15-065-21689 **CHENEY TESTING COMPANY** 27-9s-22w

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Viking Resources	Test No.	2
Well Name & Number	Barber #1	Zone Tested	K.C.
Company Address	Wichita, Ks.	Date	9-21-82
Comp. Rep.	Tom Wesselowski	Tester	Jerry Cross
Contractor	B & B Drlg.	Elevation	2349 G.L.
Location: Sec. 27 Twp. 9 Rge. 22 Co. Graham State Ks.		Est. Feet of Pay	

Recorder No. 13277 Type AK-1 Range 4125 PSI

Recorder Depth 3785

(A) Initial Hydrostatic Mud 2004 PSI

(B) First Initial Flow Pressure 62 PSI

(C) First Final Flow Pressure 62 PSI

(D) Initial Closed-in Pressure 352 PSI

(E) Second Initial Flow Pressure 72 PSI

(F) Second Final Flow Pressure 72 PSI

(G) Final Closed-in Pressure 373 PSI

(H) Final Hydrostatic Mud 1983 PSI

Temperature 109

Mud Weight 9.8 Viscosity 44

Fluid Loss 9.8

Interval Tested 3700-3788

Anchor Length 88

Top Packer Depth 3695

Bottom Packer Depth 3700

Total Depth 3788

Drill Pipe Size 4½ XH

Wt. Pipe I. D. - Ft. Run -

Recovery—Total Feet 62

Recovered 143 Feet Of GAS IN PIPE.

Recovered 27 Feet Of CLEAN GASSY OIL. 38.2 GRAVITY.

Recovered 35 Feet Of OIL CUT MUD. 20% OIL 3% WATER 77% MUD.

Recovered Feet Of

Extra Equipment NONE

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 3782

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

Initial Shut-in 30 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1"

Bottom Choke Size ¾"

Main Hole Size 7⅞"

Rubber Size 6¾"

Tool Open @ 12:45 P.M.

Blow WEAK TO FAIR BLOW THROUGHOUT TEST.

Remarks

CHLORIDES-8,000 P.P.M.

Drill Collar I. D. - Ft. Run -

Price of Job $600.00

CHENEY TESTING COMPANY
Pressure Data

Date 9-21-82 Test Ticket No. 6435

Recorder No. 13277 Capacity 4125 Location 3785 Ft.

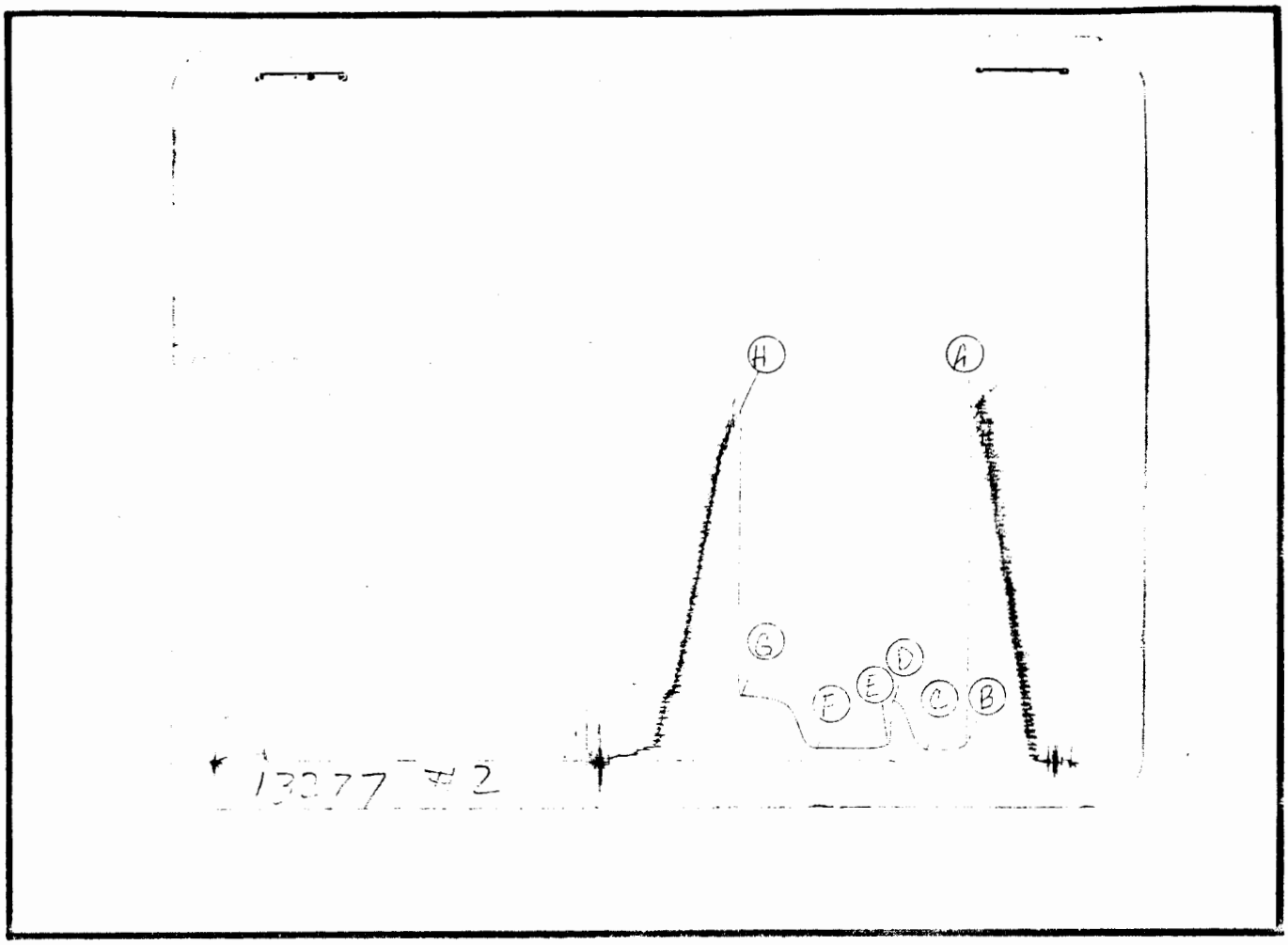
Clock No. 23859 Elevation 2349 G.L. Well Temperature 109 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2004 P.S.I.	Open Tool	12:45 P.M	
B First Initial Flow Pressure	61 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	64 P.S.I.	Initial Closed-in Pressure	30 Mins.	28 Mins.
D Initial Closed-in Pressure	345 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	67 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	74 P.S.I.			
G Final Closed-in Pressure	367 P.S.I.			
H Final Hydrostatic Mud	1983 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 6 Inc.	Breakdown: 5 Inc.	Breakdown: 12 Inc.	Breakdown: 11 Inc.
of 5 mins. and a	of 5 mins. and a	of 5 mins. and a	of 5 mins. and a
final inc. of 0 Min.	final inc. of 3 Min.	final inc. of 0 Min.	final inc. of 2 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	61	0	64	0	67	0	74
P 2 5	61	5	77	5	67	5	89
P 3 10	61	10	120	10	67	10	153
P 4 15	61	15	218	15	67	15	247
P 5 20	61	20	303	20	67	20	302
P 6 25	62	25	338	25	67	25	327
P 7 30	64	28	345	30	68	30	341
P 8				35	68	35	350
P 9				40	69	40	356
P10				45	70	45	361
P11				50	71	50	364
P12				55	72	55	366
P13				60	74	57	367
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2004	2004	PSI
(B)	First Initial Flow Pressure	62	61	PSI
(C)	First Final Flow Pressure	62	64	PSI
(D)	Initial Closed-in Pressure	352	345	PSI
(E)	Second Initial Flow Pressure	72	67	PSI
(F)	Second Final Flow Pressure	72	74	PSI
(G)	Final Closed-in Pressure	373	367	PSI
(H)	Final Hydrostatic Mud	1983	1983	PSI

CHENEY TESTING CO.

FIELD EVALUATIONS

Ticket No. 6435

Date 9-21-82

To Viking Resources

217 E. William

Wichita, Ks. 67202

These calculations are based upon information furnished by you and taken from drill stem test pressure charts and are furnished for your information. In furnishing such calculations and evaluations, Cheney Testing Co. is merely expressing its opinion. You agree that The Testing Company makes no warranty as to the accuracy of such calculations or opinions and the Testing Company shall not be liable for any loss or damage, whether due to negligence or otherwise in connection with such calculations and opinions.

We Give Below Results of Drill Stem Evaluation

Lease Barber #1 Sec. 27 Twp. 9 Rge. 22

County Graham Test Interval 3700-3788

FINAL

P.S.I. Slope Cycle $M = \frac{Pisi - Pfsi}{\text{Log } \frac{T + t}{t}}$ — 6.64

Damage Ratio $DR = .183 \frac{Ps - Pf}{M}$ — 7.46

Production $Q = \frac{1440\ R}{T}$ — .3 Bbls./Hr.; 7.2 Bbls./Day

Effective Pay $\frac{Kh}{\mu B} = 162.6 \frac{Q}{M}$ — 176.31 Md. Ft.

Theoretical Potential With Damage Removed $Q_1 = Q\ DR$ — 53.71 Bbls./Day

.01 % Drop in B.H.P.

DIETZGEN CORPORATION
MADE IN U.S.A.
NO. 341-L210 DIETZGEN GRAPH PAPER
SEMI-LOGARITHMIC
2 CYCLES X 10 DIVISIONS PER INCH
10
9
8
7
6
5
4
3
2
1
100
200
300
400
500
600
Δ IS-TP 423
○ SIP 423

CHENEY TESTING COMPANY

P. O. BOX 3 HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Viking Resources	Test No.	3
Well Name & Number	Barber #1	Zone Tested	Arbuckle
Company Address	Wichita, Ks.	Date	9-22-82
Comp. Rep.	Tom Wesselowski	Tester	Jerry Cross
Contractor	B & B Drlg.	Elevation	2349 G.L.
Location: Sec. 27 Twp. 9 Rge. 22 Co. Graham State Ks.		Est. Feet of Pay	

Recorder No. 13277 Type AK-1 Range 4125 PSI

Recorder Depth 3929

(A) Initial Hydrostatic Mud 2128 PSI

(B) First Initial Flow Pressure 51 PSI

(C) First Final Flow Pressure 51 PSI

(D) Initial Closed-in Pressure 497 PSI

(E) Second Initial Flow Pressure 51 PSI

(F) Second Final Flow Pressure 51 PSI

(G) Final Closed-in Pressure 394 PSI

(H) Final Hydrostatic Mud 2097 PSI

Temperature 110

Mud Weight 9.8 Viscosity 44

Fluid Loss 9.8

Interval Tested 3874-3932

Anchor Length 58

Top Packer Depth 3869

Bottom Packer Depth 3874

Total Depth 3932

Drill Pipe Size 4½ XH

Wt. Pipe I. D. - Ft. Run -

Recovery—Total Feet 12

Recorder No. 13371 Type AK-1 Range 3900 PSI

Recorder Depth 3926

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

Initial Shut-in 30 Mins.

Flow Period 30 Mins.

Final Shut-in 30 Mins.

Surface Choke Size 1"

Bottom Choke Size ¾"

Main Hole Size 7⅞"

Rubber Size 6¾"

Tool Open @ 10:05 A.M.

Blow WEAK BLOW DIED 6 MIN. INTO 2ND OPEN.

Remarks

Drill Collar I. D. - Ft. Run -

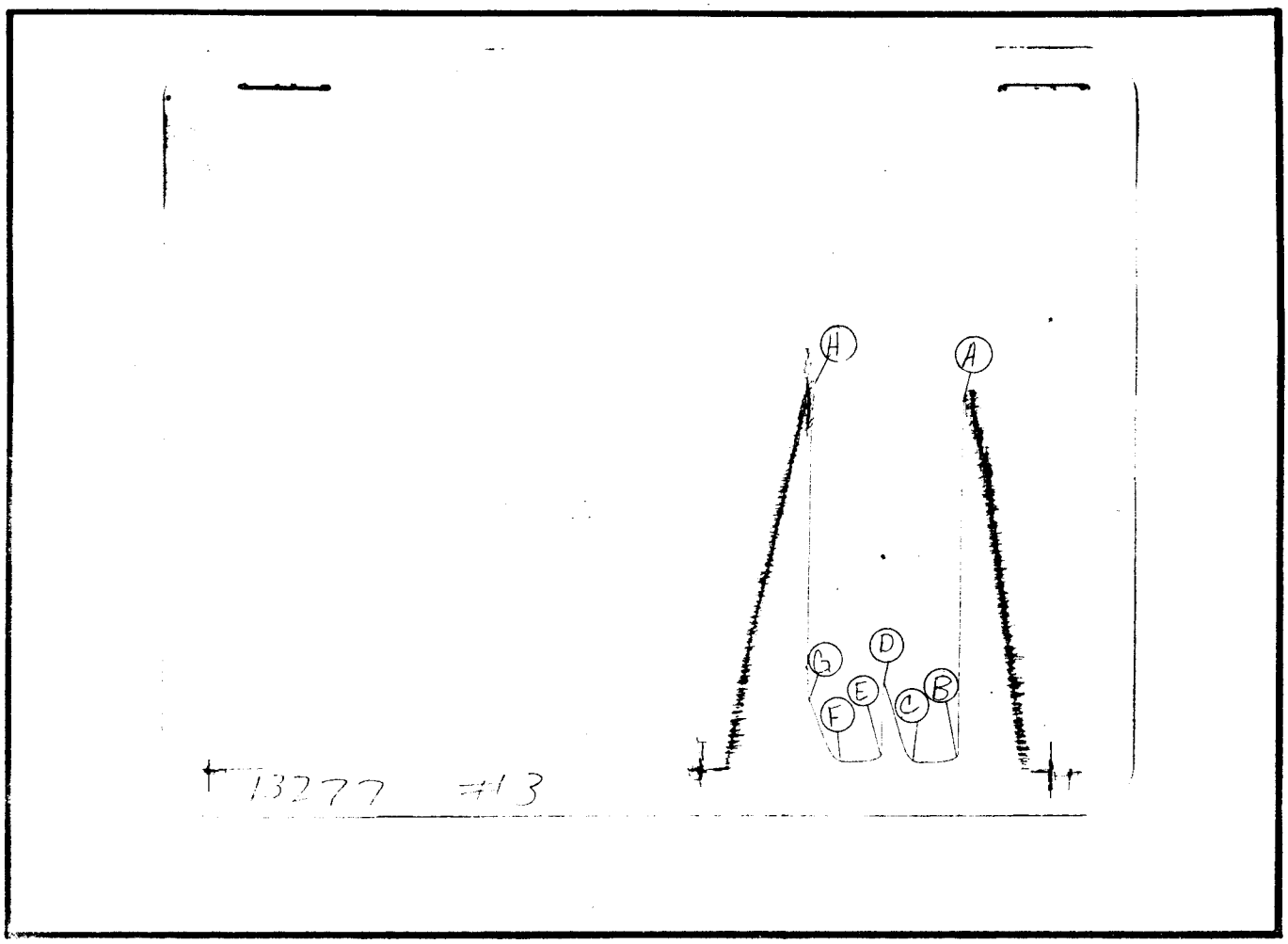
Recovered 12 Feet Of OIL SPECKED MUD. 9,000 P.P.M. CHLORIDES

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment NONE Price of Job $600.00



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2128		PSI
(B)	First Initial Flow Pressure	51		PSI
(C)	First Final Flow Pressure	51		PSI
(D)	Initial Closed-in Pressure	497		PSI
(E)	Second Initial Flow Pressure	51		PSI
(F)	Second Final Flow Pressure	51		PSI
(G)	Final Closed-in Pressure	394		PSI
(H)	Final Hydrostatic Mud	2097		PSI