

Computer Inventoried

Vintage Petroleum
Lease Watts 28-1

28-33s-12w

L. Watts #1
Eng well FILE
OK

		Hr.	Min.
4/5/91	Eve Tour		
	Jet and clean #2 for displacement		15
	Clean suction pit		8
	Jet. #1 pit and clean for displacement		30
4/6/91	Day Tour		
	C.F.S. @ 3870	1	13
	C.F.S. @ 3914	2	55
	Short Trip		50
	C.T.C.H. @ 3914		10
	Eve Tour		
	C.T.C.H. @ 3914		50
	Trip Out w Bit & Strap Pipe & Survey	1	50
	Make up Tool	1	
	Go in Hole w/Tool		50
	DST #1 3898-3914	3	30
4/7/91	Morn Tour		
	Trip out w/Tool & Lay Down Same	1	45
	Trip in w/Bit	1	30
	Jet Water off Pits & C.T.C.H.		45
	C.F.S. @ 3981		12
	Day Tour		
	C.F.S. @ 3981	1	
	Trip Out s/Bit	1	45
	Make up Tool & Go in Hole	1	30
	DST #2 3948-3981	3	30
	Trip Out w/Tool		15
	Eve Tour		
	Trip Out w/Tool - Drop Bar. Displace		
	Salt Water & Lay Down Tool	2	15
	Trip in w/Bit & Jet Water off Pits	2	15
4/8/91	Morn Tour		
	Jet Hole in Pit to Add Tank of Mud		7
	Day Tour		
	Jet #1 Pit		7
4/9/91	Morn Tour		
	C.F.S. @ 4556	1	
	Short Trip		45
	C.T.C.H.		60
	Trip Out w/Bit	1	10
	Day Tour		
	Trip Out w/Bit	1	
	Make up Tool & Go in Hole	2	
	DST #3 4536-4556	2	45
	Trip Out w/Tool & Lay Down Same	1	45
	Trip in w/Bit		30
	Eve Tour		
	Trip in w/Bit & Jet Water off Pits	1	45
4/10/91	Morn Tour		
	Jet #2 Pit		8
	Eve Tour		
	Jet #1 Pit		10
	Fill Premix		12
4/11/91	Morn Tour		
	C.F.S. @ 5067		53

RECEIVED
STATE CORPORATION COMMISSION

OCT 16 1991

CONSERVATION DIVISION
Wichita Falls

28-33s-12w

4/11/91	Day Tour		
	C.F.S. @ 5100 RTD	1	
	Short Trip 27 Stands	1	30
	C.T.C.H. for Log @ 5100	1	
	Survey		15
	Trip Out w/Bit	2	30
	Logging	1	15
	Eve Tour		
	Logging	6	
	Trip in w/Bit	1	45
4/12/91	Morn Tour		
	Trip in w/Bit		15
	C.T.C.H.	2	15
	Trip Out w/Bit	2	
	Wait on Tester	1	45
	Make up Tool & Go in Hole	1	45
	Day Tour		
	Go in Hole w/Toole		30
	DST #4 Straddle Test. MisRun (Pkr. Failure)		45
	Out w/Tool & Lay Down Same	1	45
	Wait On Hook Wall Tool	3	
	Make up Tool & Go in Hole	1	30
	D.S.T. #5 Hook Wall MisRun		30
	Eve Tour		
	D.S.T. #5 Hook Wall MisRun		45
	Out w/Tool & Change Anchor	3	
	Go in Hole w/Tool	1	30
	DST #6 Hook Wall	2	45
4/13/91	Morn Tour		
	DST #6	1	15
	Out w/Tool & Dump Salt Water	2	15
	Wait on Orders	1	30
	Go in Hole w/Drill Pipe Open Ended to Plug Hole	1	30
	Circ. to Equalize Mud System	1	
	Set Bottom Plug		30

Started laying down drill pipe @ 7:00 a.m. 4/13/91

Hole plugged @ 1:30 p.m. by B. J. Titan

50 sx @ 5050'
 50 sx @ 550'
 50 sx @ 308'
 10 sx @ 40'
 15 sx in Rathole
 60-40 Pozmix 6% Gel.

Plugging order from Glenn Barlow - Dodge City KCC Office

5100 - 5 KB = 5095 @ \$5.50/ft = \$28,022.50
 93 hrs 25 min. @ \$160.00/hr. = \$14,920.00
 \$42,942.50

RECEIVED
 STATE CORPORATION COMMISSION

OCT 16 1991

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 1 Date 4/6/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1544
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 3898-3914
Anchor Length 16
Top Packer Depth 3893
Bottom Packer Depth 3898
Total Depth 3914

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 8.9 lb / gal. Viscosity 39 Filtrate 18.4

Tool Open @ 7:28 PM Initial Blow (SLID TOOL 4' WHEN OPENED)-STRONG BLOW-TO BOTTOM
OF BUCKET IN 1 MINUTE-(2" BLOW BACK ON SHUTIN)
Final Blow STRONG BLOW-TO BOTTOM OF BUCKET IMMEDIATELY-(NO BLOW
BACK ON FINAL SHUTIN)

Recovery — Total Feet 30 Flush Tool? NO

Rec. 1180 Feet of GAS IN PIPE

Rec. 30 Feet of GASSY MUD W/ OIL SPECKS IN TOOL

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. 106 Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1688.4 PSI Ak1 Recorder No. 24174 Range 3350

(B) First Initial Flow Pressure 26.9 PSI @ (depth) 3913 w/Clock No. 17639

(C) First Final Flow Pressure 26.9 PSI AK1 Recorder No. 13277 Range 4125

(D) Initial Shut-In Pressure 637.2 PSI @ (depth) 3900 w/Clock No. 27501

(E) Second Initial Flow Pressure 29 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 29 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 936.4 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1622.5 PSI Initial Shut-In 60 Final Shut-In 60

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 600

RM WATTS #28-1DST #1
INITIAL SHUTIN

30 INITIAL FLOW TIME

Slope
P *

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	33.1	11	1.041	33.1
6	35.2	6	0.778	2.1
9	47.7	4	0.637	12.5
12	66.3	4	0.544	18.6
15	82.9	3	0.477	16.6
18	109.9	3	0.426	27.0
21	139.0	2	0.385	29.1
24	143.1	2	0.352	4.1
27	188.8	2	0.325	45.7
30	226.1	2	0.301	37.3
33	263.4	2	0.281	37.3
36	300.8	2	0.263	37.4
39	356.8	2	0.248	56.0
42	379.6	2	0.234	22.8
45	410.7	2	0.222	31.1
48	487.5	2	0.211	76.8
51	522.5	2	0.201	35.0
54	573.7	2	0.192	51.2
57	594.2	2	0.184	20.5
60	637.2	2	0.176	43.0

RM WATTS #28-1DST #1
FINAL SHUTIN

90 TOTAL FLOW TIME

Slope
P *

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	31.1	31	1.491	31.1
6	114.1	16	1.204	83.0
9	186.7	11	1.041	72.6
12	257.2	9	0.929	70.5
15	313.2	7	0.845	56.0
18	379.6	6	0.778	66.4
21	412.8	5	0.723	33.2
24	477.1	5	0.677	64.3
27	508.2	4	0.637	31.1
30	565.5	4	0.602	57.3
33	604.5	4	0.571	39.0
36	659.8	4	0.544	55.3
39	690.5	3	0.520	30.7
42	729.5	3	0.497	39.0
45	774.5	3	0.477	45.0
48	801.2	3	0.459	26.7
51	834	3	0.442	32.8
54	856.5	3	0.426	22.5
57	899.5	3	0.411	43.0
60	924.1	3	0.398	24.6
63	936.4	2	0.385	12.3

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

No 3708

Test Ticket

Well Name & No. <u>R M Watts #28-1</u>	Test No. <u>1</u>	Date <u>4-6-91</u>
Company <u>Vintage Petroleum, Inc</u>	Zone Tested <u>LKL - Iatan</u>	
Address <u>4200 One Williams Center Tulsa OK</u>	Elevation <u>1544</u>	
Co. Rep./Geo. <u>Chris Hughes</u>	Cont. <u>Val Leary</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33s</u>	Rge. <u>12w</u> Co. <u>Barber</u> State <u>Ks</u>
No. of Copies <u>5</u>	Distribution Sheet _____	Yes <u>X</u> No _____ Turnkey _____ Yes <u>X</u> No _____ Evaluation _____

Interval Tested 3898-3914 Drill Pipe Size 9 1/2 XA
 Anchor Length 16 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3893 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3898 Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 3914 Drill Collar — 2.25 Ft. Run
 Mud Wt. 8.9 lb/gal. Viscosity 37 Filtrate 18.4 ?

Tool Open @ 7:28 PM Initial Blow (slid tool 4' when opened) strong blow - to bottom of bucket in minute (2" blow back on shut in)
 Final Blow strong blow - to bottom of bucket immediately - (no blow back on final shut in)

Recovery — Total Feet 30 Feet of Gas In Pipe 1180 Flush Tool? no

Rec.	Feet Of	%gas	%oil	%water	%mud
<u>30</u>	<u>gassy mud</u>				
	<u>(oil specks in tool)</u>				

BHT 106 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1682 PSI AK1 Recorder No. 24174 Range 415 3350

(B) First Initial Flow Pressure 16 PSI @ (depth) 3913 W/Clock No. 17639

(C) First Final Flow Pressure 16 PSI AK1 Recorder No. 13277 Range 4125

(D) Initial Shut-In Pressure 628 PSI @ (depth) 3900 W/Clock No. 27501

(E) Second Initial Flow Pressure 16 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 16 PSI @ (depth) _____ W/Clock No. _____

(G) Final Shut-In Pressure 845 PSI Initial Opening 30 Test 550

(H) Final Hydrostatic Mud 1623 PSI Initial Shut-In 60 Jars _____

Final Flow 60 Safety Joint 50

Final Shut-In 60 Straddle _____

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ 600

Approved By Gary Rowe

Our Representative Paul Simpson

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 2 Date 4/7/91
Company VINTAGE PETROLEUM INC Zone Tested LANSING
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1544
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 3948-3981
Anchor Length 33
Top Packer Depth 3943
Bottom Packer Depth 3948
Total Depth 3981

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.6 lb / gal. Viscosity 46 Filtrate 16.4

Tool Open @ 11:15 AM Initial Blow STRONG BLOW-TO BOTTOM OF BUCKET IMMEDIATELY-(GAS
TO SURFACE 18 MINUTES INTO ISI

Final Blow GAUGING GAS-5.86 MCF/D AT END OF FINAL FLOW
7.88 MCF/DAY AT END OF FINAL SHUTIN

Recovery - Total Feet 2540 Flush Tool? NO

Rec. 2540 Feet of GSY MUDDY SALT WATER-NO SHOW OF OIL

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 118 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.169 @ 90 °F Chlorides 32000 ppm Recovery Chlorides 15200 ppm System

(A) Initial Hydrostatic Mud 1915.6 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 195 PSI @ (depth) 3951 w/Clock No. 17652

(C) First Final Flow Pressure 674.1 PSI AK1 Recorder No. 24174 Range 3350

(D) Initial Shut-In Pressure 1440.5 PSI @ (depth) 3980 w/Clock No. 25828

(E) Second Initial Flow Pressure 774.5 PSI AK1 Recorder No. _____ Range _____

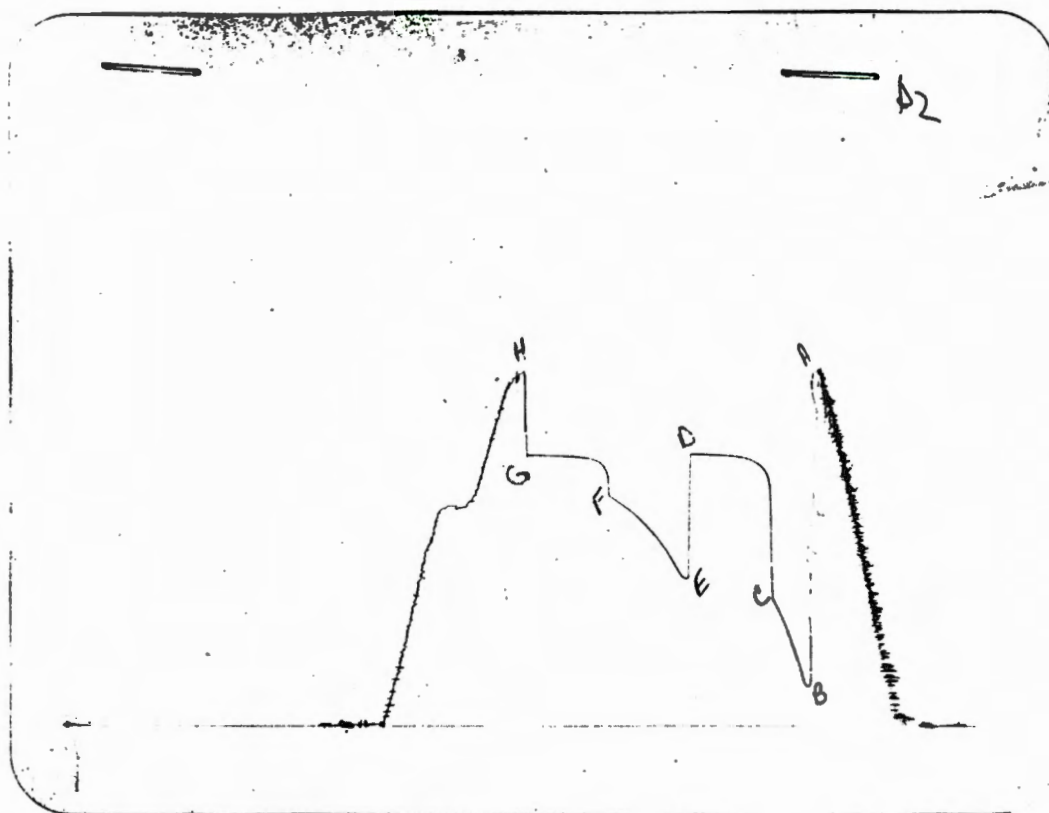
(F) Second Final Flow Pressure 1215.1 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 1442.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1894.5 PSI Initial Shut-In 60 Final Shut-In 60

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 635



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1907	1915.6
(B) FIRST INITIAL FLOW PRESSURE	239	195
(C) FIRST FINAL FLOW PRESSURE	653	674.1
(D) INITIAL CLOSED-IN PRESSURE	1448	1440.5
(E) SECOND INITIAL FLOW PRESSURE	770	774.5
(F) SECOND FINAL FLOW PRESSURE	1213	1215.1
(G) FINAL CLOSED-IN PRESSURE	1448	1442.6
(H) FINAL HYDROSTATIC MUD	1890	1894.5

BARBER KANSAS

[illegible][illegible]

- .7785797 (Z)

INITIAL FLOW

RECORDER # 13277

DST #2

DT(MIN)	PRESSURE	<> PRESSURE
0	195	195
3	207.4	12.39999
6	290.4	83
9	352.7	62.30002
12	396.2	43.5
15	473	76.79999
18	528.6	55.59998
21	596.3	67.70001
24	674.1	77.79999

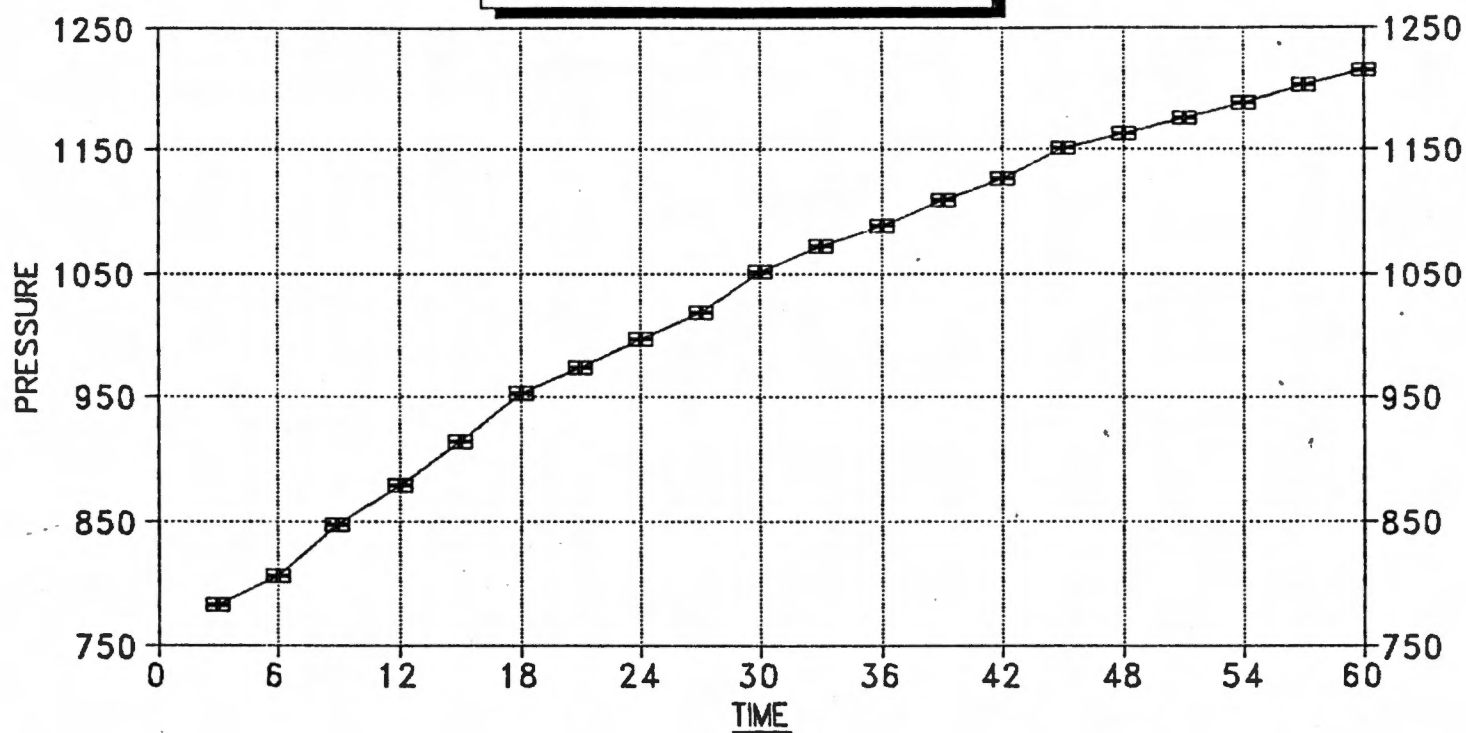
FINAL FLOW

RECORDER # 13277

DST #2

DT(MIN)	PRESSURE	<> PRESSURE
0	774.5	774.5
3	782.7	8.200013
6	805.3	22.59998
9	846.3	41
12	879.1	32.79999
15	913.9	34.80005
18	952.8	38.89996
21	973.3	20.5
24	995.9	22.60004
27	1018.4	22.5
30	1051.2	32.79993
33	1071.7	20.5
36	1088.1	16.40003
39	1108.6	20.5
42	1127	18.40003
45	1151.6	24.59998
48	1163.9	12.30005
51	1176.2	12.29993
54	1188.5	12.30005
57	1202.8	14.30005
60	1215.1	12.29993

DELTA T DELTA P
FINAL FLOW - DST #2



RM WATTS #28-1DST #2

INITIAL

SHUTIN

30 INITIAL FLOW TIME

Slope * psi/cycle
P * 1,457 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	1235.6	11	1.041	1235.6
6	1342.2	6	0.778	106.6
9	1377.0	4	0.637	34.8
12	1387.2	4	0.544	10.2
15	1401.6	3	0.477	14.4
18	1411.8	3	0.426	10.2
21	1415.9	2	0.385	4.1
24	1424.1	2	0.352	8.2
27	1426.2	2	0.325	2.1
30	1428.2	2	0.301	2.0
33	1430.3	2	0.281	2.1
36	1431.3	2	0.263	1.0
39	1432.3	2	0.248	1.0
42	1433.4	2	0.234	1.1
45	1434.4	2	0.222	1.0
48	1435.4	2	0.211	1.0
51	1436.4	2	0.201	1.0
54	1437.5	2	0.192	1.1
57	1438.5	2	0.184	1.0
60	1440.5	2	0.176	2.0

RM WATTS #28-1DST #2

FINAL

SHUTIN

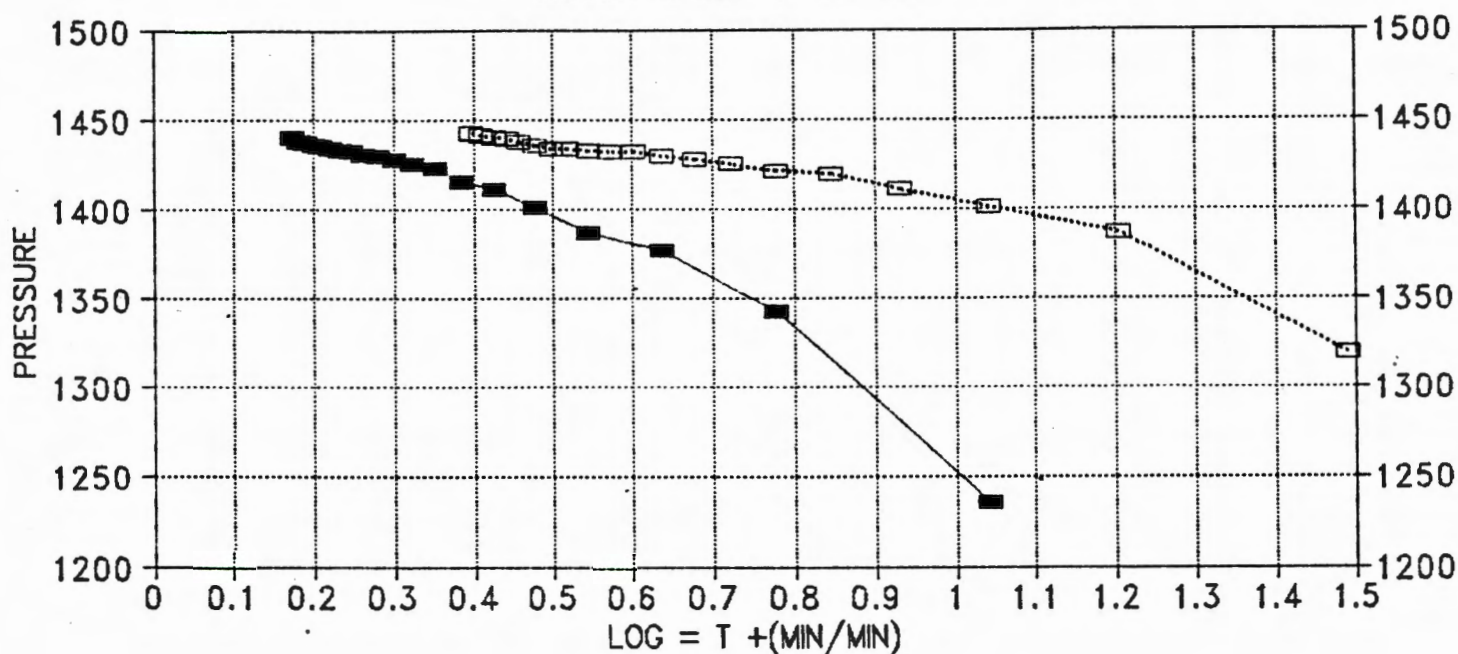
90 TOTAL FLOW TIME

Slope * psi/cycle
P * 1,469 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	1319.6	31	1.491	1319.6
6	1387.2	16	1.204	67.6
9	1401.6	11	1.041	14.4
12	1411.8	9	0.929	10.2
15	1420.0	7	0.845	8.2
18	1422.1	6	0.778	2.1
21	1426.2	5	0.723	4.1
24	1428.2	5	0.677	2.0
27	1430.3	4	0.637	2.1
30	1432.3	4	0.602	2.0
33	1432.3	4	0.571	0.0
36	1433.3	4	0.544	1.0
39	1434.4	3	0.520	1.1
42	1434.4	3	0.497	0.0
45	1436.4	3	0.477	2.0
48	1438.5	3	0.459	2.1
51	1439.5	3	0.442	1.0
54	1440.5	3	0.426	1.0
57	1441.6	3	0.411	1.1
60	1442.6	3	0.398	1.0

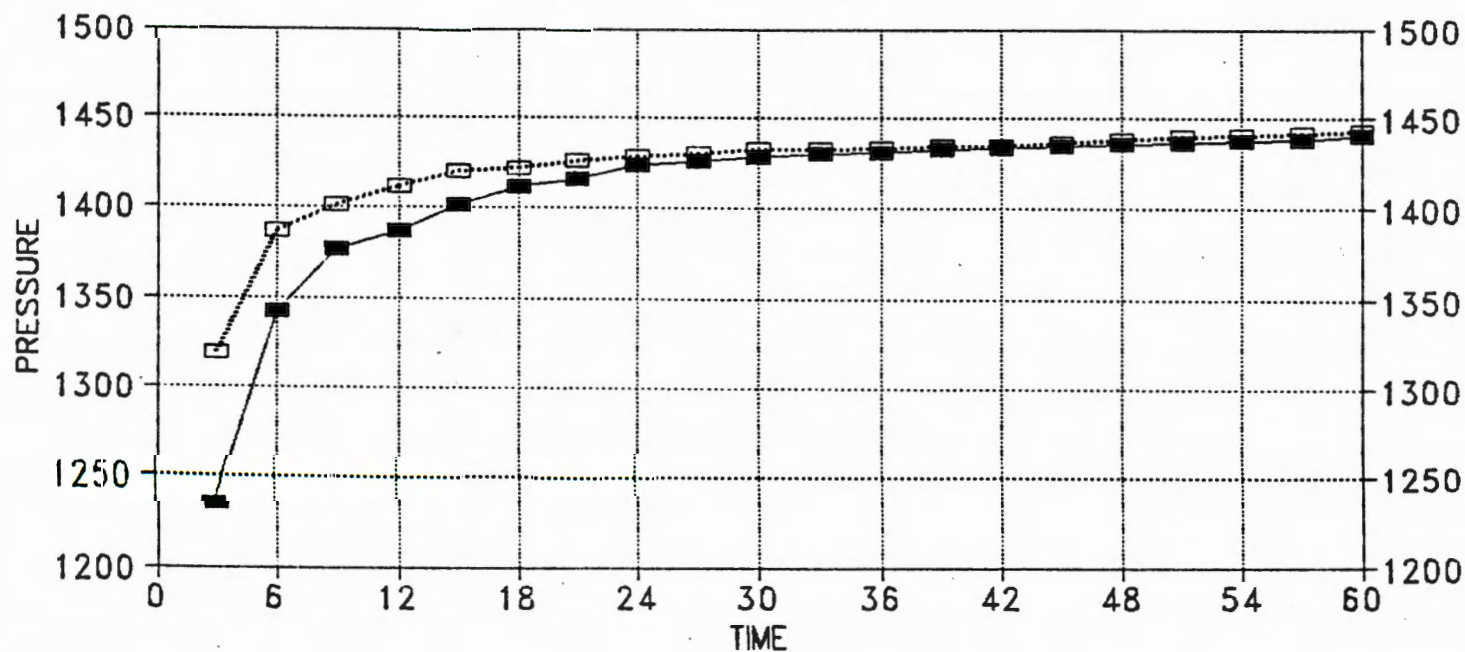
HORNER PLOT

RM WATTS #28-1-DST #2



DELTA T DELTA P

RM WATTS #28-1-DST #2





GAS VOLUME REPORT

2

WELL NAME AND NO.

DST NO.

[illegible]

Remarks:

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

No 3709

Test Ticket

Well Name & No.	R. M. Watts #28-1	Test No.	2	Date	4-7-91
Company	Vintage Petroleum Inc	Zone Tested	Loring		
Address	4200 One Williams Center Tulsa OK 74177	Elevation			
Co. Rep./Geo.	Chas Hughes/Evan	Cont.	Val Energy	Est. Ft. of Pay	
Location: Sec.	28	Twp.	33s	Rge.	12w
		Co.	Barber	State	Ks
No. of Copies	5	Distribution Sheet	Yes	No	Turnkey
			Yes	No	Evaluation

Interval Tested	3948-3981	Drill Pipe Size	4 1/2" YH
Anchor Length	33	Top Choke — 1"	Bottom Choke — 3/4"
Top Packer Depth	3943	Hole Size — 7 7/8"	Rubber Size — 6 3/4"
Bottom Packer Depth	3948	Wt. Pipe I.D. — 2.7 Ft. Run	
Total Depth	3981	Drill Collar — 2.25 Ft. Run	
Mud Wt.	9.6	lb/gal.	Viscosity 46
			Filtrate 16.4
Tool Open @	11:15 AM	Initial Blow	strong blow - to bottom of bucket immediately
			(gas to surface 18 minutes into I.S.I.)
Final Blow	gassy gas - 5.86 McFD at end of final flow		7.88 McFD at end of final shut-in

Recovery — Total Feet	2540	Feet of Gas in Pipe		Flush Tool?	
Rec.	2540	Feet Of	gassy, muddy salt water	%gas	%oil
			(no show of oil)	%water	%mud
Rec.		Feet Of		%gas	%oil
				%water	%mud
Rec.		Feet Of		%gas	%oil
				%water	%mud
Rec.		Feet Of		%gas	%oil
				%water	%mud

BHT	78	°F Gravity		°API @		°F Corrected Gravity		°API
RW	116	@	90	°F Chlorides	32,000	ppm Recovery	Chlorides	11,200
60k	122	@	83		53,000		ppm System	
(A) Initial Hydrostatic Mud	1907	PSI	AK1 Recorder No.	13277	Range	4125		
(B) First Initial Flow Pressure	239	PSI	@ (depth)	3951	w/Clock No.	17652		
(C) First Final Flow Pressure	653	PSI	AK1 Recorder No.	24174	Range	3350		
(D) Initial Shut-In Pressure	1448	PSI	@ (depth)	3980	w/Clock No.	25828		
(E) Second Initial Flow Pressure	770	PSI	AK1 Recorder No.		Range			
(F) Second Final Flow Pressure	1213	PSI	@ (depth)		w/Clock No.			
(G) Final Shut-In Pressure	1448	PSI	Initial Opening	30	Test	550		
(H) Final Hydrostatic Mud	1890	PSI	Initial Shut-In	60	Jars			

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow	60	Safety Joint	50
Final Shut-In	60	Straddle	
		Circ. Sub	35
		Sampler	
		Extra Packer	
		Other	625

Approved By Paul Simpson
 Our Representative Paul Simpson

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 3 Date 4/9/91
Company VINTAGE PETROLEUM INC Zone Tested MISSISSIPPI
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1549
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4536-4556
Anchor Length 20
Top Packer Depth 4531
Bottom Packer Depth 4536
Total Depth 4556

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.2 lb / gal. Viscosity 44 Filtrate 13

Tool Open @ 10:06 AM Initial Blow WEAK 1/2" BLOW DECREASING TO SURFACE

Final Blow 1/2" BLOW DECREASED & DIED IN 16 MINUTES

Recovery — Total Feet 10 Flush Tool? NO

Rec. 10 Feet of MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____
BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2288.9 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 21.2 PSI @ (depth) 4538 w/Clock No. 17652

(C) First Final Flow Pressure 21.2 PSI AK1 Recorder No. 24174 Range 3350

(D) Initial Shut-In Pressure 44.6 PSI @ (depth) 4555 w/Clock No. 25828

(E) Second Initial Flow Pressure 21.2 PSI AK1 Recorder No. _____ Range _____

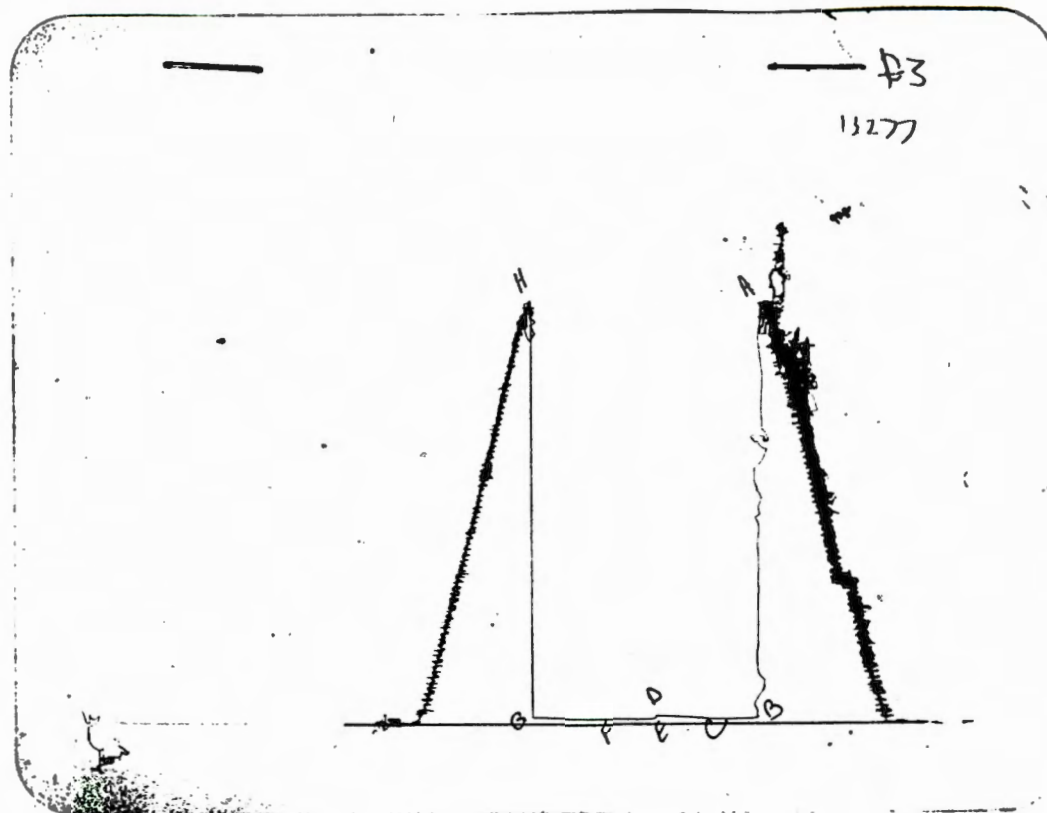
(F) Second Final Flow Pressure 21.2 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 35.4 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2249.7 PSI Initial Shut-In 45 Final Shut-In 45

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 800



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2284	2288.9
(B) FIRST INITIAL FLOW PRESSURE	16	21.2
(C) FIRST FINAL FLOW PRESSURE	16	21.2
(D) INITIAL CLOSED-IN PRESSURE	41	44.6
(E) SECOND INITIAL FLOW PRESSURE	16	21.2
(F) SECOND FINAL FLOW PRESSURE	16	21.2
(G) FINAL CLOSED-IN PRESSURE	33	35.4
(H) FINAL HYDROSTATIC MUD	2251	2249.7

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3

Test Ticket

Well Name & No. R.M. Watts 28-1 Test No. 3 Date 4/9/91
 Company Vintage Petroleum Inc Zone Tested Mississippi
 Address 4200 One William Center Tulsa OK 74172 Elevation 1549
 Co. Rep./Geo. C. Hughes Cont. Val Energy Est. Ft. of Pay _____
 Location: Sec. 28 Twp. 33s Rge. 12w Co. Barber State Ks
 No. of Copies 5 Distribution Sheet _____ Yes _____ No Turnkey _____ Yes _____ No _____ Evaluate _____

Interval Tested 4536-4556 Drill Pipe Size 4 1/2 XA
 Anchor Length 20 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 4531 Hole Size — 77/8" _____ Rubber Size — 63/4" _____
 Bottom Packer Depth 4536 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4556 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb/gal. Viscosity 44 Filtrate 13
 Tool Open @ 10:06 AM Initial Blow weak 1/2" blow decreasing to surface

Final Blow 1/4" blow decreased & died in 16 minutes

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
Rec. <u>10</u> Feet Of <u>Mud</u>	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil

BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm S

(A) Initial Hydrostatic Mud 2284 PSI AK1 Recorder No. 13277 Range 4125
 (B) First Initial Flow Pressure 16 PSI @ (depth) 4538 w/Clock No. 27501
 (C) First Final Flow Pressure 16 PSI AK1 Recorder No. 24174 Range 3350
 (D) Initial Shut-In Pressure 41 PSI @ (depth) 4555 w/Clock No. 17652
 (E) Second Initial Flow Pressure 16 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 16 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 33 PSI Initial Opening 30 Test > 550
 (H) Final Hydrostatic Mud 2251 PSI Initial Shut-In 45 Jars > 20

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow 45 Safety Joint > 50
 Final Shut-In 45 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By [Signature]

Our Representative Paul Simpson

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 4 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested N/A
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4205-4227
Anchor Length 22
Top Packer Depth 4205
Bottom Packer Depth 4227
Total Depth 5100

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 8:00 AM Initial Blow PACKER FAILURE

Final Blow _____

Recovery — Total Feet _____ Flush Tool? _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI Ak1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure _____ PSI @ (depth) 4210 w/Clock No. 31154

(C) First Final Flow Pressure _____ PSI Ak1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure _____ PSI @ (depth) 4222 w/Clock No. 27585

(E) Second Initial Flow Pressure _____ PSI Ak1 Recorder No. 1055 Range 4025

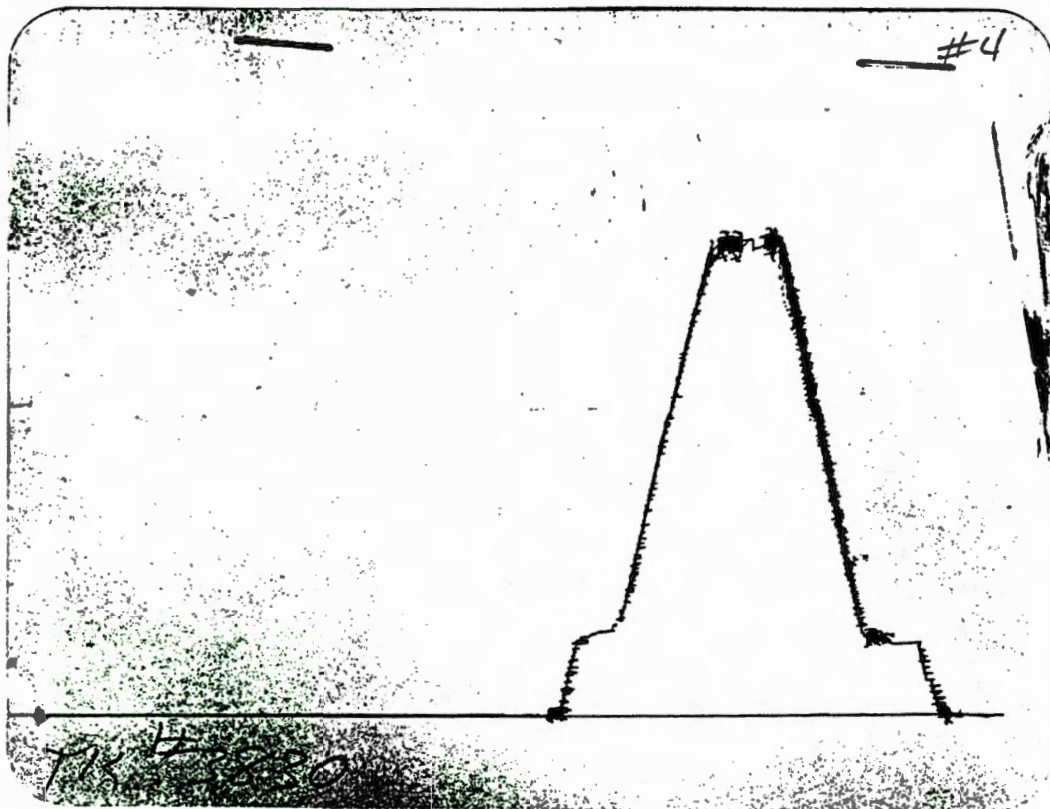
(F) Second Final Flow Pressure _____ PSI @ (depth) 5100 w/Clock No. 20272

(G) Final Shut-In Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Final Shut-In _____

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1050



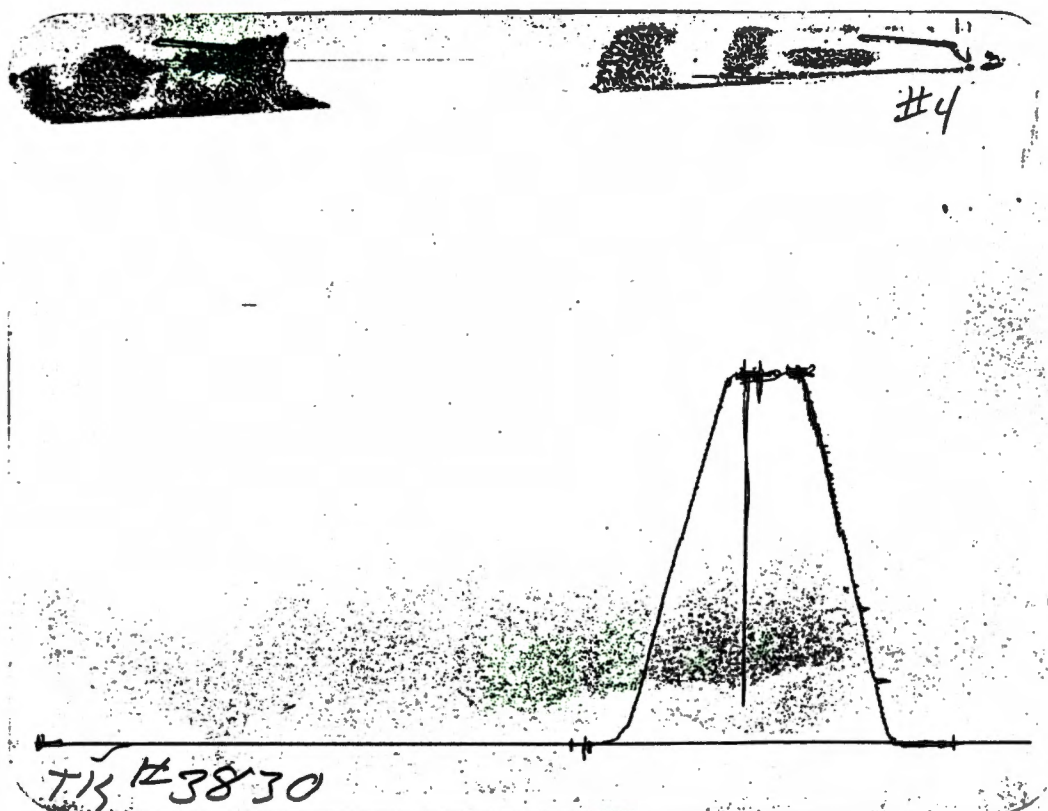
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3830

Test Ticket

Well Name & No. <u>R.M. WATTS</u>	Test No. <u>FOUR</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested _____	
Address <u>4200 ONE WILLIAMS CENTER TULSA OK. 74172</u>	Elevation <u>1532 GL</u>	
Co. Rep./Geo. _____	Cont. _____	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33 S</u>	Rge. <u>12 W</u>
Co. <u>BARBARA</u>	State <u>KS</u>	
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
Turnkey _____	Yes _____	No _____
Evaluation _____		

Interval Tested <u>4205 TO 4227</u>	Drill Pipe Size <u>4 1/2" X.17.</u>
Anchor Length <u>22'</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4205</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4227</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5100</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>12</u>
Tool Open @ <u>8:00 A</u>	Initial Blow <u>PKR'S FAILED</u>

Final Blow _____

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____	PSI Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure _____	PSI @ (depth) <u>4210</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure _____	PSI Ak1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure _____	PSI @ (depth) <u>4222</u>	w/Clock No. <u>27585</u>
(E) Second Initial Flow Pressure _____	PSI Ak1 Recorder No. <u>1055</u>	Range <u>4025</u>
(F) Second Final Flow Pressure _____	PSI @ (depth) <u>5100</u>	w/Clock No. <u>20272</u>
(G) Final Shut-In Pressure _____	PSI Initial Opening _____	Test <u>M/R</u> <u>4000</u>
(H) Final Hydrostatic Mud _____	PSI Initial Shut-In _____	Jars <u>200</u>

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50
 Final Shut-In _____ Straddle 250
 Circ. Sub _____
 Sampler _____

Approved By Gary Rowe

Our Representative Henry Schmidt

Extra Packer 150

Other _____

TOTAL PRICE \$ 4050

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 5 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4205-4227
Anchor Length 22
Top Packer Depth 4205
Bottom Packer Depth 4227
Total Depth 5100

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 3:15 PM Initial Blow PACKER FAILURE

Final Blow _____

Recovery — Total Feet _____ Flush Tool? _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI Ak1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure _____ PSI @ (depth) 4210 w/Clock No. 31154

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure _____ PSI @ (depth) 4222 w/Clock No. 27585

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4025

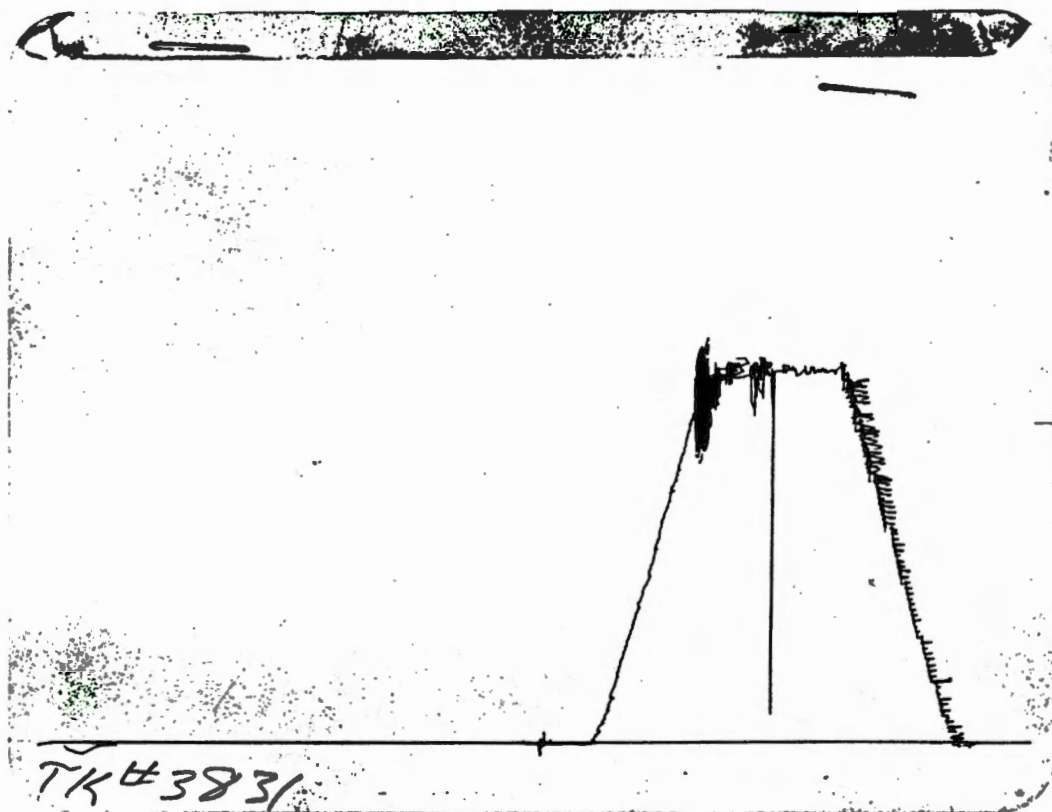
(F) Second Final Flow Pressure _____ PSI @ (depth) 4237 w/Clock No. 20272

(G) Final Shut-In Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Final Shut-In _____

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1350



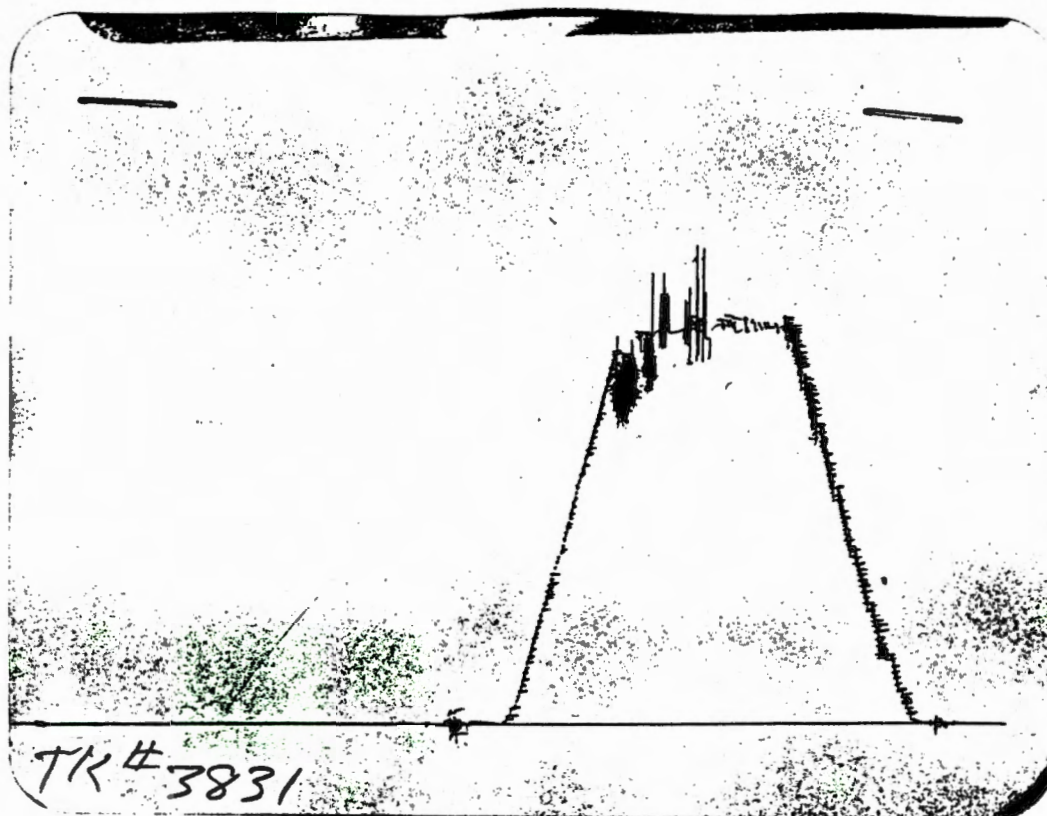
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3831

Test Ticket

Well Name & No. <u>R.M. WATTS</u>	Test No. <u>5</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested <u>CLC</u>	
Address <u>4200 ONE WILLIAMS CENTER TULSA 74178</u>	Elevation <u>1532 G.L.</u>	
Co. Rep./Geo. _____	Cont. _____	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33S</u>	Rge. <u>12W</u> Co. <u>BARBER</u> State <u>OK</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 4205 TO 4227 Drill Pipe Size 4 1/2" X.14.
 Anchor Length 22' Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 4205 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4227 Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 5100 Drill Collar — 2.25 Ft. Run
 Mud Wt. 9.3 lb/gal. Viscosity 44 Filtrate 12
 Tool Open @ 3:15 P Initial Blow PKR'S 1-41-60

Final Blow _____

Recovery — Total Feet _____ Feet of Gas in Pipe _____ Flush Tool? _____

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure _____ PSI @ (depth) 4210 w/Clock No. 31154

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure _____ PSI @ (depth) 4222 w/Clock No. 27585

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4025

(F) Second Final Flow Pressure _____ PSI @ (depth) 4237 w/Clock No. 20272

(G) Final Shut-In Pressure _____ PSI Initial Opening _____ Test M/R 4000

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Jars 200 00

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50 00

Final Shut-In _____ Straddle 250 00

Circ. Sub _____

Sampler _____

Extra Packer 150 00

Other WALL HOOK 300!

TOTAL PRICE \$ 1350 00

Approved By Gary Rowe

Our Representative Thurman Schmidt

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 6 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4221-4230
Anchor Length 9
Top Packer Depth 4221
Bottom Packer Depth 4230
Total Depth 5100

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 8:17 PM Initial Blow VERY GOOD - BOTTOM OF BUCKET IN 5 MINUTES

Final Blow SAME AS INITIAL

Recovery — Total Feet 1050 Flush Tool? NO

Rec. 1050 Feet of SALT WATER

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.22 @ 63 °F Chlorides 36000 ppm Recovery Chlorides 54000 ppm System

(A) Initial Hydrostatic Mud 2214.6 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 61.2 PSI @ (depth) 4223 w/Clock No. 31154

(C) First Final Flow Pressure 225.8 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure 1620.4 PSI @ (depth) 4211 w/Clock No. 27585

(E) Second Initial Flow Pressure 304.5 PSI AK1 Recorder No. 1055 Range 4025

(F) Second Final Flow Pressure 556.5 PSI @ (depth) 4240 w/Clock No. 20272

(G) Final Shut-In Pressure 1617.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2201.3 PSI Initial Shut-In 60 Final Shut-In 80

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1500

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 3832

Well Name & No. <u>R.M. WATTS #</u>	Test No. <u>SIX</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested <u>LKC</u>	
Address <u>4200 ONE WILLIAMS CENTER TULSA 74122</u>	Elevation <u>1532 G.L.</u>	
Co. Rep./Geo. <u>GARY ROWE</u>	Cont. <u>VAL ENERGY</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33S</u>	Rge. <u>12W</u> Co. <u>KARBER</u> State <u>KS.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4221 TO 4230</u>	Drill Pipe Size <u>4 1/2" KH.</u>
Anchor Length <u>9'</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4221</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4230</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5100</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>12.0</u>
Tool Open @ <u>8:17 P</u>	Initial Blow <u>VERY GOOD BOT. BUCKET IN 5 MIN.</u>

Final Blow SAME AS INITIAL

Recovery — Total Feet <u>1,050</u>	Feet of Gas in Pipe <u>—</u>	Flush Tool? <u>NO</u>
Rec. <u>1,050</u> Feet Of <u>SALT WATER</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

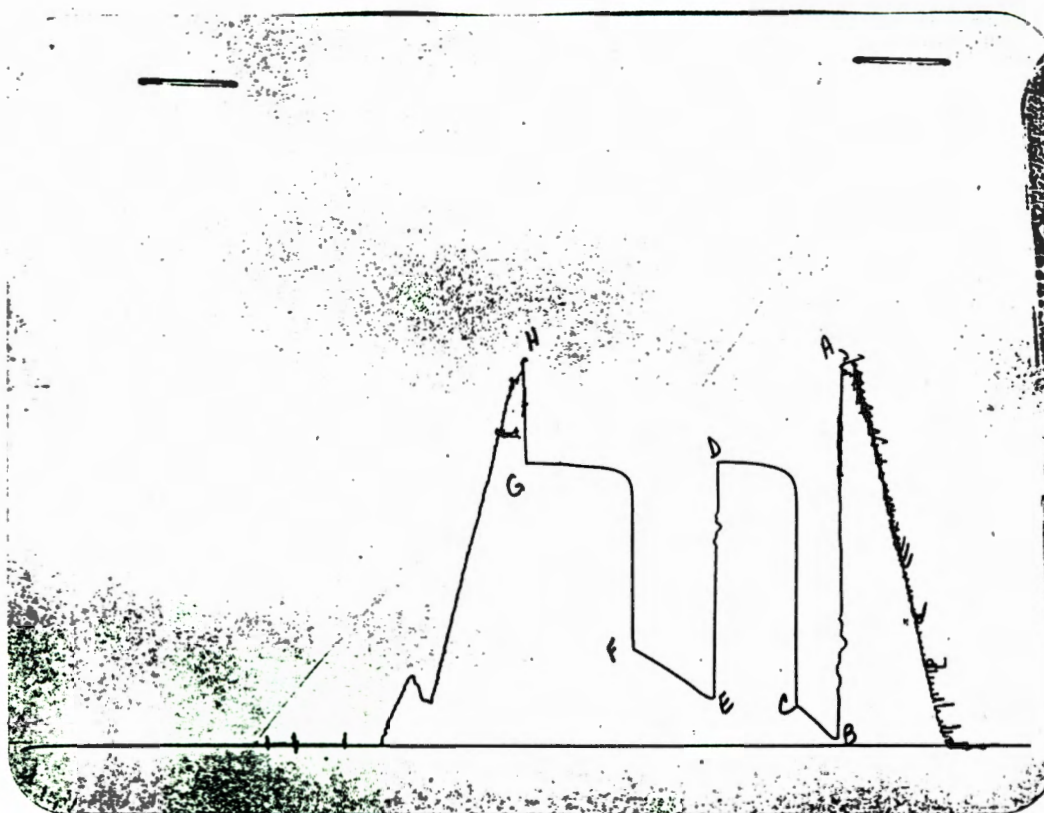
BHT _____ °F Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>0.22</u> @ <u>63</u> °F	Chlorides <u>36,000</u> ppm	Recovery Chlorides <u>54,000</u> ppm	System _____
(A) Initial Hydrostatic Mud <u>2207</u> PSI	AK1 Recorder No. <u>13851</u>	Range <u>4425</u>	
(B) First Initial Flow Pressure <u>55</u> PSI	@ (depth) <u>4223</u>	w/Clock No. <u>31154</u>	
(C) First Final Flow Pressure <u>222</u> PSI	AK1 Recorder No. <u>13850</u>	Range <u>4325</u>	
(D) Initial Shut-In Pressure <u>1619</u> PSI	@ (depth) <u>4211</u>	w/Clock No. <u>27585</u>	
(E) Second Initial Flow Pressure <u>300</u> PSI	AK1 Recorder No. <u>1055</u>	Range <u>4025</u>	
(F) Second Final Flow Pressure <u>554</u> PSI	@ (depth) <u>4240</u>	w/Clock No. <u>20272</u>	
(G) Final Shut-In Pressure <u>1619</u> PSI	Initial Opening <u>30</u>	Test <u>5500</u>	
(H) Final Hydrostatic Mud <u>2207</u> PSI	Initial Shut-In <u>60</u>	Jars <u>2000</u>	

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>60</u>	Safety Joint <u>5000</u>
Final Shut-In <u>80</u>	Straddle <u>2500</u>
RAIN RAIN RAIN	Circ. Sub _____
	Sampler _____
	Extra Packer <u>1500</u>
	Other <u>WALL HOOK 3000</u>
	TOTAL PRICE \$ <u>1500</u>

Approved By Gary Rowe

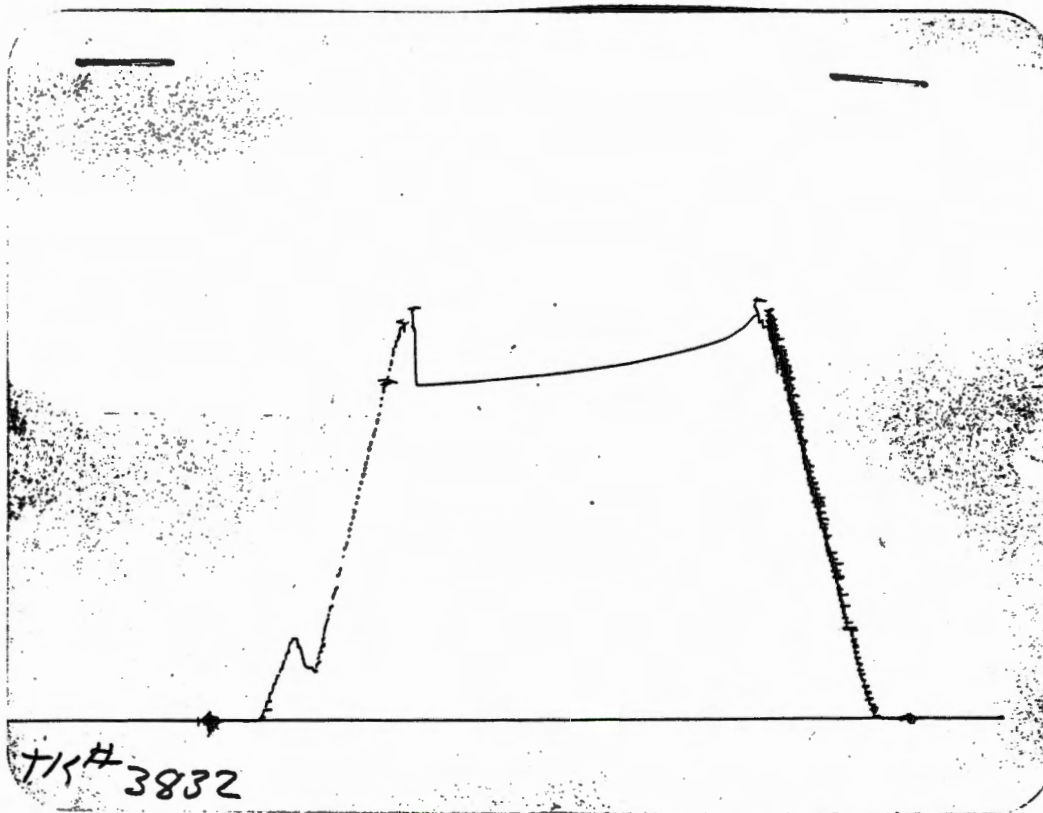
Our Representative Henry Schmitt



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2207	2214.6
(B) FIRST INITIAL FLOW PRESSURE	55	61.2
(C) FIRST FINAL FLOW PRESSURE	222	225.8
(D) INITIAL CLOSED-IN PRESSURE	1619	1620.4
(E) SECOND INITIAL FLOW PRESSURE	300	304.5
(F) SECOND FINAL FLOW PRESSURE	554	556.5
(G) FINAL CLOSED-IN PRESSURE	1619	1617.6
(H) FINAL HYDROSTATIC MUD	2207	2201.3



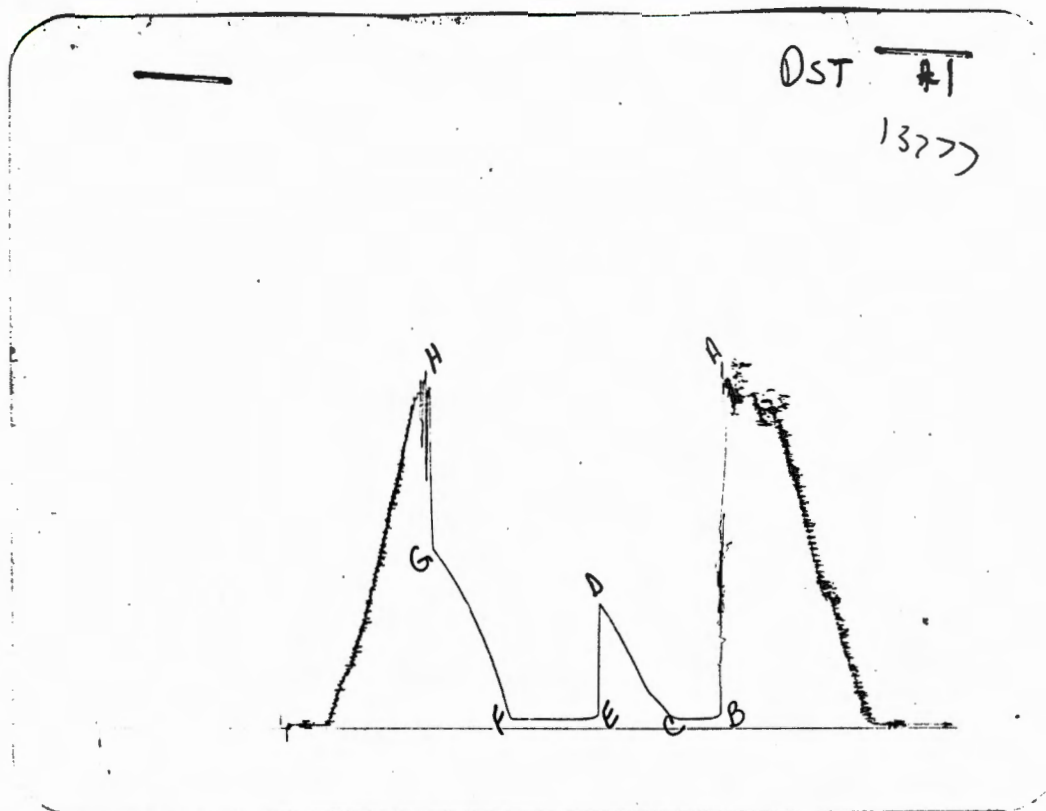
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1682	1688.4
(B) FIRST INITIAL FLOW PRESSURE	16	26.9
(C) FIRST FINAL FLOW PRESSURE	16	26.9
(D) INITIAL CLOSED-IN PRESSURE	628	637.2
(E) SECOND INITIAL FLOW PRESSURE	16	29
(F) SECOND FINAL FLOW PRESSURE	16	29
(G) FINAL CLOSED-IN PRESSURE	945	936.4
(H) FINAL HYDROSTATIC MUD	1623	1622.5

JAN 02 1992

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 1 Date 4/6/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1544
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 3898-3914
Anchor Length 16
Top Packer Depth 3893
Bottom Packer Depth 3898
Total Depth 3914

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 8.9 lb / gal. Viscosity 39 Filtrate 18.4

Tool Open @ 7:28 PM Initial Blow (SLID TOOL 4' WHEN OPENED)-STRONG BLOW-TO BOTTOM
OF BUCKET IN 1 MINUTE-(2" BLOW BACK ON SHUTIN)
Final Blow STRONG BLOW-TO BOTTOM OF BUCKET IMMEDIATELY-(NO BLOW
BACK ON FINAL SHUTIN)

Recovery — Total Feet 30 Flush Tool? NO

Rec. 1180 Feet of GAS IN PIPE

Rec. 30 Feet of GASSY MUD W/ OIL SPECKS IN TOOL

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. 106 Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1688.4 PSI Ak1 Recorder No. 24174 Range 3350

(B) First Initial Flow Pressure 26.9 PSI @ (depth) 3913 w/Clock No. 17639

(C) First Final Flow Pressure 26.9 PSI AK1 Recorder No. 13277 Range 4125

(D) Initial Shut-In Pressure 637.2 PSI @ (depth) 3900 w/Clock No. 27501

(E) Second Initial Flow Pressure 29 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 29 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 936.4 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1622.5 PSI Initial Shut-In 60 Final Shut-In 60

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 600

RM WATTS #28-1DST #1

INITIAL

SHUTIN

30 INITIAL FLOW TIME

Slope

P *

TIME(MIN)	Pws (psi)	Horn T	Log		<> PRESSURE
			Horn T		
3	33.1	11	1.041		33.1
6	35.2	6	0.778		2.1
9	47.7	4	0.637		12.5
12	66.3	4	0.544		18.6
15	82.9	3	0.477		16.6
18	109.9	3	0.426		27.0
21	139.0	2	0.385		29.1
24	143.1	2	0.352		4.1
27	188.8	2	0.325		45.7
30	226.1	2	0.301		37.3
33	263.4	2	0.281		37.3
36	300.8	2	0.263		37.4
39	356.8	2	0.248		56.0
42	379.6	2	0.234		22.8
45	410.7	2	0.222		31.1
48	487.5	2	0.211		76.8
51	522.5	2	0.201		35.0
54	573.7	2	0.192		51.2
57	594.2	2	0.184		20.5
60	637.2	2	0.176		43.0

RM WATTS #28-1DST #1

FINAL

SHUTIN

90 TOTAL FLOW

TIME

Slope

P *

TIME(MIN)	Pws (psi)	Horn T	Log		<> PRESSURE
			Horn T		
3	31.1	31	1.491		31.1
6	114.1	16	1.204		83.0
9	186.7	11	1.041		72.6
12	257.2	9	0.929		70.5
15	313.2	7	0.845		56.0
18	379.6	6	0.778		66.4
21	412.8	5	0.723		33.2
24	477.1	5	0.677		64.3
27	508.2	4	0.637		31.1
30	565.5	4	0.602		57.3
33	604.5	4	0.571		39.0
36	659.8	4	0.544		55.3
39	690.5	3	0.520		30.7
42	729.5	3	0.497		39.0
45	774.5	3	0.477		45.0
48	801.2	3	0.459		26.7
51	834	3	0.442		32.8
54	856.5	3	0.426		22.5
57	899.5	3	0.411		43.0
60	924.1	3	0.398		24.6
63	936.4	2	0.385		12.3

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3708

Test Ticket

Well Name & No. <u>R M Watts #28-1</u>	Test No. <u>1</u>	Date <u>4-6-91</u>
Company <u>Vintage Petroleum, Inc</u>	Zone Tested <u>LKC-Iatan</u>	
Address <u>4200 One Williams Center Tulsa OK</u>	Elevation <u>1544</u>	
Co. Rep./Geo. <u>Otis Hughes</u>	Cont. <u>Val Energy</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u> Twp. <u>33s</u> Rge. <u>12w</u>	Co. <u>Barber</u>	State <u>Ks</u>
No. of Copies <u>5</u>	Distribution Sheet _____	Yes ☒ No ☐ Turnkey _____
		Yes ☒ No ☐ Evaluation _____

Interval Tested <u>3898-3917</u>	Drill Pipe Size <u>4 1/2 XA</u>
Anchor Length <u>16</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>3893</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3898</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3914</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>37</u> Filtrate <u>18.4 ?</u>
Tool Open @ <u>7:28 PM</u>	Initial Blow <u>(slid tool 4' when opened) strong blow - to bottom of bucket in minute (2" blow back on shut in)</u>
Final Blow <u>strong blow - to bottom of bucket immediately - (no blow back on final shut in)</u>	

Recovery — Total Feet <u>30</u>	Feet of Gas In Pipe <u>1180</u>	Flush Tool? <u>no</u>
Rec. <u>30</u> Feet Of <u>gassy mud</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of <u>(oil specks in tool)</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 106 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud <u>1682</u>	PSI	AK1 Recorder No. <u>24174</u>	Range <u>45 3350</u>
(B) First Initial Flow Pressure <u>16</u>	PSI	@ (depth) <u>3913</u>	w/Clock No. <u>17639</u>
(C) First Final Flow Pressure <u>16</u>	PSI	AK1 Recorder No. <u>13277</u>	Range <u>4125</u>
(D) Initial Shut-In Pressure <u>628</u>	PSI	@ (depth) <u>3900</u>	w/Clock No. <u>27501</u>
(E) Second Initial Flow Pressure <u>16</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>16</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>845</u>	PSI	Initial Opening <u>30</u>	Test <u>550</u>
(H) Final Hydrostatic Mud <u>1623</u>	PSI	Initial Shut-In <u>60</u>	Jars _____

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>60</u>	Safety Joint <u>50</u>
Final Shut-In <u>60</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>600</u>

Approved By Gary Rowe

Our Representative Paul Simpson

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 2 Date 4/7/91
Company VINTAGE PETROLEUM INC Zone Tested LANSING
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1544
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 3948-3981
Anchor Length 33
Top Packer Depth 3943
Bottom Packer Depth 3948
Total Depth 3981

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.6 lb / gal. Viscosity 46 Filtrate 16.4

Tool Open @ 11:15 AM Initial Blow STRONG BLOW-TO BOTTOM OF BUCKET IMMEDIATELY-(GAS
TO SURFACE 18 MINUTES INTO ISI
Final Blow GAUGING GAS-5.86 MCF/D AT END OF FINAL FLOW
7.88 MCF/DAY AT END OF FINAL SHUTIN

Recovery — Total Feet 2540 Flush Tool? NO

Rec. 2540 Feet of GSY MUDDY SALT WATER-NO SHOW OF OIL

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 118 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.169 @ 90 °F Chlorides 32000 ppm Recovery Chlorides 11200 ppm System

(A) Initial Hydrostatic Mud 1915.6 PSI Ak1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 195 PSI @ (depth) 3951 w/Clock No. 17652

(C) First Final Flow Pressure 674.1 PSI AK1 Recorder No. 24174 Range 3350

(D) Initial Shut-In Pressure 1440.5 PSI @ (depth) 3980 w/Clock No. 25828

(E) Second Initial Flow Pressure 774.5 PSI AK1 Recorder No. _____ Range _____

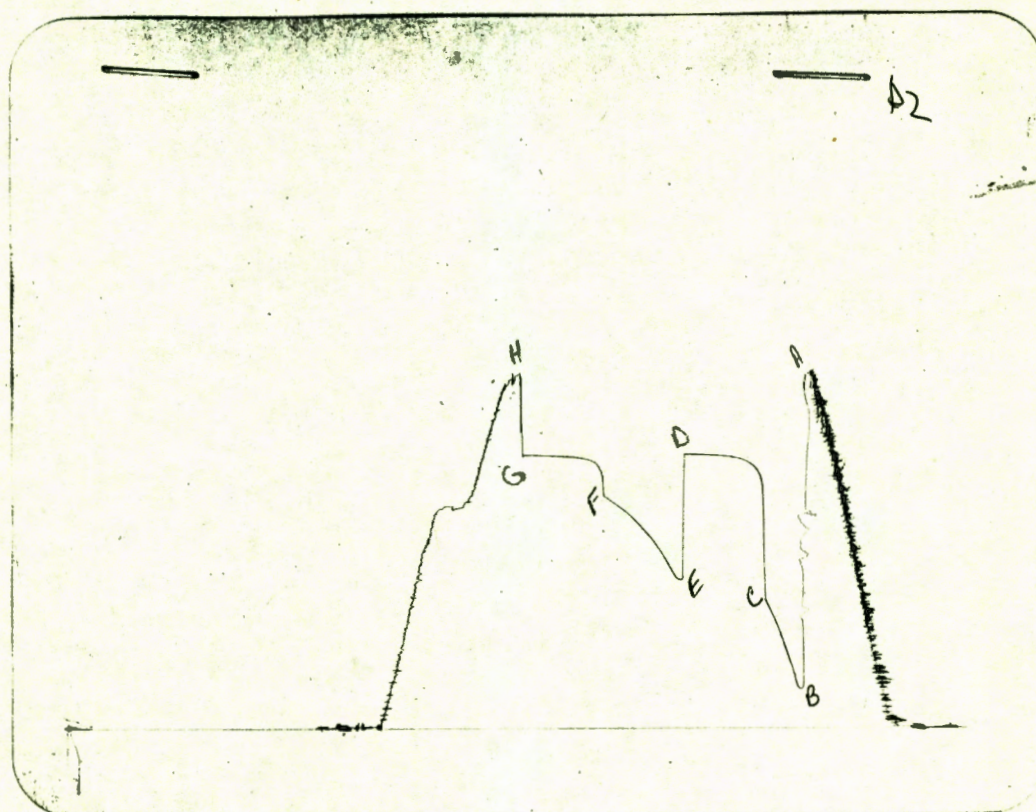
(F) Second Final Flow Pressure 1215.1 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 1442.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1894.5 PSI Initial Shut-In 60 Final Shut-In 60

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 635



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1907	1915.6
(B) FIRST INITIAL FLOW PRESSURE	239	195
(C) FIRST FINAL FLOW PRESSURE	653	674.1
(D) INITIAL CLOSED-IN PRESSURE	1448	1440.5
(E) SECOND INITIAL FLOW PRESSURE	770	774.5
(F) SECOND FINAL FLOW PRESSURE	1213	1215.1
(G) FINAL CLOSED-IN PRESSURE	1448	1442.6
(H) FINAL HYDROSTATIC MUD	1890	1894.5

BARTER KANDAK

[illegible][illegible]

DRAWDOWN FACTOR - .7785797 (%)

INITIAL FLOW

REORDER # 13277
DST #2

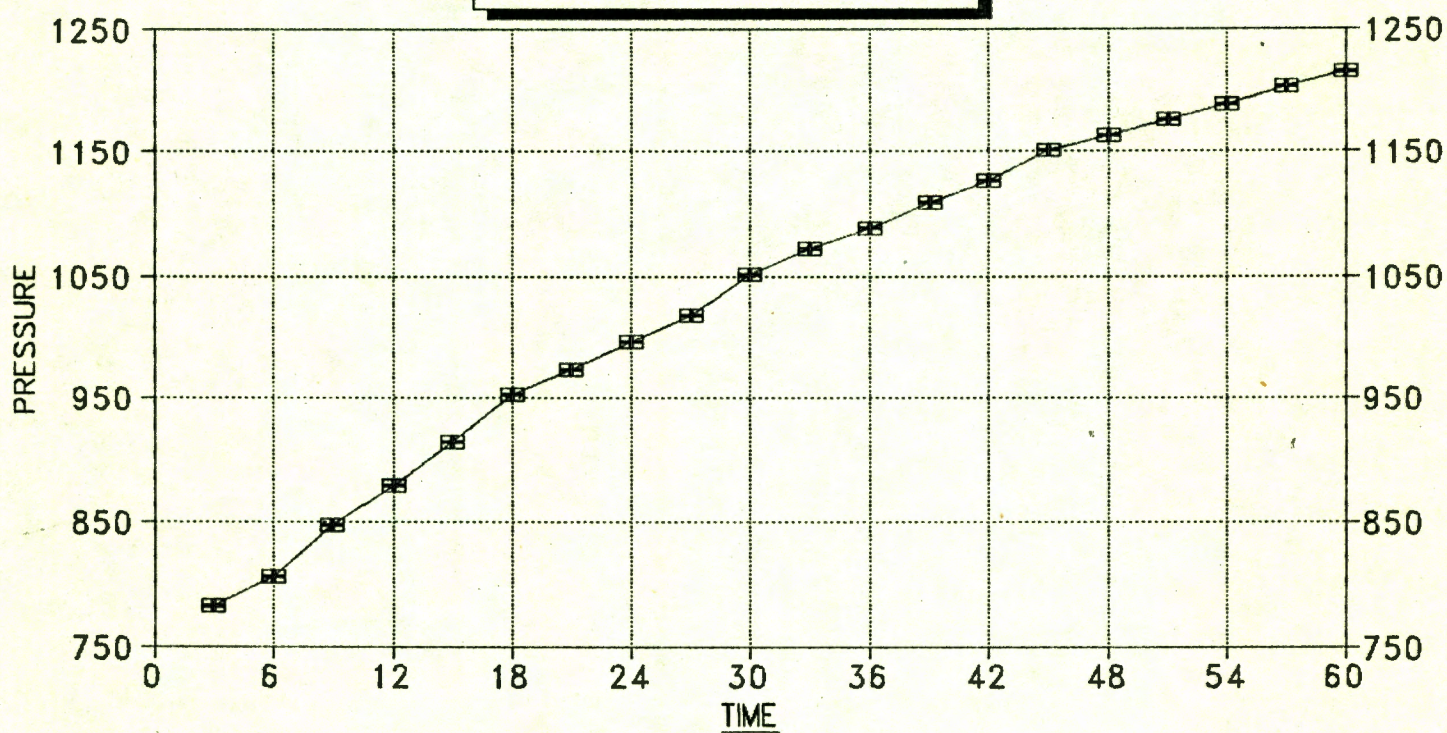
DT(MIN)	PRESSURE	<> PRESSURE
0	195	195
3	207.4	12.39999
6	290.4	83
9	352.7	62.30002
12	396.2	43.5
15	473	76.79999
18	528.6	55.59998
21	596.3	67.70001
24	674.1	77.79999

FINAL FLOW

REORDER # 13277
DST #2

DT(MIN)	PRESSURE	<> PRESSURE
0	774.5	774.5
3	782.7	8.200013
6	805.3	22.59998
9	846.3	41
12	879.1	32.79999
15	913.9	34.80005
18	952.8	38.89996
21	973.3	20.5
24	995.9	22.60004
27	1018.4	22.5
30	1051.2	32.79993
33	1071.7	20.5
36	1088.1	16.40003
39	1108.6	20.5
42	1127	18.40003
45	1151.6	24.59998
48	1163.9	12.30005
51	1176.2	12.29993
54	1188.5	12.30005
57	1202.8	14.30005
60	1215.1	12.29993

DELTA T DELTA P
FINAL FLOW - DST #2



RM WATTS #28-1DST #2
INITIAL SHUTIN

30 INITIAL FLOW TIME

Slope psi/cycle
P * 1,457 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	1235.6	11	1.041	1235.6
6	1342.2	6	0.778	106.6
9	1377.0	4	0.637	34.8
12	1387.2	4	0.544	10.2
15	1401.6	3	0.477	14.4
18	1411.8	3	0.426	10.2
21	1415.9	2	0.385	4.1
24	1424.1	2	0.352	8.2
27	1426.2	2	0.325	2.1
30	1428.2	2	0.301	2.0
33	1430.3	2	0.281	2.1
36	1431.3	2	0.263	1.0
39	1432.3	2	0.248	1.0
42	1433.4	2	0.234	1.1
45	1434.4	2	0.222	1.0
48	1435.4	2	0.211	1.0
51	1436.4	2	0.201	1.0
54	1437.5	2	0.192	1.1
57	1438.5	2	0.184	1.0
60	1440.5	2	0.176	2.0

RM WATTS #28-1DST #2
FINAL SHUTIN

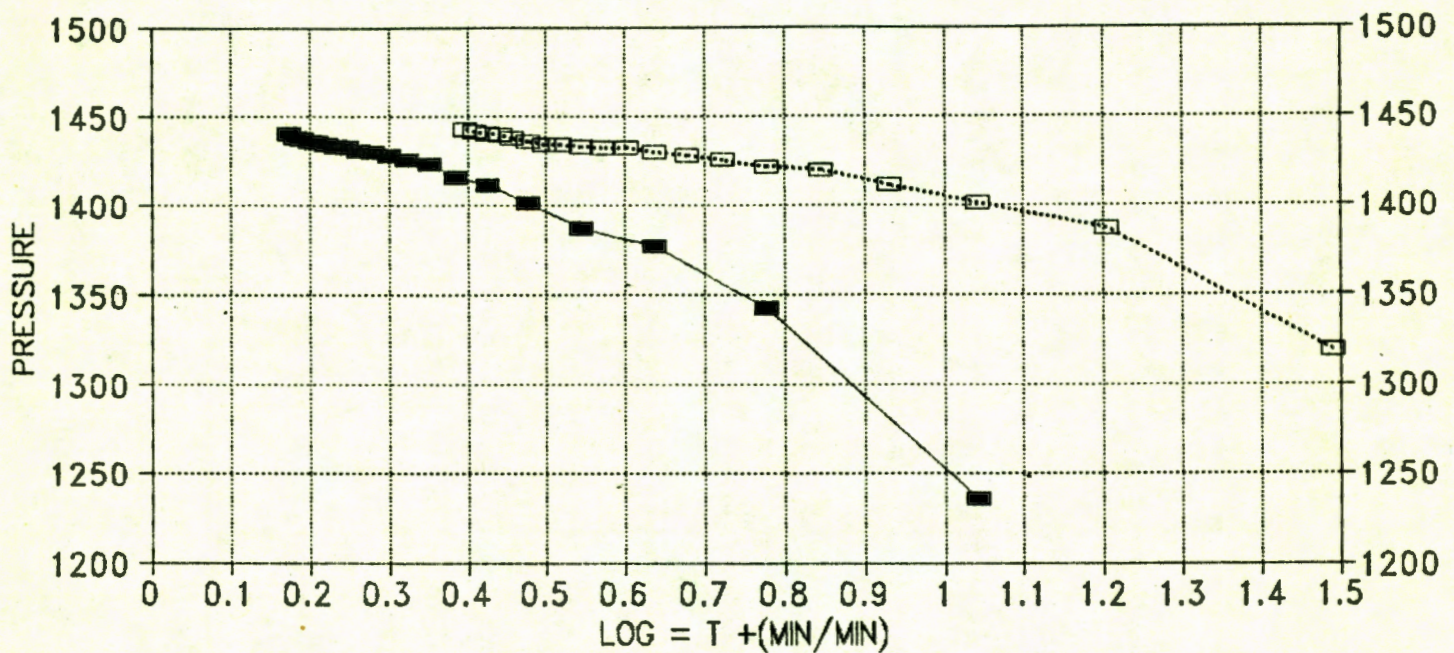
90 TOTAL FLOW TIME

Slope psi/cycle
P * 1,469 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	1319.6	31	1.491	1319.6
6	1387.2	16	1.204	67.6
9	1401.6	11	1.041	14.4
12	1411.8	9	0.929	10.2
15	1420.0	7	0.845	8.2
18	1422.1	6	0.778	2.1
21	1426.2	5	0.723	4.1
24	1428.2	5	0.677	2.0
27	1430.3	4	0.637	2.1
30	1432.3	4	0.602	2.0
33	1432.3	4	0.571	0.0
36	1433.3	4	0.544	1.0
39	1434.4	3	0.520	1.1
42	1434.4	3	0.497	0.0
45	1436.4	3	0.477	2.0
48	1438.5	3	0.459	2.1
51	1439.5	3	0.442	1.0
54	1440.5	3	0.426	1.0
57	1441.6	3	0.411	1.1
60	1442.6	3	0.398	1.0

HORNER PLOT

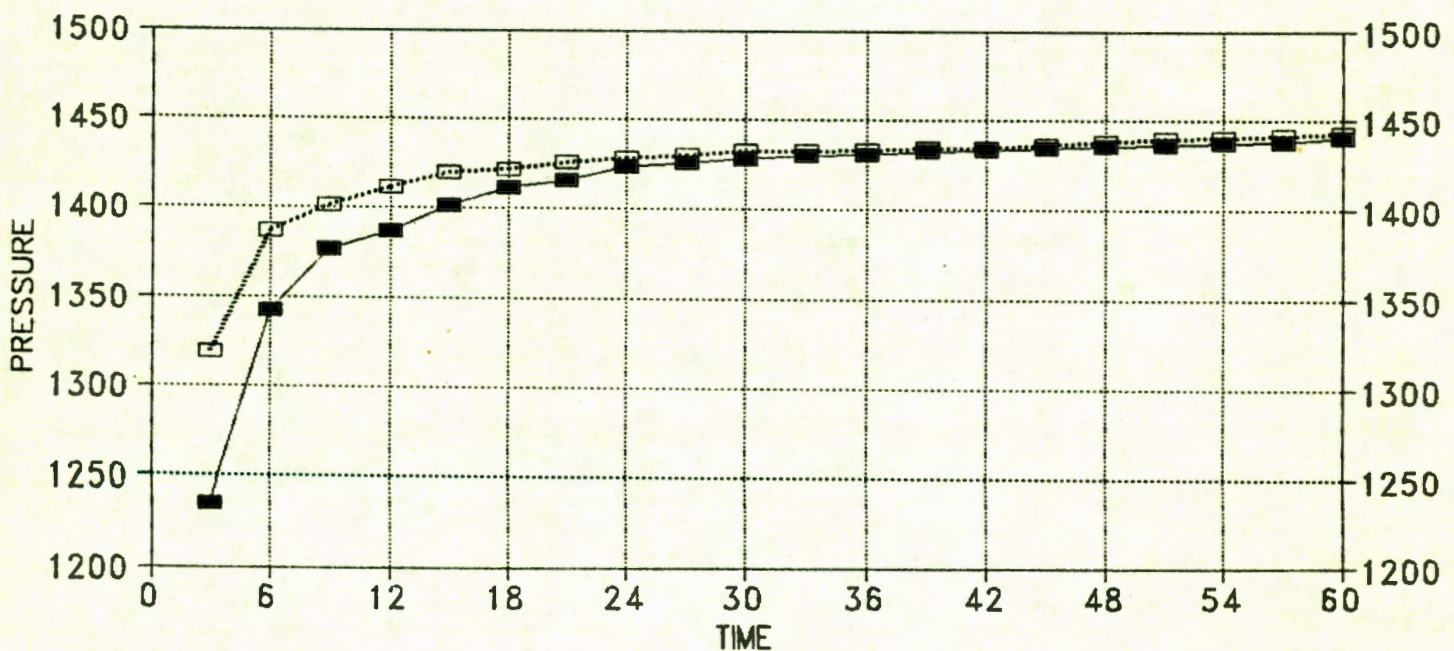
RM WATTS #28-1-DST #2



—■— INITIAL ...□... FINAL

DELTA T DELTA P

RM WATTS #28-1-DST #2



—■— INITIAL ...□... FINAL



GAS VOLUME REPORT

2

DST NO.

Remarks:

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

No 3709

Test Ticket

Well Name & No. <u>R. M. Watts #25-1</u>	Test No. <u>2</u>	Date <u>4-7-91</u>
Company <u>Vintage Petroleum Inc</u>	Zone Tested <u>Lansing</u>	
Address <u>4200 One Williams Center Tulsa OK 74177</u>	Elevation _____	
Co. Rep./Geo. <u>Oliver Hughes/Evan</u>	Cont. <u>Val Energy</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33s</u>	Rge. <u>12w</u>
	Co. <u>Barber</u>	State <u>Ks</u>
No. of Copies <u>5</u>	Distribution Sheet _____	Yes ☒ No ☐ Turnkey _____
		Yes ☒ No ☐ Evaluation _____

Interval Tested <u>3948-3981</u>	Drill Pipe Size <u>4 1/2" XH</u>
Anchor Length <u>33</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3943</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3948</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3981</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.6</u> lb/gal.	Viscosity <u>46</u> Filtrate <u>16.4</u>
Tool Open @ <u>11:15 AM</u>	Initial Blow <u>string blow - to bottom of bucket immediately</u>
	<u>(gas to surface 18 minutes into IST)</u>
Final Blow <u>gaging gas - 5.86 MCFD at end of final flow</u>	
	<u>7.88 MCFD at end of final shut-in</u>

Recovery — Total Feet <u>2540</u>	Feet of Gas In Pipe _____	Flush Tool? _____
Rec. <u>2540</u> Feet Of <u>gassy, muddy salt water</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of <u>(no show of oil)</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT <u>118</u> °F Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
del <u>116</u> @ <u>90</u> °F	Chlorides <u>32,000</u> ppm Recovery	Chlorides <u>11,200</u> ppm System	
del <u>122</u> @ <u>83</u> °F	PSI Ak1 Recorder No. <u>13277</u>	Range <u>4125</u>	
(A) Initial Hydrostatic Mud <u>1907</u>	PSI @ (depth) <u>3951</u>	w/Clock No. <u>17652</u>	
(B) First Initial Flow Pressure <u>239</u>	PSI AK1 Recorder No. <u>24124</u>	Range <u>3350</u>	
(C) First Final Flow Pressure <u>653</u>	PSI @ (depth) <u>3980</u>	w/Clock No. <u>25828</u>	
(D) Initial Shut-In Pressure <u>1448</u>	PSI Initial Opening <u>30</u>	Test <u>550</u>	
(E) Second Initial Flow Pressure <u>770</u>	PSI Initial Shut-In <u>60</u>	Jars _____	
(F) Second Final Flow Pressure <u>1213</u>	PSI Final Flow <u>60</u>	Safety Joint <u>50</u>	
(G) Final Shut-In Pressure <u>1448</u>	PSI Final Shut-In <u>60</u>	Straddle _____	
(H) Final Hydrostatic Mud <u>1890</u>		Circ. Sub <u>35</u>	

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Approved By [Signature]
Our Representative Paul Simpson

Sampler _____
Extra Packer _____
Other _____
TOTAL PRICE \$ 635

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 3 Date 4/9/91
Company VINTAGE PETROLEUM INC
Address 4200 ONE WILLIAMS CENTER TULSA Zone Tested MISSISSIPPI
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Elevation 1549 Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4536-4556
Anchor Length 20
Top Packer Depth 4531
Bottom Packer Depth 4536
Total Depth 4556

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.2 lb / gal. Viscosity 44 Filtrate 13

Tool Open @ 10:06 AM Initial Blow WEAK 1/2" BLOW DECREASING TO SURFACE

Final Blow 1/2" BLOW DECREASED & DIED IN 16 MINUTES

Recovery — Total Feet 10 Flush Tool? NO

Rec. 10 Feet of MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2288.9 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 21.2 PSI @ (depth) 4538 w/Clock No. 17652

(C) First Final Flow Pressure 21.2 PSI AK1 Recorder No. 24174 Range 3350

(D) Initial Shut-In Pressure 44.6 PSI @ (depth) 4555 w/Clock No. 25828

(E) Second Initial Flow Pressure 21.2 PSI AK1 Recorder No. _____ Range _____

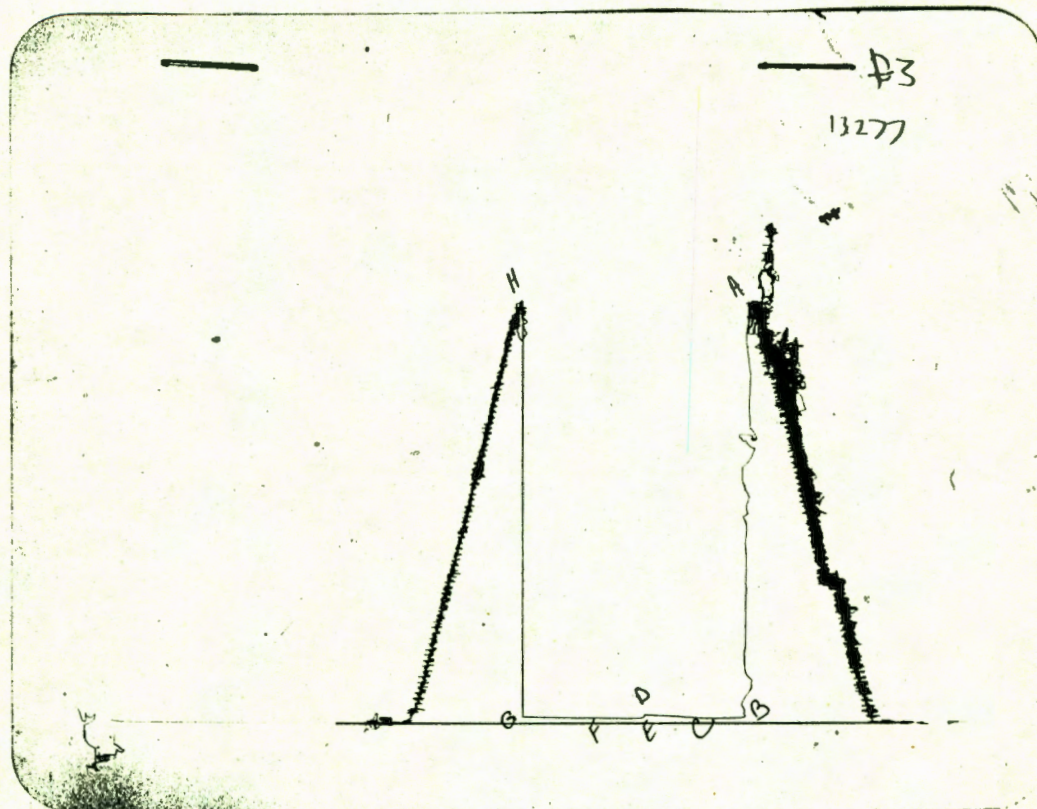
(F) Second Final Flow Pressure 21.2 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 35.4 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 2249.7 PSI Initial Shut-In 45 Final Shut-In 45

Our Representative MR PAUL SIMPSON

TOTAL PRICE \$ 800



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2284	2288.9
(B) FIRST INITIAL FLOW PRESSURE	16	21.2
(C) FIRST FINAL FLOW PRESSURE	16	21.2
(D) INITIAL CLOSED-IN PRESSURE	41	44.6
(E) SECOND INITIAL FLOW PRESSURE	16	21.2
(F) SECOND FINAL FLOW PRESSURE	16	21.2
(G) FINAL CLOSED-IN PRESSURE	33	35.4
(H) FINAL HYDROSTATIC MUD	2251	2249.7

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3

Test Ticket

Well Name & No. R.M. Watts 28-1 Test No. 3 Date 4/9/91
 Company Vintage Petroleum Inc Zone Tested Mississippi
 Address 4200 One Williams Center Tulsa OK 74172 Elevation 1549
 Co. Rep./Geo. OT & Hughes Cont. Val Energy Est. Ft. of Pay _____
 Location: Sec. 28 Twp. 33s Rge. 12w Co. Barber State Ks
 No. of Copies 5 Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluate _____

Interval Tested 4536-4556 Drill Pipe Size 4 1/2 XA
 Anchor Length 20 Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 4531 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 4536 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4556 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb/gal. Viscosity 44 Filtrate 13
 Tool Open @ 10:06 AM Initial Blow weak 1/2" blow decreasing to surface

Final Blow 1/4" blow decreased & died in 16 minutes

Recovery — Total Feet 10 Feet of Gas In Pipe _____ Flush Tool? NO

Rec.	Feet Of	% gas	% oil	% water	%
<u>10</u>	<u>Mud</u>				
Rec.	Feet Of	% gas	% oil	% water	%
Rec.	Feet Of	% gas	% oil	% water	%
Rec.	Feet Of	% gas	% oil	% water	%
Rec.	Feet Of	% gas	% oil	% water	%

BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm S

(A) Initial Hydrostatic Mud 2284 PSI AK1 Recorder No. 13277 Range 4125
 (B) First Initial Flow Pressure 16 PSI @ (depth) 4538 w/Clock No. 27501
 (C) First Final Flow Pressure 16 PSI AK1 Recorder No. 24174 Range 3350
 (D) Initial Shut-In Pressure 41 PSI @ (depth) 4555 w/Clock No. 17652
 (E) Second Initial Flow Pressure 16 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 16 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 33 PSI Initial Opening 30 Test > 550
 (H) Final Hydrostatic Mud 2251 PSI Initial Shut-In 45 Jars > 20

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow 45 Safety Joint > 50
 Final Shut-In 45 Straddle _____
 Circ. Sub _____
 Sampler _____

Approved By [Signature]

Our Representative Paul Simpson

Extra Packer _____

Other _____

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 4 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested N/A
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4205-4227
Anchor Length 22
Top Packer Depth 4205
Bottom Packer Depth 4227
Total Depth 5100

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 8:00 AM Initial Blow PACKER FAILURE

Final Blow _____

Recovery — Total Feet _____ Flush Tool? _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure _____ PSI @ (depth) 4210 w/Clock No. 31154

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure _____ PSI @ (depth) 4222 w/Clock No. 27585

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4025

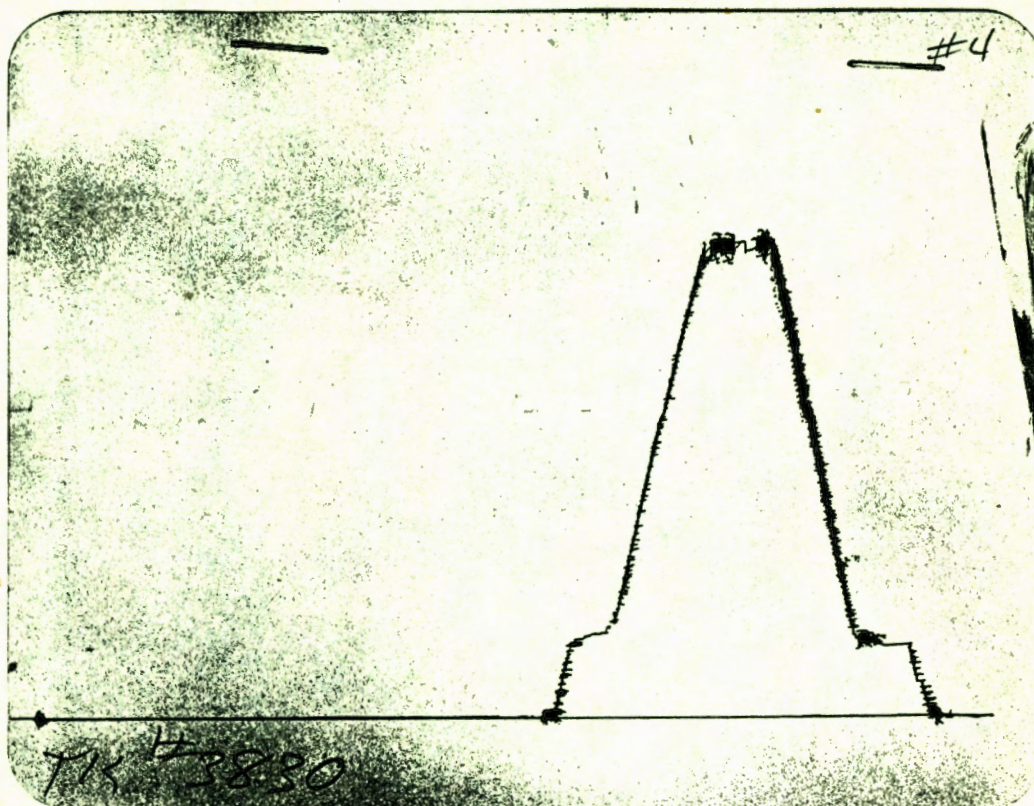
(F) Second Final Flow Pressure _____ PSI @ (depth) 5100 w/Clock No. 20272

(G) Final Shut-In Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Final Shut-In _____

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1050



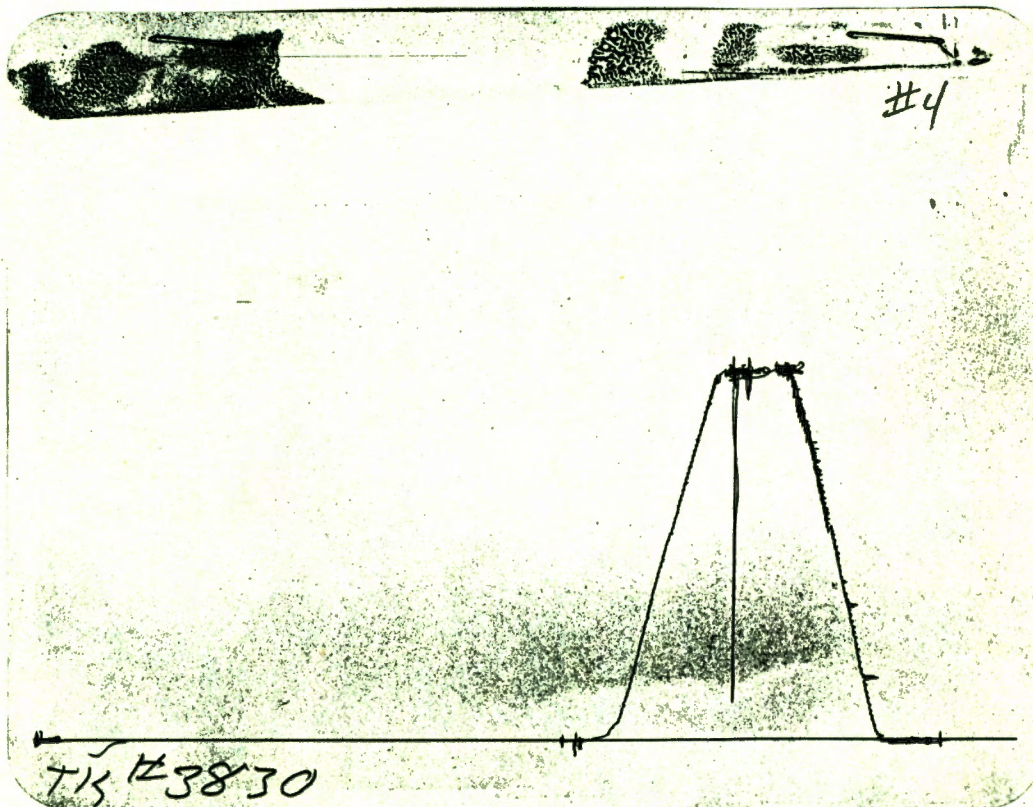
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3830

Test Ticket

Well Name & No. <u>R.M. WATTS</u>	Test No. <u>FOUR</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested _____	
Address <u>4200 ONE WILLIAMS CENTER TULSA OK. 74122</u>	Elevation <u>1532 GL</u>	
Co. Rep./Geo. _____	Cont. _____	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33 S</u>	Rge. <u>12 W</u>
Co. <u>BARBARA</u>		State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____
Turnkey _____		Yes _____ No _____
Evaluation _____		

Interval Tested <u>4205 TO 4227</u>	Drill Pipe Size <u>4 1/2" X.17.</u>
Anchor Length <u>22</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4205</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4227</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5100</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>12</u>
Tool Open @ <u>8:00 A</u>	Initial Blow <u>PIR'S FAILED</u>

Final Blow _____

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____	PSI Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure _____	PSI @ (depth) <u>4210</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure _____	PSI AK1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure _____	PSI @ (depth) <u>4222</u>	w/Clock No. <u>27585</u>
(E) Second Initial Flow Pressure _____	PSI AK1 Recorder No. <u>1055</u>	Range <u>4025</u>
(F) Second Final Flow Pressure _____	PSI @ (depth) <u>5100</u>	w/Clock No. <u>20272</u>
(G) Final Shut-In Pressure _____	PSI Initial Opening _____	Test <u>M/R 4000</u>
(H) Final Hydrostatic Mud _____	PSI Initial Shut-In _____	Jars <u>200</u>

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Final Flow _____ Safety Joint 50
 Final Shut-In _____ Straddle 250
 Circ. Sub _____
 Sampler _____

Approved By Gary Rowe

Our Representative Henry Smith

Extra Packer 150

Other _____

TOTAL PRICE \$ 4050

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 5 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4205-4227
Anchor Length 22
Top Packer Depth 4205
Bottom Packer Depth 4227
Total Depth 5100

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 3:15 PM Initial Blow PACKER FAILURE

Final Blow _____

Recovery — Total Feet _____ Flush Tool? _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure _____ PSI @ (depth) 4210 w/Clock No. 31154

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-In Pressure _____ PSI @ (depth) 4222 w/Clock No. 27585

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4025

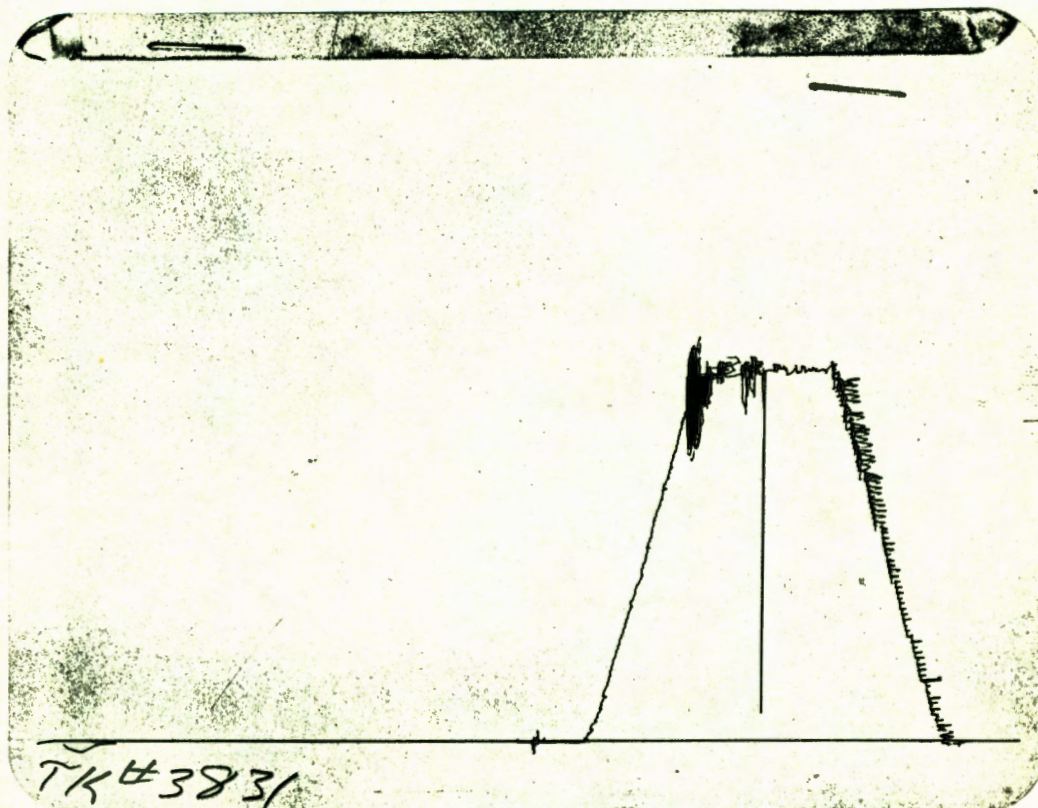
(F) Second Final Flow Pressure _____ PSI @ (depth) 4237 w/Clock No. 20272

(G) Final Shut-In Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Final Shut-In _____

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1350



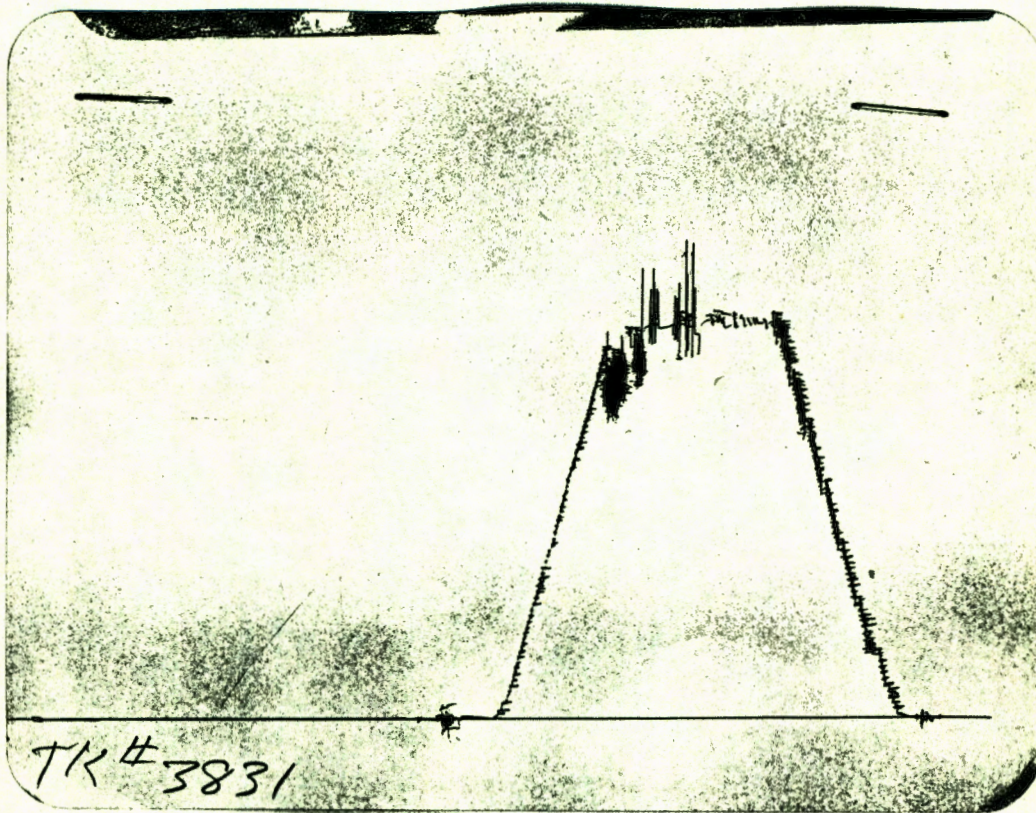
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3831

Test Ticket

Well Name & No. <u>R.M. WATTS</u>	Test No. <u>5</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested <u>LKC</u>	
Address <u>4200 ONE WILLIAMS CENTER TULSA 74172</u>	Elevation <u>1532 G.L.</u>	
Co. Rep./Geo. _____	Cont. _____	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33S</u>	Rge. <u>12W</u> Co. <u>KARREZ</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4205 TO 4227</u>	Drill Pipe Size <u>4 1/2" X.17.</u>
Anchor Length <u>22'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4205</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4227</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5100</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>12</u>
Tool Open @ <u>3:15 P</u>	Initial Blow <u>PKR'S FAILED</u>

Final Blow _____

Recovery — Total Feet	Feet of Gas in Pipe			Flush Tool?	
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____	PSI	Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure _____	PSI	@ (depth) <u>4210</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure _____	PSI	Ak1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure _____	PSI	@ (depth) <u>4222</u>	w/Clock No. <u>27585</u>
(E) Second Initial Flow Pressure _____	PSI	Ak1 Recorder No. <u>1055</u>	Range <u>4025</u>
(F) Second Final Flow Pressure _____	PSI	@ (depth) <u>4237</u>	w/Clock No. <u>20272</u>
(G) Final Shut-In Pressure _____	PSI	Initial Opening _____	Test <u>M/R 4000</u>
(H) Final Hydrostatic Mud _____	PSI	Initial Shut-In _____	Jars <u>200 00</u>

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Final Flow _____ Safety Joint 50 00
Final Shut-In _____ Straddle 250 00

Approved By Gary Rowe

Our Representative James Schmitt

Printcraft Printers - Hays, KS

Sampler _____
Extra Packer 150 00
Other WALL HOOK 300
TOTAL PRICE \$ 1350 00

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RM WATTS #28-1 Test No. 6 Date 4/12/91
Company VINTAGE PETROLEUM INC Zone Tested LANS-KS CITY
Address 4200 ONE WILLIAMS CENTER TULSA Elevation 1532 GL
Co. Rep./Geo. OTIS HUGHES Cont. VAL ENERGY Est. Ft. of Pay _____
Location: Sec. 28 Twp. 33S Rge. 12W Co. BARBER State KS

Interval Tested 4221-4230 Drill Pipe Size 4.5 XH
Anchor Length 9 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4221 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4230
Total Depth 5100

Mud Wt. 9.3 lb / gal. Viscosity 44 Filtrate 12

Tool Open @ 8:17 PM Initial Blow VERY GOOD - BOTTOM OF BUCKET IN 5 MINUTES

Final Blow SAME AS INITIAL

Recovery — Total Feet 1050 Flush Tool? NO

Rec. 1050 Feet of SALT WATER

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT N/A °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.22 @ 63 °F Chlorides 36000 ppm Recovery Chlorides 54000 ppm System

(A) Initial Hydrostatic Mud 2214.6 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 61.2 PSI @ (depth) 4223 w/Clock No. 31154

(C) First Final Flow Pressure 225.8 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1620.4 PSI @ (depth) 4211 w/Clock No. 27585

(E) Second Initial Flow Pressure 304.5 PSI AK1 Recorder No. 1055 Range 4025

(F) Second Final Flow Pressure 556.5 PSI @ (depth) 4240 w/Clock No. 20272

(G) Final Shut-in Pressure 1617.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2201.3 PSI Initial Shut-in 60 Final Shut-in 80

Our Representative MR HARRY SCHMIDT

TOTAL PRICE \$ 1500

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Nº 3832

Test Ticket

Well Name & No. <u>R.M. WATTS #</u>	Test No. <u>81X</u>	Date <u>4-12-91</u>
Company <u>VINTAGE PET. INC.</u>	Zone Tested <u>LISC</u>	
Address <u>4200 ONE WILLIAMS CENTER TULSA 74122</u>	Elevation <u>1532 G.L.</u>	
Co. Rep./Geo. <u>GARY ROWE</u>	Cont. <u>VAL EXNERBY</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>33S</u>	Rge. <u>12W</u> Co. <u>BARBER</u> State <u>OK</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4221 TO 4230</u>	Drill Pipe Size <u>4 1/2" KH.</u>
Anchor Length <u>9'</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4221</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4230</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5100</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>12.0</u>
Tool Open @ <u>8:17 P</u>	Initial Blow <u>VERY GOOD BOT. BUCKET IN 5 MIN.</u>

Final Blow SAME AS INITIAL

Recovery — Total Feet <u>1,050</u>	Feet of Gas in Pipe <u>—</u>	Flush Tool? <u>NO</u>
Rec. <u>1,050</u> Feet Of <u>SALT WATER</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

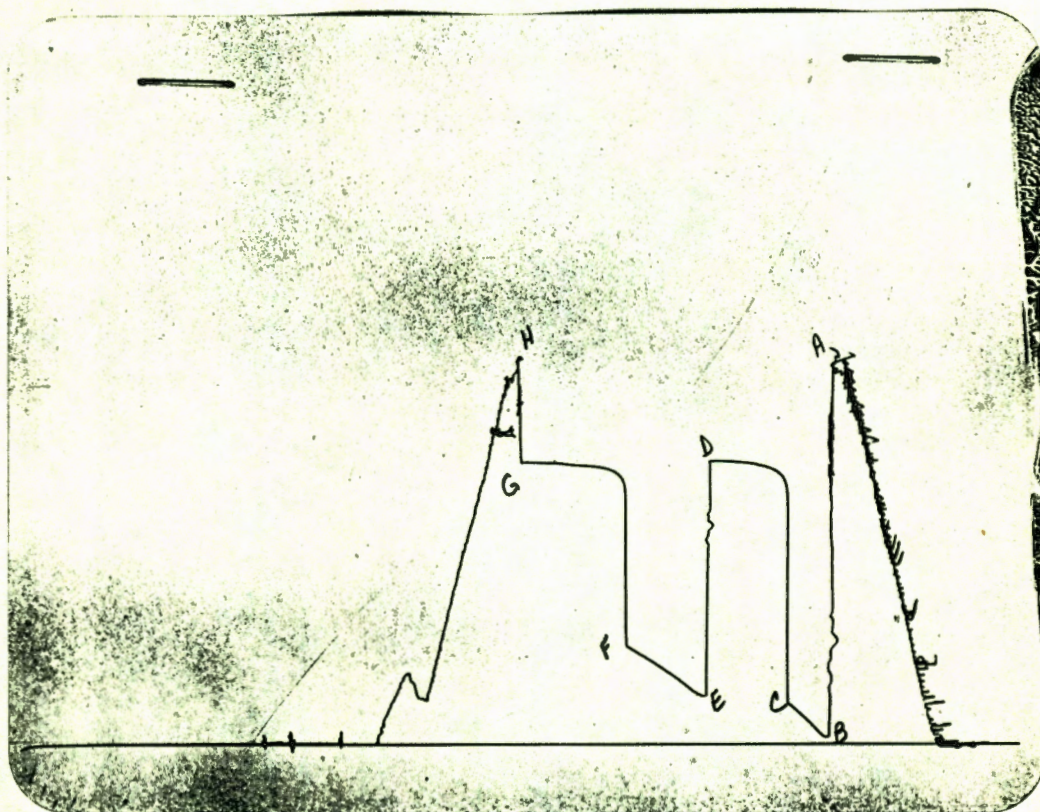
BHT _____ °F	Gravity _____ °API @ _____ °F	Corrected Gravity _____ °API
RW <u>0.22</u> @ <u>63</u> °F	Chlorides <u>36,000</u> ppm	Recovery Chlorides <u>54,000</u> ppm System
(A) Initial Hydrostatic Mud <u>2207</u> PSI	Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure <u>55</u> PSI	@ (depth) <u>4223</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure <u>222</u> PSI	Ak1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure <u>1619</u> PSI	@ (depth) <u>4211</u>	w/Clock No. <u>27585</u>
(E) Second Initial Flow Pressure <u>300</u> PSI	Ak1 Recorder No. <u>1055</u>	Range <u>4025</u>
(F) Second Final Flow Pressure <u>554</u> PSI	@ (depth) <u>4240</u>	w/Clock No. <u>20272</u>
(G) Final Shut-In Pressure <u>1619</u> PSI	Initial Opening <u>30</u>	Test <u>5500</u>
(H) Final Hydrostatic Mud <u>2207</u> PSI	Initial Shut-In <u>60</u>	Jars <u>2000</u>

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Final Flow <u>60</u>	Safety Joint <u>5000</u>
Final Shut-In <u>80</u>	Straddle <u>2500</u>
RAIN RAIN RAIN	Circ. Sub _____
	Sampler _____
	Extra Packer <u>1500</u>
	Other <u>WALL HOOK 3000</u>
	TOTAL PRICE \$ <u>1500</u>

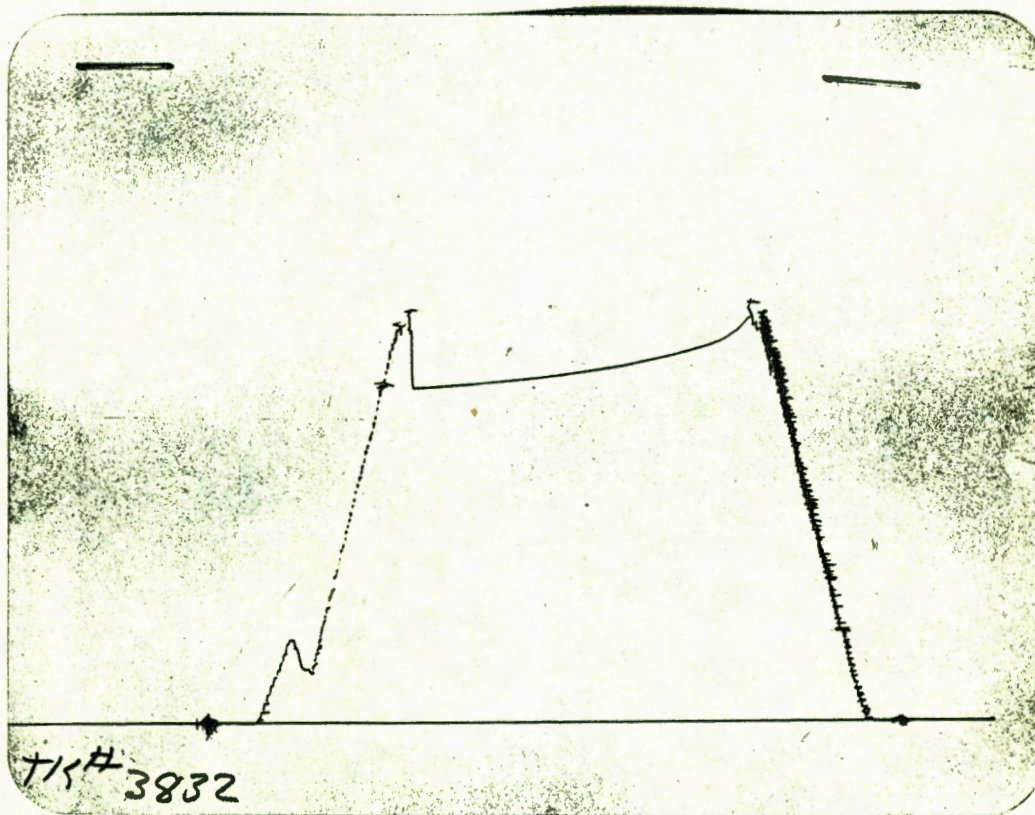
Approved By Gary Rowe

Our Representative Henry Schmidt



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2207	2214.6
(B) FIRST INITIAL FLOW PRESSURE	55	61.2
(C) FIRST FINAL FLOW PRESSURE	222	225.8
(D) INITIAL CLOSED-IN PRESSURE	1619	1620.4
(E) SECOND INITIAL FLOW PRESSURE	300	304.5
(F) SECOND FINAL FLOW PRESSURE	554	556.5
(G) FINAL CLOSED-IN PRESSURE	1619	1617.6
(H) FINAL HYDROSTATIC MUD	2207	2201.3



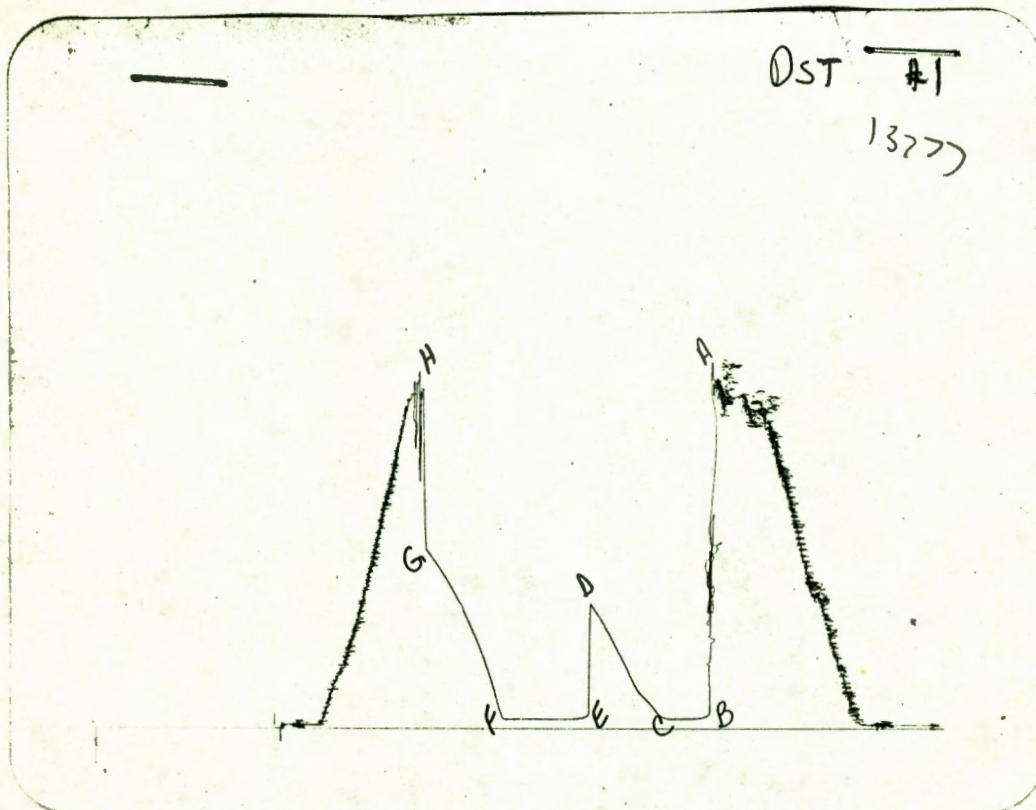
POINT

This is an actual photograph of recorder chart
PRESSURE

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD



POINT

This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1682	1688.4
(B) FIRST INITIAL FLOW PRESSURE	16	26.9
(C) FIRST FINAL FLOW PRESSURE	16	26.9
(D) INITIAL CLOSED-IN PRESSURE	628	637.2
(E) SECOND INITIAL FLOW PRESSURE	16	29
(F) SECOND FINAL FLOW PRESSURE	16	29
(G) FINAL CLOSED-IN PRESSURE	945	936.4
(H) FINAL HYDROSTATIC MUD	1623	1622.5