

JOHNSTON TESTERS

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TEST DATA								
Formation	Zone Thickness		Ft.		Elevation	2190 KB	2177 GL	
Interval	5195	To	5413	T.D.	5413	Bottom Hole Choke Size	1/2"	
Type of Test	Open Hole, Bottom Hole				Fluid Cushion Type			
Time Started in Hole	0230	Hrs.	Tool Open	0409	Hrs.	Amount		
First Flow	3	Min.	Shut In	30	Min.	TOOL SEQUENCE		
Second Flow	128	Min.	Final Shut In	120	Min.	Tool	Length	O.D.
Pulled Loose @	0850	Hrs.	Out of Hole	1115	Hrs.	Sub.	.82	6"
Wt. Set on Packer	40,000	#	Pulled Loose Wt.	45,000	#	P.O. Sub.	1.05	4 3/4"
Remarks	Mud Dropped 2 Feet and Tool was Chased 2 feet During Test Period.				Shut in Tool			
Description of Blow During Test Good Blow. Gas to Surface in 1 Minute.					Hyd. Tool			
					D. Valve			
					Jars			
					Safety Jt.			
					Recorder			
					T.C. & Pkr.			
					T.C. & Pkr.			
					Total			
					Stub			
					Perf.			
Recorder								
Sub.								
D.C.								
Sub.								
Perf. & B.N.								
Total Interval								
GAS BLOW MEASUREMENTS								
Measured with	3"		I.D. Riser or Est.		<input type="checkbox"/>			
Type of Instrument	Manometer				Sub.			
Impact Mercury					Recorder			
Time	Sfce. Choke	Reading Inches	M	Cubic Feet/Day		Sub.		
0450		6.5		2930		D.C.		
0520		1.6		1460		Sub.		
0550		2.0	2" Riser	7340		Perf. & B.N.		
0620		6.0 water	1" Riser	313		Total Interval		
FLUID RECOVERY								
Was Test Reverse Circulated	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Total Length			
Fluid Recovered (Total)	330'		Ft.		259.81			
Description of Fluid Recovered	330' Gas Cut Drilling Fluid.				MUD AND HOLE DATA			
					Mud Type Gel. W.L. 5.1			
					Filter Cake 2/32 Visc. 95 Wt. 9.4			
					Time Taken June 3, 1965 @ 1000 hrs.			
					Contractor Parker Drilling			
Remarks	Test Satisfactory.				Rig No. 10			
					Drill Pipe Size 4 1/2 XH			
					Drill Collar Size 2 7/8 ID Length 601.86'			
					Main Hole Size 8 5/8"			
					Rat Hole Size			
Co. Rep.	A. Clare				Date June 4/65			
Tester	L. Navratil				Address P.O. Box 240, Dawson Creek, British Columbia			
District	Edmonton				Ticket No. C 3675			
Company	Socony Mobil Oil of Canada				Date June 4/65			
Well Name	Socony Mobil Western Min.				Address P.O. Box 240, Dawson Creek, British Columbia			
Number	Birch YT B-34				Test No. 9			
Formation	66°-03'-03"N-136°-51'-17"W				J.T.L. Test No. 9			
and Interval	DST#9 5195-5413				Field Wildcat			
Distribution of Reports					Province Yukon			
					Consultant			
					8 - Dawson Creek			

JOHNSTON TESTERS

Pressure Data

Test Ticket No. C 3675

Recorder No.	T-49	T-52		
Capacity (P.S.I.G.)	7000	7000		
Recorder Depth	5177	5205		
Pressure Gradient P.S.I./Ft.				
Well Temperature °F.	125° Est.	125° Est.		
A Initial Hydrostatic	2610#	2594#		
B First Initial Flow	1106#	1280#		
C Initial Shut-In-Pres	1951#	1945#		
D Flowing Pres	1231#	1339#		
E Final Flow	115#	90#		
F Final Shut-In	676#	413#		
G Final Hydrostatic	2551#	2537#		

Remarks

T-49 - Inside Recorder - Called in for Recalibration.
 T-52 - Outside Recorder



JOHNSTON TESTERS

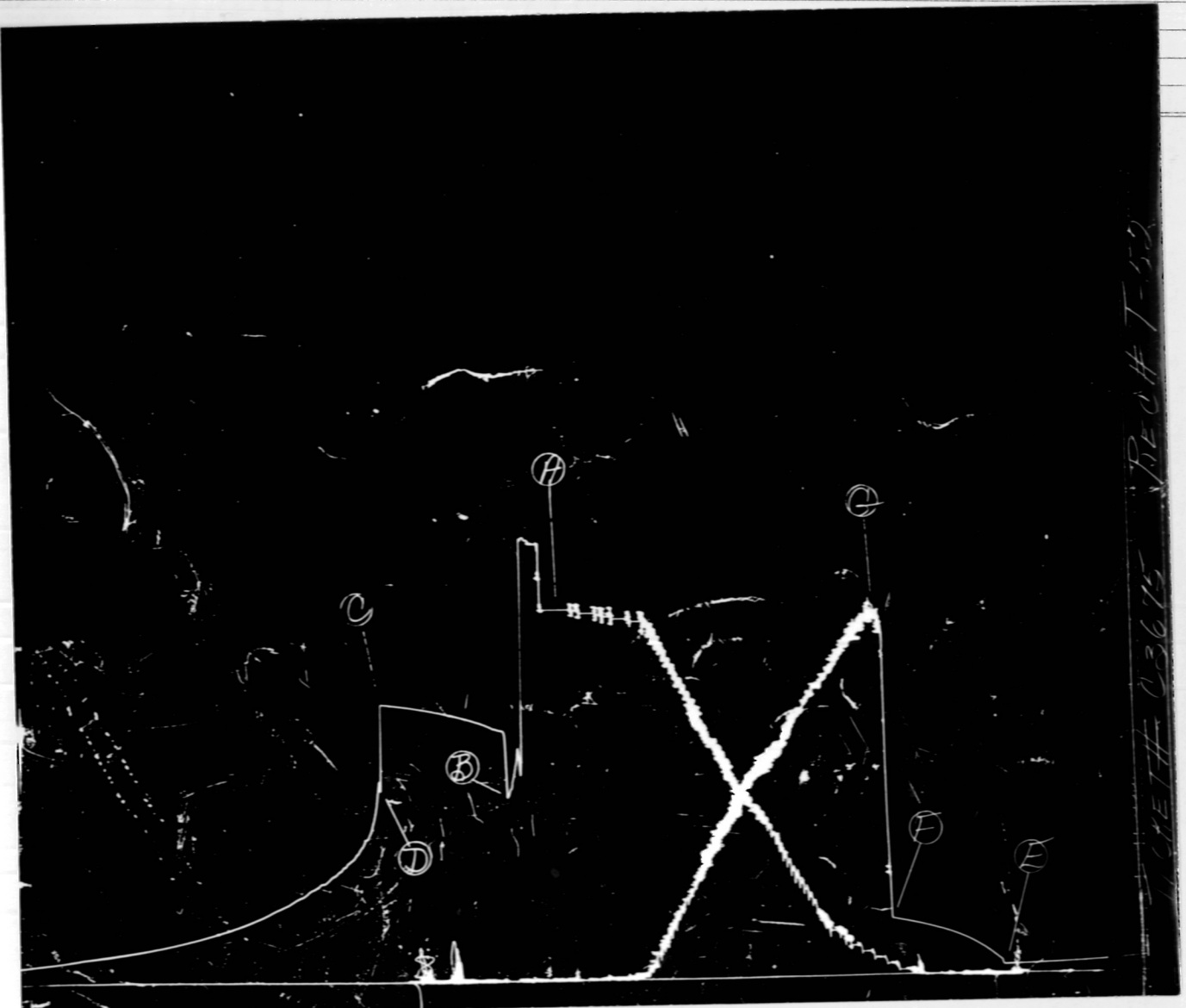
Pressure Data

Test Ticket No. C 3675

Recorder No.	T-49	T-52			
Capacity (P.S.I.G.)	7000	7000			
Recorder Depth	5177	5205			
Pressure Gradient P.S.I./Ft.					
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WIRE # C3675 REC'D # T-52

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Pressure Data

Test Ticket No. C 3675

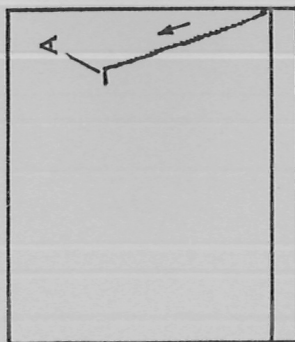
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Recorder Depth	5177	5205		
Pressure Gradient P.S.I./Ft.				
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Remarks

T-49 - Inside Recorder - Called in for Recalibration.

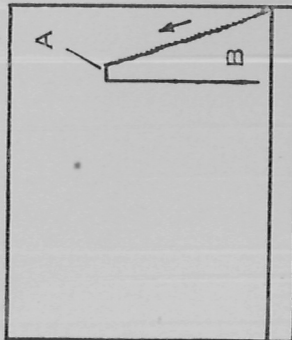
T-52 - Outside Recorder

GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



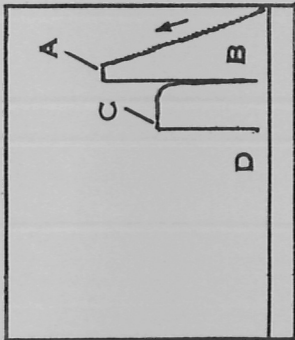
1

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.



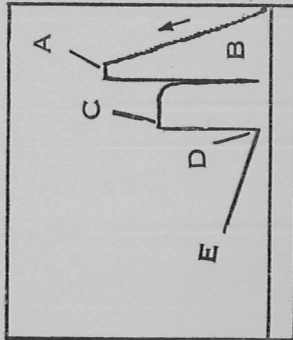
2

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 the removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



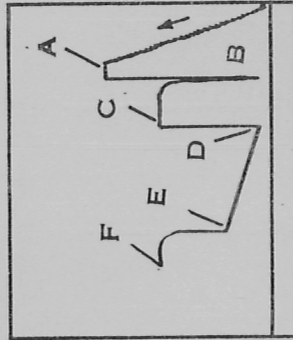
4

The chart indicates a pressure drop. The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position. Permitting the open formation to produce.



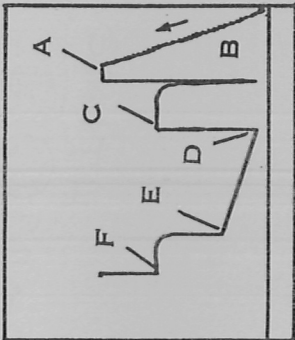
5

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.



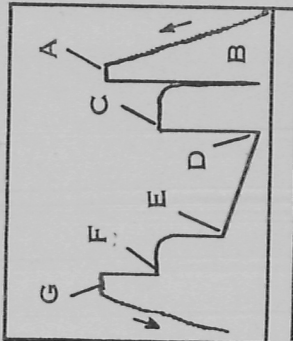
6

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.



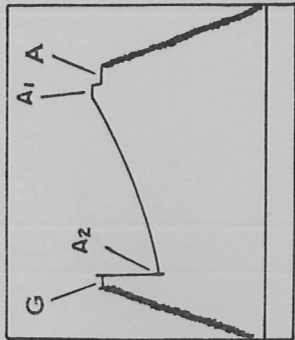
7

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.



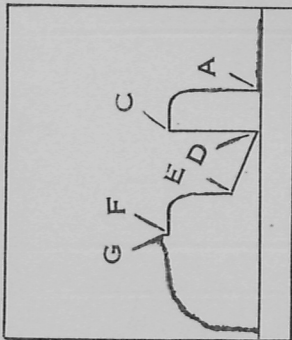
8

The packer has been removed from the hole.



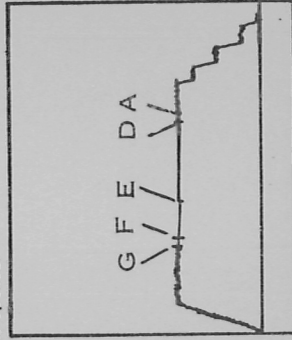
9

The above is a typical illustration of a chart from a recorder that is run below the bottom packer on a conventional 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.



10

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.



11

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 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.

INDEX OF LABELED POINTS:

- A—Initial Hyd. Mud
- B—First Initial Flow
- C—Initial Shut-in
- D—Initial Flow
- E—Final Flow
- F—Final Shut-in
- G—Final Hyd. Mud
- A-1, A-2, A-3, etc. Initial Hyd. Pressures.
- B-1, B-2, B-3, First Initial Flow.
- C-1, C-2, C-3, etc. The Initial Shut-in Pressures.
- D-1, D-2, D-3, etc. Flowing Pressures.
- E-1, E-2, E-3, etc. The Final Flow Pressures or Final Shut-in Pressures.
- F-1, F-2, F-3, etc. The Final Shut-in Pressures.
- G-1, G-2, G-3, etc. Final Hyd. Mud Pressures.
- Z — Special pressure points such as pumping pressure recorded for formation breakdown.

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