



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 16656

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1389 K.B Formation Arb Eff. Pay Ft.

District 12 Pratt Date 11/26/90 Customer Order No.

COMPANY NAME Hawkins Oil & Gas Inc

ADDRESS 400 S. BOSTON #800 TULSA, OK 74103

LEASE AND WELL NO. Hamilton #1A COUNTY Butlen STATE Ok Sec. 11 Twp. 26 Rge. 4E

Mail Invoice To Same HAMILTON #1A Co. Name Address No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2358 ft. to 2367 ft. Total Depth 2367 ft.

Packer Depth 2353 ft. Size 6 1/8 in. Packer Depth - ft. Size - in.

Packer Depth 2358 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2346 ft. Recorder Number 13552 Cap. 40.50

Bottom Recorder Depth (Outside) 2362 ft. Recorder Number 13361 Cap. 42.50

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor White & Ellis Rig #7 Drill Collar Length 180 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 36 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 12.8 cc. Drill Pipe Length 2152 I. D. 3.8 in.

Chlorides 2,600 P.P.M. Test Tool Length 26 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 9 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out No Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak to strong on first flow

Strong throughout second flow

Recovered 60 ft. of Gas in Pipe

Recovered 390 ft. of Clean Gassy Oil (36 Gravity)

Recovered ft. of 390 oil

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 4:30 A.M. P.M. Time Pick Up Tool 5:00 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 6:30 A.M. P.M. Time Started Off Bottom 9:30 A.M. P.M. Maximum Temperature 102°

Initial Hydrostatic Pressure (A) 1135 P.S.I.

Initial Flow Period Minutes 30 (B) 20 P.S.I. to (C) 81 P.S.I.

Initial Closed In Period Minutes 30 (D) 821 P.S.I.

Final Flow Period Minutes 60 (E) 111 P.S.I. to (F) 152 P.S.I.

Final Closed In Period Minutes 60 (G) 831 P.S.I.

Final Hydrostatic Pressure (H) 1115 P.S.I.

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. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

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 Jim Wandra Thank You

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$550), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, TOTAL.

2376

WESTERN TESTING CO., INC.
Pressure Data

Date 11-26-90 Test Ticket No. 16656
 Recorder No. 13552 Capacity 4050 Location _____ Pt. _____
 Clock No. _____ Elevation 1389 K.B. Well Temperature 102 °P

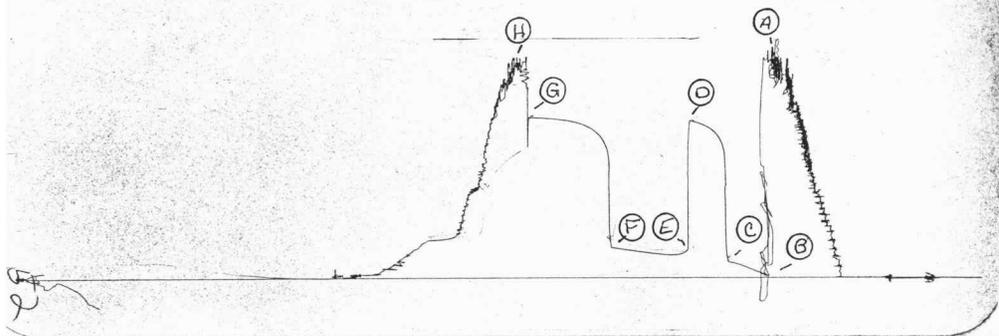
Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1155</u> P.S.I.		<u>6:30 P</u> M	
B First Initial Flow Pressure	<u>24</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins
C First Final Flow Pressure	<u>87</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>33</u> Mins
D Initial Closed-in Pressure	<u>837</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins	<u>60</u> Mins
E Second Initial Flow Pressure	<u>127</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins	<u>60</u> Mins
F Second Final Flow Pressure	<u>163</u> P.S.I.			
G Final Closed-in Pressure	<u>851</u> P.S.I.			
H Final Hydrostatic Mud	<u>1147</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ 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	<u>24</u>	0	<u>87</u>	0	<u>127</u>	0	<u>163</u>
P 2 5	<u>24</u>	3	<u>166</u>	5	<u>127</u>	3	<u>709</u>
P 3 10	<u>38</u>	6	<u>614</u>	10	<u>127</u>	6	<u>743</u>
P 4 15	<u>52</u>	9	<u>721</u>	15	<u>127</u>	9	<u>767</u>
P 5 20	<u>67</u>	12	<u>756</u>	20	<u>128</u>	12	<u>784</u>
P 6 25	<u>78</u>	15	<u>780</u>	25	<u>132</u>	15	<u>798</u>
P 7 30	<u>87</u>	18	<u>795</u>	30	<u>136</u>	18	<u>808</u>
P 8 35		21	<u>809</u>	35	<u>141</u>	21	<u>816</u>
P 9 40		24	<u>818</u>	40	<u>146</u>	24	<u>823</u>
P10 45		27	<u>825</u>	45	<u>152</u>	27	<u>829</u>
P11 50		30	<u>831</u>	50	<u>157</u>	30	<u>834</u>
P12 55		33	<u>837</u>	55	<u>162</u>	33	<u>837</u>
P13 60		36		60	<u>163</u>	36	<u>840</u>
P14 65		39		65		39	<u>843</u>
P15 70		42		70		42	<u>844</u>
P16 75		45		75		45	<u>846</u>
P17 80		48		80		48	<u>848</u>
P18 85		51		85		51	<u>850</u>
P19 90		54		90		54	<u>851</u>
P20 95		57		95		57	<u>851</u>
100		60		100		60	<u>851</u>

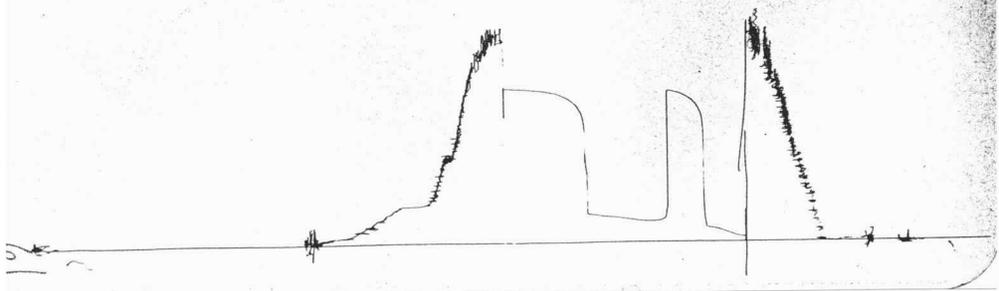
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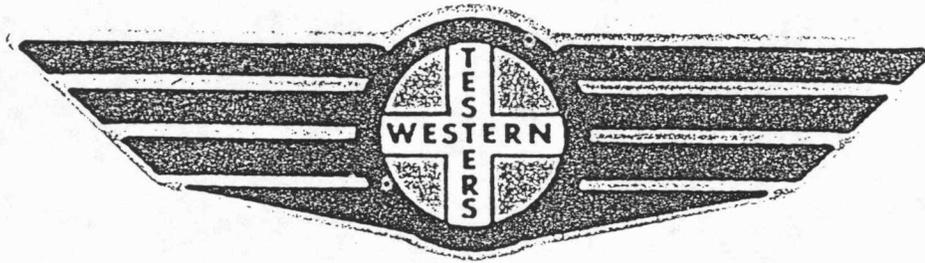


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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 11-26-90 TICKET : 16656
CUSTOMER : HAWKINS OIL & GAS INC. LEASE : HAMILTON
WELL : 1-A TEST: 1 GEOLOGIST : JOHNSON
ELEVATION : 1389 K.B. FORMATION : ARBUCKLE
SECTION : 11 TOWNSHIP : 26S
RANGE : 4E COUNTY : BUTLER STATE : KANSAS
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 2358 TO : 2367 TOTAL DEPTH : 2367
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2353 SIZE : 6.63
PACKER DEPTH : 2358 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : WHITE & ELLIS RIG 7
MUD TYPE : CHEMICAL VISCOSITY : 36
WEIGHT : 9.3 WATER LOSS (CC) : 12.8
CHLORIDES (PPM) : 2600
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 180 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 2152 FT I.D. inch : 3.80
TEST TOOL LENGTH : 26 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 9 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

BLOW COMMENT #1 : INITIAL FLOW PERIOD WEAK TO STRONG BLOW.
BLOW COMMENT #2 : FINAL FLOW PERIOD STRONG BLOW THROUGHOUT.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 390 FT OF: CLEAN GASSY OIL
RECOVERED : 0 FT OF: 36 GRAVITY CORRECTED

Total Barrels Fluid = 3.83
Total Fluid Prod Rate = 61.29 BFPD
Indicated Oil Rate = 61.29 BOPD
Corrected Oil Rate = 59.72 BOPD

REMARK 1 :
REMARK 2 : RECOVERED 60 FT. OF GAS ABOVE FLUID
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 6:30 P.M. TIME STARTED OFF BOTTOM : 9:30 P.M.
WELL TEMPERATURE : 102
INITIAL HYDROSTATIC PRESSURE (A) 1155
INITIAL FLOW PERIOD MIN: 30 (B) 24 PSI TO (C) : 87
INITIAL CLOSED IN PERIOD MIN: 33 (D) 837
FINAL FLOW PERIOD MIN: 60 (E) 127 PSI TO (F) : 163
FINAL CLOSED IN PERIOD MIN: 60 (G) 851
FINAL HYDROSTATIC PRESSURE (H) 1147

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : HAWKINS OIL & GAS INC.
RIG : BUTLER-KANSAS
FIELD : HAMILTON
WELL : 1-A
DATE : 11-26-90
GAUGE NO : 13552

OPERATIONAL COMMENTS

RECOVERED 60 FT. OF GAS ABOVE FLUID

COMPANY : HAWKINS OIL & GAS INC.
 WELL : 1-A
 GAUGE # : 13552
 DATE : 26/11/90

FIELD : HAMILTON
 JOB # : 16656
 DEPTH : 2367
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	6:30: 0	0.000	24.000	102.00	0.000
3	6:34:59	0.083	24.000	102.00	0.000
4	6:40: 0	0.167	38.000	102.00	14.000
5	6:45: 0	0.250	52.000	102.00	14.000
6	6:49:59	0.333	67.000	102.00	15.000
7	6:55: 0	0.417	78.000	102.00	11.000
8	7: 0: 0	0.500	87.000	102.00	9.000
INITIAL SHUT-IN PERIOD					
9	7: 3: 0	0.550	166.000	102.00	79.000
10	7: 6: 0	0.600	614.000	102.00	448.000
11	7: 9: 0	0.650	721.000	102.00	107.000
12	7:12: 0	0.700	756.000	102.00	35.000
13	7:15: 0	0.750	780.000	102.00	24.000
14	7:18: 0	0.800	795.000	102.00	15.000
15	7:21: 0	0.850	809.000	102.00	14.000
16	7:24: 0	0.900	818.000	102.00	9.000
17	7:27: 0	0.950	825.000	102.00	7.000
18	7:30: 0	1.000	831.000	102.00	6.000
19	7:33: 0	1.050	837.000	102.00	6.000
FINAL FLOW PERIOD					
20	7:34: 0	1.067	127.000	102.00	-710.000
21	7:37:59	1.133	127.000	102.00	0.000
22	7:43: 0	1.217	127.000	102.00	0.000
23	7:48: 0	1.300	127.000	102.00	0.000
24	7:52:59	1.383	128.000	102.00	1.000
25	7:58: 0	1.467	132.000	102.00	4.000
26	8: 3: 0	1.550	136.000	102.00	4.000
27	8: 7:59	1.633	141.000	102.00	5.000
28	8:13: 0	1.717	146.000	102.00	5.000
29	8:18: 0	1.800	152.000	102.00	6.000
30	8:22:59	1.883	157.000	102.00	5.000
31	8:28: 0	1.967	162.000	102.00	5.000
32	8:33: 0	2.050	163.000	102.00	1.000
FINAL SHUT-IN PERIOD					
33	8:36: 0	2.100	709.000	102.00	546.000
34	8:38:59	2.150	743.000	102.00	34.000
35	8:42: 0	2.200	767.000	102.00	24.000
36	8:45: 0	2.250	784.000	102.00	17.000
37	8:48: 0	2.300	798.000	102.00	14.000
38	8:51: 0	2.350	808.000	102.00	10.000
39	8:53:59	2.400	816.000	102.00	8.000
40	8:57: 0	2.450	823.000	102.00	7.000
41	9: 0: 0	2.500	829.000	102.00	6.000
42	9: 3: 0	2.550	834.000	102.00	5.000
43	9: 6: 0	2.600	837.000	102.00	3.000
44	9: 9: 0	2.650	840.000	102.00	3.000
45	9:11:59	2.700	843.000	102.00	3.000
46	9:15: 0	2.750	844.000	102.00	1.000
47	9:18: 0	2.800	846.000	102.00	2.000
48	9:21: 0	2.850	848.000	102.00	2.000

COMPANY : HAWKINS OIL & GAS INC.
WELL : 1-A
GAUGE # : 13552
DATE : 26/11/90

FIELD : HAMILTON
JOB # : 16656
DEPTH : 2367
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	9:24: 0	2.900	850.000	102.00	2.000
50	9:26:59	2.950	851.000	102.00	1.000
51	9:30: 0	3.000	851.000	102.00	0.000
52	9:33: 0	3.050	851.000	102.00	0.000

WESTERN TESTING CO. INC.