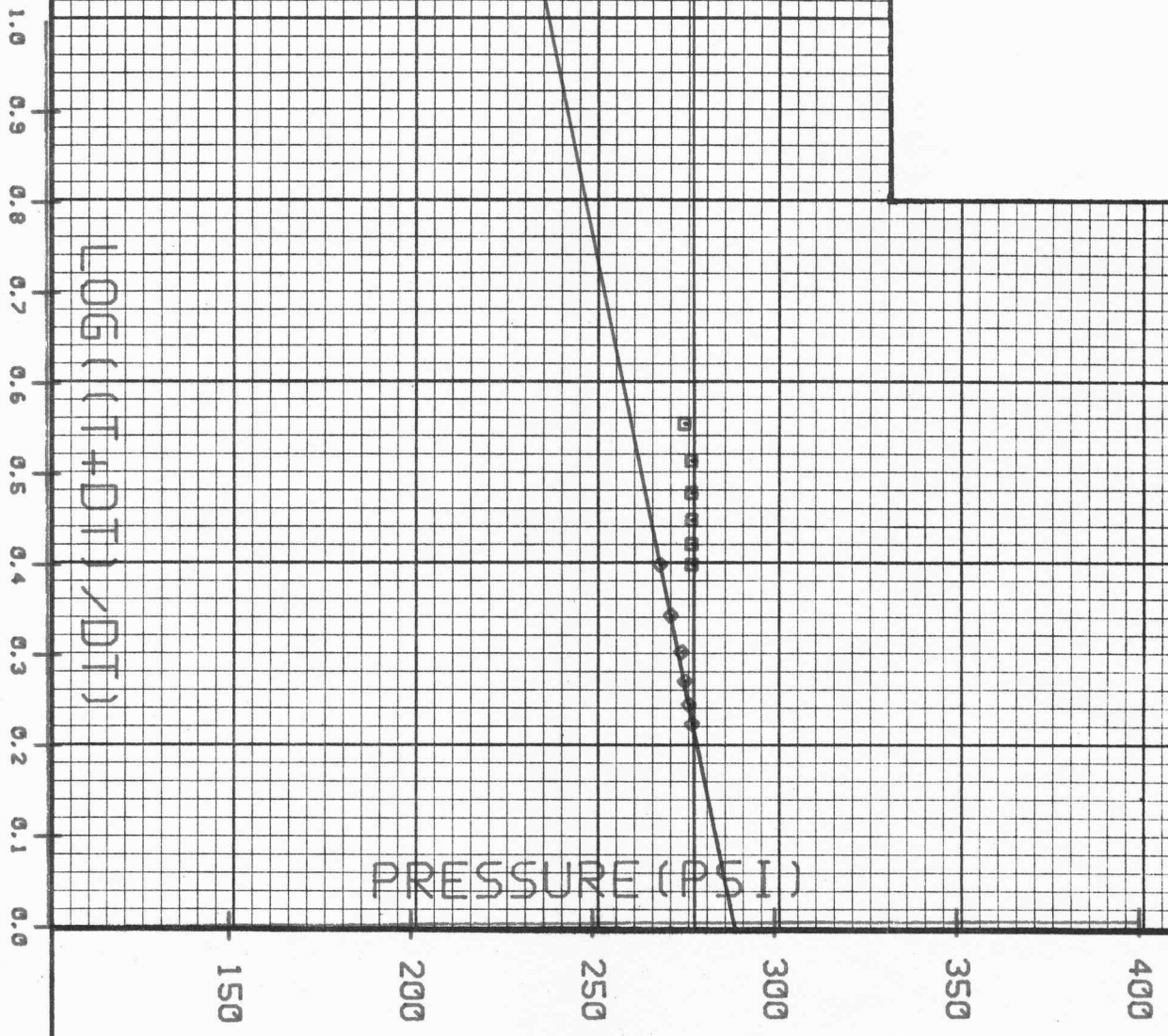
EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 287
SLOPE (PSI-CYCLE): 61 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 277
SLOPE (PSI-CYCLE): 10 POINTS USED: 5

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 50.96
TRANSMISSIBILITY (MD-FT/CP)	: 828.65
PERMEABILITY (MD)	: 725.07
PRODUCTIVITY INDEX (B/D/PSI)	: 0.1840
DAMAGE RATIO	: 1.841
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 255.5
DRAWDOWN FACTOR (%)	: 3.484
POTENTIOMETRIC SURFACE (FT)	: -486.64

HORNER PLOT
OIL CAPITAL CORPORATION
DICKER #4
DST # 3 DEPTH: 3975
RECORDER NO. 13275
INITIAL SHUT-IN: $\diamond$
FINAL SHUT-IN: $\square$



CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	4
Well Name & Number	Dickey #4	Zone Tested	Lansing
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/16/84
Company Rep.	Bob Jinkins	Tester	Dave Hunt/Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.		Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4027 Clock # 25829

(A) Initial Hydrostatic Mud 2137 PSI

(B) First Initial Flow Pressure 50 PSI

(C) First Final Flow Pressure 50 PSI

(D) Initial Shut-in Pressure 1030 PSI

(E) Second Initial Flow Pressure 60 PSI

(F) Second Final Flow Pressure 70 PSI

(G) Final Shut-in Pressure 912 PSI

(H) Final Hydrostatic Mud 2038 PSI

Temperature 110

Mud Weight 9.0 Viscosity 56

Fluid Loss 9.6

Interval Tested 4008-4030

Anchor Length 22

Top Packer Depth 4003

Bottom Packer Depth 4008

Total Depth 4030

Drill Pipe Size 4 1/2 Xh

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 15

Recovered 15 Feet Of mud, scum of oil.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment

Price of Job \$675.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4024 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 30 Mins.

Final Shut-in 45 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

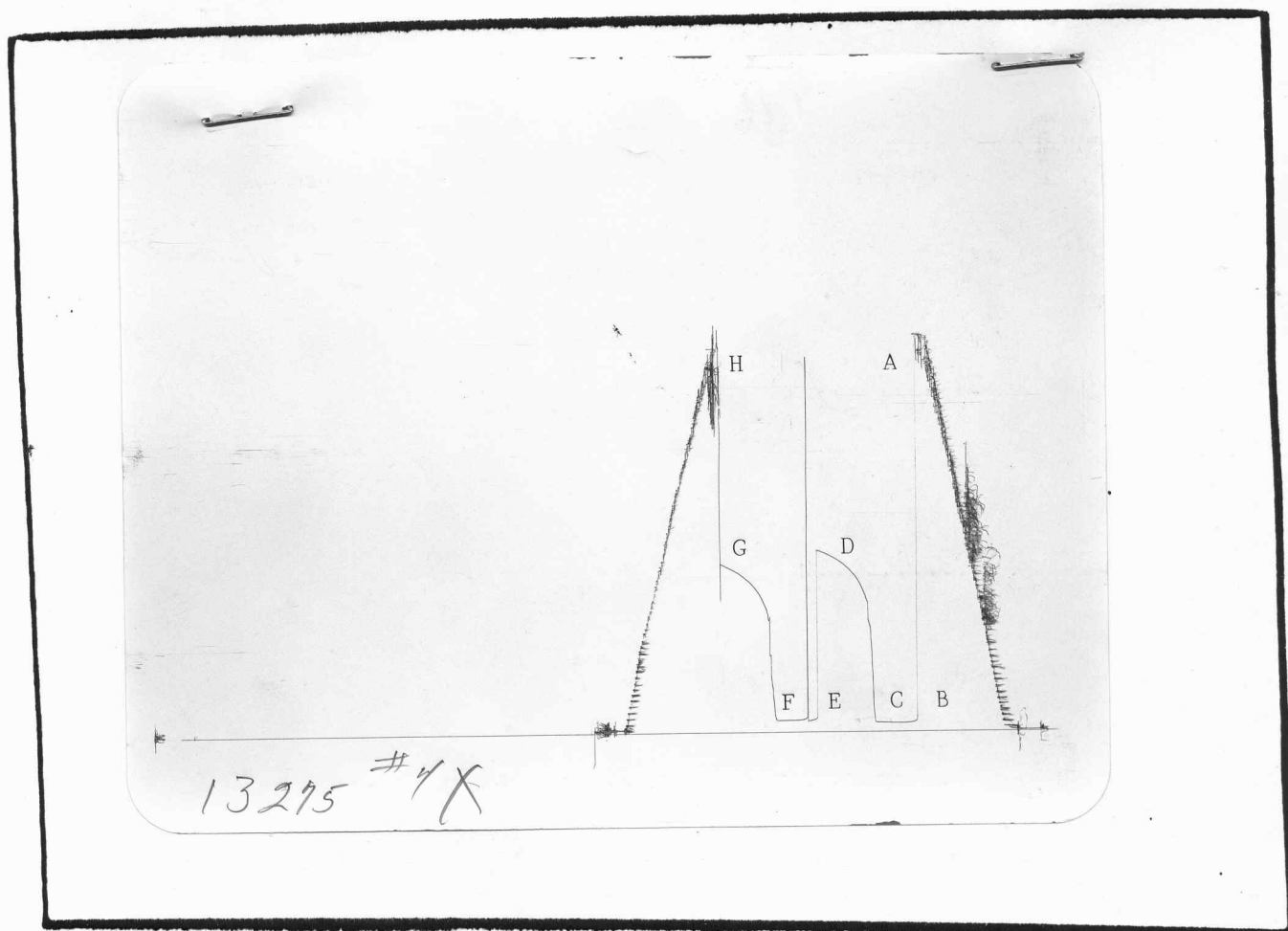
Tool Open @ 8:47 Am

Blow Remarks 1st open: Weak blow 1/2" in bucket.

2nd open: Blow died in 9 minutes. Flushed tool, good surge, blow died in 6 minutes.

Well chlorides: 7,000 ppm

Recovery Chlorides: 7,000 ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2137	PSI
(B) First Initial Flow Pressure	50	PSI
(C) First Final Flow Pressure	50	PSI
(D) Initial Closed-in Pressure	1030	PSI
(E) Second Initial Flow Pressure	60	PSI
(F) Second Final Flow Pressure	70	PSI
(G) Final Closed-in Pressure	912	PSI
(H) Final Hydrostatic Mud	2038	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	5
Well Name & Number	Dickey #4	Zone Tested	Lansing J
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/17/84
Company Rep.	Bob Jinkins	Tester	Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25	Twp. 16	Rge. 32	Co. Lane State Ks.
		Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4187 Clock # 25829

(A) Initial Hydrostatic Mud 2216 PSI

(B) First Initial Flow Pressure 70 PSI

(C) First Final Flow Pressure 100 PSI

(D) Initial Shut-in Pressure 1088 PSI

(E) Second Initial Flow Pressure 130 PSI

(F) Second Final Flow Pressure 200 PSI

(G) Final Shut-in Pressure 1078 PSI

(H) Final Hydrostatic Mud 1296 PSI

Temperature 111

Mud Weight 9.4 Viscosity 45

Fluid Loss 8.4

Interval Tested 4135-4190

Anchor Length 55

Top Packer Depth 4130

Bottom Packer Depth 4135

Total Depth 4190

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 320

Recovered 320 Feet Of mud.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4184 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 7:18 AM

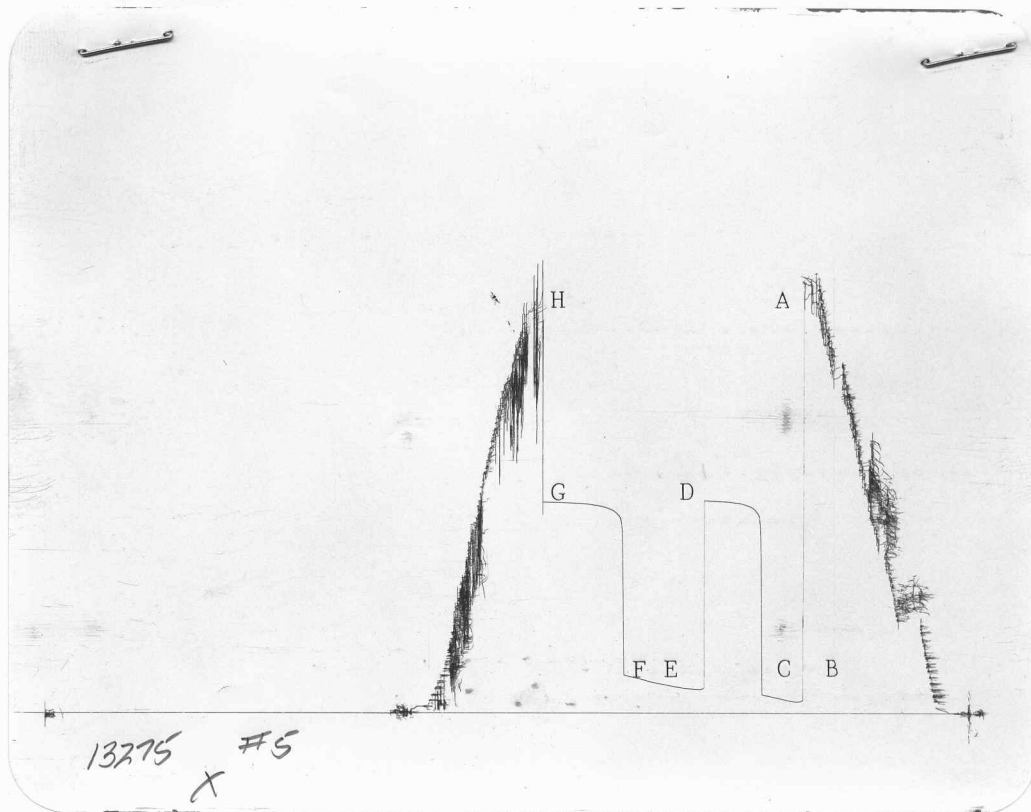
Blow Remarks 1st open: Weak blow built up to 4" in bucket.

2nd open: Building blow 7" in bucket.

Well Chlorides: 5,000 ppm

Recovery Chlorides: 5,000 ppm

Price of Job \$675.00



This is an actual photograph of recorder chart.

	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2216	PSI
(B) First Initial Flow Pressure	70	PSI
(C) First Final Flow Pressure	100	PSI
(D) Initial Closed-In Pressure	1088	PSI
(E) Second Initial Flow Pressure	130	PSI
(F) Second Final Flow Pressure	200	PSI
(G) Final Closed-In Pressure	1078	PSI
(H) Final Hydrostatic Mud	2196	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	6
Well Name & Number	Dickey #4	Zone Tested	Lansing
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/17/84
Company Rep.	Bob Jenkins	Tester	Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.		Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4217 Clock # 25829

(A) Initial Hydrostatic Mud 2226 PSI

(B) First Initial Flow Pressure 50 PSI

(C) First Final Flow Pressure 60 PSI

(D) Initial Shut-in Pressure 1039 PSI

(E) Second Initial Flow Pressure 50 PSI

(F) Second Final Flow Pressure 60 PSI

(G) Final Shut-in Pressure 971 PSI

(H) Final Hydrostatic Mud 2117 PSI

Temperature 112

Mud Weight 9.6 Viscosity 49

Fluid Loss 8.0

Interval Tested 4195-4220

Anchor Length 25

Top Packer Depth 4190

Bottom Packer Depth 4195

Total Depth 4220

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 5

Recovered 5 Feet Of oil speced mud, trace of oil.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Price of Job \$675.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4214 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 30 Mins.

Final Shut-in 45 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

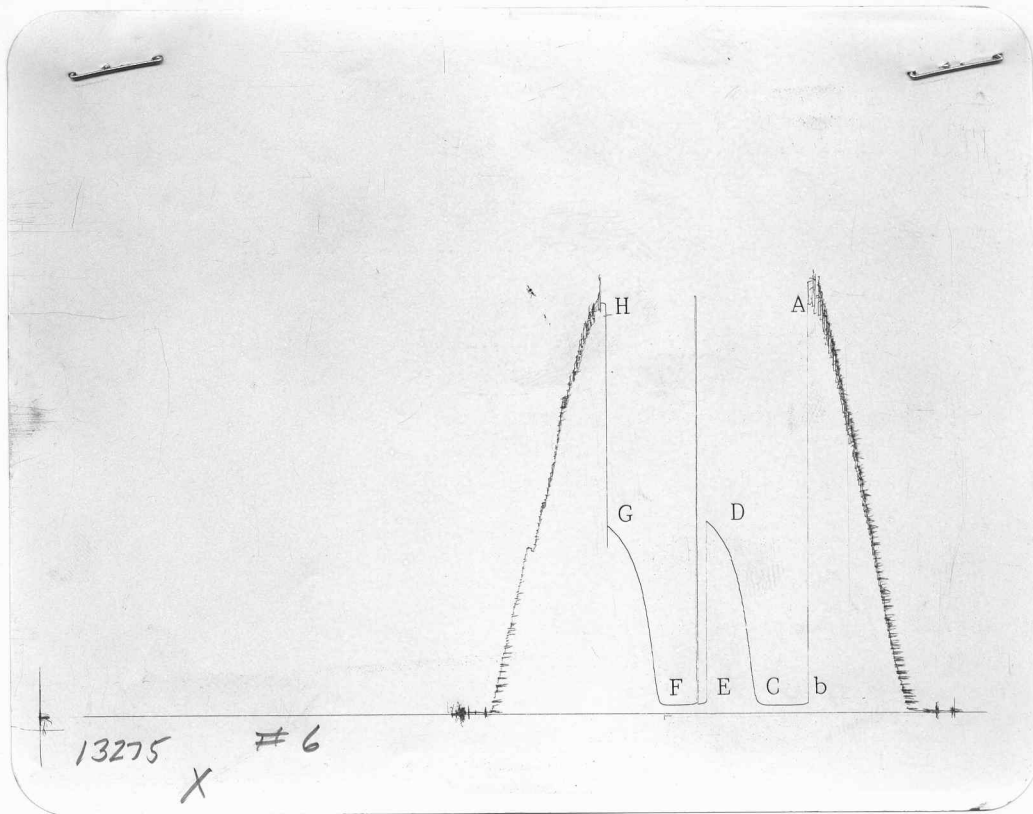
Tool Open @ 9:48 PM

Blow Remarks 1st open: Weak blow, died in 7 minutes.

2nd open: No blow, flushed tool, weak surge, no blow.

Well Chlorides: 4,000 ppm

Recovery Chlorides: 4,000 ppm



This is an actual photograph of recorder chart.

	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	<u>2226</u>	PSI
(B) First Initial Flow Pressure	<u>50</u>	PSI
(C) First Final Flow Pressure	<u>60</u>	PSI
(D) Initial Closed-In Pressure	<u>1039</u>	PSI
(E) Second Initial Flow Pressure	<u>50</u>	PSI
(F) Second Final Flow Pressure	<u>60</u>	PSI
(G) Final Closed-In Pressure	<u>971</u>	PSI
(H) Final Hydrostatic Mud	<u>2117</u>	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	7
Well Name & Number	Dickey #4	Zone Tested	Marmaton
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/19/84
Company Rep.	Bob Jenkins	Tester	Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.	Est. Feet of Pay		

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4377 Clock # 25829

(A) Initial Hydrostatic Mud 2285 PSI

(B) First Initial Flow Pressure 60 PSI

(C) First Final Flow Pressure 80 PSI

(D) Initial Shut-in Pressure 1098 PSI

(E) Second Initial Flow Pressure 120 PSI

(F) Second Final Flow Pressure 150 PSI

(G) Final Shut-in Pressure 1069 PSI

(H) Final Hydrostatic Mud 2216 PSI

Temperature 114

Mud Weight 9.5 Viscosity 48

Fluid Loss 8.0

Interval Tested 4308-4380

Anchor Length 72

Top Packer Depth 4303

Bottom Packer Depth 4308

Total Depth 4380

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.7 Ft. Run 500

Recovery-Total Feet 242

Recovered 62 Feet Of slightly oil cut mud, 5% oil, 75% mud, 20% gas.

Recovered 180 Feet Of gassy mud, 20% gas, 80% mud.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Price of Job \$675.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4374 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

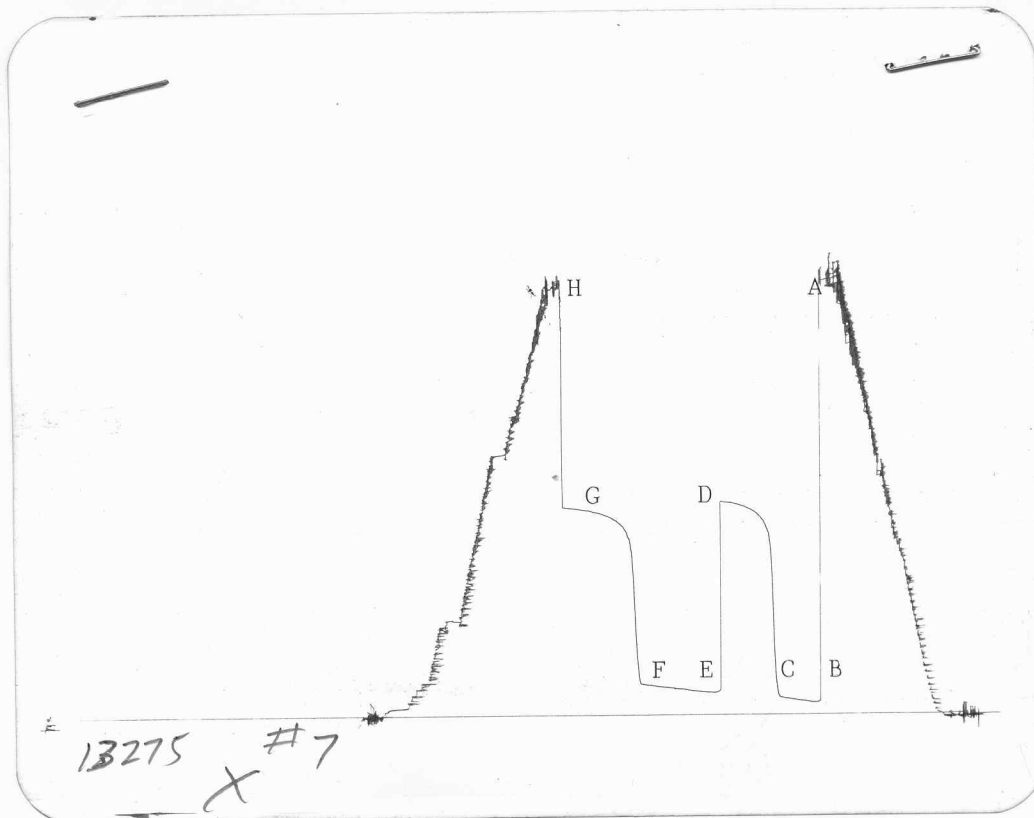
Tool Open @ 2:18 AM

Blow Remarks 1st open: Weak blow, built up to 4" in bucket.

2nd open: Blow built to 8" in bucket.

Well Chlorides: 4,000 ppm

Recovery Chlorides: 8,000 ppm



This is an actual photograph of recorder chart.

	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2285	PSI
(B) First Initial Flow Pressure	60	PSI
(C) First Final Flow Pressure	80	PSI
(D) Initial Closed-In Pressure	1098	PSI
(E) Second Initial Flow Pressure	120	PSI
(F) Second Final Flow Pressure	150	PSI
(G) Final Closed-In Pressure	1069	PSI
(H) Final Hydrostatic Mud	2216	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	8
Well Name & Number	Dickey #4	Zone Tested	Fort Scott & Pawnee
Company Address	411 Farmers & Bankers Bldg. Wichita Ks	Date	6/19/84
Company Rep.	Bob Jinkins	Tester	Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane State Ks.		Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4467 Clock # 25829

(A) Initial Hydrostatic Mud 2383 PSI

(B) First Initial Flow Pressure 290 PSI

(C) First Final Flow Pressure 360 PSI

(D) Initial Shut-in Pressure 726 PSI

(E) Second Initial Flow Pressure 469 PSI

(F) Second Final Flow Pressure 519 PSI

(G) Final Shut-in Pressure 785 PSI

(H) Final Hydrostatic Mud 2334 PSI

Temperature 118

Mud Weight 9.5 Viscosity 51

Fluid Loss 9.6

Interval Tested 4405-4470

Anchor Length 65

Top Packer Depth 4400

Bottom Packer Depth 4405

Total Depth 4470

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 1380

Recovered 1260 Feet Of clean gassy oil.

Recovered 120 Feet Of mud cut oil.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Circulating Sub Price of Job \$705.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4464 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 10:17 PM

Blow Remarks 1st open: Strong blow, off bottom in 4 minutes.

2nd open: Strong blow, off bottom of bucket.

Well Chlorides: 4,000 ppm

Recovery Chlorides: 12,000

INITIAL SHUT-IN

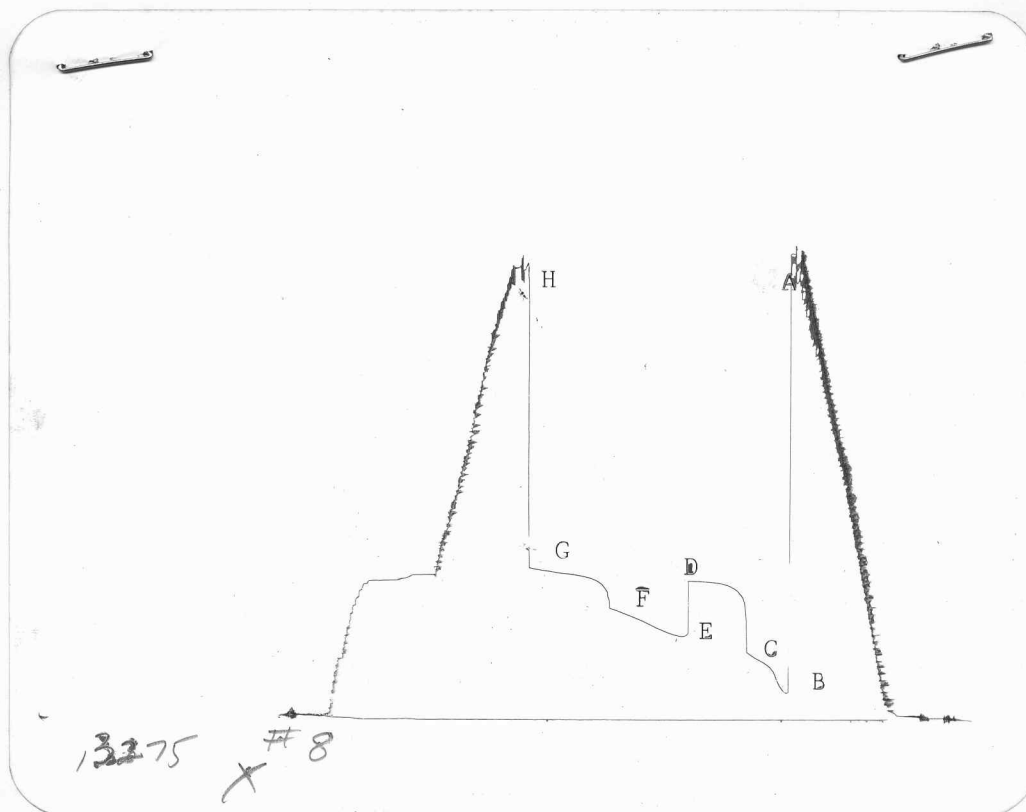
RECORDER NO: 13275 DEPTH: 4470 FT.
INITIAL FLOW TIME (T): 30 MIN.

DT (MIN)	LOG ((T+DT)/DT)	PRESSURE (PSIG)
0	0.000	333.0
5	0.845	629.3
10	0.602	666.0
15	0.477	685.8
20	0.398	695.7
25	0.342	701.7
30	0.301	704.6
35	0.269	706.6
40	0.243	708.6
45	0.222	710.6

FINAL SHUT-IN

RECORDER NO: 13275 DEPTH: 4470 FT.
TOTAL FLOW TIME: 90 MIN.

DT (MIN)	LOG ((T+DT)/DT)	PRESSURE (PSIG)
0	0.000	563.9
5	1.279	678.9
10	1.000	708.6
15	0.845	723.5
20	0.740	731.4
25	0.663	737.3
30	0.602	743.3
35	0.553	746.3
40	0.512	751.2
45	0.477	758.1
50	0.447	762.1
55	0.421	769.0
60	0.398	774.0



This is an actual photograph of recorder chart.

	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2383	2378	PSI
(B) First Initial Flow Pressure	290	134.8	PSI
(C) First Final Flow Pressure	360	333.0	PSI
(D) Initial Closed-In Pressure	726	710.6	PSI
(E) Second Initial Flow Pressure	469	423.2	PSI
(F) Second Final Flow Pressure	519	563.9	PSI
(G) Final Closed-In Pressure	785	774.0	PSI
(H) Final Hydrostatic Mud	2334	2329	PSI

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: OIL CAPITAL CORP.
DICKY #4
SEC 25-16S-32W
LANE COUNTY, KANSAS
DST # 8
FORMATION: FORT SCOTT & PAWNEE
ELEVATION: 2846 KB

† *****

TEST PARAMETERS

TEST INTERVAL: 4405 - 4470	EST PAY: 8
TIME INTERVAL: 30 - 45 - 60 - 60	VISCOSITY OF FLUID: 1
INITIAL FLOW PRESS: 134.8- 333.0	HOLE SIZE: 7.875
FINAL FLOW PRESS: 423.2- 563.9	D.C. CAPACITY: 0.00492
SHUT-IN PRESS(I-F): 710.6- 774.0	W.P. CAPACITY: 0.00708
BOTTOM HOLE TEMPERATURE: 118	D.P. CAPACITY: 0.01402
TOTAL FEET OF RECOVERY: 1380	TOTAL BARRELS RECOVERY: 15.8769

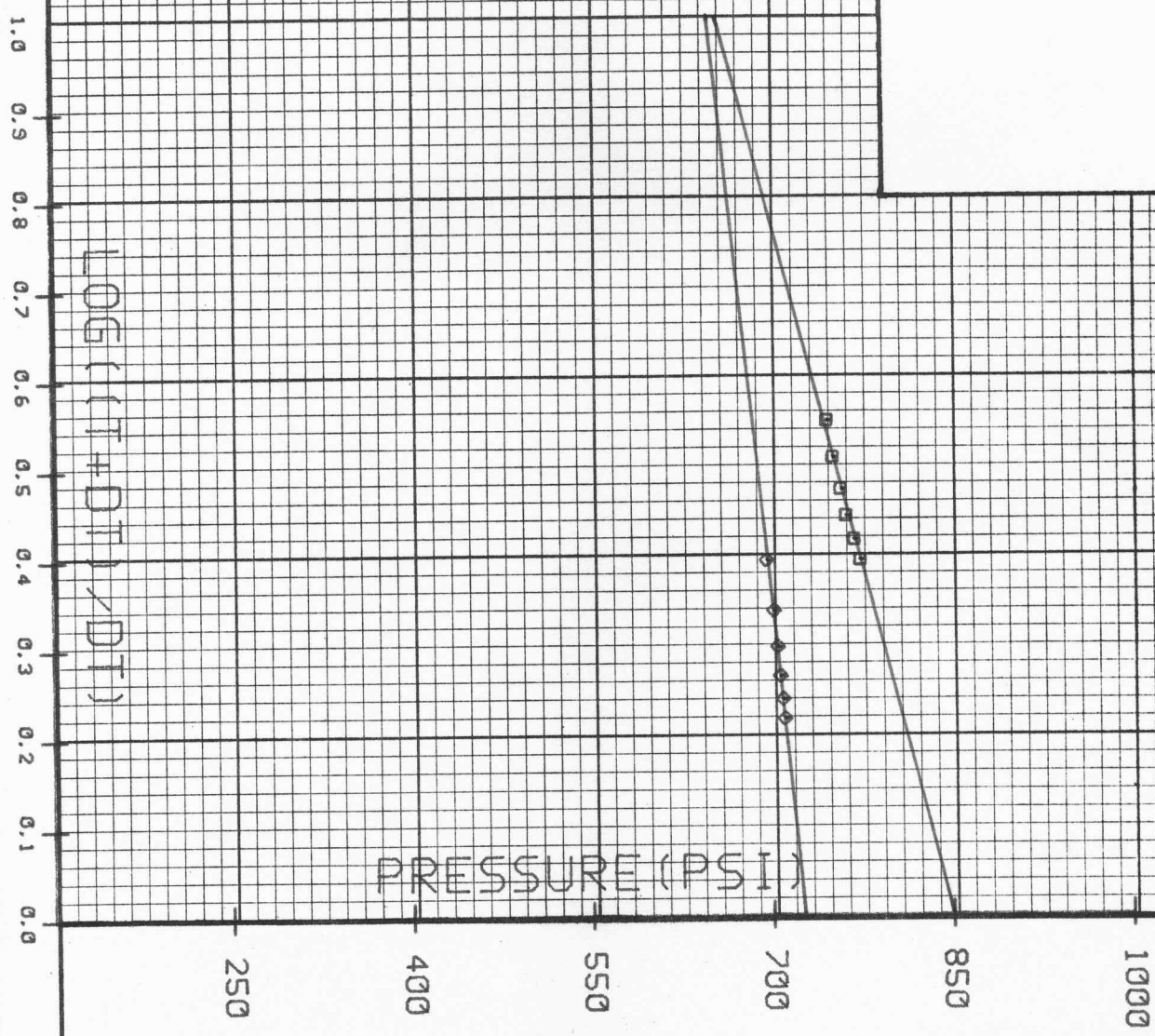
EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 848
SLOPE (PSI-CYCLE): 194 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 723
SLOPE (PSI-CYCLE): 79 POINTS USED: 6

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 254.03
TRANSMISSIBILITY (MD-FT/CP)	: 522.85
PERMEABILITY (MD)	: 65.36
PRODUCTIVITY INDEX (B/D/PSI)	: 0.3514
DAMAGE RATIO	: 0.369
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 76.7
DRAWDOWN FACTOR (%)	: 14.741
POTENTIOMETRIC SURFACE (FT)	: 52.64

HORNER PLOT
 OIL CAPITAL CORP.
 DICKY #4
 DST # 8 DEPTH: 4470
 RECORDER NO. 13275
 INITIAL SHUT-IN: $\diamond$
 FINAL SHUT-IN: $\square$



CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Oil Capital Corp.	Test No.	9
Well Name & Number	Dickey #4	Zone Tested	Cherokee
Company Address	411 Farmers & Bankers Bldg. Wichita Ks.	Date	6/20/84
Company Rep.	Bob Jinkins	Tester	Larry Hunt
Contractor	Abercrombie Drilling Inc.	Elevation	2846 KB
Location: Sec. 25 Twp. 16 Rge. 32 Co. Lane	State Ks.	Est. Feet of Pay	

Recorder No. 13275 Type AK-1 Range 3950 PSI

Recorder Depth 4525 Clock # 25829

(A) Initial Hydrostatic Mud 2334 PSI

(B) First Initial Flow Pressure 120 PSI

(C) First Final Flow Pressure 140 PSI

(D) Initial Shut-in Pressure 834 PSI

(E) Second Initial Flow Pressure 220 PSI

(F) Second Final Flow Pressure 320 PSI

(G) Final Shut-in Pressure 961 PSI

(H) Final Hydrostatic Mud 2324 PSI

Temperature 118

Mud Weight 9.6 Viscosity 50

Fluid Loss 11.2

Interval Tested 4481-4528

Anchor Length 47

Top Packer Depth 4476

Bottom Packer Depth 4481

Total Depth 4528

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 2.70 Ft. Run 500

Recovery-Total Feet 905

Recovered 755 Feet Of clean gassy oil, 65% oil, 35% gas.

Recovered 150 Feet Of oil cut mud, 10% oil, 30% gas, 60% mud.

Recovered Feet Of Gravity: 37 API corrected.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Price of Job \$675.00

Recorder No. 13276 Type AK-1 Range 3950 PSI

Recorder Depth 4522 Clock # 22345

Tool Open Before I.S.I. 30 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Top Choke Size 1" Hole Size 7 7/8"

Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 6:07 PM

Blow Remarks 1st open: Blow built to bottom of bucket in 4 minutes, strong blow.

2nd open: Blow built up to bottom of bucket strong blow.

Well Chlorides: 4,000 ppm

Recovery Chlorides: 14,000 ppm

INITIAL SHUT-IN

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RECORDER NO: 13275 DEPTH: 4528 FT.
 INITIAL FLOW TIME (T): 30 MIN.

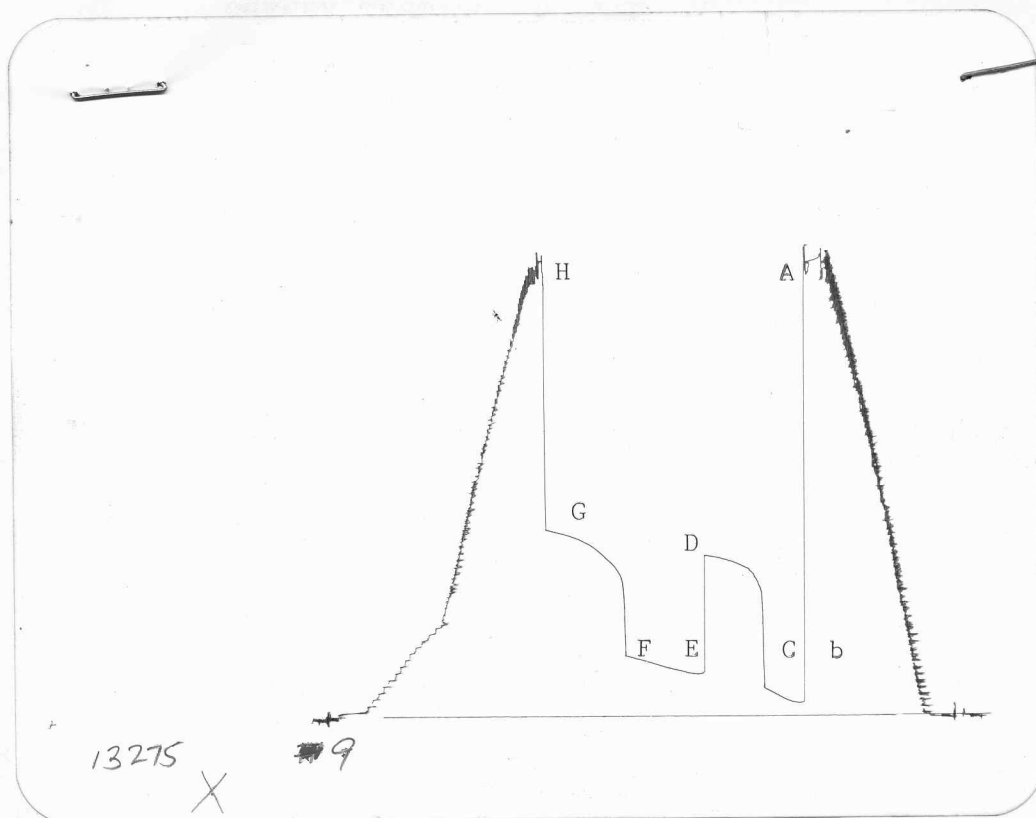
DT(MIN)	LOG((T+DT)/DT)	PRESSURE(PSIG)
0	0.000	133.8
5	0.845	673.9
10	0.602	741.3
15	0.477	766.1
20	0.398	780.9
25	0.342	793.8
30	0.301	803.7
35	0.269	814.6
40	0.243	820.6
45	0.222	824.5

FINAL SHUT-IN

=====

RECORDER NO: 13275 DEPTH: 4528 FT.
 TOTAL FLOW TIME: 90 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(PSIG)
0	0.000	306.2
5	1.279	715.5
10	1.000	773.0
15	0.845	804.7
20	0.740	839.4
25	0.663	866.2
30	0.602	890.0
35	0.553	907.8
40	0.512	921.7
45	0.477	933.6
50	0.447	942.5
55	0.421	952.4
60	0.398	960.3



This is an actual photograph of recorder chart.

	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2334	2329	PSI
(B) First Initial Flow Pressure	120	65.4	PSI
(C) First Final Flow Pressure	140	133.8	PSI
(D) Initial Closed-In Pressure	834	824.5	PSI
(E) Second Initial Flow Pressure	220	214.1	PSI
(F) Second Final Flow Pressure	320	306.2	PSI
(G) Final Closed-In Pressure	961	960.3	PSI
(H) Final Hydrostatic Mud	2324	2319	PSI

1.1% PRODUCTIVE (13/0)

PLAN (13/18, 13/19, 13/20)

1.1% PRODUCTIVE (13/0)

PRODUCTIVITY (13/0, 13/1)

1.1% PRODUCTIVE (13/0)

AT (13/18, 13/19, 13/20)

1.1% PRODUCTIVE (13/0)

1.1% PRODUCTIVE (13/0)

CHENEY TESTING CO, INC.
CALCULATION OF FORMATION CHARACTERISTICS
FROM DST DATA

FOR: OIL CAPITAL CORP.
DICKEY #4
SEC 25-16S-32W
LANE COUNTY, KANSAS

DST # 9
FORMATION: CHEROKEE
ELEVATION: 2846 KB

TEST PARAMETERS

TEST INTERVAL: 4481 - 4528
TIME INTERVAL: 30 - 45 - 60 - 60
INITIAL FLOW PRESS: 65.4- 133.8
FINAL FLOW PRESS: 214.1- 306.2
SHUT-IN PRESS(I-F): 824.5- 960.3
BOTTOM HOLE TEMPERATURE: 118
TOTAL FEET OF RECOVERY: 905

EST PAY: 4
VISCOSITY OF FLUID: 3
HOLE SIZE: 7.875
D.C. CAPACITY: 0.00492
W.P. CAPACITY: 0.00708
D.P. CAPACITY: 0.01402
TOTAL BARRELS RECOVERY: 9.2172

EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 1091
SLOPE (PSI-CYCLE): 333 POINTS USED: 6

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 879
SLOPE (PSI-CYCLE): 256 POINTS USED: 6

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 147.48
TRANSMISSIBILITY (MD-FT/CP)	: 93.67
PERMEABILITY (MD)	: 70.25
PRODUCTIVITY INDEX (B/D/PSI)	: 0.1678
DAMAGE RATIO	: 0.409
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 79.5
DRAWDOWN FACTOR (%)	: 19.432
POTENTIOMETRIC SURFACE (FT)	: 356.40

HORNER PLOT
OIL CAPITAL CORP.
DICKY #4
DST # 9 DEPTH: 4528
RECORDER NO. 13275
INITIAL SHUT-IN: $\diamond$
FINAL SHUT-IN: $\square$

