

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Rains & Williamson Oil Company, Inc.	Test No.	1
Well Name & Number	Ziegler #2	Zone Tested	Toronto-Lansing "A"
Company Address	435 Page Court 220 W. Douglas, Wichita	Date	10/31/84
Company Rep.	Craig Caulk	Tester	Gary Pevoteaux
Contractor	Company Tools	Elevation	2584 KB
Location: Sec. 3	Twp. 10s	Rge. 26w	Co. Sheridan State Ks.
		Est. Feet of Pay	

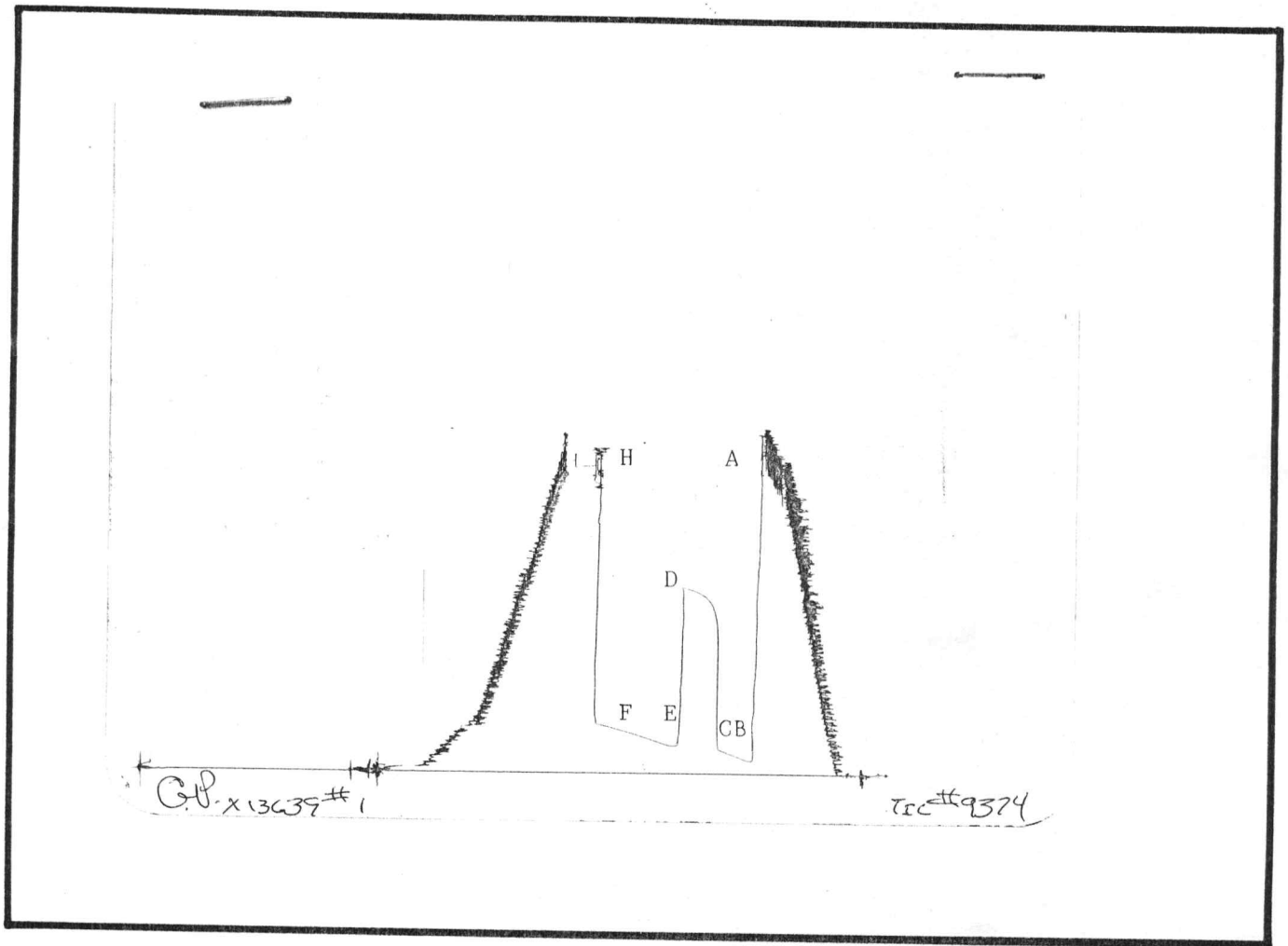
Recorder No. 13638 Type AK-1 Range 4675 PSI
 Recorder Depth 3847 Clock # 25559
 (A) Initial Hydrostatic Mud 2032 PSI
 (B) First Initial Flow Pressure 70 PSI
 (C) First Final Flow Pressure 141 PSI
 (D) Initial Shut-in Pressure 1179 PSI
 (E) Second Initial Flow Pressure 159 PSI
 (F) Second Final Flow Pressure 285 PSI
 (G) Final Shut-in Pressure _____ PSI
 (H) Final Hydrostatic Mud 1928 PSI
 Temperature 115
 Mud Weight 9.9 Viscosity 51
 Fluid Loss 13.6
 Interval Tested 3790-3850
 Anchor Length 60
 Top Packer Depth 3785
 Bottom Packer Depth 3790
 Total Depth 3850
 Drill Pipe Size 4 1/2 Xh
 Wt. Pipe I. D. _____ Ft. Run _____
 Recovery-Total Feet 650

Recorder No. 13639 Type AK-1 Range 4675 PSI
 Recorder Depth 3842 Clock # 19127
 Tool Open Before I.S.I. 30 Mins.
 Initial Shut-in 30 Mins.
 Flow Period 60 Mins.
 Final Shut-in _____ Mins.
 Top Choke Size 1" Hole Size 7 7/8"
 Bottom Choke Size 3/4" Rubber Size 6 3/4"
 Tool Open @ 1:50 PM
 Blow Remarks 1st open: Strong blow, bottom of bucket in 10 minutes.
2nd open: Strong blow, bottom of bucket in 20 minutes.

 Rotary table torquing up, could not turn into Final shut-in.

 Well Chlorides: 12,000 ppm.
 Recovery Chlorides: 24,000 ppm.
 Resistivity: 0.31 ohms @ 67°F

Recovered 92 Feet Of Slightly oil cut watery mud:5% gas,10% oil,25% water,10% mud.
 Recovered 186 Feet Of Slightly oil cut muddy water:5% gas,5% oil,30% mud,60% water.
 Recovered 186 Feet Of Slightly oil cut muddy water:1% oil,25% mud, 74% water.
 Recovered 186 Feet Of Muddy water with oil specks:20% mud & 80% water.
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Extra Equipment _____ Price of Job \$625.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2032	PSI
(B) First Initial Flow Pressure	70	PSI
(C) First Final Flow Pressure	141	PSI
(D) Initial Closed-in Pressure	1179	PSI
(E) Second Initial Flow Pressure	159	PSI
(F) Second Final Flow Pressure	285	PSI
(G) Final Closed-in Pressure		PSI
(H) Final Hydrostatic Mud	1928	PSI

SEC. 100
 TEST NO. 1
 DATE 10

CHENEY TESTING COMPANY, INC.

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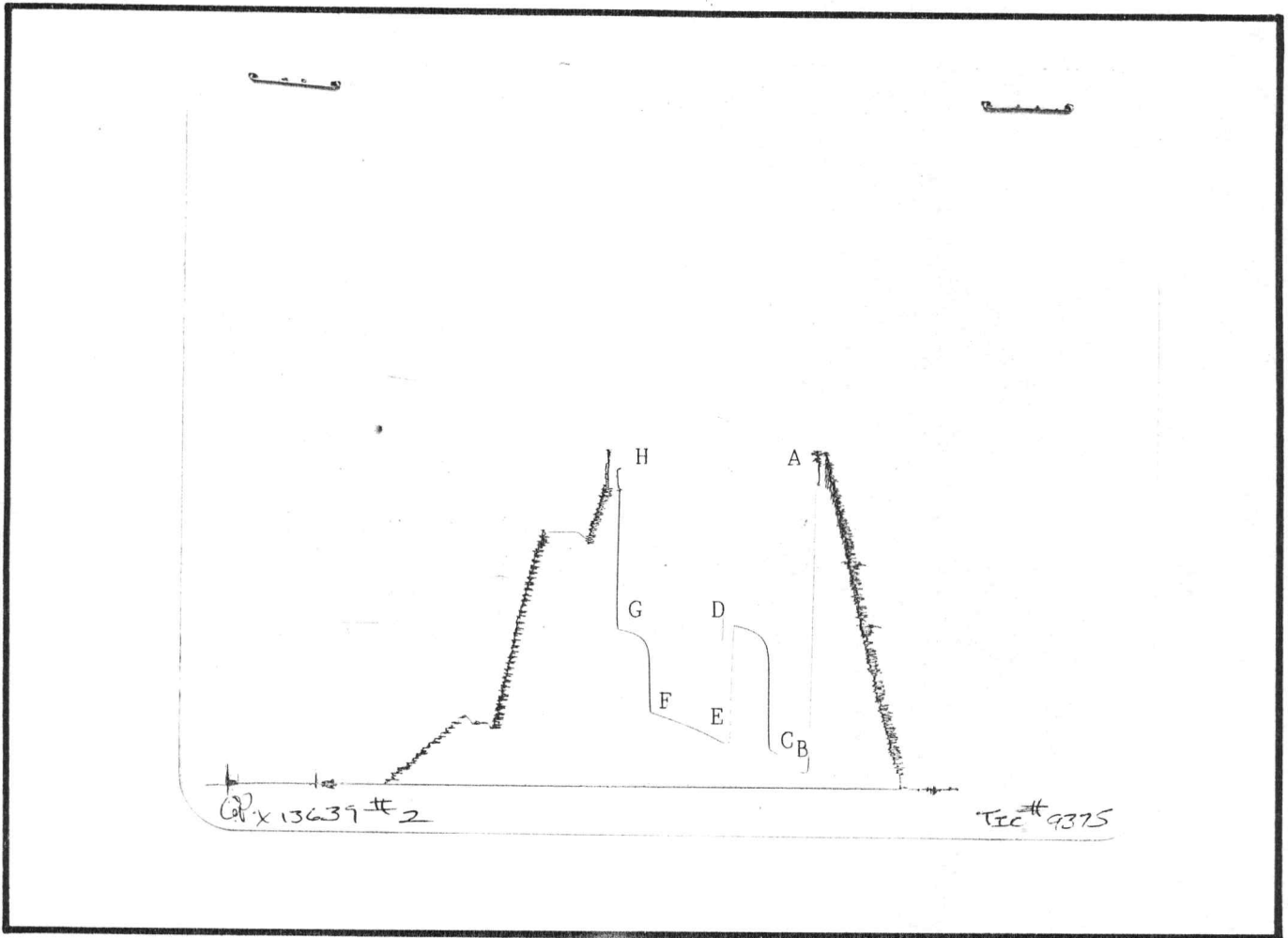
DRILL-STEM TEST DATA

Company	Rains & Williamson Oil Company Inc.	Test No.	2
Well Name & Number	Ziegler #2	Zone Tested	Lansing 35
Company Address	435 Page Court 220 W. Douglas Wichita	Date	11/1/84
Company Rep.	Craig Caulk	Tester	Gary Pevoteaux
Contractor	Company Tools	Elevation	2584 KB
Location: Sec. 3	Twp. 10s Rge. 26w Co. Sheridan State Ks.	Est. Feet of Pay	

Recorder No. 13638 Type AK-1 Range 4675 PSI
 Recorder Depth 3864 Clock # 25559
 (A) Initial Hydrostatic Mud 2043 PSI
 (B) First Initial Flow Pressure 91 PSI
 (C) First Final Flow Pressure 228 PSI
 (D) Initial Shut-in Pressure 1002 PSI
 (E) Second Initial Flow Pressure 262 PSI
 (F) Second Final Flow Pressure 456 PSI
 (G) Final Shut-in Pressure 972 PSI
 (H) Final Hydrostatic Mud 1882 PSI
 Temperature 120
 Mud Weight 9.9 Viscosity 51
 Fluid Loss 13.6
 Interval Tested 3845-3867
 Anchor Length 22
 Top Packer Depth 3840
 Bottom Packer Depth 3845
 Total Depth 3867
 Drill Pipe Size 4 1/2 XH
 Wt. Pipe I. D. _____ Ft. Run _____
 Recovery-Total Feet 1000

Recorder No. 13639 Type AK-1 Range 4675 PSI
 Recorder Depth 3859 Clock # 19127
 Tool Open Before I.S.I. 30 Mins.
 Initial Shut-in 30 Mins.
 Flow Period 60 Mins.
 Final Shut-in 30 Mins.
 Top Choke Size 1" Hole Size 7 7/8"
 Bottom Choke Size 3/4" Rubber Size 6 3/4"
 Tool Open @ 4:20 AM
 Blow Remarks 1st open: Strong blow, Bottom
of bucket in 2 minutes.
2nd open: Strong blow, bottom of bucket
in 10 minutes.
 Well Chlorides: 12,000 ppm.
 Recovery Chlorides: 33,000 ppm.
 Resistivity .23 ohms @ 68° F.

Recovered 132 Feet Of Heavy oil cut mud: 33 % oil & 67 % mud.
 Recovered 186 Feet Of Clean oil. Gravity .31 @ 60° F API Corrected.
 Recovered 62 Feet Of Muddy oil: 20% mud & 80 % oil.
 Recovered 434 Feet Of Muddy water with oil specks: 10% mud & 90% water.
 Recovered 62 Feet Of Watery cut oil: 40% water & 60% oil.
 Recovered 124 Feet Of Salt water.
 Extra Equipment 248 Gas in pipe. Price of Job \$625.00



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2043	2038	PSI
(B) First Initial Flow Pressure	91	102.1	PSI
(C) First Final Flow Pressure	228	244.4	PSI
(D) Initial Closed-in Pressure	1002	1012.1	PSI
(E) Second Initial Flow Pressure	262	278.8	PSI
(F) Second Final Flow Pressure	456	571.4	PSI
(G) Final Closed-in Pressure	972	977.6	PSI
(H) Final Hydrostatic Mud	1882	1877	PSI

CHENEY TESTING COMPANY, INC.

P. O. Box 367

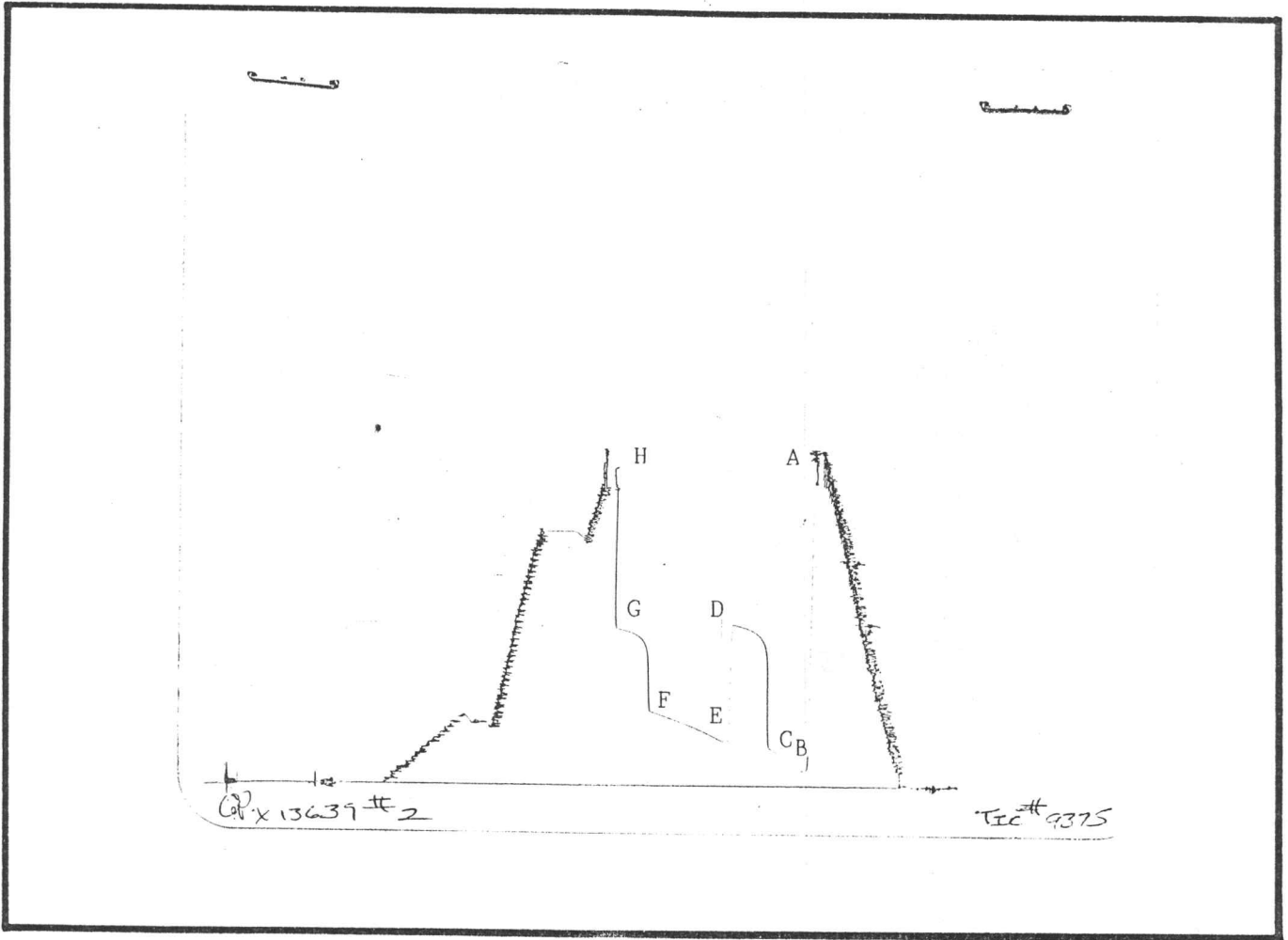
HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company Rains & Williamson Oil Company Inc.	Test No. 2
Well Name & Number Ziegler #2	Zone Tested Lansing 35
Company Address 435 Page Court 220 W. Douglas Wichita	Date 11/1/84
Company Rep. Craig Caulk	Tester Gary Pevoteaux
Contractor Company Tools	Elevation 2584 KB
Location: Sec. 3 Twp. 10s Rge. 26w Co. Sheridan State Ks.	Est. Feet of Pay

Recorder No. 13638 Type AK-1 Range 4675 PSI
 Recorder Depth 3864 Clock # 25559
 (A) Initial Hydrostatic Mud 2043 PSI
 (B) First Initial Flow Pressure 91 PSI
 (C) First Final Flow Pressure 228 PSI
 (D) Initial Shut-in Pressure 1002 PSI
 (E) Second Initial Flow Pressure 262 PSI
 (F) Second Final Flow Pressure 456 PSI
 (G) Final Shut-in Pressure 972 PSI
 (H) Final Hydrostatic Mud 1882 PSI
 Temperature 120
 Mud Weight 9.9 Viscosity 51
 Fluid Loss 13.6
 Interval Tested 3845-3867
 Anchor Length 22
 Top Packer Depth 3840
 Bottom Packer Depth 3845
 Total Depth 3867
 Drill Pipe Size 4 1/2 XH
 Wt. Pipe I. D. _____ Ft. Run _____
 Recovery-Total Feet 1000
 Recovered 132 Feet Of Heavy oil cut mud: 33 % oil & 67 % mud.
 Recovered 186 Feet Of Clean oil. Gravity .31 @ 60° F API Corrected.
 Recovered 62 Feet Of Muddy oil: 20% mud & 80 % oil.
 Recovered 434 Feet Of Muddy water with oil specks: 10% mud & 90% water.
 Recovered 62 Feet Of Watery cut oil: 40% water & 60% oil.
 Recovered 124 Feet Of Salt water.
 248 Gas in pipe.
 Extra Equipment _____

Recorder No. 13639 Type AK-1 Range 4675 PSI
 Recorder Depth 3859 Clock # 19127
 Tool Open Before I.S.I. 30 Mins.
 Initial Shut-in 30 Mins.
 Flow Period 60 Mins.
 Final Shut-in 30 Mins.
 Top Choke Size 1" Hole Size 7 7/8"
 Bottom Choke Size 3/4" Rubber Size 6 3/4"
 Tool Open @ 4:20 AM
 Blow Remarks 1st open: Strong blow, Bottom of bucket in 2 minutes.
 2nd open: Strong blow, bottom of bucket in 10 minutes.
 Well Chlorides: 12,000 ppm.
 Recovery Chlorides: 33,000 ppm.
 Resistivity .23 ohms @ 68° F.
 Price of Job \$625.00



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2043	2038	PSI
(B) First Initial Flow Pressure	91	102.1	PSI
(C) First Final Flow Pressure	228	244.4	PSI
(D) Initial Closed-in Pressure	1002	1012.1	PSI
(E) Second Initial Flow Pressure	262	278.8	PSI
(F) Second Final Flow Pressure	456	571.4	PSI
(G) Final Closed-in Pressure	972	977.6	PSI
(H) Final Hydrostatic Mud	1882	1877	PSI

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DRILL-STEM TEST DATA

Company <u>Rains & Williamson Oil Company Inc.</u>	Test No. <u>3</u>
Well Name & Number <u>Ziegler #2</u>	Zone Tested <u>Lansing 50</u>
Company Address <u>435 Page Court 220 W. Douglas Wichita</u>	Date <u>11/1/84</u>
Company Rep. <u>Craig Caulk</u>	Tester <u>Gary Pevoteaux</u>
Contractor <u>Company Tools</u>	Elevation <u>2584 KB</u>
Location: Sec. <u>3</u> Twp. <u>10s</u> Rge. <u>26w</u> Co. <u>Sheridan</u> State <u>Ks.</u>	Est. Feet of Pay _____

Recorder No. 13638 Type AK-1 Range 4675 PSI

Recorder Depth 3905 Clock # 25559

(A) Initial Hydrostatic Mud 2031 PSI

(B) First Initial Flow Pressure 11 PSI

(C) First Final Flow Pressure 11 PSI

(D) Initial Shut-in Pressure 22 PSI

(E) Second Initial Flow Pressure 11 PSI

(F) Second Final Flow Pressure 11 PSI

(G) Final Shut-in Pressure 18 PSI

(H) Final Hydrostatic Mud 1997 PSI

Temperature 112

Mud Weight 9.5 Viscosity 70

Fluid Loss 8.0

Interval Tested 3893-3908

Anchor Length 15

Top Packer Depth 3888

Bottom Packer Depth 3893

Total Depth 3908

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. _____ Ft. Run _____

Recovery-Total Feet 5

Recovered 5 Feet Of Drilling mud with few specks of oil at top of tool.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment _____ Price of Job \$625.00

Recorder No. 13639 Type AK-1 Range 4675 PSI

Recorder Depth 3900 Clock # 19127

Tool Open Before I.S.I. 20 Mins.

Initial Shut-in 30 Mins.

Flow Period 30 Mins.

Final Shut-in 30 Mins.

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

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

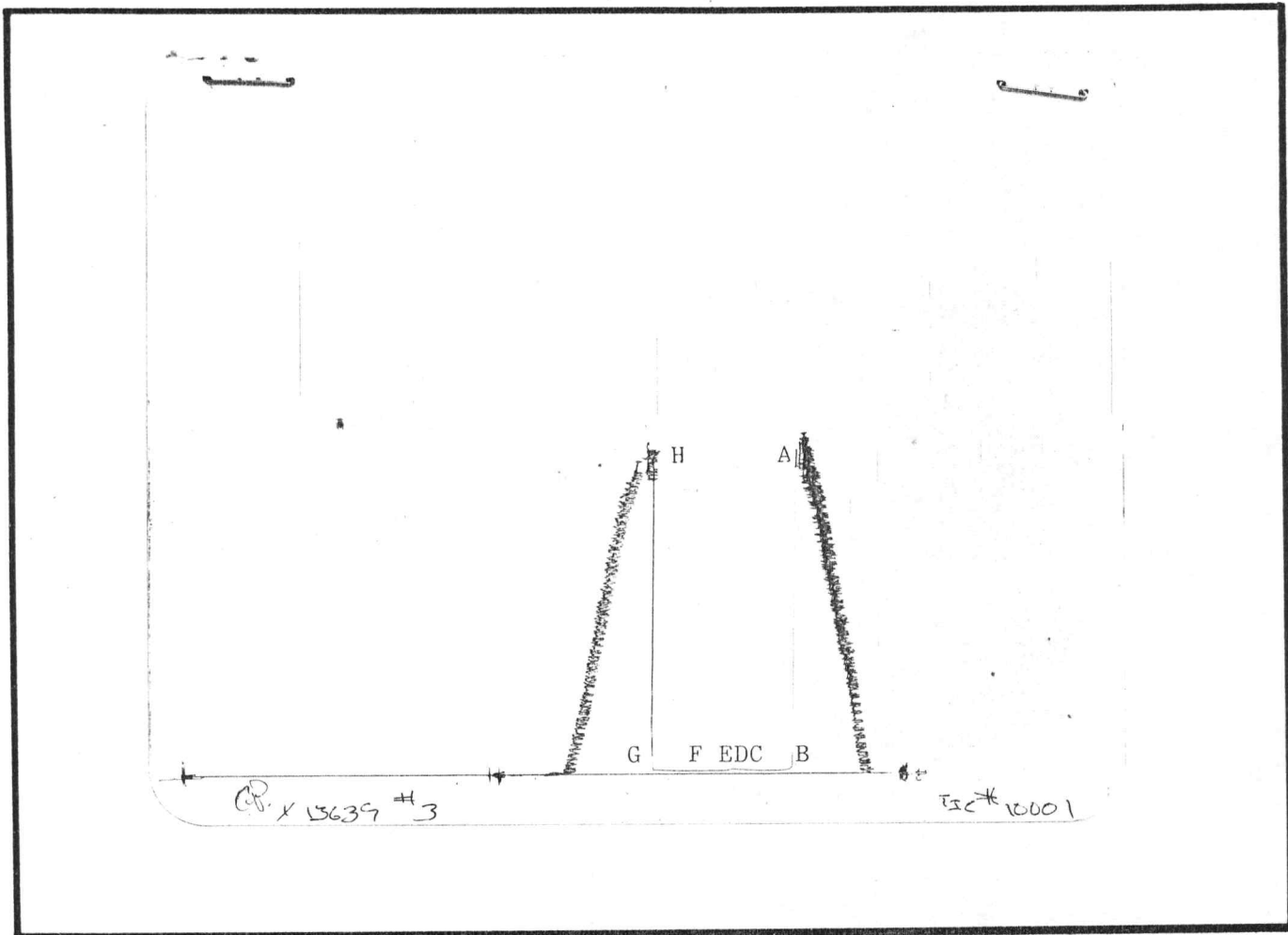
Tool Open @ 8:30 PM

Blow Remarks 1st open: Very weak blow, died in 20 minutes.

2nd open: No blow.

Well Chlorides: 10,000 ppm.

Recovery Chlorides: 10,000 ppm.



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2032	PSI
(B) First Initial Flow Pressure	11	PSI
(C) First Final Flow Pressure	11	PSI
(D) Initial Closed-in Pressure	22	PSI
(E) Second Initial Flow Pressure	11	PSI
(F) Second Final Flow Pressure	11	PSI
(G) Final Closed-in Pressure	18	PSI
(H) Final Hydrostatic Mud	1997	PSI

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DRILL-STEM TEST DATA

Company Rains & Williamson Oil Company Inc.	Test No. 4
Well Name & Number Ziegler #2	Zone Tested Lansing 140
Company Address 435 Page Court 220 W. Douglas Wichita	Date 11/2/84
Company Rep. Craig Caulk	Tester Gary Pevoteaux
Contractor Company Tools	Elevation 2584 KB
Location: Sec. 3 Twp. 10s Rge. 26w Co. Sheridan State Ks.	Est. Feet of Pay

Recorder No. 13638 Type AK-1 Range 4675 PSI

Recorder Depth 3993 Clock # 25559

(A) Initial Hydrostatic Mud 2032 PSI

(B) First Initial Flow Pressure 130 PSI

(C) First Final Flow Pressure 228 PSI

(D) Initial Shut-in Pressure 342 PSI

(E) Second Initial Flow Pressure 251 PSI

(F) Second Final Flow Pressure 285 PSI

(G) Final Shut-in Pressure 312 PSI

(H) Final Hydrostatic Mud 1951 PSI

Temperature 122

Mud Weight 9.5 Viscosity 58

Fluid Loss 8.0

Interval Tested 3962-3996

Anchor Length 34

Top Packer Depth 3957

Bottom Packer Depth 3962

Total Depth 3996

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. _____ Ft. Run _____

Recovery-Total Feet 740

Recovered 1,700 Feet Of Gas in pipe.

Recovered 422 Feet Of Gassy clean oil: 5% gas. Gravity 40 @60°F. API Corrected.

Recovered 126 Feet Of Gassy mud cut oil: 15% gas, 20% mud, & 65% oil.

Recovered 100 Feet Of Gassy clean oil: 5% gas. Gravity 40 @ 60°F API Corrected.

Recovered 92 Feet Of Gassy mud cut oil: 10% gas, 35% mud, 55% oil & no water.

Recovered _____ Feet Of _____

Extra Equipment _____

Recorder No. 13639 Type AK-1 Range 4675 PSI

Recorder Depth 3988 Clock # 19127

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

Initial Shut-in 30 Mins.

Flow Period 60 Mins.

Final Shut-in 30 Mins.

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

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

Tool Open @ 2:15 PM

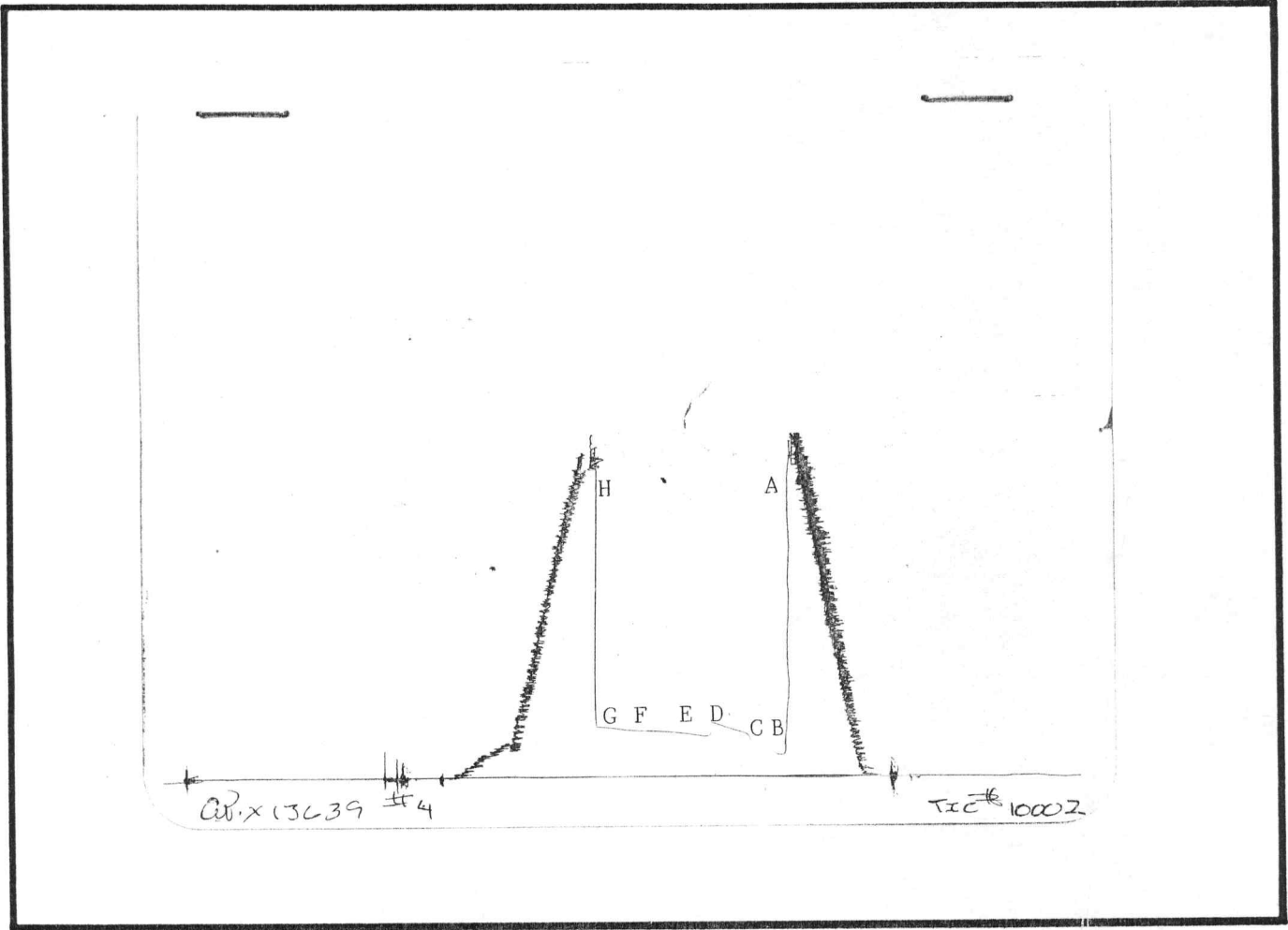
Blow Remarks 1st open: Stron blow, bott-
om of bucket in 1 minutes.

2nd open: Strong blow, bottom of bucket in
2-3 minutes.

Well Chlorides: 11,000 ppm.

Recovery Chlorides: 11,000 ppm.

Price of Job \$625.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2032	PSI
(B) First Initial Flow Pressure	130	PSI
(C) First Final Flow Pressure	228	PSI
(D) Initial Closed-in Pressure	342	PSI
(E) Second Initial Flow Pressure	251	PSI
(F) Second Final Flow Pressure	285	PSI
(G) Final Closed-in Pressure	312	PSI
(H) Final Hydrostatic Mud	1951	PSI

COMPANY
 LEASE AND WELL NO.
 SFC.
 TWP.
 LOS
 RCF
 ZOW TEST N/A
 DATE

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company Rains & Willaiamson Oil Company Inc.	Test No. 5
Well Name & Number Ziegler #2	Zone Tested Lansing 180
Company Address 435 Page Court 220 W. Douglas Wichita	Date 11/3/84
Company Rep. Craig Caulk	Tester Gary Pevoteaux
Contractor Company Tools.	Elevation 2584 KB
Location: Sec. 3 Twp. 10s Rge. 26w Co. Sheridan State Ks.	Est. Feet of Pay

Recorder No. 13638 Type AK-1 Range 4675 PSI

Recorder Depth 4038 Clock # 25559

(A) Initial Hydrostatic Mud 2090 PSI

(B) First Initial Flow Pressure 27 PSI

(C) First Final Flow Pressure 38 PSI

(D) Initial Shut-in Pressure 326 PSI

(E) Second Initial Flow Pressure 43 PSI

(F) Second Final Flow Pressure 54 PSI

(G) Final Shut-in Pressure 273 PSI

(H) Final Hydrostatic Mud 1951 PSI

Temperature 124

Mud Weight 9.7 Viscosity 49

Fluid Loss 8.4

Interval Tested 4016-4041

Anchor Length 25

Top Packer Depth 4011

Bottom Packer Depth 4016

Total Depth 4041

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. _____ Ft. Run _____

Recovery-Total Feet 70

Recovered 225 Feet Of Gas in pipe.

Recovered 25 Feet Of Clean oil. Gravity 36 @ 60° F. API corrected.

Recovered 45 Feet Of Heavy oil cut mud:5% gas, 40% oil, & 55% mud, no water.

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Extra Equipment _____

Recorder No. 13639 Type AK-1 Range 4675 PSI

Recorder Depth 4033 Clock # 19127

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

Initial Shut-in 30 Mins.

Flow Period 60 Mins.

Final Shut-in 30 Mins.

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

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

Tool Open @ 8:20 AM

Blow Remarks 1st open: Weak to fair blow,

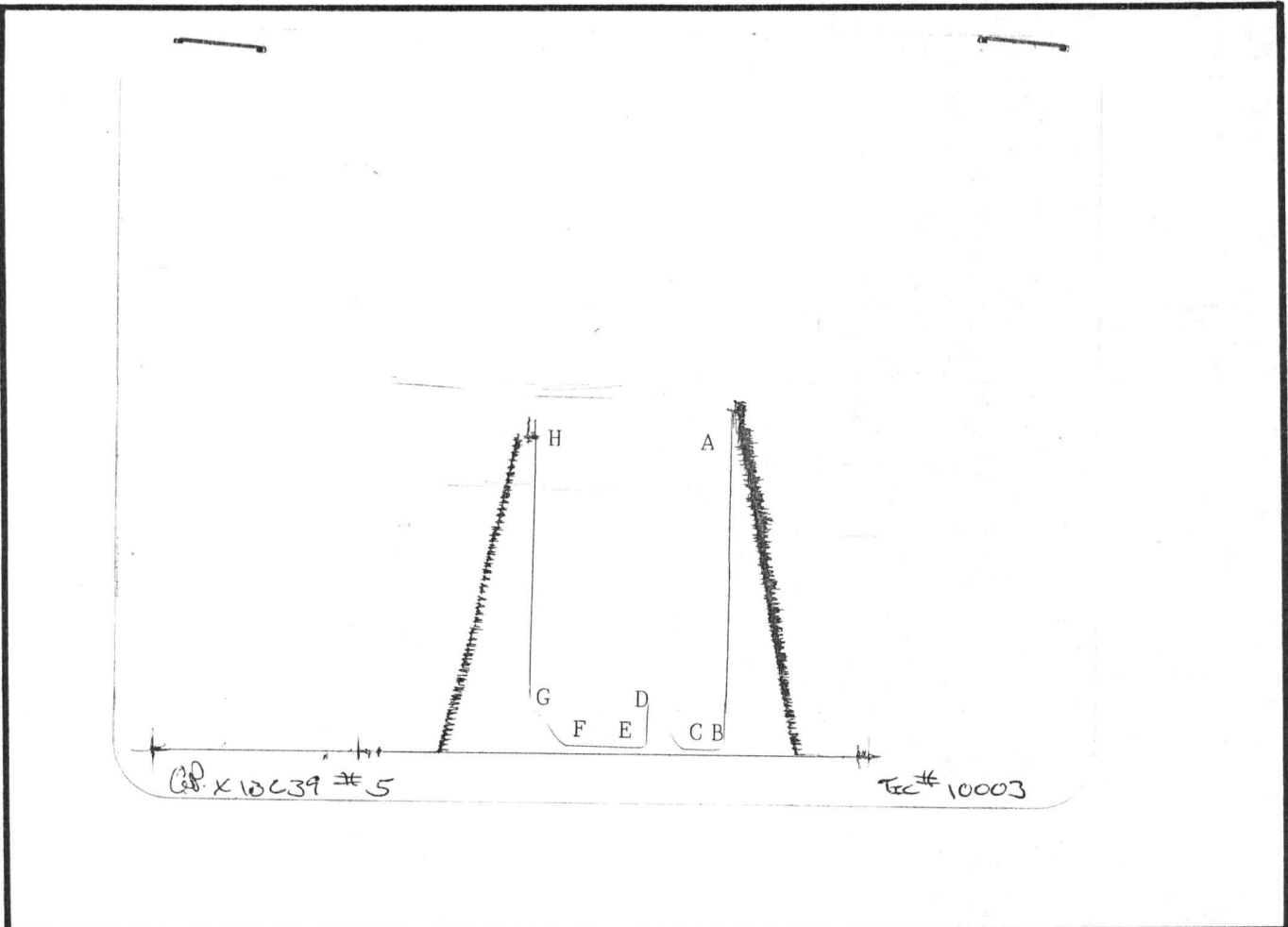
4-5 inches after 30 minutes.

2nd open: Fair blow, 3-4 inches.

Well Chlorides: 10,000 ppm.

Recovery Chlorides: 10,000 ppm.

Price of Job \$675.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2090	PSI
(B) First Initial Flow Pressure	27	PSI
(C) First Final Flow Pressure	38	PSI
(D) Initial Closed-in Pressure	326	PSI
(E) Second Initial Flow Pressure	43	PSI
(F) Second Final Flow Pressure	54	PSI
(G) Final Closed-in Pressure	273	PSI
(H) Final Hydrostatic Mud	1951	PSI

3
run
10
26

CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company Rains & Williamson Oil Company Inc.	Test No. 6
Well Name & Number Ziegler #2	Zone Tested Lansing 200
Company Address 435 Page Court 220 W. Douglas Wichita	Date 11/4/84
Company Rep. Craig Caulk	Tester Gary Pevoteaux
Contractor Company Tools	Elevation 2584 Kb
Location: Sec. 3 Twp. 10s Rge. 26w Co. Sheridan State Ks.	Est. Feet of Pay

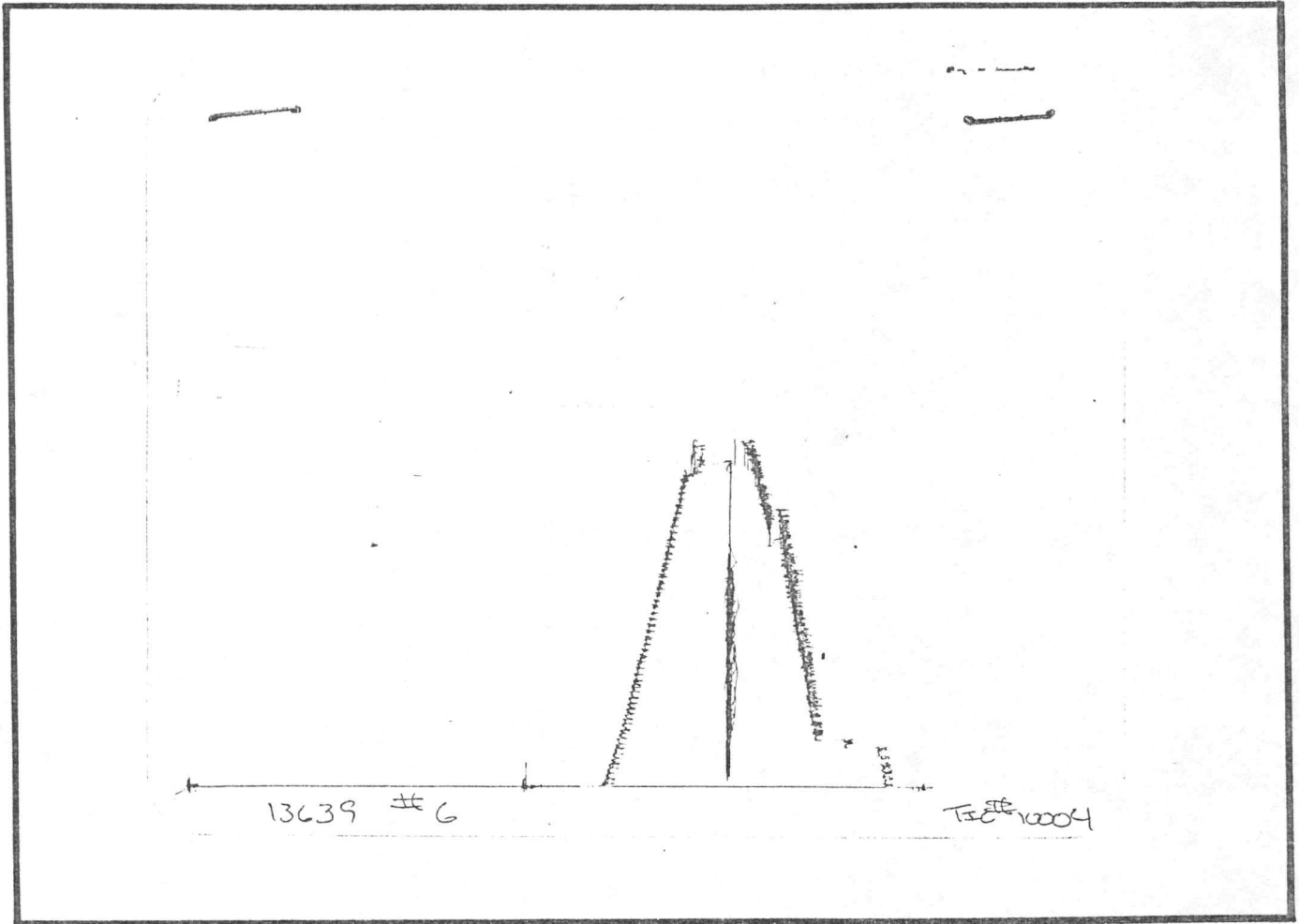
Recorder No. 13638 Type AK-1 Range 4675 PSI
 Recorder Depth 4060 Clock # 25559
 (A) Initial Hydrostatic Mud _____ PSI
 (B) First Initial Flow Pressure _____ PSI
 (C) First Final Flow Pressure _____ PSI
 (D) Initial Shut-in Pressure _____ PSI
 (E) Second Initial Flow Pressure _____ PSI
 (F) Second Final Flow Pressure _____ PSI
 (G) Final Shut-in Pressure _____ PSI
 (H) Final Hydrostatic Mud _____ PSI
 Temperature _____ 118
 Mud Weight 9.7 Viscosity 49
 Fluid Loss _____ 8.4
 Interval Tested _____ 4040-4063
 Anchor Length _____ 23
 Top Packer Depth _____ 4035
 Bottom Packer Depth _____ 4040
 Total Depth _____ 4063
 Drill Pipe Size _____ 4½ XH
 Wt. Pipe I. D. _____ Ft. Run _____
 Recovery-Total Feet _____ 180
 Recovered 180 Feet Of _____ Drilling Mud.
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____
 Recovered _____ Feet Of _____

Recorder No. 13639 Type AK-1 Range 4675 PSI
 Recorder Depth 4055 Clock # 19127
 Tool Open Before I.S.I. _____ Mins.
 Initial Shut-in _____ Mins.
 Flow Period _____ Mins.
 Final Shut-in _____ Mins.
 Top Choke Size 1" Hole Size 7 7/8"
 Bottom Choke Size 3/4" Rubber Size 6 3/4"
 Tool Open @ _____ 12:00 AM
 Blow Remarks 1st open: Strong blow.

Misrun, packer failure.

Well Chlorides: 10,000 ppm.

Extra Equipment _____ Price of Job \$330.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	MISRUN.....	PSI
(B) First Initial Flow Pressure		PSI
(C) First Final Flow Pressure		PSI
(D) Initial Closed-in Pressure		PSI
(E) Second Initial Flow Pressure		PSI
(F) Second Final Flow Pressure		PSI
(G) Final Closed-in Pressure		PSI
(H) Final Hydrostatic Mud		PSI