

15-065-22345

12-75-21w

**CHENEY TESTING COMPANY, INC.**

P. O. Box 367

HILL CITY, KANSAS 67642

**DRILL-STEM TEST DATA**

DSO #5605

Company	PanCanadian Petroleum	Test No.	1
Well Name & Number	Wilbur #44-12 #2	Zone Tested	Topeka
Company Address	Box 929 Denver, Colo. 80201	Date	12-14-86
Company Rep.	Joe Rusnak	Tester	Gary Hartwell
Contractor	Murfin #8	Elevation	2105 K.B.
Location: Sec. 12 Twp. 7S Rge. 21W Co.Graham StateKs.		Est. Feet of Pay	

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 3249 Clock # 22993

(A) Initial Hydrostatic Mud 1590 PSI

(B) First Initial Flow Pressure - PSI

(C) First Final Flow Pressure - PSI

(D) Initial Shut-in Pressure 748 PSI

(E) Second Initial Flow Pressure - PSI

(F) Second Final Flow Pressure - PSI

(G) Final Shut-in Pressure 759 PSI

(H) Final Hydrostatic Mud 1590 PSI

Temperature 99

Mud Weight 9.5 Viscosity 41

Fluid Loss 5.8

Interval Tested 3237-3255

Anchor Length 18

Top Packer Depth 3232

Bottom Packer Depth 3237

Total Depth 3255

Drill Pipe Size 4 1/2" F.H.

Wt. Pipe I. D. 2.7 Ft. Run 475

Recovery-Total Feet 100

Recovered 100 Feet Of Mud.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Sampler Data

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3252 Clock # 25561

Tool Open Before I.S.I. 15 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 90 Mins.

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

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

Tool Open @ 5:49 A.M.

Blow Remarks Weak 1/2" blow dying to surface  
blow (1st Open)

No blow. Flushed tool. Good surge.

No blow. (2nd Open)

Tool slid 12' to bottom after opened, lost  
10'-12' mud.

Tool plugged!

Collar I.D. 2.25 Ft. Run 30

Price of Job \$175.00 (misrun)

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10600	Date	12-14-86
Company Name	PanCanadian Petro.		
Lease	Wilbur #44-12 #2	Test No.	1
County	Graham CO., KS.	Sec. 12	Twp. 7S Rge. 21W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ - \_\_\_\_\_ ML  
Oil \_\_\_\_\_ - \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Water \_\_\_\_\_ - \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 30 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 3,000 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 2.10 \_\_\_\_\_ ohms @ \_\_\_\_\_ 55 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 41 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.5 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 8.8 \_\_\_\_\_ cc  
Other \_\_\_\_\_ - \_\_\_\_\_  
\_\_\_\_\_ - \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 2.0 \_\_\_\_\_ ohms @ \_\_\_\_\_ 60 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 3,000 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

TOP:

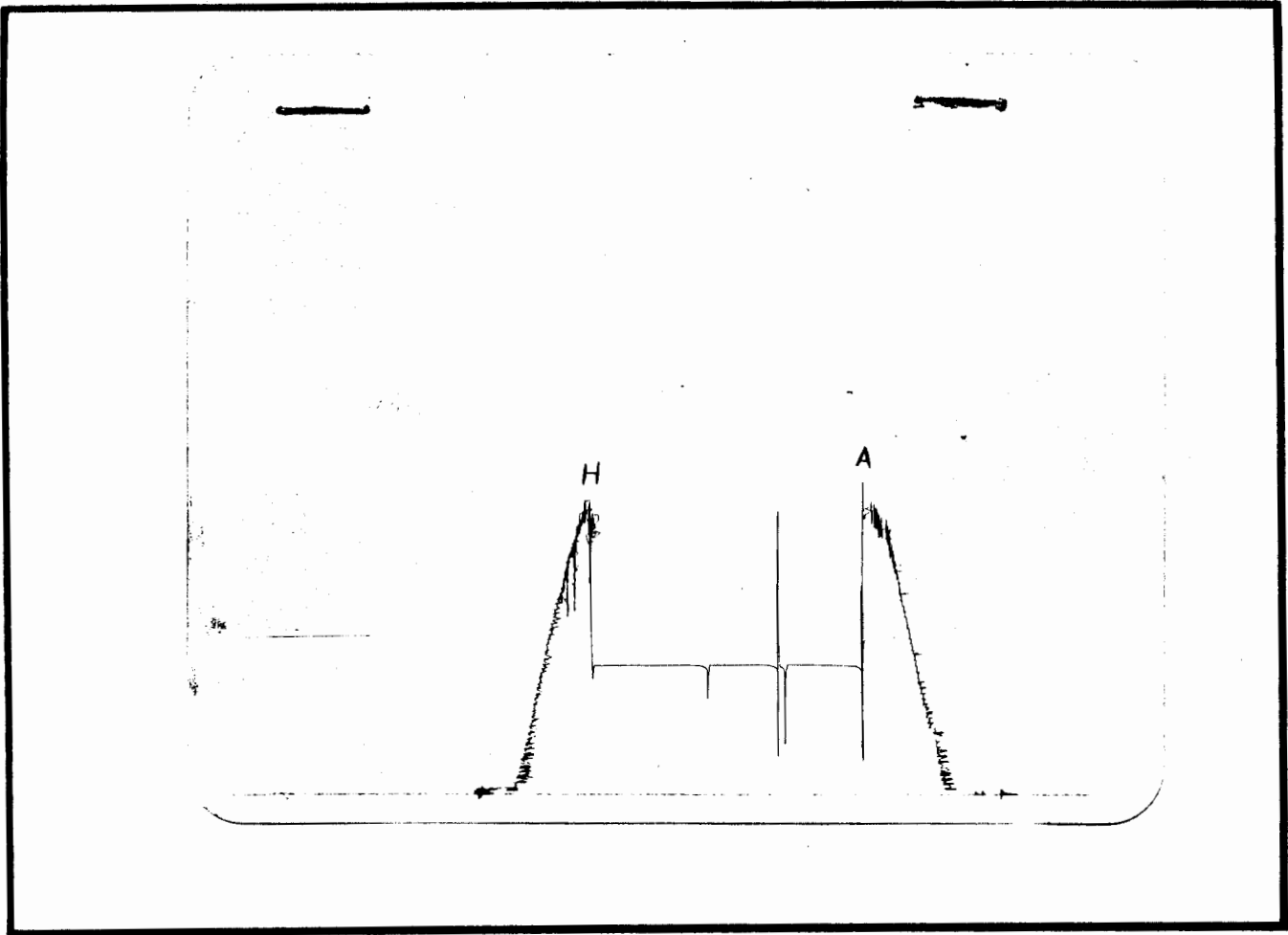
Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm

MIDDLE:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm

BOTTOM:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1590	PSI
(B) First Initial Flow Pressure .....	-	PSI
(C) First Final Flow Pressure .....	-	PSI
(D) Initial Closed-in Pressure .....	748	PSI
(E) Second Initial Flow Pressure .....	-	PSI
(F) Second Final Flow Pressure .....	-	PSI
(G) Final Closed-in Pressure .....	759	PSI
(H) Final Hydrostatic Mud .....	1590	PSI



# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10601	Date	12-14-86
Company Name	PanCanadian Petroleum		
Lease	Wilbur #44-12 #2	Test No.	2
County	Graham Co., Ks.	Sec. 12	Twp. 7S Rge. 21W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil \_\_\_\_\_ ML  
Mud \_\_\_\_\_ ML  
Water \_\_\_\_\_ 2,000 ML  
Other \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 150 P.S.I.  
Total \_\_\_\_\_ 2,000 ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 3,000 ppm  
Resistivity \_\_\_\_\_ 1.65 ohms @ \_\_\_\_\_ 70 °F  
Viscosity \_\_\_\_\_ 44  
Wt. \_\_\_\_\_ 9.4  
Filtrate \_\_\_\_\_ 8.8 cc  
Other \_\_\_\_\_ -

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 0.14 ohms @ \_\_\_\_\_ 66 °F  
Chlorides \_\_\_\_\_ 55,000 ppm  
Gravity \_\_\_\_\_ Corrected @ 60°F

### PIPE RECOVERY

#### TOP:

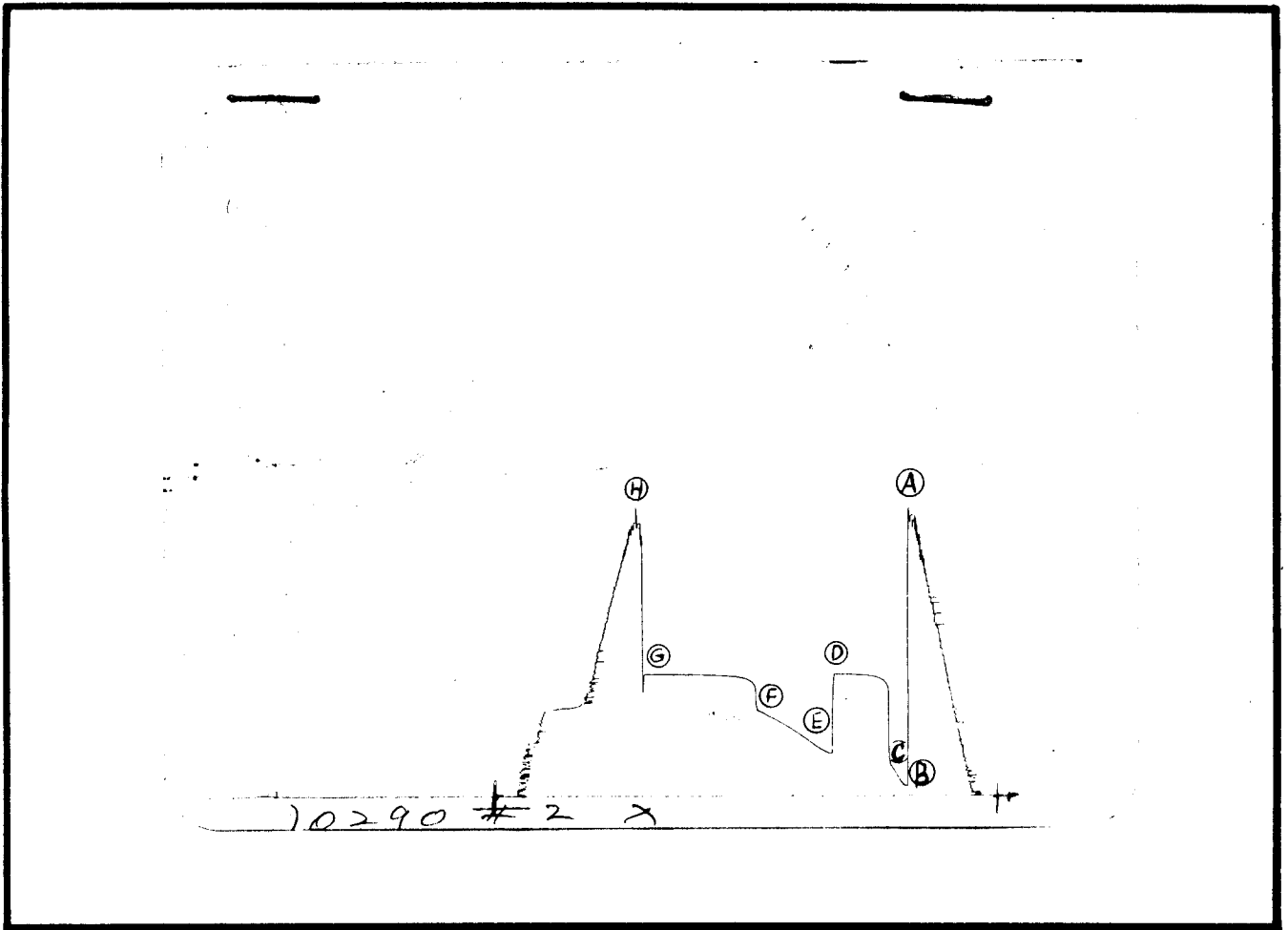
Resistivity \_\_\_\_\_ 0.15 ohms @ \_\_\_\_\_ 62 °F  
Chlorides \_\_\_\_\_ 50,000 ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ 0.13 ohms @ \_\_\_\_\_ 67 °F  
Chlorides \_\_\_\_\_ 58,000 ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ 0.12 ohms @ \_\_\_\_\_ 70 °F  
Chlorides \_\_\_\_\_ 65,000 ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1705	PSI
(B) First Initial Flow Pressure .....	43	PSI
(C) First Final Flow Pressure .....	163	PSI
(D) Initial Closed-in Pressure .....	716	PSI
(E) Second Initial Flow Pressure .....	239	PSI
(F) Second Final Flow Pressure .....	500	PSI
(G) Final Closed-in Pressure .....	716	PSI
(H) Final Hydrostatic Mud .....	1694	PSI



# CHENEY TESTING CO., INC.

P. O. BOX 387

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10602	Date	12-15-86
Company Name	PanCanadian Petroleum		
Lease	Wilbur #44-12 #2	Test No.	3
County	Graham CO., Ks.	Sec. 12 Twp. 7S Rge. 21W	

### SAMPLER RECOVERY

Gas \_\_\_\_\_ - \_\_\_\_\_ ML  
Oil \_\_\_\_\_ - \_\_\_\_\_ ML  
Mud \_\_\_\_\_ - \_\_\_\_\_ ML  
Water \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 50 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 3,800 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.80 ohms @ \_\_\_\_\_ 60 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 40 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.5 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 8.8 \_\_\_\_\_ cc  
Other \_\_\_\_\_ - \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 0.16 ohms @ \_\_\_\_\_ 70 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 48,000 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

#### TOP:

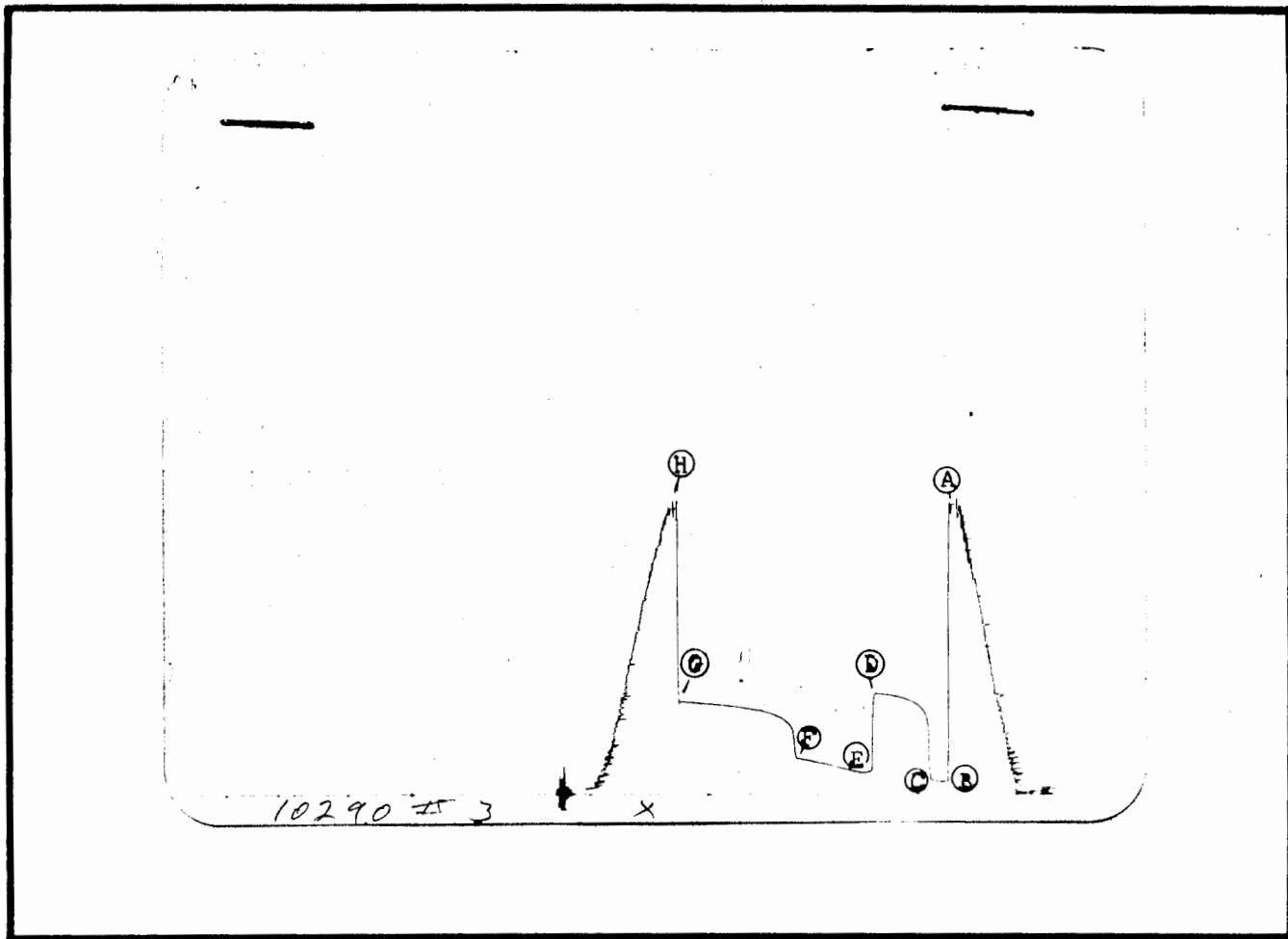
Resistivity \_\_\_\_\_ 0.30 ohms @ \_\_\_\_\_ 67 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 22,000 \_\_\_\_\_ ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ 0.15 ohms @ \_\_\_\_\_ 66 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 48,000 \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ 0.16 ohms @ \_\_\_\_\_ 68 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 46,000 \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1715		PSI
(B) First Initial Flow Pressure	54		PSI
(C) First Final Flow Pressure	65		PSI
(D) Initial Closed-in Pressure	564		PSI
(E) Second Initial Flow Pressure	108		PSI
(F) Second Final Flow Pressure	195		PSI
(G) Final Closed-in Pressure	523		PSI
(H) Final Hydrostatic Mud	1705		PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

DSO #5605

Company <u>PanCanadian Petroleum</u>	Test No. <u>4</u>
Well Name & Number <u>Wilbur #44-12 #2</u>	Zone Tested <u>K.C. "A"</u>
Company Address <u>Box 929 Denver, Co. 80201</u>	Date <u>12-16-86</u>
Company Rep. <u>Joe Rusnak</u>	Tester <u>Gary Hartwell</u>
Contractor <u>Murfin Rig #8</u>	Elevation <u>2105 K.B.</u>
Location: Sec. <u>12</u> Twp. <u>7S</u> Rge. <u>21W</u> Co. <u>Graham State KS.</u>	Est. Feet of Pay _____

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 3336 Clock # 23859

(A) Initial Hydrostatic Mud 1726 PSI

(B) First Initial Flow Pressure 10 PSI

(C) First Final Flow Pressure 10 PSI

(D) Initial Shut-in Pressure 619 PSI

(E) Second Initial Flow Pressure 10 PSI

(F) Second Final Flow Pressure 10 PSI

(G) Final Shut-in Pressure 619 PSI

(H) Final Hydrostatic Mud 1715 PSI

Temperature 101°

Mud Weight 9.5 Viscosity 46

Fluid Loss 8.8

Interval Tested 3320-3342

Anchor Length 22'

Top Packer Depth 3315

Bottom Packer Depth 3320

Total Depth 3342

Drill Pipe Size 4½" F.H.

Wt. Pipe I. D. 2.7 Ft. Run 475

Recovery-Total Feet 10

Recovered 10 Feet Of MUD.

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Extra Equipment \_\_\_\_\_

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3339 Clock # 25561

Tool Open Before I.S.I. 15 Mins.

Initial Shut-in 45 Mins.

Flow Period 60 Mins.

Final Shut-in 90 Mins.

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

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

Tool Open @ 12:28 A.M.

Blow Remarks Weak 3/4" Blow Throughout (1st open)

No Blow. (2nd Open)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Collars I.D.: 2.25 Ft. Run: 30'

\_\_\_\_\_

\_\_\_\_\_

Sampler Data

Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10603	Date	12-15-86
Company Name	PanCanadian Petro.		
Lease	Wilbur #44-12	Test No.	4
County	Graham Co., Kansas	Sec. 12 Twp. 7S Rge. 21W	

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 ML  
Water \_\_\_\_\_ ML  
Other \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 30 P.S.I.  
Total \_\_\_\_\_ 2,000 ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,800 ppm  
Resistivity \_\_\_\_\_ 1.20 ohms @ 65 °F  
Viscosity \_\_\_\_\_ 46  
Wt. \_\_\_\_\_ 9.5  
Filtrate \_\_\_\_\_ 8.8 cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 1.0 ohms @ 70 °F  
Chlorides \_\_\_\_\_ 5,800 ppm  
Gravity \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

#### TOP:

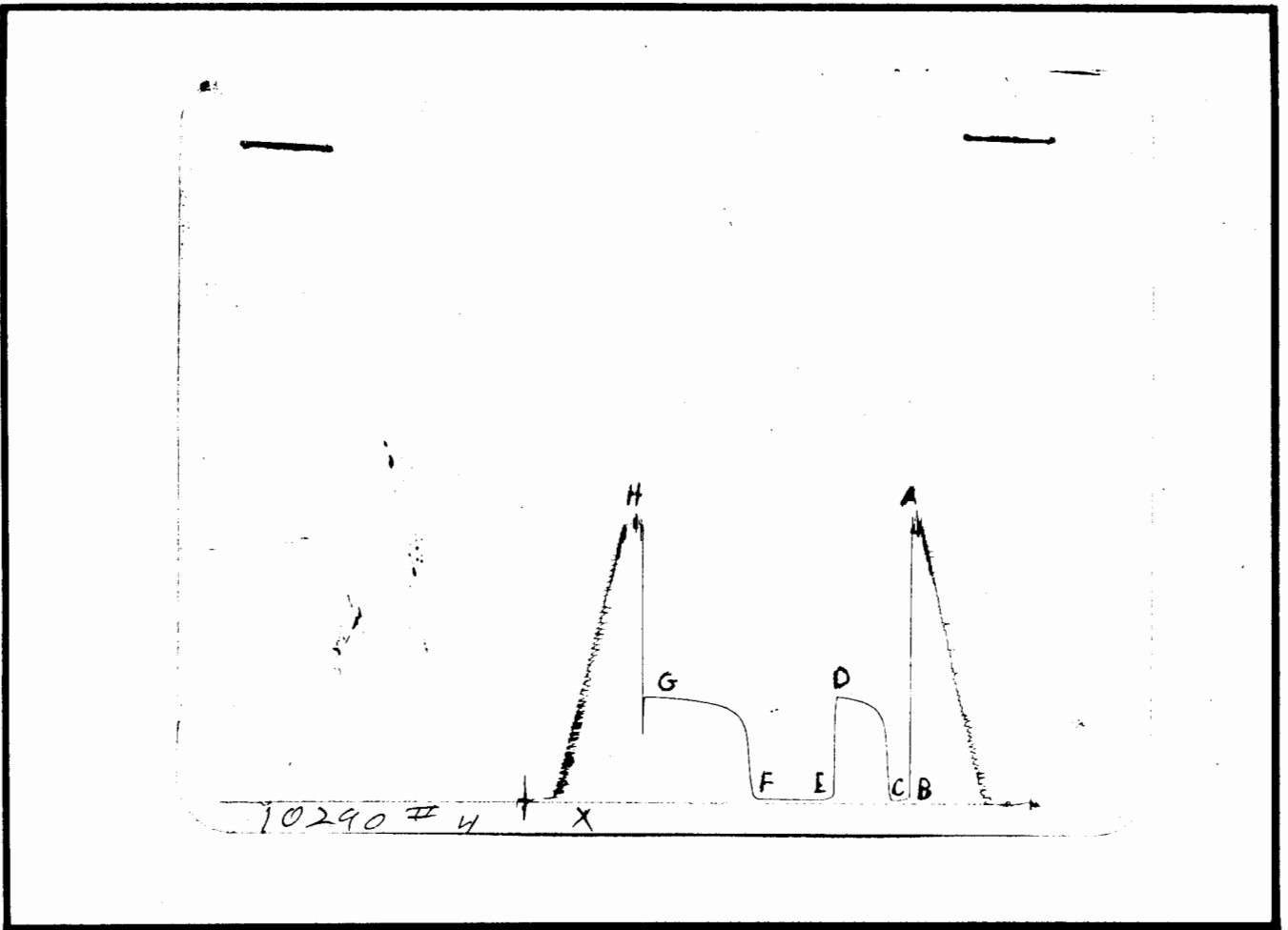
Resistivity \_\_\_\_\_ 1.0 ohms @ 70 °F  
Chlorides \_\_\_\_\_ 5,800 ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1726	PSI
(B) First Initial Flow Pressure .....	10	PSI
(C) First Final Flow Pressure .....	10	PSI
(D) Initial Closed-in Pressure .....	619	PSI
(E) Second Initial Flow Pressure .....	10	PSI
(F) Second Final Flow Pressure .....	10	PSI
(G) Final Closed-in Pressure .....	619	PSI
(H) Final Hydrostatic Mud .....	1715	PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

Company	PanCanadian Petroleum	Test No.	5
Well Name & Number	Wilbur #44-12 #2	Zone Tested	K.C. "B"
Company Address	Box 929 Denver, Colo. 80201	Date	12-16-86
Company Rep.	Joe Rusnak	Tester	Gary Hartwell
Contractor	Murfin #8	Elevation	2105 K.B.
Location: Sec. 12 Twp. 7S Rge. 21W Co. Graham State Ks.	Est. Feet of Pay		

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3368 Clock # 23859

Recorder Depth 3371 Clock # 25561

(A) Initial Hydrostatic Mud 1747 PSI

Tool Open Before I.S.I. 15 Mins.

(B) First Initial Flow Pressure 20 PSI

Initial Shut-in 45 Mins.

(C) First Final Flow Pressure 20 PSI

Flow Period 30 Mins.

(D) Initial Shut-in Pressure 423 PSI

Final Shut-in 90 Mins.

(E) Second Initial Flow Pressure 30 PSI

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

(F) Second Final Flow Pressure 30 PSI

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

(G) Final Shut-in Pressure 597 PSI

Tool Open @ 12:52 P.M.

(H) Final Hydrostatic Mud 1726 PSI

Blow Remarks Weak 1/2" Blow Throughout (1st Open)

Temperature 101<sup>o</sup>

No Blow (2nd open)

Mud Weight 9.6 Viscosity 44

Fluid Loss 10.4

Interval Tested 3344-3374

Anchor Length 30'

Top Packer Depth 3339

Bottom Packer Depth 3344

Total Depth 3374

Drill Pipe Size 4 1/2" F.H.

Wt. Pipe I. D. 2.7 Ft. Run 475

Collar I.D.: 2.25 Ft. Run: 30'

Recovery-Total Feet 1'

Recovered 1' Feet Of Drilling Mud

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Extra Equipment \_\_\_\_\_ Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10604	Date	12-16-86
Company Name	PanCanadian Petroleum		
Lease	Wilbur #44-12 #2	Test No.	5
County	Graham	Sec.12	Twp. 7S Rge. 21W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ - \_\_\_\_\_ ML  
Oil \_\_\_\_\_ - \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Water \_\_\_\_\_ - \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 40 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.60 ohms @ \_\_\_\_\_ 61 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 44 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.6 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 10.4 \_\_\_\_\_ cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 1.30 ohms @ \_\_\_\_\_ 74 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ - \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

#### TOP:

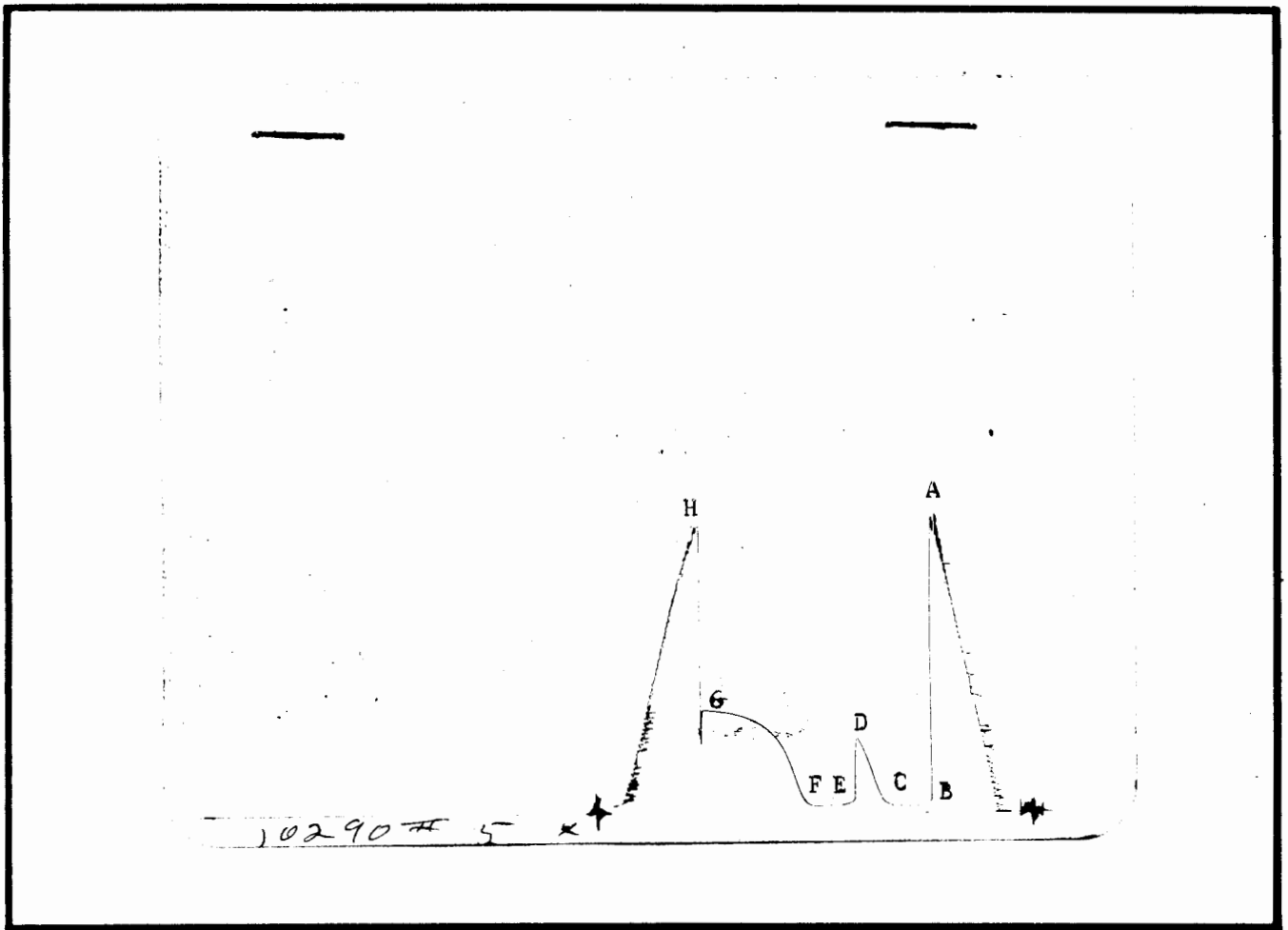
Resistivity \_\_\_\_\_ 1.30 ohms @ \_\_\_\_\_ 74 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ - \_\_\_\_\_ ohms @ \_\_\_\_\_ - \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ - \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ - \_\_\_\_\_ ohms @ \_\_\_\_\_ - \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ - \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1724	PSI
(B) First Initial Flow Pressure .....	20	PSI
(C) First Final Flow Pressure .....	20	PSI
(D) Initial Closed-in Pressure .....	423	PSI
(E) Second Initial Flow Pressure .....	30	PSI
(F) Second Final Flow Pressure .....	30	PSI
(G) Final Closed-in Pressure .....	597	PSI
(H) Final Hydrostatic Mud .....	1726	PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

Company <u>PanCanadian Petroleum</u>	Test No. <u>6</u>
Well Name & Number <u>Wilbur #44-12 #2</u>	Zone Tested <u>Kansas City "D-E-F"</u>
Company Address <u>Box 929 Denver, Colo. 80201</u>	Date <u>12-17-86</u>
Company Rep. <u>Joe Rusnak</u>	Tester <u>Gary Hartwell</u>
Contractor <u>Murfin #8</u>	Elevation <u>2105 K.B.</u>
Location: Sec. <u>12</u> Twp. <u>7S</u> Rge. <u>21W</u> Co. <u>GRAHAM</u> State <u>Ks.</u>	Est. Feet of Pay _____

Recorder No. 13276 Type AK-1 Range 4000 PSI

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 3414 Clock # 23859

Recorder Depth 3417 Clock # 25561

(A) Initial Hydrostatic Mud 1779 PSI

Tool Open Before I.S.I. 15 Mins.

(B) First Initial Flow Pressure 43 PSI

Initial Shut-in 45 Mins.

(C) First Final Flow Pressure 54 PSI

Flow Period 60 Mins.

(D) Initial Shut-in Pressure 694 PSI

Final Shut-in 90 Mins.

(E) Second Initial Flow Pressure 86 PSI

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

(F) Second Final Flow Pressure 152 PSI

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

(G) Final Shut-in Pressure 586 PSI

Tool Open @ 3:30 A.m.

(H) Final Hydrostatic Mud 1758 PSI

Blow Remarks Fair building Blow 7" (1st open)

Temperature 102°

Mud Weight 9.5 Viscosity 44

Fluid Loss 10.4

Interval Tested 3368-3420

Anchor Length 52'

Top Packer Depth 3363

Bottom Packer Depth 3368

Total Depth 3420

Drill Pipe Size 4 1/2" F.H.

P.T. Mud Temp. at Flow line 79°

Wt. Pipe I. D. 2.25 Ft. Run 425

Collar I.D.: 2.25 Ft. Run: 30'

Recovery-Total Feet 310

Recovered 124 Feet Of Muddy water.

Recovered 186 Feet Of Saltwater.

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Extra Equipment \_\_\_\_\_

Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10605	Date	12-27-86
Company Name	PanCanadian Petroleum		
Lease	Wilbur #44-12 #2	Test No.	6
County	Graham Co., Ks.	Sec. 12	Twp. 7S Rge. 21W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil \_\_\_\_\_ ML  
Mud \_\_\_\_\_ ML  
Water \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Other \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 50 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,400 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.48 \_\_\_\_\_ ohms @ \_\_\_\_\_ 64 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 44 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.5 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 10.4 \_\_\_\_\_ cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 0.21 \_\_\_\_\_ ohms @ \_\_\_\_\_ 66 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 34,000 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @ 60°F

### PIPE RECOVERY

#### TOP:

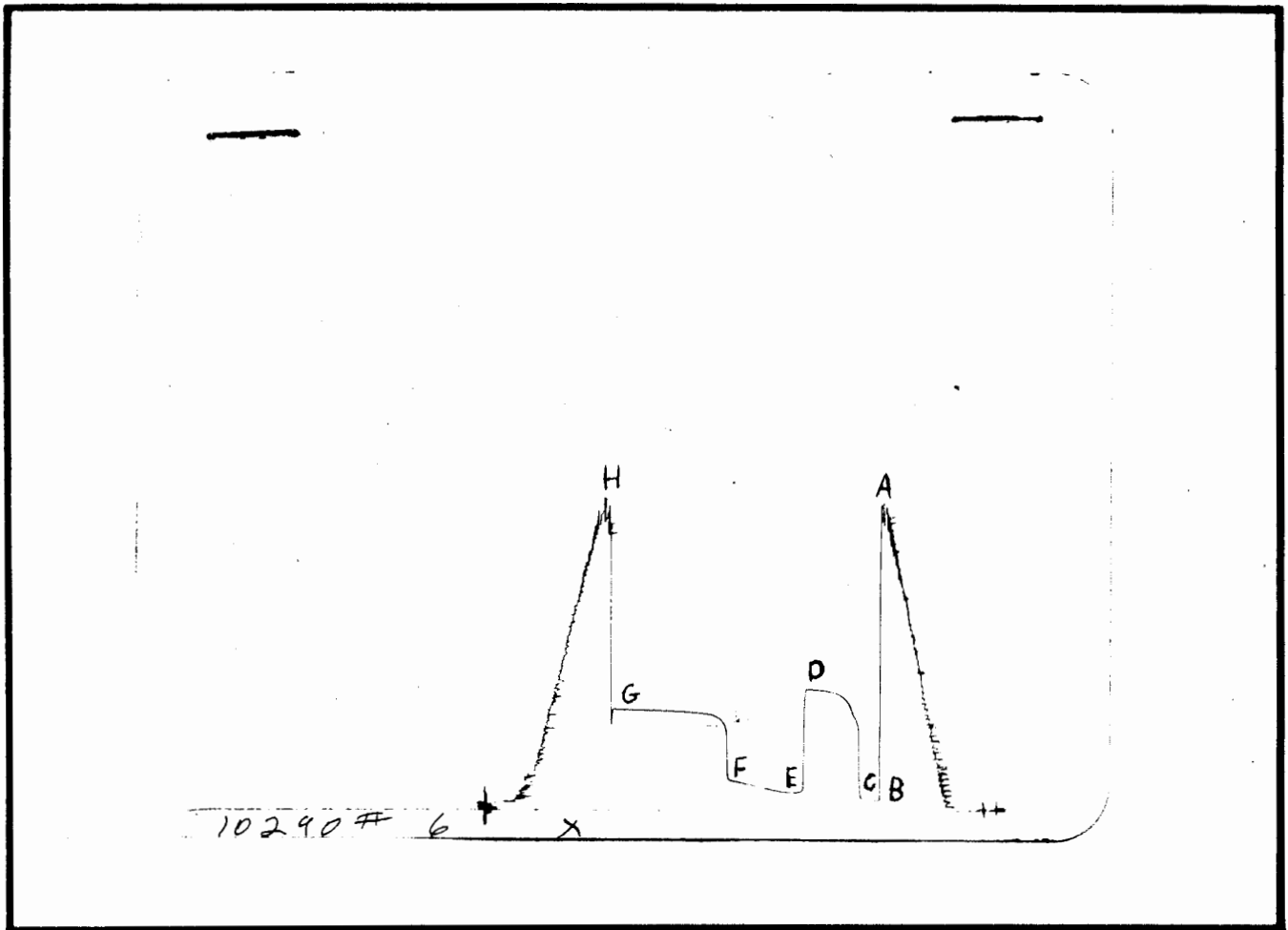
Resistivity \_\_\_\_\_ 0.31 \_\_\_\_\_ ohms @ \_\_\_\_\_ 61 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 26,000 \_\_\_\_\_ ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ 0.21 \_\_\_\_\_ ohms @ \_\_\_\_\_ 66 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 34,000 \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ 0.21 \_\_\_\_\_ ohms @ \_\_\_\_\_ 66 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 34,000 \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1779	PSI
(B) First Initial Flow Pressure .....	43	PSI
(C) First Final Flow Pressure .....	54	PSI
(D) Initial Closed-in Pressure .....	694	PSI
(E) Second Initial Flow Pressure .....	86	PSI
(F) Second Final Flow Pressure .....	152	PSI
(G) Final Closed-in Pressure .....	586	PSI
(H) Final Hydrostatic Mud .....	1758	PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

Company <u>PanCanadian Petro.</u>	Test No. <u>7</u>
Well Name & Number <u>Wilbur #44-12 #2</u>	Zone Tested <u>K.C. "I-J"</u>
Company Address <u>Box 929, Denver, Colo.</u>	Date <u>12-17-86</u>
Company Rep. <u>Joe Rusnak</u>	Tester <u>Gary Hartwell</u>
Contractor <u>Murfin #8</u>	Elevation <u>2105 K.B.</u>
Location: Sec. <u>12</u> Twp. <u>7</u> Rge. <u>21</u> Co. <u>Graham</u> State <u>Kan.</u>	Est. Feet of Pay _____

Recorder No. 13276 Type AK-1 Range 4000 PSI  
 Recorder Depth 3482 Clock # 23859  
 (A) Initial Hydrostatic Mud 1822 PSI  
 (B) First Initial Flow Pressure 5 PSI  
 (C) First Final Flow Pressure 5 PSI  
 (D) Initial Shut-in Pressure 10 PSI  
 (E) Second Initial Flow Pressure 5 PSI  
 (F) Second Final Flow Pressure 5 PSI  
 (G) Final Shut-in Pressure 10 PSI  
 (H) Final Hydrostatic Mud 1801 PSI  
 Temperature 102  
 Mud Weight 9.6 Viscosity 49  
 Fluid Loss 8.8  
 Interval Tested 3458-3488  
 Anchor Length 30'  
 Top Packer Depth 3453  
 Bottom Packer Depth 3458  
 Total Depth 3488  
 Drill Pipe Size 4½ F.H.

Recorder No. 10290 Type AK-1 Range 4250 PSI  
 Recorder Depth 3485 Clock # 25561  
 Tool Open Before I.S.I. 15 Mins.  
 Initial Shut-in 45 Mins.  
 Flow Period 30 Mins.  
 Final Shut-in 90 Mins.

Top Choke Size 1" Hole Size 7 7/8"  
 Bottom Choke Size 3/4" Rubber Size 6 3/4"

Tool Open @ 5:25 P.M.  
 Blow Remarks Weak ½" blew through out 1st opening.  
No Blow second opening.

Wt. Pipe I. D. 2.7 Ft. Run 475  
 Recovery-Total Feet 1  
 Recovered 1 Feet Of Mud with Oil spots  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_

Pit mud temp. at flow line 78.4  
 Collar I.D. 2.25 - 30'

Extra Equipment \_\_\_\_\_ Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10606	Date	12-17-86
Company Name	PanCanadian Petro.		
Lease	Wilbur #44-12 #2	Test No.	7
County	Graham	Sec. 12	Twp. 7 Rge. 21

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil \_\_\_\_\_ spots \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Water \_\_\_\_\_ - \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 5 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,500 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.42 \_\_\_\_\_ ohms @ \_\_\_\_\_ 66 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 49 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.6 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 8.8 \_\_\_\_\_ cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 1.59 \_\_\_\_\_ ohms @ \_\_\_\_\_ 62 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,200 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

TOP:

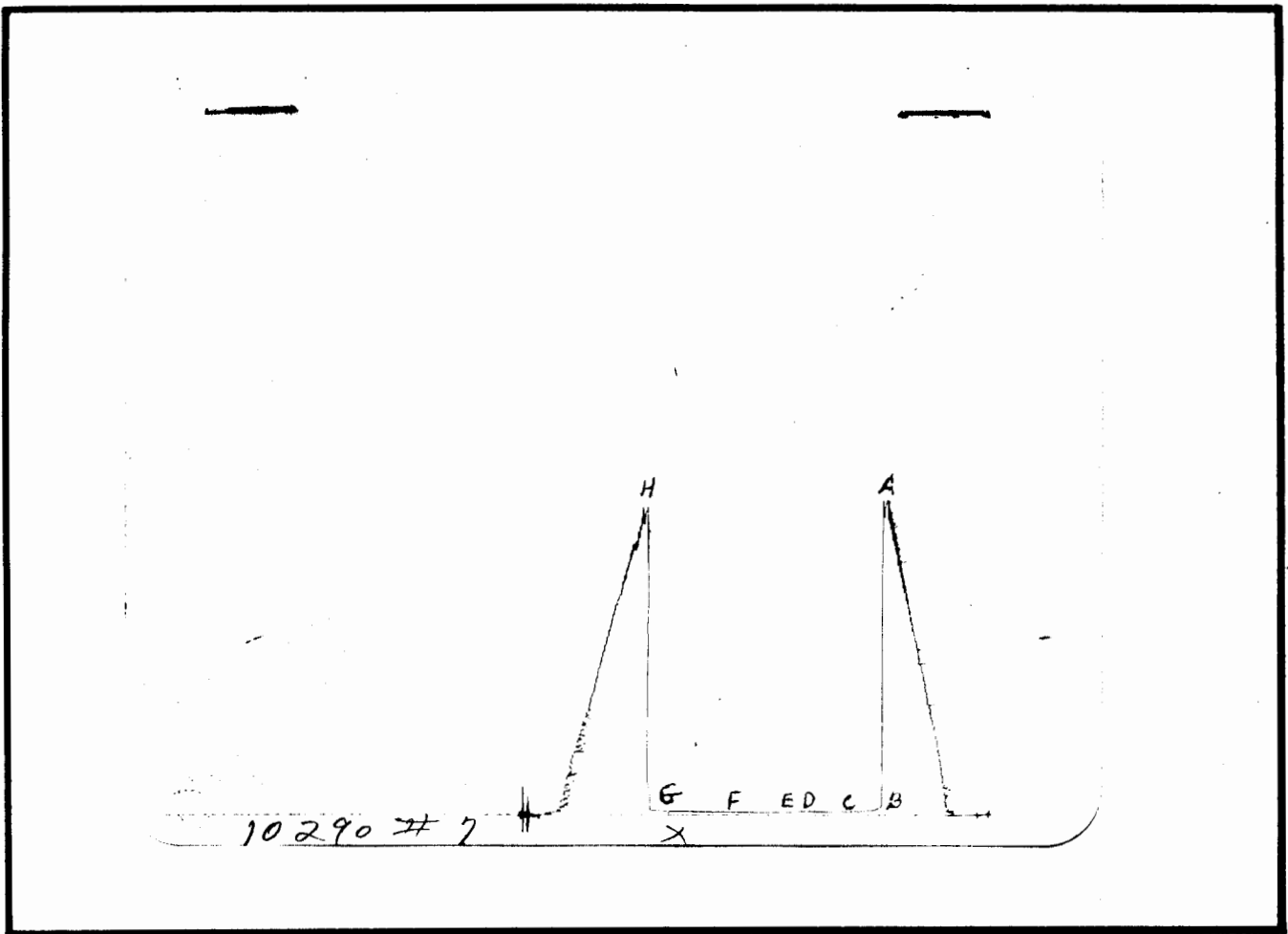
Resistivity \_\_\_\_\_ 1.59 \_\_\_\_\_ ohms @ \_\_\_\_\_ 62 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,200 \_\_\_\_\_ ppm

MIDDLE:

Resistivity \_\_\_\_\_ - \_\_\_\_\_ ohms @ \_\_\_\_\_ - \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ - \_\_\_\_\_ ppm

BOTTOM:

Resistivity \_\_\_\_\_ - \_\_\_\_\_ ohms @ \_\_\_\_\_ - \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ - \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1822	PSI
(B) First Initial Flow Pressure .....	5	PSI
(C) First Final Flow Pressure .....	5	PSI
(D) Initial Closed-in Pressure .....	10	PSI
(E) Second Initial Flow Pressure .....	5	PSI
(F) Second Final Flow Pressure .....	5	PSI
(G) Final Closed-in Pressure .....	10	PSI
(H) Final Hydrostatic Mud .....	1801	PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67842

## DRILL-STEM TEST DATA

Company PanCanadian Petro.	Test No. 8
Well Name & Number Wilbur #44-12 #2	Zone Tested K.C. "K-L"
Company Address Box 929, Denver, Colo. 80201	Date 12-18-86
Company Rep. Joe Rusnak	Tester Gary Hartwell
Contractor Murfin #8	Elevation 2105 K.B.
Location: Sec. 12 Twp. 7 Rge. 21 Co. Graham State Kan.	Est. Feet of Pay

Recorder No. 13276 Type AK-1 Range 4000 PSI  
 Recorder Depth 3530 Clock # 23859  
 (A) Initial Hydrostatic Mud 1865 PSI  
 (B) First Initial Flow Pressure 20 PSI  
 (C) First Final Flow Pressure 20 PSI  
 (D) Initial Shut-in Pressure 889 PSI  
 (E) Second Initial Flow Pressure 20 PSI  
 (F) Second Final Flow Pressure 20 PSI  
 (G) Final Shut-in Pressure 943 PSI  
 (H) Final Hydrostatic Mud 1844 PSI  
 Temperature 102  
 Mud Weight 9.6 Viscosity 50  
 Fluid Loss 8.8  
 Interval Tested 3488-3536  
 Anchor Length 48'  
 Top Packer Depth 3483  
 Bottom Packer Depth 3488  
 Total Depth 3536  
 Drill Pipe Size 4½ F.H.  
 Wt. Pipe I. D. 2.7 Ft. Run 475  
 Recovery-Total Feet 5

Recorder No. 10290 Type AK-1 Range 4250 PSI  
 Recorder Depth 3533 Clock # 25561  
 Tool Open Before I.S.I. 15 Mins.  
 Initial Shut-in 45 Mins.  
 Flow Period 30 Mins.  
 Final Shut-in 90 Mins.  
 Top Choke Size 1" Hole Size 7 7/8"  
 Bottom Choke Size 3/4" Rubber Size 6 3/4"  
 Tool Open @ 8:41 A.M.  
 Blow Remarks Weak ½" blow through out 1st opening.  
No Blow second opening.  
Collara I.D. 2.25 - 30'

Recovered 5 Feet Of Mud with few oil specks  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Recovered \_\_\_\_\_ Feet Of \_\_\_\_\_  
 Extra Equipment \_\_\_\_\_ Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67842

## FLUID SAMPLER DATA

Ticket No. 10607	Date 12-18-86
Company Name PanCanadian Petro.	
Lease Wilbur #44-12 #2	Test No. 8
County Graham	Sec. 12 Twp. 7 Rge. 21

### SAMPLER RECOVERY

Gas \_\_\_\_\_ - \_\_\_\_\_ ML  
Oil \_\_\_\_\_ Few specks \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Water \_\_\_\_\_ - \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 10 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,200 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.45 \_\_\_\_\_ ohms @ \_\_\_\_\_ 68 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 50 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.6 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 8.8 \_\_\_\_\_ cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 1.58 \_\_\_\_\_ ohms @ \_\_\_\_\_ 57 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,200 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @ 60°F

### PIPE RECOVERY

#### TOP:

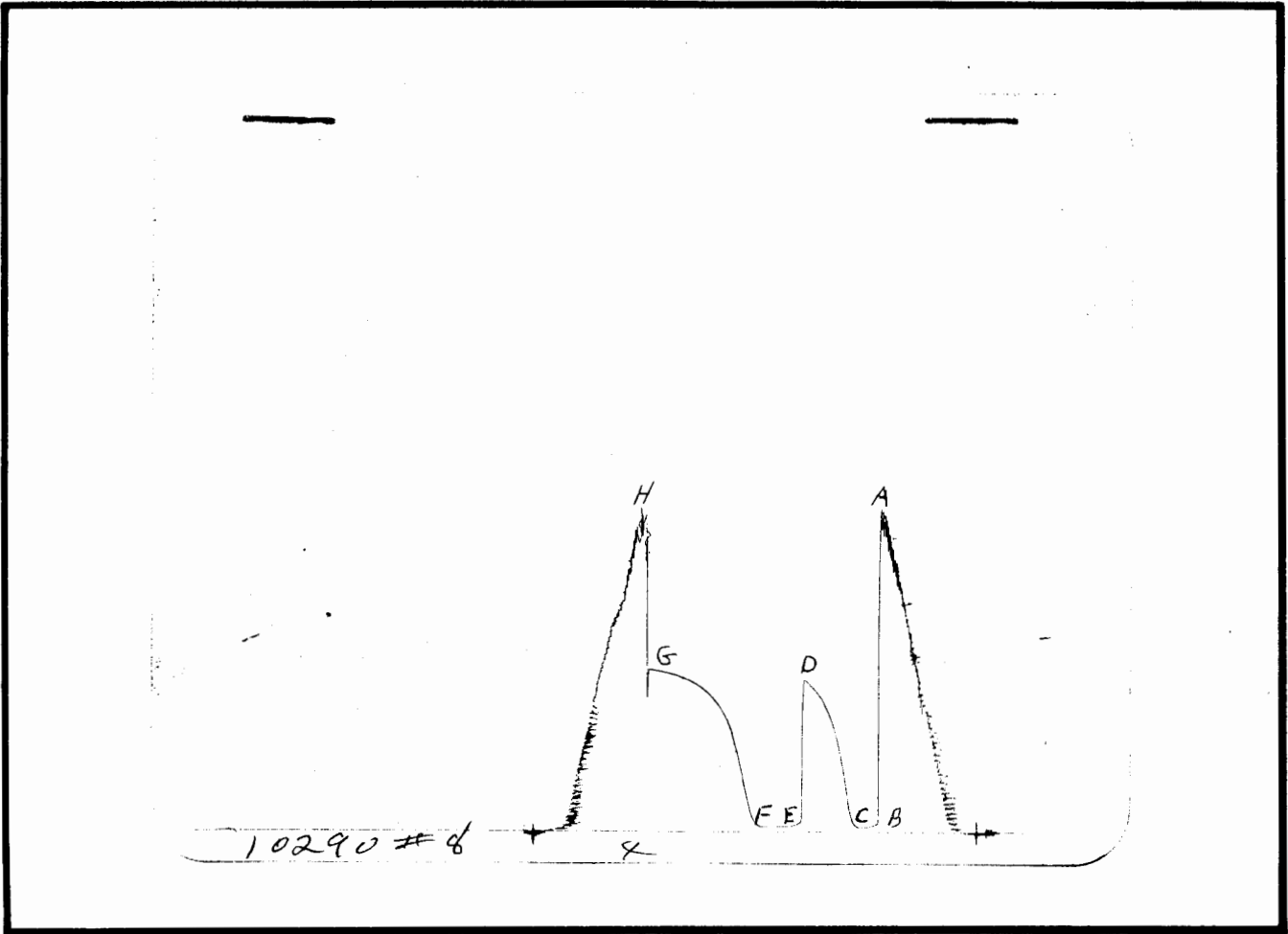
Resistivity \_\_\_\_\_ 1.58 \_\_\_\_\_ ohms @ \_\_\_\_\_ 57 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,200 \_\_\_\_\_ ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud .....	1865	PSI
(B) First Initial Flow Pressure .....	20	PSI
(C) First Final Flow Pressure .....	20	PSI
(D) Initial Closed-in Pressure .....	889	PSI
(E) Second Initial Flow Pressure .....	20	PSI
(F) Second Final Flow Pressure .....	20	PSI
(G) Final Closed-in Pressure .....	943	PSI
(H) Final Hydrostatic Mud .....	1844	PSI

# CHENEY TESTING COMPANY, INC.

P. O. Box 367

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

Company	PanCanadian Petro.	Test No.	9
Well Name & Number	Wilbur #44-12 #2	Zone Tested	"Arbuckle"
Company Address	Box 929 Denver, Colo. 80201	Date	12-18-86
Company Rep.	Joe Rusnak	Tester	Gary Hartwell
Contractor	Murfin Drlg. Rig #8	Elevation	2105 K.B.
Location: Sec. 12 Twp. 7S Rge. 21W Co. Graham State Kansas		Est. Feet of Pay	

Recorder No. 13276 Type AK-1 Range 4000 PSI  
Recorder Depth 3615 Clock # 23859  
(A) Initial Hydrostatic Mud 1940 PSI  
(B) First Initial Flow Pressure 54 PSI  
(C) First Final Flow Pressure 54 PSI  
(D) Initial Shut-in Pressure 954 PSI  
(E) Second Initial Flow Pressure 76 PSI  
(F) Second Final Flow Pressure plugged PSI  
(G) Final Shut-in Pressure 1019 PSI  
(H) Final Hydrostatic Mud 1918 PSI  
Temperature 105°  
Mud Weight 9.7 Viscosity 50  
Fluid Loss 9.6  
Interval Tested 3574-3621  
Anchor Length 47'  
Top Packer Depth 3569  
Bottom Packer Depth 3574  
Total Depth 3621  
Drill Pipe Size 4½" F.H.  
Wt. Pipe I. D. 2.7 Ft. Run 475  
Recovery-Total Feet 70'

Recorder No. 10290 Type AK-1 Range 4250 PSI  
Recorder Depth 3618 Clock # 25561  
Tool Open Before I.S.I. 15 Mins.  
Initial Shut-in 45 Mins.  
Flow Period 60 Mins.  
Final Shut-in 90 Mins.  
Top Choke Size 1" Hole Size 7 7/8"  
Bottom Choke Size 3/4" Rubber Size 6 3/4"  
Tool Open @ 11:59 P.M.  
Blow Remarks Weak-building Blow To 2½" (1st Open)  
Weak-building Blow 2", Dying off to surface  
(2nd Blow)  
Collar I.D.: 2.25 Ft. Run : 30'

Recovered 70 Feet Of Drilling Mud.  
Recovered Feet Of  
Recovered Feet Of  
Recovered Feet Of  
Recovered Feet Of  
Recovered Feet Of  
Extra Equipment Sampler Data Price of Job \$350.00

# CHENEY TESTING CO., INC.

P. O. BOX 367

HILL CITY, KANSAS 67642

## FLUID SAMPLER DATA

Ticket No.	10608	Date	12-19-86
Company Name	PanCanadian Petroleum		
Lease	Wilbur #44-12 #2	Test No.	9
County	Graham Co. , Kansas	Sec. 12	Twp. 7S Rge. 21W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil \_\_\_\_\_ spots \_\_\_\_\_ ML  
Mud \_\_\_\_\_ 2,000 \_\_\_\_\_ ML  
Water \_\_\_\_\_ - \_\_\_\_\_ ML  
Other \_\_\_\_\_ - \_\_\_\_\_ ML  
Pressure \_\_\_\_\_ 40 \_\_\_\_\_ P.S.I.  
Total \_\_\_\_\_ 2,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm  
Resistivity \_\_\_\_\_ 1.91 ohms @ 57 \_\_\_\_\_ °F  
Viscosity \_\_\_\_\_ 50 \_\_\_\_\_  
Wt. \_\_\_\_\_ 9.7 \_\_\_\_\_  
Filtrate \_\_\_\_\_ 9.6 \_\_\_\_\_ cc  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ 1.70 ohms @ 60 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm  
Gravity \_\_\_\_\_ Corrected @60°F

### PIPE RECOVERY

#### TOP:

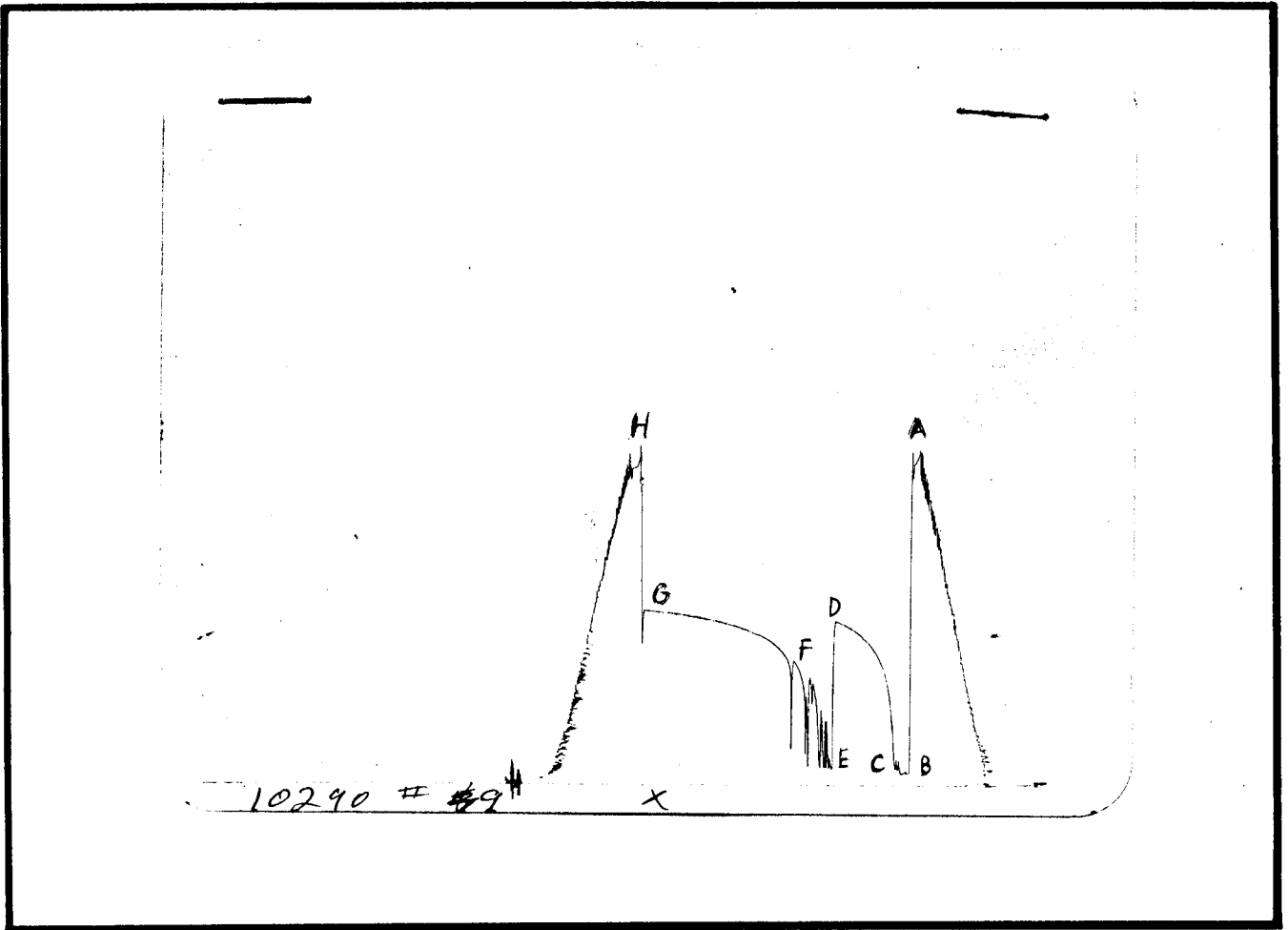
Resistivity \_\_\_\_\_ 1.70 ohms @ 60 \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ 4,000 \_\_\_\_\_ ppm

#### MIDDLE:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm

#### BOTTOM:

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ °F  
Chlorides \_\_\_\_\_ ppm



This is an actual photograph of recorder chart.

POINT	PRESSURE		PSI
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1940		PSI
(B) First Initial Flow Pressure	54		PSI
(C) First Final Flow Pressure	54		PSI
(D) Initial Closed-in Pressure	954		PSI
(E) Second Initial Flow Pressure	76		PSI
(F) Second Final Flow Pressure	plugged		PSI
(G) Final Closed-in Pressure	1019		PSI
(H) Final Hydrostatic Mud	1918		PSI