



Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

GAS FLOW REPORT

Date 2-5-77 Ticket 24600 Company Hess Oil Company
Well Name and No. Bertha Stucky #1 Dst No. 1 Interval Tested 2972' - 2997'
County McPherson State Kansas Sec. 24 Twp. 21S Rg. 2W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
10:25AM	10 min.	3.5 PSIG	3/4" choke			144,000 C.F.P.D.
10:30AM	15 min.	4.5 PSIG	3/4" choke			166,000 C.F.P.D.
10:35AM	20 min.	5.5 PSIG	3/4" choke			185,000 C.F.P.D.
Gas to surface in 7 minutes.						

SECOND FLOW						
11:00AM	25 min.	9.0 PSIG	3/4" choke			245,000 C.F.P.D.
11:05AM	30 min.	9.0 PSIG	3/4" choke			245,000 C.F.P.D.
11:10AM	35 min.	8.5 PSIG	3/4" choke			236,000 C.F.P.D.
11:15AM	40 min.	8.0 PSIG	3/4" choke			227,000 C.F.P.D.

GAS BOTTLE

Serial No. - Date Bottle Filled 2-5-77 Date to be Invoiced 2-5-77

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

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Hess Oil Company

Authorized by Jim Hess



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Company Hess Oil Company Lease & Well No. Bertha Stucky #1
Elevation 1497 Kelly Bush Formation Mississippi Effective Pay - Ft. Ticket No. 24600
Date 2-5-77 Sec. 24 Twp. 21S Range 2W County McPherson State Kansas
Test Approved by Jim Hess Western Representative Bill Baker
Formation Test No. 1 O.K. ☒ Misrun ☐ Interval Tested From 2972' to 2997' Total Depth 2997'
Size Main Hole 7 7/8 Rat Hole ☐ Conv. ☐ B.T. ☒ Damaged ☐ Yes ☒ No Conv. ☒ B.T. ☐ Damaged ☐ Yes ☒ No
Top Packer Depth 2967 Ft. Size 6 3/4 Bottom Packer Depth 2972 Ft. Size 6 3/4
Straddle ☐ Conv. ☐ B.T. ☐ Damaged ☐ Yes ☐ No Packer Depth - Ft. Size -
Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 25 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.
RECORDERS Depth 2990 Ft. Clock No. 10167 Depth 2993 Ft. Clock No. 6895
Top Make Kuster Cap. 3150 No. 1565 ^{Inside} ~~Outside~~ Bottom Make Kuster Cap. 3150 No. 1562 ^{Inside} ~~Outside~~
Below Straddle: Depth - Rec. No. - Clock No. - ^{Inside} ~~Outside~~ Depth - Ft. Rec. No. - Clock No. - ^{Inside} ~~Outside~~
Time Set Packer 10:13A. M
Tool Open I.F.P. From 10:15A. M. to 10:35A. M. - Hr. 20 Min. From (B) 44 P.S.I. To (C) 57 P.S.I.
Tool Closed I.C.I.P. From 10:35A. M. to 10:55A. M. - Hr. 20 Min (D) 840 P.S.I.
Tool Open F.F.P. From 10:55A. M. to 11:15A. M. - Hr. 20 Min. From (E) 78 P.S.I. To (F) 67 P.S.I.
Tool Closed F.C.I.P. From 11:15A. M. to 11:45A. M. - Hr. 30 Min. (G) 829 P.S.I.
Initial Hydrostatic Pressure (A) 1567 P.S.I. Final Hydrostatic Pressure (H) 1546 P.S.I. Maximum Temp. 108

INFORMATION

BLOW Strong blow throughout test. Gas to surface in 7 minutes. See attached sheet for
gas measurements.

Did Well Flow - Yes ☒ No ☐ Recovery Total Ft. 60' of gas cut mud.

Reversed Out - Yes ☒ No ☐ Mud Type Chem Viscosity 35 Weight 9.5 Water Loss 13.6 cc. Chlorides 1200 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Blackstone Drllg. (#2) Length Drill Pipe? 2997 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars - Ft. I.D. Drill Collars - In.

Tool Joint Size - In. Length D.S.T. Tool 45 Ft.

Remarks:

WESTERN TESTING CO., INC.

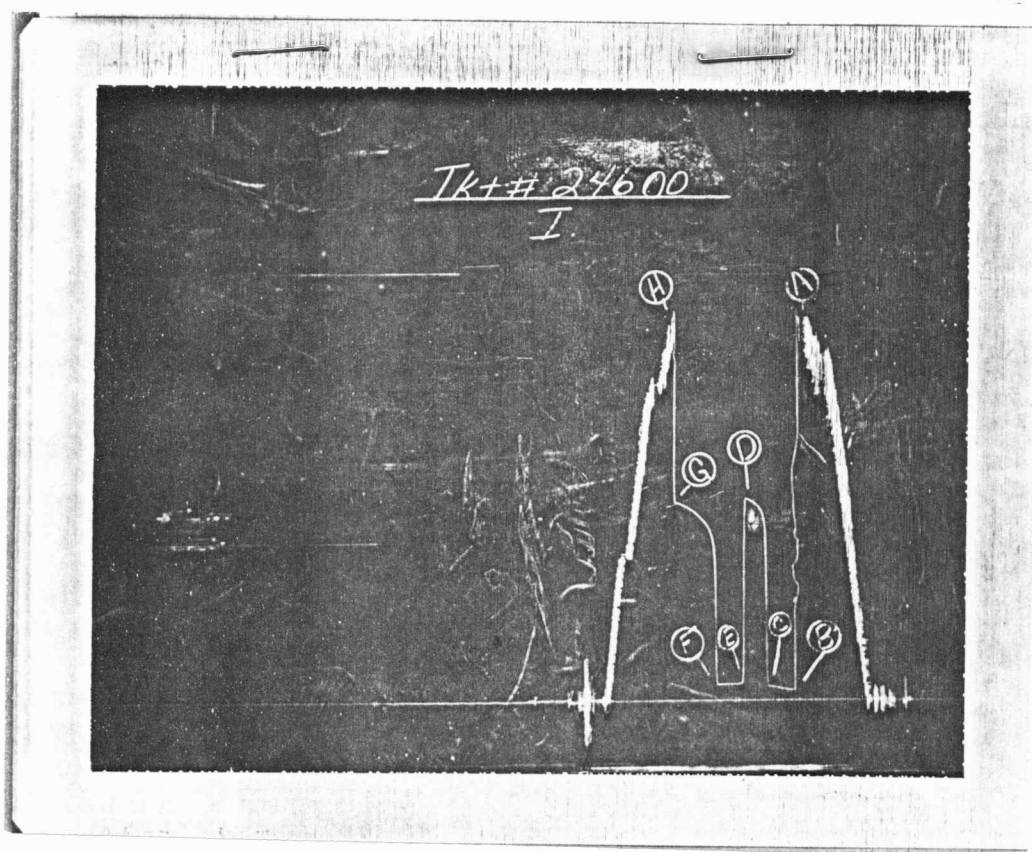
Pressure Data

Date 2-5-77 Test Ticket No. 24600
 Recorder No. 1565 Capacity 3150 Location 2990 Ft.
 Clock No. 10167 Elevation 1497 Kelly Bushing Well Temperature 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1567</u>	P.S.I.	<u>10:13A.</u>	<u>M</u>
B First Initial Flow Pressure	<u>44</u>	P.S.I.	<u>20</u>	<u>20</u> Mins.
C First Final Flow Pressure	<u>57</u>	P.S.I.	<u>20</u>	<u>18</u> Mins.
D Initial Closed-in Pressure	<u>840</u>	P.S.I.	<u>20</u>	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>78</u>	P.S.I.	<u>30</u>	<u>33</u> Mins.
F Second Final Flow Pressure	<u>67</u>	P.S.I.		
G Final Closed-in Pressure	<u>829</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1546</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>4</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>11</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 <u>0</u>	<u>44</u>	<u>0</u>	<u>57</u>	<u>0</u>	<u>78</u>	<u>0</u>	<u>67</u>
P 2 <u>5</u>	<u>45</u>	<u>3</u>	<u>716</u>	<u>5</u>	<u>67</u>	<u>3</u>	<u>652</u>
P 3 <u>10</u>	<u>49</u>	<u>6</u>	<u>785</u>	<u>10</u>	<u>67</u>	<u>6</u>	<u>707</u>
P 4 <u>15</u>	<u>55</u>	<u>9</u>	<u>810</u>	<u>15</u>	<u>67</u>	<u>9</u>	<u>735</u>
P 5 <u>20</u>	<u>57</u>	<u>12</u>	<u>824</u>	<u>20</u>	<u>67</u>	<u>12</u>	<u>755</u>
P 6		<u>15</u>	<u>835</u>			<u>15</u>	<u>773</u>
P 7		<u>18</u>	<u>840</u>			<u>18</u>	<u>787</u>
P 8						<u>21</u>	<u>798</u>
P 9						<u>24</u>	<u>807</u>
P10						<u>27</u>	<u>815</u>
P11						<u>30</u>	<u>823</u>
P12						<u>33</u>	<u>829</u>
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1567	1567	PSI
(B) First Initial Flow Pressure	54	44	PSI
(C) First Final Flow Pressure	62	57	PSI
(D) Initial Closed-in Pressure	854	840	PSI
(E) Second Initial Flow Pressure	78	78	PSI
(F) Second Final Flow Pressure	78	67	PSI
(G) Final Closed-in Pressure	854	829	PSI
(H) Final Hydrostatic Mud	1551	1546	PSI