



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

Company Crowe Drilling Co., Inc. Lease & Well No. Willard #1
 Elevation 1450 Kelly Bush Formation Mississippi Effective Pay - Ft. Ticket No. 24049
 Date 8-13-75 14 Twp. 30S Range 6 E County Cowley State Kansas
 Test Approved by George A. McCaleb Western Representative Forrest Purnell

Formation Test No. 1 O.K. Misrun Interval Tested From 2985' to 2905' Total Depth 2905'
 Size Main Hole 7 7/8 Bit Hole - Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No
 Top Packer Depth 2880 Ft. Size 6 3/4 Bottom Packer Depth 2885 Ft. Size 6 3/4
 Straddle Conv. B.T. Damaged Yes No Packer Depth - Ft. Size -
 Tool Size 5/8 OD Tool Joint Size 4 1/2 FH Anchor Length 20 Ft. Size 5/8 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2894 Ft. Clock No. 9727 Depth 2897 Ft. Clock No. 9103
 Top Make Kuster Cap. 3200 No. 1561 Inside Outside Bottom Make Kuster Cap. 4300 No. 1566 Inside Outside
 Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 5:57 P M
 Tool Open I.F.P. From 6:00P M. to 6:20P M. - Hr. 20 Min. From (B) 18 P.S.I. To (C) 18 P.S.I.
 Tool Closed I.C.I.P. From 6:20P M. to 6:50P M. - Hr. 30 Min (D) 966 P.S.I.
 Tool Open F.F.P. From 6:50P M. to 7:05P M. - Hr. 15 Min. From (E) 25 P.S.I. To (F) 25 P.S.I.
 Tool Closed F.C.I.P. From 7:05P M. to 7:35P M. - Hr. 30 Min. (G) 924 P.S.I.
 Initial Hydrostatic Pressure (A) 1562 P.S.I. Final Hydrostatic Pressure (H) 1493 P.S.I. Maximum Temp. 110

INFORMATION

BLOW No blow. (Flushed tool) no surge.

Did Well Flow Yes No Recovery Total Ft. 10' drilling mud with few specks of oil.

Reversed Out Yes No Mud Type Chemical Viscosity 58 Weight 10 Water Loss 13.6 cc. Chlorides 1600 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 Crowe Drilling Co. Length Drill Pipe? 2046 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.

Length Weight Pipe 798 Ft. I.D. Weight Pipe 2.7 In. Tool Joint Size 4 1/2 FH In. Length Drill Collars 60 Ft. I.D. Drill Collars 2 1/2 In.

Tool Joint Size 4H-90 In. Length D.S.T. Tool 41 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 8-13-75

Test Ticket No. 24049

Recorder No. 1561

Capacity 3200

Location 2894 Ft.

Clock No. 9727

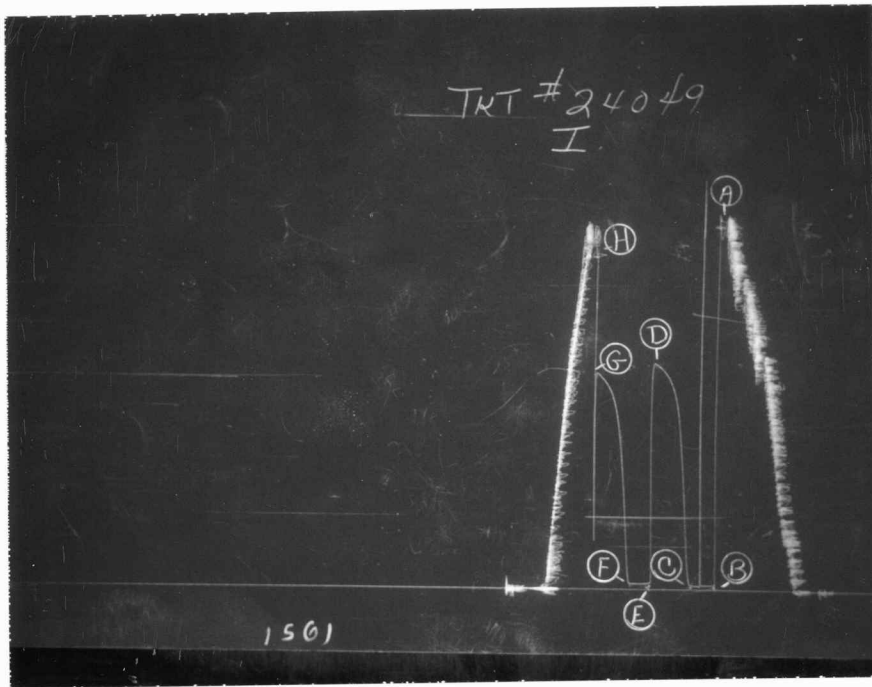
Elevation 1450 Kelly Bushing

Well Temperature 110 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1562</u>	P.S.I.	<u>05:57 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>18</u>	P.S.I.	<u>20</u>	Mins. <u>20</u> Mins.
C First Final Flow Pressure	<u>18</u>	P.S.I.	<u>30</u>	Mins. <u>27</u> Mins.
D Initial Closed-in Pressure	<u>966</u>	P.S.I.	<u>15</u>	Mins. <u>15</u> Mins.
E Second Initial Flow Pressure	<u>25</u>	P.S.I.	<u>30</u>	Mins. <u>27</u> Mins.
F Second Final Flow Pressure	<u>25</u>	P.S.I.		
G Final Closed-in Pressure	<u>924</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1493</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>9</u> Inc.		Breakdown: <u>3</u> Inc.		Breakdown: <u>9</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>18</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>25</u>
P 2 <u>5</u>	<u>18</u> Flushed tool	<u>3</u>	<u>364</u>	<u>5</u>	<u>25</u>	<u>3</u>	<u>183</u>
P 3 <u>10</u>	<u>18</u>	<u>6</u>	<u>649</u>	<u>10</u>	<u>25</u>	<u>6</u>	<u>495</u>
P 4 <u>15</u>	<u>18</u>	<u>9</u>	<u>801</u>	<u>15</u>	<u>25</u>	<u>9</u>	<u>664</u>
P 5 <u>20</u>	<u>18</u>	<u>12</u>	<u>862</u>			<u>12</u>	<u>774</u>
P 6		<u>15</u>	<u>903</u>			<u>15</u>	<u>832</u>
P 7		<u>18</u>	<u>925</u>			<u>18</u>	<u>868</u>
P 8		<u>21</u>	<u>946</u>			<u>21</u>	<u>892</u>
P 9		<u>24</u>	<u>957</u>			<u>24</u>	<u>911</u>
P10		<u>27</u>	<u>966</u>			<u>27</u>	<u>924</u>
P11							
P12							
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	1564	1562	PSI
(B) First Initial Flow Pressure	15	18	PSI
(C) First Final Flow Pressure	15	18	PSI
(D) Initial Closed-in Pressure	974	966	PSI
(E) Second Initial Flow Pressure	23	25	PSI
(F) Second Final Flow Pressure	23	25	PSI
(G) Final Closed-in Pressure	927	924	PSI
(H) Final Hydrostatic Mud	1508	1493	PSI