Date 4-4-60 Well Hare #A-1 Field Conway Spring County Sumner State Kansas

Formation Test No. 1 Casing Test No. - Test Interval 3304' to 3315' Test Ticket No. 59383 L

Company Jones - Gebert Oil Company Address 811 Centeral Bldg.; Wichita, Kansas

Tester Kenneth Cheney Test Approved By Geo. Jones No. of DST Reports Requested 5

SURFACE INFORMATION

		Amount
Well Flowed:	Gas	
Reversed Out:	No	
Recovered:	Heavily oil cut mud	30'
	Free oil	240'

Blow Strong

Maximum Surface Pressure - -

Description (rate of flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool:	12:05 PM	-	-
Closed tool for initial shut-in	12.07 PM	-	-
Re-opened tool	12:22 PM	-	-
Gas to surface	12:57 PM	-	-

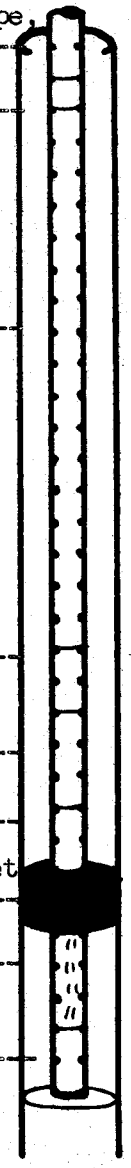
Remarks:

TOOL, HOLE & MUD DATA

Type Test Conventional

Formation Tested Kansas City **Elevation** 1295 **Ft.**

All Depths Measured From kelly bushing.



Total Depth 3315 **Ft.**

Main Hole Size 7 7/8" **Rat Hole Size** -

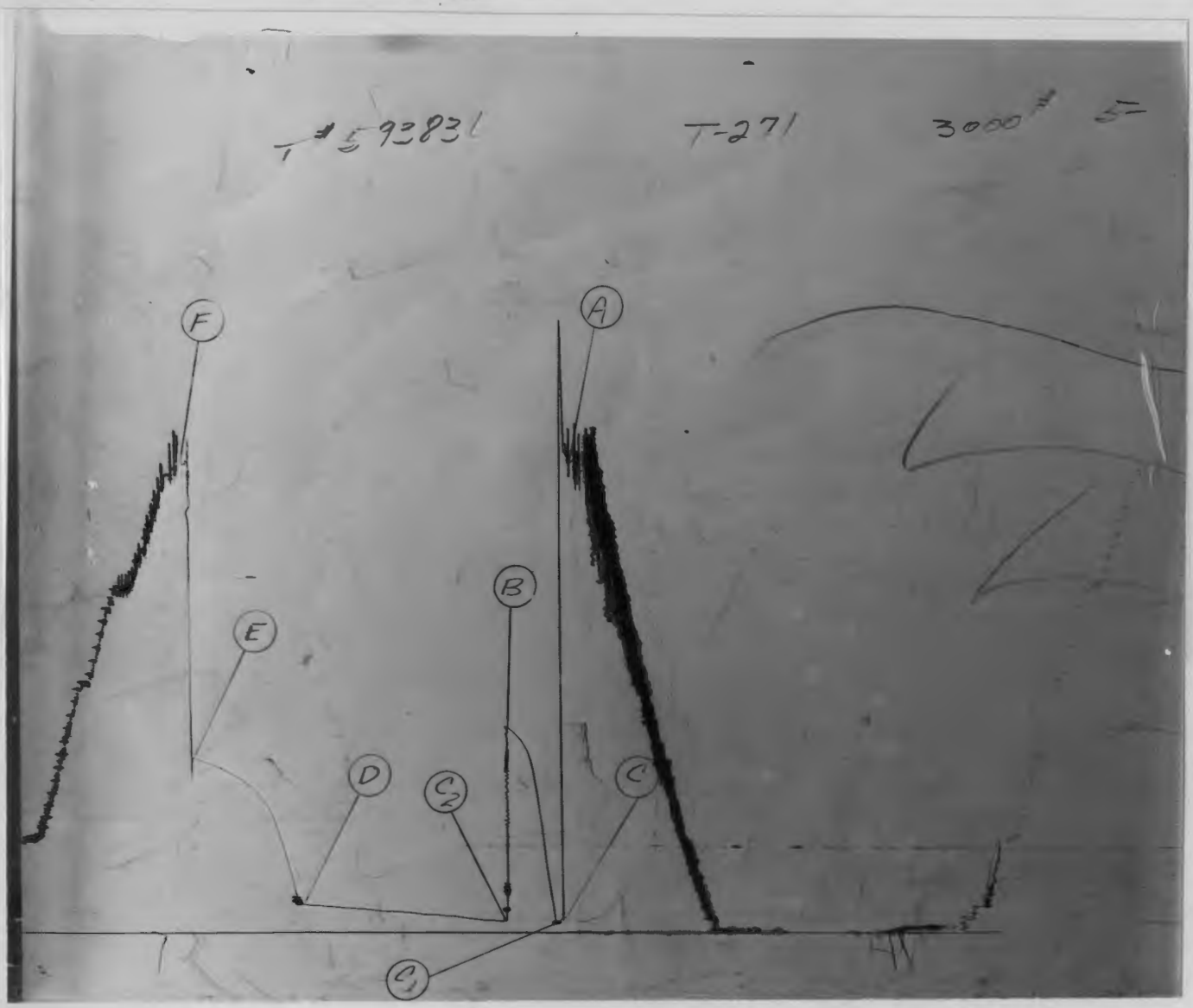
Casing Size - **Liner Size** -

Bottom Choke Size 1/2" **Mud Type** Gel.

Mud Weight 9.8 **Mud Viscosity** 40

Air Chamber: Length			
	Cushion Type	Amount	Pressure
	— —		

TIME



TIME DATA

Initial Shut-in	-	Hrs.	15	Mins.
Flow Period	1	Hrs.	-	Mins.
Final Shut-in	-	Hrs.	25	Mins.

Well Temperature 110 °F.

PRESSURE READING (P.S.I.G.)

Recorder No.	T-271
Capacity (P.S.I.G.)	3000
Location	3294'
A Initial Hyd. Mud.	1731
B Initial Shut-in	*760
C Initial Flow	47
D Final Flow	112
E Final Shut-in	*656
F Final Hyd. Mud	1731
REMARKS	C-1 35
	C-2 44

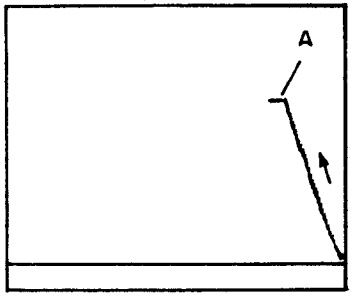
Recorder No.	
Capacity (P.S.I.G.)	
Location	
A Initial Hyd. Mud	
B Initial Shut-in	
C Initial Flow	
D Final Flow	
E Final Shut-in	
F Final Hyd. Mud	
REMARKS	

*Shut in pressure did not reach static reservoir pressure.

Form J-130

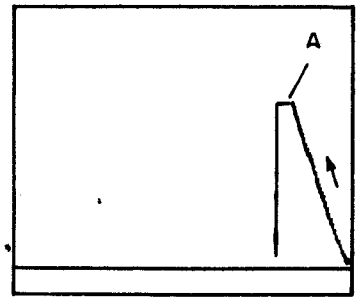
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS

1



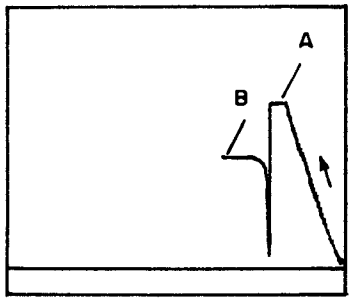
The pressure chart records the build-up in hydrostatic pressure as the testing assembly is lowered into the hole. Upon reaching the testing depth the hydrostatic head or pressure of mud column is recorded.

2



The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.

3

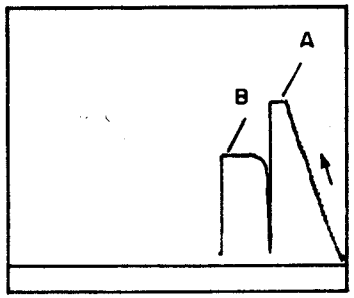


This chart shows the initial shut-in pressure. There are three mechanical methods by which this initial shut-in pressure can be taken:

1. A disc valve with air chamber
2. A shut-in tool closed at top of an air chamber
3. Closing of the main testing valve (no air chamber)

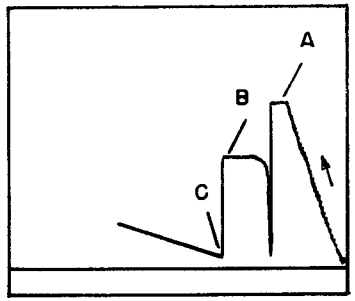
All these methods are carried out by allowing only a minimum of formation fluid to be produced. This initial shut-in pressure is the best method yet devised for recording the original, undisturbed reservoir pressure of a formation.

4



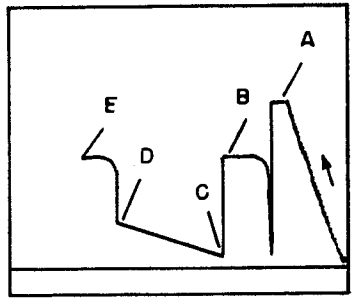
The chart indicates a pressure drop. The test tool has been opened to the surface either by breaking a disc, rotating a shut-in tool open or by reopening the main testing valve to permit the formation to produce.

5



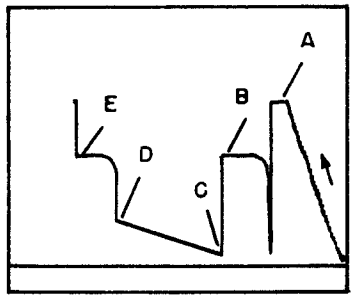
The pressure of fluid flowing from the formation into the well bore, through the perforated anchor, and into the drill pipe, is recorded on the chart.

6



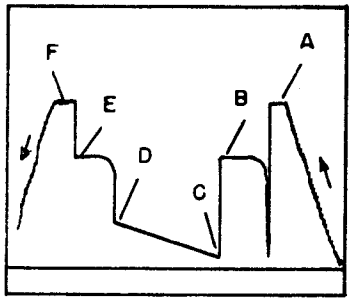
The final shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. Note the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressure. When the shut-in curve levels-off the static reservoir pressure has been reached.

7



The chart shows the equalizing, the by-pass ports have been opened permitting the drilling fluid to flow through the packer to the test zone. Thus, pressure is equalized above and below the packer. The equalization of the pressure facilitates easier removal of the packer from the packer seat.

8



The packer has been unseated. The testing assembly is being removed from the hole.

INDEX OF LABELED POINTS:

- A. Initial Hyd. Mud
- B. Initial shut-in
- C. Initial flow
- D. Final flow
- E. Final shut-in
- F. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings, (testing different zones).

A-1, A-2, A-3, etc. Initial Hyd. Pressures

B-1, B-2, B-3, etc. The Initial Shut-in Pressures

C-1, C-2, C-3, etc. Flowing Pressures

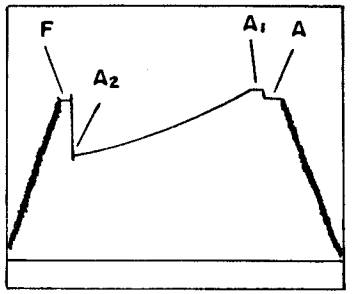
D-1, D-2, D-3, etc. The Final Flow Pressures or Final Shut-in Pressures

E-1, E-2, E-3, etc. The Final Shut-In Pressures

F-1, F-2, F-3, etc. Final Hyd. Mud Pressures

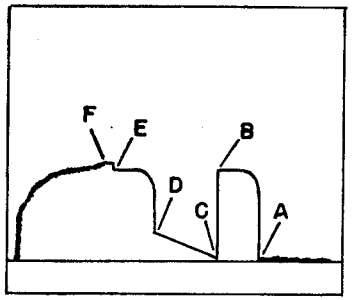
Z — Special pressure points such as pumping pressure recorded for formation breakdown.

A



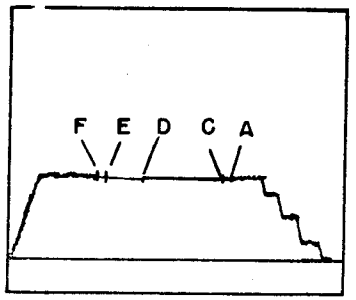
The above is a typical illustration of a chart from a recorder that is run below the bottom pocker on a straddle test. Only the hydrostatic mud pressures are recorded. When the tool is opened, there is a pressure differential across the bottom packer. This differential is lessened by the rubber flow of the packer element, which in turn causes a draw-down in pressure. If the below straddle chart reads the same as a chart that is run to record pressures of the test zone, then the bottom packer has failed. If this occurs, all zones below the top packer are being tested.

B



In this case a recorder has been run in an air chamber. The hydrostatic mud pressures are not influencing the recorder while going in or coming out of the hole due to the main tester valve being closed. The flow pressures and shut-in pressures are recorded while the main tester valve is opened.

C



In this case a recorder has been run above the main tester valve with a fluid cushion used in the drill pipe. No pressure is recorded as the testing tool is being lowered into the hole. Then the fluid cushion pressure is recorded as the drill pipe is filled with fluid. As more stands are run into the hole, the recorder registers the hydrostatic pressures of the cushion. When the main testing valve is opened the pressure of the cushion column or the flowing pressure of the formation, (which ever is greater), is recorded.