

15-151-21484

CHENEY TESTING COMPANY, INC.

35-28s-12w

P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Vincent Oil Corporation	Test No.	1
Well Name & Number	Country Estates #1	Zone Tested	Mississippi
Company Address	125 N. Market, Wichita, Kansas	Date	10-1-84
Company Rep.	Larry Friend	Tester	Randy Keesling
Contractor	Wheatstate Drlg. Co.	Elevation	1872 G.L.
Location: Sec.	35 Twp. 28 Rge. 12 Co. Pratt State Kansas	Est. Feet of Pay	

Recorder No. 13770 Type AK-1 Range 4200 PSI

Recorder Depth 4223 Clock # 23859

(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

Mud Weight 9.4 Viscosity 46

Fluid Loss 10

Interval Tested 4172-4230

Anchor Length 59'

Top Packer Depth 4167

Bottom Packer Depth 4172

Total Depth 4231

Drill Pipe Size 4 1/2 X.H.

Wt. Pipe I. D. Ft. Run

Recovery-Total Feet 360

Recovered 360 Feet Of Mud.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Safety Joint

Recorder No. 13769 Type AK-1 Range 4200 PSI

Recorder Depth 4226 Clock # 7062

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 @ 11:45

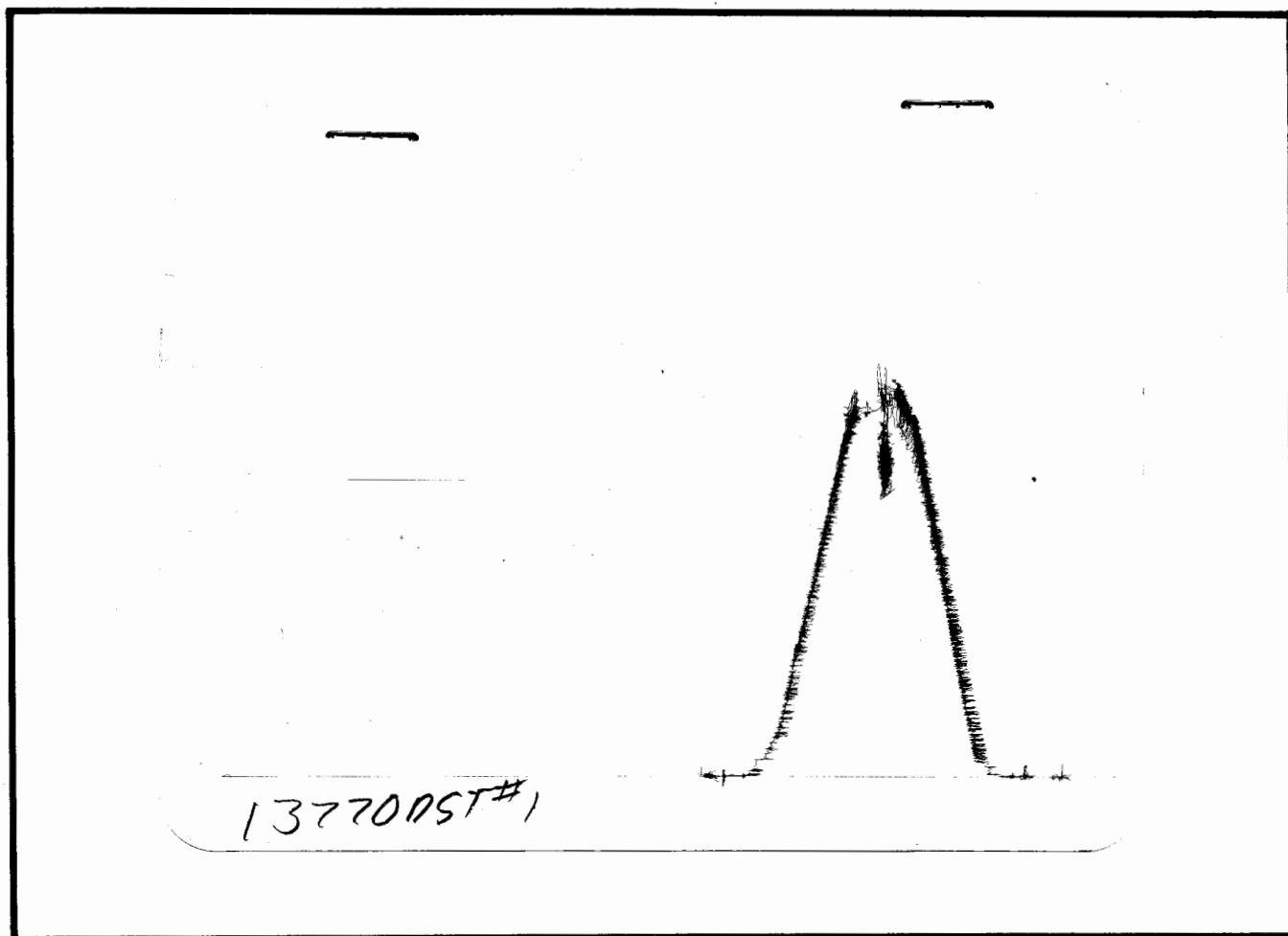
Blow Remarks

No Packer Seat- Misrun

Mud System Chlorides- 19,000 PPM

Drill collars- 2.25 Ft. Run- 120'

Price of Job \$390.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud		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

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DRILL-STEM TEST DATA

Company	Vincent Oil Corp.	Test No.	2
Well Name & Number	Country Estates #1	Zone Tested	Mississippi
Company Address	125 N Market Suite 1110 Wichita Ks.	Date	10/1/84
Company Rep.	Larry Friend	Tester	Randy Keesling
Contractor	Wheatstate Drilling Company	Elevation	1872 GL
Location: Sec. 35	Twp. 28	Rge. 12	Co.Pratt State Ks.
Est. Feet of Pay			

Recorder No. 13770 Type AK-1 Range 4200 PSI

Recorder Depth 4223 Clock # 23859

(A) Initial Hydrostatic Mud 2151 PSI

(B) First Initial Flow Pressure 74 PSI

(C) First Final Flow Pressure 95 PSI

(D) Initial Shut-in Pressure 1405 PSI

(E) Second Initial Flow Pressure 105 PSI

(F) Second Final Flow Pressure 105 PSI

(G) Final Shut-in Pressure 1373 PSI

(H) Final Hydrostatic Mud 2151 PSI

Temperature 128

Mud Weight 9.4 Viscosity 46

Fluid Loss 10

Interval Tested 4154-4231

Anchor Length 77

Top Packer Depth 4149

Bottom Packer Depth 4154

Total Depth 4231

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. Ft. Run

Recovery-Total Feet 210

Recovered 30 Feet Of mud.

Recovered 60 Feet Of 75% mud, 10% oil, 15% gas.

Recovered 120 Feet Of 50% mud, 25% oil, 25% gas.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Safety Joint

Recorder No. 13769 Type AK-1 Range 4200 PSI

Recorder Depth 4226 Clock # 7062

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

Initial Shut-in 60 Mins.

Flow Period 75 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 @ 4:00 PM

Blow Remarks 1st open: Strong blow, off bottom of bucket in 2 minutes.

2nd open: Off bottom in 30 seconds.

Gas to surface in 67 minutes.

Mud Chlorides: 19,000 ppm

Recovery Chlorides: 20,000 ppm

Drill Collars: 2.25 Ft Run: 120

Price of Job \$735.00

Vincent Oil Corp.
Country Estates #1
Test #2

INITIAL SHUT-IN

=====

RECORDER NO: 13770 DEPTH: 4231 FT.
INITIAL FLOW TIME (T): 30 MIN.

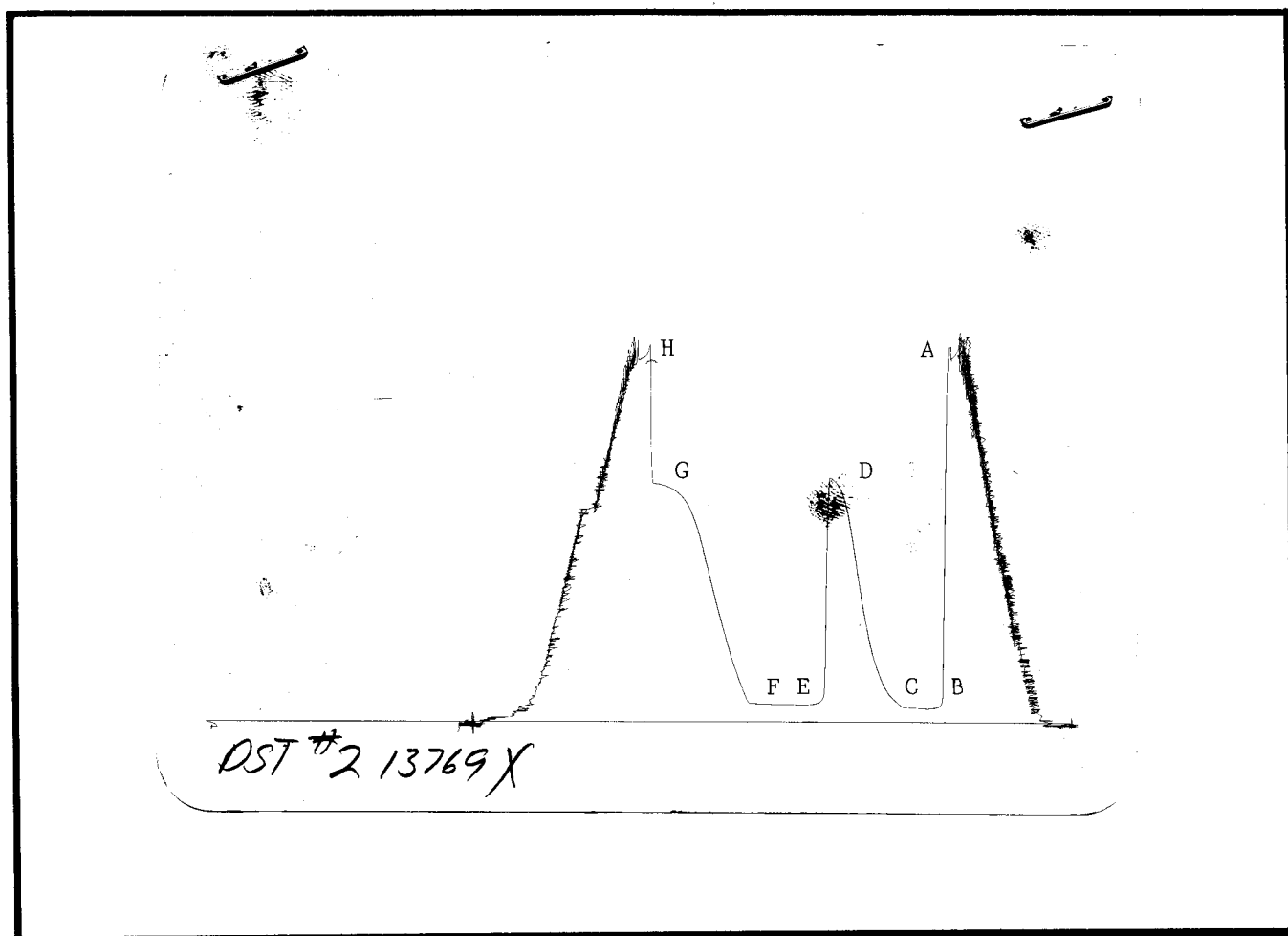
DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	105.8
5	0.845	141.8
10	0.602	192.6
15	0.477	279.3
20	0.398	386.2
25	0.342	526.2
30	0.301	923.4
35	0.269	1173.9
40	0.243	1320.6
45	0.222	1373.0
50	0.204	1397.1
55	0.189	1423.3

FINAL SHUT-IN

=====

RECORDER NO: 13770 DEPTH: 4231 FT.
TOTAL FLOW TIME: 90 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(P SIG)
0	0.000	127.0
5	1.279	154.5
10	1.000	260.3
15	0.845	372.5
20	0.740	497.3
25	0.663	622.6
30	0.602	766.2
35	0.553	924.4
40	0.512	1062.8
45	0.477	1170.8
50	0.447	1250.4
55	0.421	1295.5
60	0.398	1331.1
65	0.377	1348.9
70	0.359	1363.6
75	0.342	1381.4



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2151	PSI
(B) First Initial Flow Pressure	74	PSI
(C) First Final Flow Pressure	95	PSI
(D) Initial Closed-in Pressure	1405	PSI
(E) Second Initial Flow Pressure	105	PSI
(F) Second Final Flow Pressure	105	PSI
(G) Final Closed-in Pressure	1373	PSI
(H) Final Hydrostatic Mud	2151	PSI

GAS FLOW REPORT

Date 10/1/84 Ticket 9671 Company Vincent Oil Corp.
 Well Name and No. Country Estates #1 Dst No. 2 Interval Tested 4154-4231
 County Pratt State Ks. Sec. 35 Twp. 28 Rg. 12

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
4:00	Tool Open					
4:30	30					

SECOND FLOW						
5:30	Tool Open					
6:07	67	Gas to surface				
6:10	70	3" of water			½" orifice	2.92 MCF/DAY
6:15	75	9" of water			½" orifice	5.05 MCF/DAY
6:20	80	12" of water			½" orifice	5.86 MCF/DAY
6:25	85	12" of water			½" orifice	5.86 MCF/DAY
6:30	90	12" of water			½" orifice	5.86 MCF/DAY

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure steel gas bottles. Cheney Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Cheney Testing Co., Inc. within thirty (30) days free of charge or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½ % per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

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

FOR: VINCENT OIL CORP.
COUNTRY ESTATES #1 DST # 2
SEC35-28S-12W FORMATION: MISSISSIPPI
PRATT COUNTY, KANSAS ELEVATION: 1872 KB

TEST PARAMETERS

TEST INTERVAL: 4154 - 4231	EST PAY: 8
TIME INTERVAL: 30 - 55 - 60 - 75	VISCOSITY OF FLUID: 2
INITIAL FLOW PRESS: 92.1- 105.8	HOLE SIZE: 7.875
FINAL FLOW PRESS: 121.7- 127.0	D.C. CAPACITY:0.00492
SHUT-IN PRESS(I-F):1423.3-1381.4	W.P. CAPACITY:0.00708
BOTTOM HOLE TEMPERATURE: 128	D.P. CAPACITY:0.01402
TOTAL FEET OF RECOVERY: 210	TOTAL BARRELS RECOVERY: 1.8517

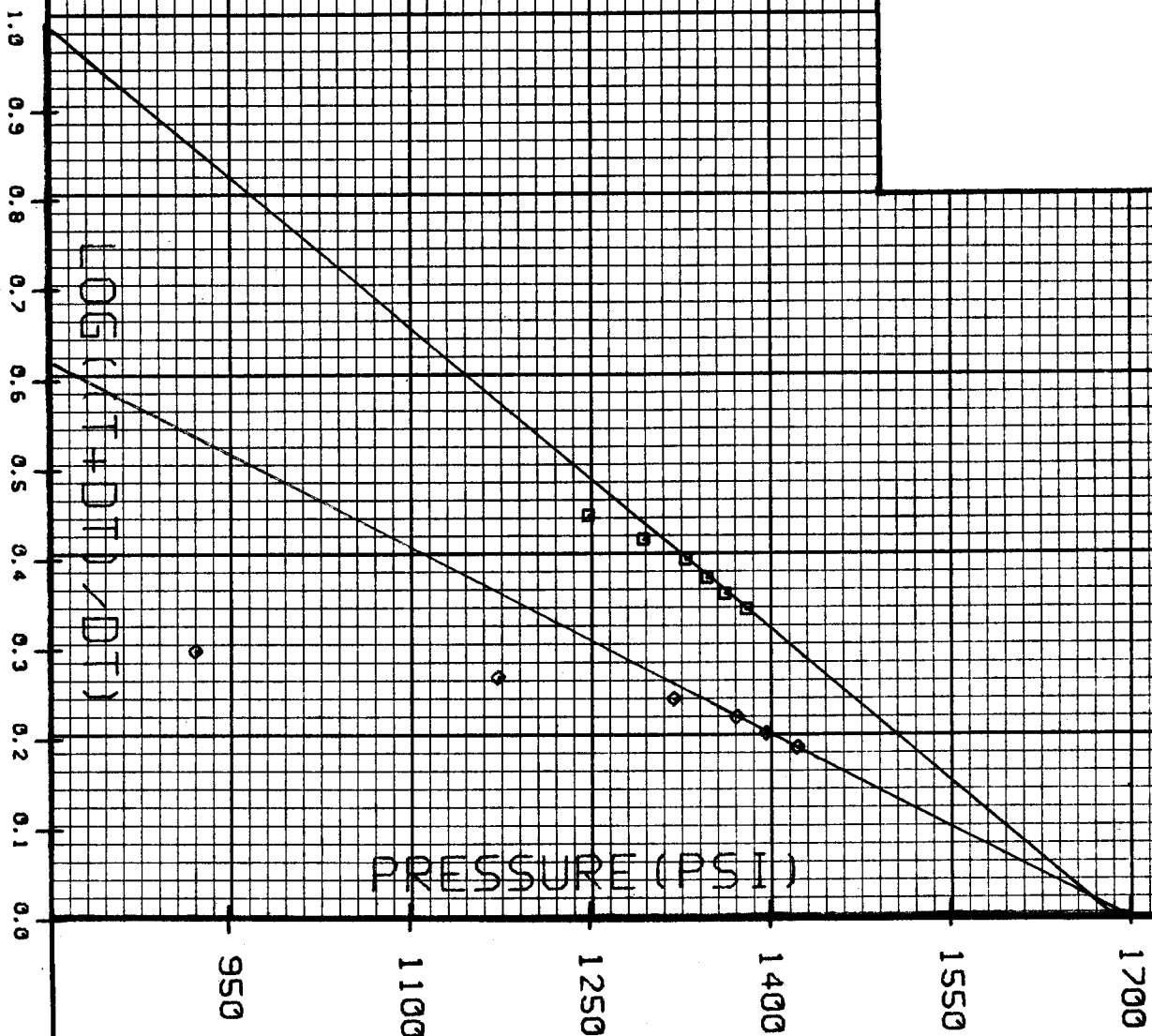
EXTRAPOLATED INITIAL SHUT-IN PRESSURE (PSI): 1696
SLOPE (PSI-CYCLE): 1436 POINTS USED: 3

EXTRAPOLATED FINAL SHUT-IN PRESSURE (PSI): 1683
SLOPE (PSI-CYCLE): 874 POINTS USED: 4

CALCULATIONS

AVERAGE PRODUCTION RATE (B/D)	: 29.63
TRANSMISSIBILITY (MD-FT/CP)	: 5.51
PERMEABILITY (MD)	: 1.38
PRODUCTIVITY INDEX (B/D/PSI)	: 0.0176
DAMAGE RATIO	: 0.326
APPROXIMATE RADIUS OF INVESTIGATION (FT)	: 11.1
DRAWDOWN FACTOR (%)	: 0.767
POTENTIOMETRIC SURFACE (FT)	:1543.88

HORNER PLOT
 VINCENT OIL CORP.
 COUNTRY ESTATES #1
 DST # 2 DEPTH: 4231
 RECORDER NO. 13770
 INITIAL SHUT-IN: $\diamond$
 FINAL SHUT-IN: $\square$



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DRILL-STEM TEST DATA

Company	Vincent Oil Corp.	Test No.	3
Well Name & Number	Country Estates #1	Zone Tested	Viola
Company Address	125 N Market Suite 1110 Wichita Ks.	Date	10/3/84
Company Rep.	Larry Friend	Tester	Randy Keesling
Contractor	Wheatstate Drilling	Elevation	1872 GL
Location: Sec. 35 Twp. 28 Rge. 12 Co. Pratt State Ks.	Est. Feet of Pay		

Recorder No. 13770 Type AK-1 Range 4200 PSI

Recorder Depth 4441 Clock # 23859

(A) Initial Hydrostatic Mud 2310 PSI

(B) First Initial Flow Pressure 52 PSI

(C) First Final Flow Pressure 52 PSI

(D) Initial Shut-in Pressure 1056 PSI

(E) Second Initial Flow Pressure 63 PSI

(F) Second Final Flow Pressure 63 PSI

(G) Final Shut-in Pressure 1215 PSI

(H) Final Hydrostatic Mud 2310 PSI

Temperature 131

Mud Weight 9.4 Viscosity 46

Fluid Loss 10.8

Interval Tested 4428-4449

Anchor Length 21

Top Packer Depth 4423

Bottom Packer Depth 4428

Total Depth 4449

Drill Pipe Size 4½ Xh

Wt. Pipe I. D. Ft. Run

Recovery-Total Feet 125

Recovered 1800 Feet Of gas in pipe.

Recovered 5 Feet Of mud.

Recovered 60 Feet Of oil speck gassey mud, 75% mud, 20% gas, 5% oil.

Recovered 60 Feet Of gassy oil cut mud, 35% oil, 20% mud, 10% water.

Recovered Feet Of

Recovered Feet Of

Extra Equipment Safety Joint Price of Job \$735.00

Recorder No. 13769 Type AK-1 Range 4200 PSI

Recorder Depth 4444 Clock # 7062

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

Initial Shut-in 45 Mins.

Flow Period 45 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 @ 12:55 AM

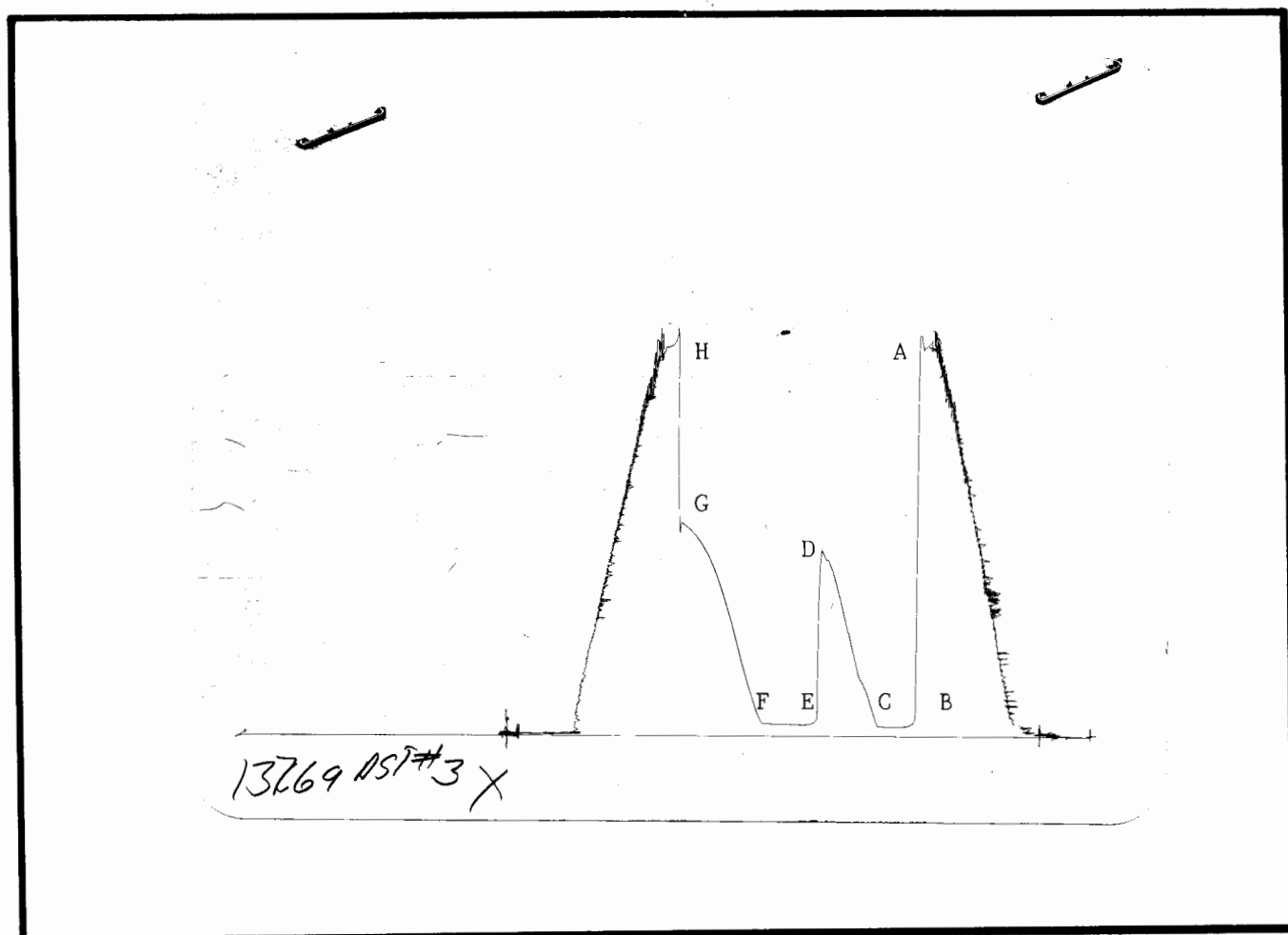
Blow Remarks 1st open: Strong blow, off bottom in 5 minutes.

2nd open: Off bottom in 30 seconds.

Mud chlorides: 20,000

Recovery Chlorides: 22,000 ppm

Drill Collars: 2.25 Ft. Run: 120



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2310	PSI
(B) First Initial Flow Pressure	52	PSI
(C) First Final Flow Pressure	52	PSI
(D) Initial Closed-in Pressure	1056	PSI
(E) Second Initial Flow Pressure	63	PSI
(F) Second Final Flow Pressure	63	PSI
(G) Final Closed-in Pressure	1215	PSI
(H) Final Hydrostatic Mud	2310	PSI

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P. O. Box 367

HILL CITY, KANSAS 67642

DRILL-STEM TEST DATA

Company	Vincent Oil Corp.	Test No.	4
Well Name & Number	Country Estates #1	Zone Tested	Simpson
Company Address	125 N Market Suite 1110 Wichita Ks.	Date	10/3/84
Company Rep.	Larry Friend	Tester	Randy Keesling
Contractor	Wheatstate Drilling	Elevation	1872 GL
Location: Sec. 35	Twp. 28	Rge. 12	Co. Pratt State Ks.
Est. Feet of Pay			

Recorder No. 13770 Type AK-1 Range 4200 PSI

Recorder Depth 4518 Clock # 23859

(A) Initial Hydrostatic Mud 2320 PSI

(B) First Initial Flow Pressure 10 PSI

(C) First Final Flow Pressure 10 PSI

(D) Initial Shut-in Pressure 21 PSI

(E) Second Initial Flow Pressure 10 PSI

(F) Second Final Flow Pressure 10 PSI

(G) Final Shut-in Pressure 21 PSI

(H) Final Hydrostatic Mud 2320 PSI

Temperature 130

Mud Weight 9.4 Viscosity 46

Fluid Loss 11.6

Interval Tested 4492-4526

Anchor Length 34

Top Packer Depth 4487

Bottom Packer Depth 4492

Total Depth 4526

Drill Pipe Size 4 1/2 Xh

Wt. Pipe I. D. Ft. Run

Recovery-Total Feet 25

Recovered 25 Feet Of mud.

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Recovered Feet Of

Extra Equipment Safety Joint

Recorder No. 13769 Type AK-1 Range 4200 PSI

Recorder Depth 4521 Clock # 7062

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

Initial Shut-in 45 Mins.

Flow Period 20 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 @ 11:07 PM

Blow Remarks 1st open: Weak blow, 1/4" in bucket, dead in 27 minutes.

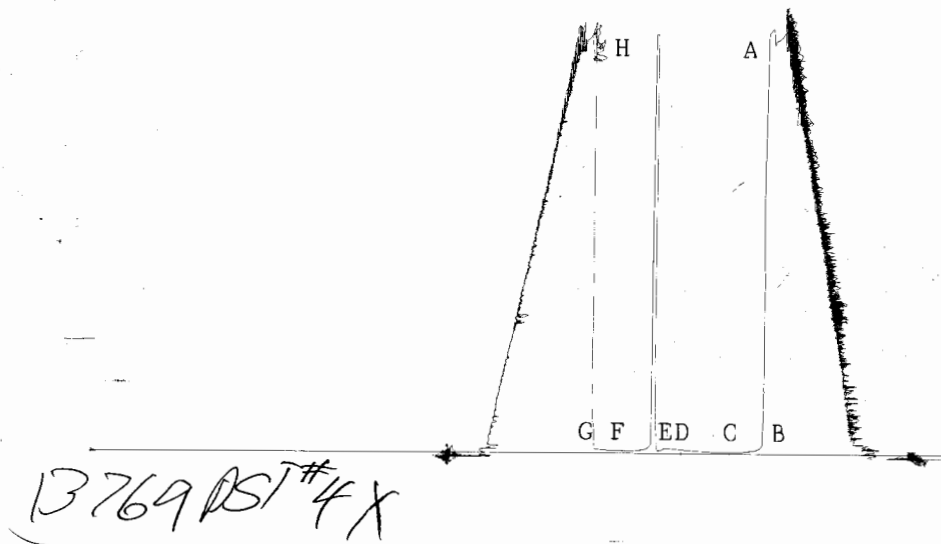
2nd open: No blow, flushed tool, good surge, no blow.

Mud Chlorides: 20,000 ppm

Recovery Chlorides: 21,000 ppm

Drill Collars: 2.25 Ft. Run :120

Price of Job \$735.00



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2320	PSI
(B) First Initial Flow Pressure	10	PSI
(C) First Final Flow Pressure	10	PSI
(D) Initial Closed-in Pressure	21	PSI
(E) Second Initial Flow Pressure	10	PSI
(F) Second Final Flow Pressure	10	PSI
(G) Final Closed-in Pressure	21	PSI
(H) Final Hydrostatic Mud	2320	PSI



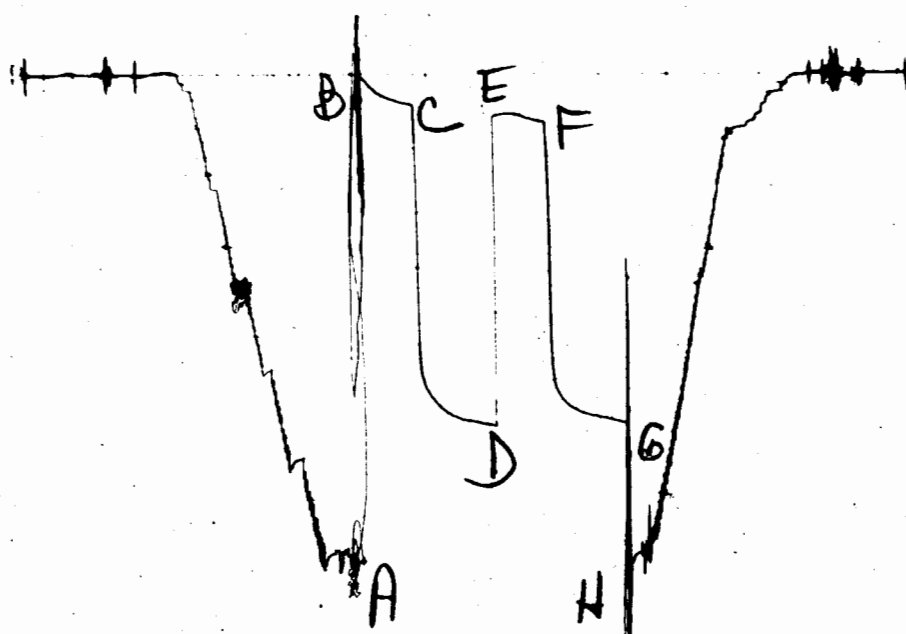
TICKET NO. 84478300

11-OCT-84

PRATT

FORMATION TESTING SERVICE REPORT

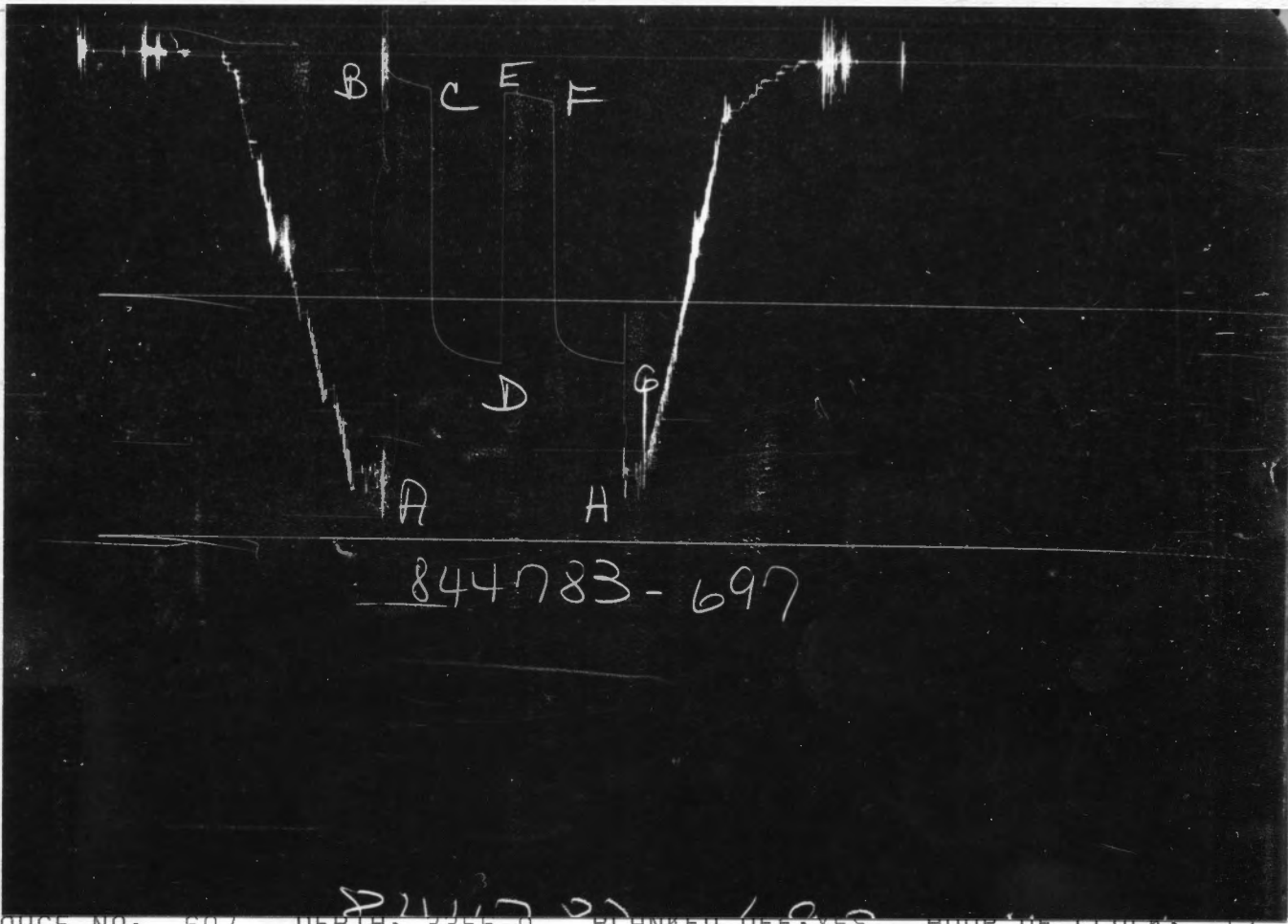
COUNTRY ESTATES		1		5		3341.1 - 3361.1		VINCENT OIL CORPORATION	
LEASE NAME		WELL NO.		TEST NO.		TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG.	35 - 28 - 12	FIELD AREA	COUNTY	PRATT	STATE	KANSAS	PW		



844783 - 1831

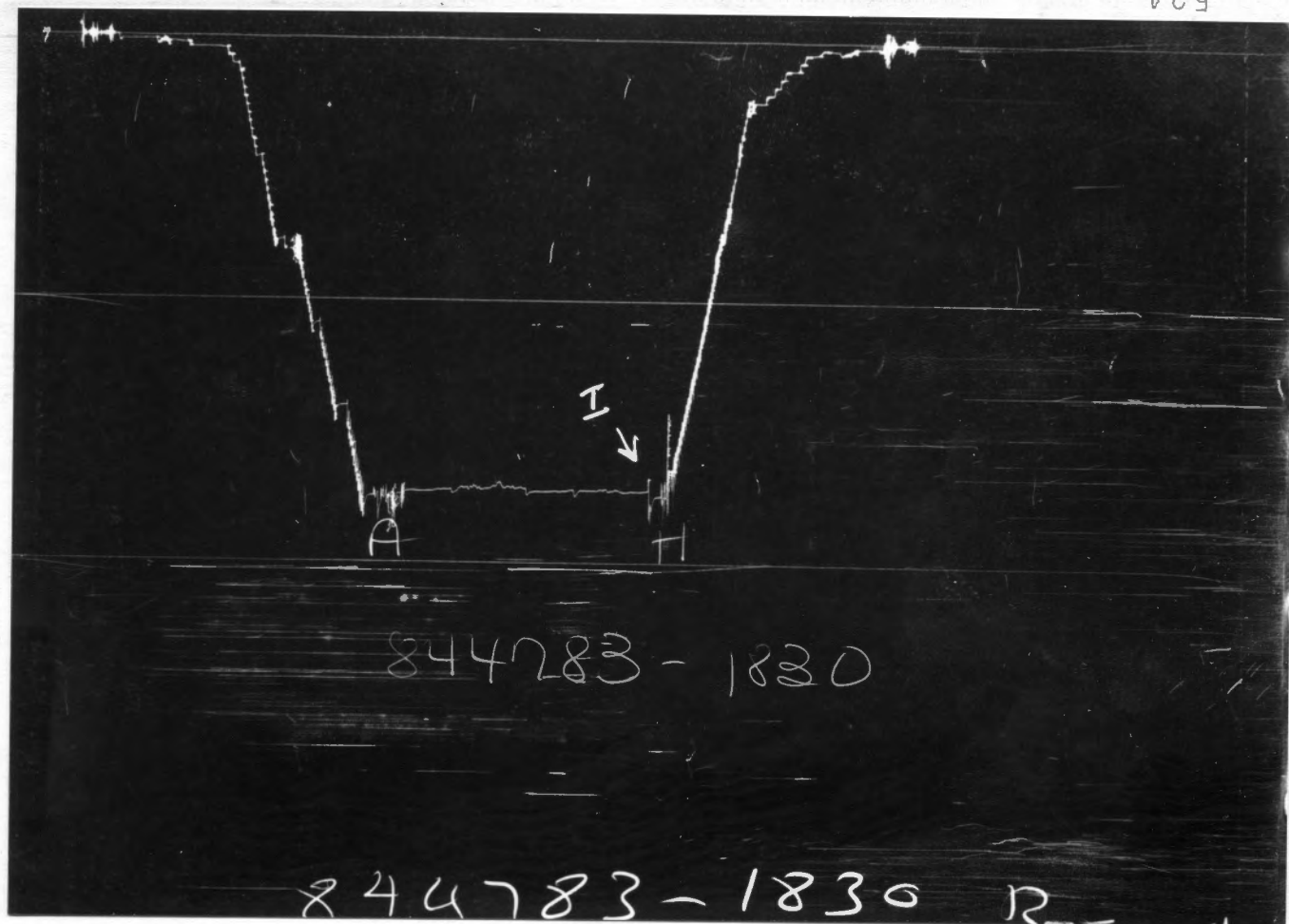
GAUGE NO: 1831 DEPTH: 3324.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1687.9			
B	INITIAL FIRST FLOW		9.0			
C	FINAL FIRST FLOW		109.4	30.0	29.5	F
C	INITIAL FIRST CLOSED-IN		109.4			
D	FINAL FIRST CLOSED-IN		1234.7	45.0	45.4	C
E	INITIAL SECOND FLOW		149.6			
F	FINAL SECOND FLOW		168.9	30.0	29.5	F
F	INITIAL SECOND CLOSED-IN		168.9			
G	FINAL SECOND CLOSED-IN		1225.6	45.0	45.7	C
H	FINAL HYDROSTATIC		1685.3			
I	HYDROSTATIC RELEASE					



GAUGE NO: 697 DEPTH: 3356.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1703	1717.8			
B	INITIAL FIRST FLOW	40	38.4			
C	FINAL FIRST FLOW	136	136.2	30.0	29.5	F
C	INITIAL FIRST CLOSED-IN	136	136.2			
D	FINAL FIRST CLOSED-IN	1250	1258.3	45.0	45.4	C
E	INITIAL SECOND FLOW	136	151.3			
F	FINAL SECOND FLOW	200	184.9	30.0	29.5	F
F	INITIAL SECOND CLOSED-IN	200	184.9			
G	FINAL SECOND CLOSED-IN	1250	1250.6	45.0	45.7	C
H	FINAL HYDROSTATIC	1703	1715.2			
I	HYDROSTATIC RELEASE					



GAUGE NO: 1830 DEPTH: 3412.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1738.0			
B	INITIAL FIRST FLOW			30.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			45.0		C
D	FINAL FIRST CLOSED-IN					
E	INITIAL SECOND FLOW			30.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			45.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC		1733.4			
I	HYDROSTATIC RELEASE		1711.6			

EQUIPMENT & HOLE DATA

FORMATION TESTED: TOPEKA
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 20.0
ALL DEPTHS MEASURED FROM: K.B.
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 4612.0
PACKER DEPTH(S) (ft): 3335, 3341, 3361, 3367
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.50
MUD VISCOSITY (sec): 42
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): @ _____ ft

TICKET NUMBER: 84478300

DATE: 10-5-84 TEST NO: 5

TYPE DST: OFF BTM STRADDLE

HALLIBURTON CAMP:
PRATT

TESTER: L.R. PARKER

WITNESS: L. FRIEND

DRILLING CONTRACTOR:
WHEATSTATE DRILLING COMPANY

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>RECOVERY</u>	<u>@</u> _____ °F	<u>53200</u> ppm
_____	<u>@</u> _____ °F	_____ ppm
_____	<u>@</u> _____ °F	_____ ppm
_____	<u>@</u> _____ °F	_____ ppm
_____	<u>@</u> _____ °F	_____ ppm
_____	<u>@</u> _____ °F	_____ ppm

SAMPLER DATA

Pstg AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 34.0 @ 60°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

1055 FEET OF GAS IN PIPE
20 FEET OF FREE OIL
340 FEET OF GAS AND OIL CUT MUDDY WATER

MEASURED FROM
TESTER VALVE

REMARKS:

GRINDOUT: 12% GAS - 3% OIL - 75% WATER - 10% MUD

TICKET NO: 84478300

CLOCK NO: 26864 HOUR: 12



HALLIBURTON

 SERVICES

GAUGE NO: 1831

DEPTH: 3324.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	9.0			
2	2.0	14.0	5.0		
3	4.0	25.5	11.5		
4	6.0	41.1	15.6		
5	8.0	52.8	11.7		
6	10.0	64.2	11.4		
7	12.0	72.7	8.5		
8	14.0	79.0	6.3		
9	16.0	83.9	4.9		
10	18.0	87.6	3.7		
11	20.0	92.8	5.2		
12	22.0	96.9	4.2		
13	24.0	99.6	2.7		
14	26.0	102.5	2.9		
15	28.0	105.7	3.2		
C 16	29.5	109.4	3.7		
FIRST CLOSED-IN					
C 1	0.0	109.4			
2	1.0	328.2	218.8	0.9	1.500
3	2.0	637.3	527.8	1.8	1.203
4	3.0	927.4	818.0	2.7	1.041
5	4.0	1031.2	921.8	3.5	0.926
6	5.0	1062.3	952.9	4.3	0.840
7	6.0	1088.3	978.9	5.0	0.771
8	7.0	1101.5	992.0	5.6	0.718
9	8.0	1112.2	1002.8	6.3	0.672
10	9.0	1123.2	1013.8	6.9	0.631
11	10.0	1133.1	1023.6	7.5	0.598
12	12.0	1147.8	1038.3	8.5	0.539
13	14.0	1162.6	1053.1	9.5	0.493
14	16.0	1174.4	1065.0	10.4	0.455
15	18.0	1185.2	1075.7	11.2	0.422
16	20.0	1192.1	1082.7	11.9	0.394
17	22.0	1198.2	1088.8	12.6	0.369
18	24.0	1204.3	1094.8	13.2	0.348
19	26.0	1209.9	1100.5	13.8	0.330
20	28.0	1213.1	1103.7	14.4	0.313
21	30.0	1215.8	1106.4	14.9	0.297
22	35.0	1220.7	1111.3	16.0	0.266
23	40.0	1227.1	1117.7	17.0	0.240
D 24	45.4	1234.7	1125.3	17.9	0.218
SECOND FLOW					
E 1	0.0	149.6			
2	2.0	141.5	-8.1		
3	4.0	139.4	-2.0		
4	6.0	137.6	-1.9		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
5	8.0	137.6	0.0		
6	10.0	138.7	1.1		
7	12.0	140.6	1.9		
8	14.0	143.3	2.7		
9	16.0	146.5	3.1		
10	18.0	150.9	4.4		
11	20.0	155.0	4.1		
12	22.0	157.9	2.9		
13	24.0	160.6	2.7		
14	26.0	162.8	2.2		
15	28.0	165.3	2.5		
F 16	29.5	168.9	3.6		
SECOND CLOSED-IN					
F 1	0.0	168.9			
2	1.0	261.9	93.0	1.0	1.792
3	2.0	388.4	219.5	2.0	1.476
4	3.0	660.3	491.4	2.8	1.318
5	4.0	949.0	780.1	3.8	1.197
6	5.0	1058.7	889.8	4.6	1.107
7	6.0	1088.0	919.1	5.4	1.038
8	7.0	1108.1	939.2	6.3	0.973
9	8.0	1120.4	951.5	7.1	0.921
10	9.0	1130.6	961.7	7.8	0.878
11	10.0	1138.9	970.0	8.6	0.839
12	12.0	1153.7	984.8	10.0	0.772
13	14.0	1164.2	995.3	11.3	0.718
14	16.0	1172.7	1003.8	12.6	0.671
15	18.0	1179.2	1010.3	13.8	0.632
16	20.0	1186.1	1017.2	15.0	0.596
17	22.0	1190.0	1021.1	16.0	0.566
18	24.0	1194.1	1025.2	17.1	0.538
19	26.0	1198.5	1029.6	18.0	0.515
20	28.0	1200.4	1031.5	19.0	0.492
21	30.0	1202.6	1033.7	19.9	0.472
22	35.0	1209.3	1040.4	21.9	0.429
23	40.0	1216.7	1047.8	23.8	0.394
G 24	45.7	1225.6	1056.7	25.7	0.360

REMARKS:

TICKET NO: 84478300
CLOCK NO: 17482 HOUR: 12



GAUGE NO: 697
DEPTH: 3356.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	38.4			
2	2.0	52.6	14.2		
3	4.0	67.9	15.3		
4	6.0	79.9	12.0		
5	8.0	92.4	12.5		
6	10.0	98.2	5.8		
7	12.0	103.2	5.0		
8	14.0	107.6	4.4		
9	16.0	112.0	4.4		
10	18.0	115.8	3.8		
11	20.0	119.4	3.6		
12	22.0	122.7	3.3		
13	24.0	126.6	3.9		
14	26.0	129.9	3.3		
15	28.0	133.1	3.2		
C 16	29.5	136.2	3.1		
FIRST CLOSED-IN					
C 1	0.0	136.2			
2	1.0	304.5	168.3	1.0	1.483
3	2.0	753.1	616.9	1.9	1.199
4	3.0	1048.9	912.7	2.8	1.030
5	4.0	1097.6	961.4	3.5	0.920
6	5.0	1123.1	986.9	4.3	0.840
7	6.0	1139.7	1003.5	5.0	0.771
8	7.0	1153.8	1017.6	5.7	0.717
9	8.0	1164.4	1028.2	6.3	0.673
10	9.0	1173.8	1037.6	6.9	0.631
11	10.0	1182.4	1046.2	7.5	0.596
12	12.0	1194.1	1057.9	8.5	0.540
13	14.0	1203.5	1067.3	9.5	0.492
14	16.0	1210.6	1074.4	10.4	0.455
15	18.0	1217.7	1081.5	11.2	0.421
16	20.0	1224.0	1087.8	11.9	0.394
17	22.0	1228.3	1092.1	12.6	0.370
18	24.0	1232.5	1096.3	13.2	0.349
19	26.0	1236.2	1100.0	13.8	0.330
20	28.0	1239.3	1103.1	14.4	0.313
21	30.0	1242.3	1106.1	14.9	0.297
22	35.0	1248.3	1112.1	16.0	0.266
23	40.0	1254.1	1117.9	17.0	0.240
D 24	45.4	1258.3	1122.1	17.9	0.218
SECOND FLOW					
E 1	0.0	151.3			
2	2.0	149.7	-1.6		
3	4.0	149.7	0.0		
4	6.0	150.6	0.9		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
5	8.0	152.6	2.0		
6	10.0	155.7	3.1		
7	12.0	158.1	2.4		
8	14.0	162.0	3.9		
9	16.0	164.4	2.4		
10	18.0	167.6	3.2		
11	20.0	170.1	2.5		
12	22.0	172.7	2.6		
13	24.0	176.2	3.5		
14	26.0	179.6	3.4		
15	28.0	181.9	2.3		
F 16	29.5	184.9	3.0		
SECOND CLOSED-IN					
F 1	0.0	184.9			
2	1.0	388.7	203.8	1.0	1.764
3	2.0	715.8	530.9	1.9	1.486
4	3.0	1011.3	826.4	2.8	1.320
5	4.0	1104.1	919.2	3.7	1.202
6	5.0	1135.2	950.3	4.6	1.106
7	6.0	1147.7	962.8	5.5	1.032
8	7.0	1161.4	976.5	6.2	0.975
9	8.0	1170.8	985.9	7.1	0.921
10	9.0	1179.6	994.7	7.8	0.878
11	10.0	1186.0	1001.1	8.6	0.838
12	12.0	1195.8	1010.9	9.9	0.773
13	14.0	1203.6	1018.7	11.3	0.716
14	16.0	1210.4	1025.5	12.6	0.670
15	18.0	1216.1	1031.2	13.8	0.631
16	20.0	1221.4	1036.5	14.9	0.597
17	22.0	1225.7	1040.8	16.0	0.566
18	24.0	1228.7	1043.8	17.1	0.538
19	26.0	1232.1	1047.2	18.1	0.514
20	28.0	1235.1	1050.2	19.0	0.493
21	30.0	1237.4	1052.5	19.9	0.472
22	35.0	1242.5	1057.6	22.0	0.429
23	40.0	1247.2	1062.3	23.8	0.393
G 24	45.7	1250.6	1065.7	25.7	0.360

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3157.0	
3		DRILL COLLARS.....	6.250	2.250	30.0	
50		IMPACT REVERSING SUB.....	6.000	2.750	1.0	3187.0
3		DRILL COLLARS.....	6.250	2.250	119.0	
5		CROSSOVER.....	6.000	2.250	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	5.750	3.750	5.0	
12		DUAL CIP VALVE.....	5.000	0.870	5.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3322.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	3324.0
16		VR SAFETY JOINT.....	5.000	1.000	3.0	
5		CROSSOVER.....	5.000	0.750	1.0	
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3335.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3341.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	11.0	
5		CROSSOVER.....	5.000	0.750	1.0	
80		AP RUNNING CASE.....	5.000	2.250	4.0	3356.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3361.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3367.0
5		CROSSOVER.....	5.000	2.000	1.0	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	30.0	
90		SIDE WALL ANCHOR.....	6.750	1.620	6.0	3404.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3412.0
TOTAL DEPTH					4612.0	

EQUIPMENT DATA