



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 1941

P. O. BOX 1599 PHONE (316) 838-0601 WICHITA, KANSAS 67201

Elevation 1303 KB Formation Cattelman Eff. Pay Ft.

District Augusta Date 28 Mar 79 Customer Order No.

COMPANY NAME Hoppe Oil & Gas Company

ADDRESS 1021 E Waterman Suite 6 City 67202

LEASE AND WELL NO. Graham #2 COUNTY Cowley STATE Kan Sec. 21 Twp 31 Rge 5E

Mail Invoice To Same Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 2836 ft. to 2888 ft. Total Depth 2888 ft. Packer Depth 2836 ft. Size 6 3/4 in. Packer Depth = ft. Size = in. Packer Depth = ft. Size = in.

Top Recorder Depth (Inside) 2875 ft. Recorder Number 1558 Cap. 4200 Bottom Recorder Depth (Outside) 2878 ft. Recorder Number 1559 Cap. 4200 Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor White & Eldio #4 Drill Collar Length 120' I. D. 2 1/4 in. Mud Type Chemical Viscosity 42 Weight Pipe Length I. D. in. Weight 9.8 Water Loss 24 cc. Drill Pipe Length 2701' I. D. 3.8 in. Chlorides 8,000 P.P.M. Test Tool Length 67' in. Tool Size 5 1/2 in. Jars: Make Serial Number Anchor Length 52 ft. Size 5 1/2 in. Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: very weak flow died 10 minutes into initial flow period / no flow on final flow period

Recovered 10 ft. of drilling mud with a few specks of oil

Recovered ft. of Recovered ft. of Recovered ft. of Recovered ft. of

Remarks:

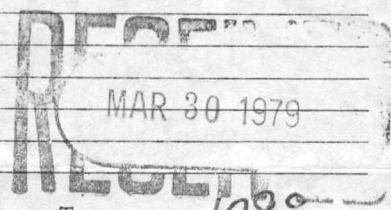


Table with 4 columns: Time Set Packer(s), P.M., Time Started Off Bottom, P.M., Maximum Temperature. Rows include Initial Hydrostatic Pressure, Initial Flow Period, Initial Closed In Period, Final Flow Period, Final Closed In Period, Final Hydrostatic Pressure.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By: [Signature] Signature of Customer or his authorized representative

Western Representative: W.K. Hager Thank You!

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Extra Charts.

TOTAL \$ 440.00

WESTERN TESTING CO., INC.

Pressure Data

Date 3-28-79

Test Ticket No. 1941

Recorder No. 1558

Capacity 4200

Location 2875 Ft.

Clock No. _____

Elevation 1303 KB

Well Temperature 109 °F

Point	Pressure	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1521</u> P.S.I.	<u>5:10</u> P.M.	
B. First Initial Flow Pressure	<u>70</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>38</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>34</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E. Second Initial Flow Pressure	<u>32</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F. Second Final Flow Pressure	<u>23</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
G. Final Closed-in Pressure	<u>23</u> P.S.I.		
H. Final Hydrostatic Mud	<u>1519</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

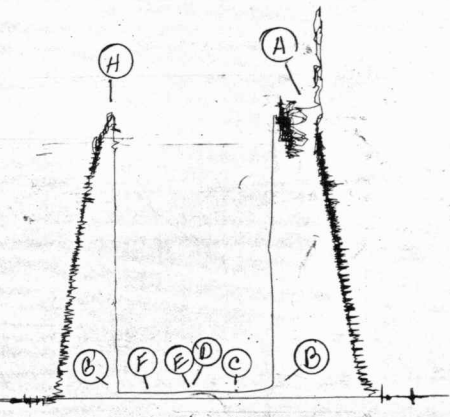
Initial Shut-In
Breakdown: _____ Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	0	70	0	38	0	32	0	23
P 2	5	48	3		5	29	3	
P 3	10	38	6		10	25	6	
P 4	15	34	9		15	23	9	
P 5	20	29	12	38	20		12	
P 6	25	27	15	35	25		15	
P 7	30	38	18	30	30	23	18	
P 8	35		21	33	35		21	
P 9	40		24	34	40		24	
P 10	45		27	34	45		27	
P 11	50		30	34	50		30	23
P 12	55		33		55		33	
P 13	60		36		60		36	
P 14			39		65		39	
P 15			42		70		42	
P 16			45		75		45	
P 17			48		80		48	
P 18			51		85		51	
P 19			54		90		54	
P 20			57				57	
			60				60	

TKC# 1941
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Company Hoppe Oil & Gas Company Lease & Well No. Graham #2
 Elevation 1303 Kelly Bushing Formation Cattleman Effective Pay -- Ft. Ticket No. 1941
 Date 3/28/79 Sec. 21 Twp. 31S Range 5E County Cowley State Kansas
 Test Approved by Don Pate Western Representative W. K. Hager

Formation Test No. 1 Interval Tested from 2836 ft. to 2888 ft. Total Depth 2888 ft.
 Packer Depth 2836 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set --

Top Recorder Depth (Inside) 2875 ft. Recorder Number 1558 Cap. 4200
 Bottom Recorder Depth (Outside) 2878 ft. Recorder Number 1559 Cap. 4200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor White & Ellis #4 Drill Collar Length 120 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 42 Weight Pipe Length - I. D. - in.
 Weight 9.8 Water Loss 24 cc. Drill Pipe Length 2701 I. D. 3.8 in.
 Chlorides 8,000 P.P.M. Test Tool Length 67' ~~in~~ Tool Size 5 1/2 in.
 Jars: Make -- Serial Number -- Anchor Length 52 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak blow; died 10 minutes into initial flow period/no blow on final flow period.

Recovered 10 ft. of drilling mud with a few specks of oil
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s)	<u>5:10</u>	<u>A.M.</u> P.M.	Time Started Off Bottom	<u>7:10</u>	<u>A.M.</u> P.M.	Maximum Temperature	<u>109</u>
Initial Hydrostatic Pressure			(A)	<u>1521</u>		P.S.I.	
Initial Flow Period			Minutes	<u>30</u>	(B)	<u>70</u>	P.S.I. to (C) <u>38</u> P.S.I.
Initial Closed In Period			Minutes	<u>30</u>	(D)	<u>34</u>	P.S.I.
Final Flow Period			Minutes	<u>30</u>	(E)	<u>32</u>	P.S.I. to (F) <u>23</u> P.S.I.
Final Closed In Period			Minutes	<u>03</u>	(G)	<u>23</u>	P.S.I.
Final Hydrostatic Pressure			(H)	<u>1519</u>		P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 3/28/79 Test Ticket No. 1941
 Recorder No. 1558 Capacity 4200 Location 2875 Ft.
 Clock No. -- Elevation 1303 Kelly Bushing Well Temperature 109 °F

Point	Pressure			Time Given	Time Computed
A Initial Hydrostatic Mud	1521	P.S.I.	Open Tool	5:10P	M
B First Initial Flow Pressure	70	P.S.I.	First Flow Pressure	30	Mins. 30 Mins.
C First Final Flow Pressure	38	P.S.I.	Initial Closed-in Pressure	30	Mins. 30 Mins.
D Initial Closed-in Pressure	34	P.S.I.	Second Flow Pressure	30	Mins. 30 Mins.
E Second Initial Flow Pressure	32	P.S.I.	Final Closed-in Pressure	30	Mins. 30 Mins.
F Second Final Flow Pressure	23	P.S.I.			
G Final Closed-in Pressure	23	P.S.I.			
H Final Hydrostatic Mud	1519	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In		
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a		
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	70	0	38	0	32	0	23
P 2	5	48	3	38	5	29	3	23
P 3	10	38	6	38	10	25	6	23
P 4	15	34	9	38	15	23	9	23
P 5	20	29	12	38	20	23	12	23
P 6	25	27	15	35	25	23	15	23
P 7	30	38	18	30	30	23	18	23
P 8			21	33			21	23
P 9			24	34			24	23
P10			27	34			27	23
P11			30	34			30	23
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								