

ARROW TESTING COMPANY
P. O. BOX 1051 GREAT BEND, KANSAS 67530

DRILL-STEM TEST DATA

Well Name	Bahr	Test No.	1
Well Number	2	Zone Tested	Arb
Company	J.A. Allison	Date	5-1-89
Comp. Rep.	O. Phelps	Tester	Don Fabricius
Contractor	Woodman-Iannitti Drlg.	Ticket No.	2717
Location	23-18-18	Elevation	

Recorder No.	3088	Clock Range	12	Recorder No.	4377	Clock Range	12
Depth	3745	Depth	3749				
Initial Hydro Mud Press.	1935	Initial Hydro Mud Press.	1935				
Initial Shut-in Press.	70	Initial Shut-in Press.	82				
Initial Flow Press.	23-23	Initial Flow Press.	46-46				
Final Flow Press.	23-23	Final Flow Press.	46-46				
Final Shut-in Press.	58	Final Shut-in Press.	82				
Final Hydro Mud Press.	1935	Final Hydro Mud Press.	1935				
Temperature		Tool Open Before I. S. I.	30	Mins.			
Mud Weight	9.5	Initial Shut-in	45	Mins.			
Fluid Loss	9.2	Flow Period	30	Mins.			
Interval Tested	3707-53	Final Shut-in	45	Mins.			
Top Packer Depth	3702	Surface Choke Size	1"				
Bottom Packer Depth	3707	Bottom Choke Size	3/4"				
Total Depth	3753	Main Hole Size	7 7/8				
Drill Pipe Size	4 1/2 X H	Wt.	16.60	Rubber Size	6 3/4		
Drill Collar I. D.		Ft. Run					
Recovery—Total Feet							
Recovered	5	Feet Of	mud				
Recovered		Feet Of					
Recovered		Feet Of					
Recovered		Feet Of					
Remarks							
Very weak blow dead in 12 min. flushed tool on second open - surge -							

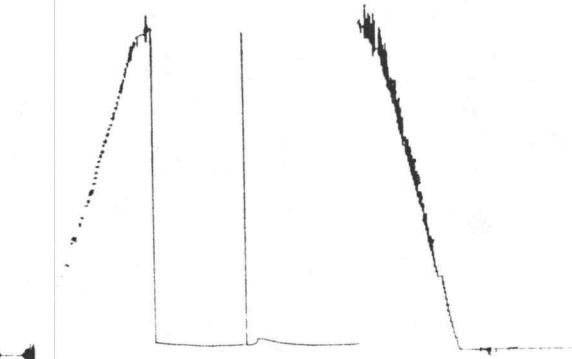
THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Arrow Testing Company shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Arrow Testing Company, nor whether resulting from the acts or omissions of Arrow Testing Company, or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

It is expressly understood and agreed that Arrow Testing Company, shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Arrow Testing Company has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

By _____
Owner, Operator or his Agent

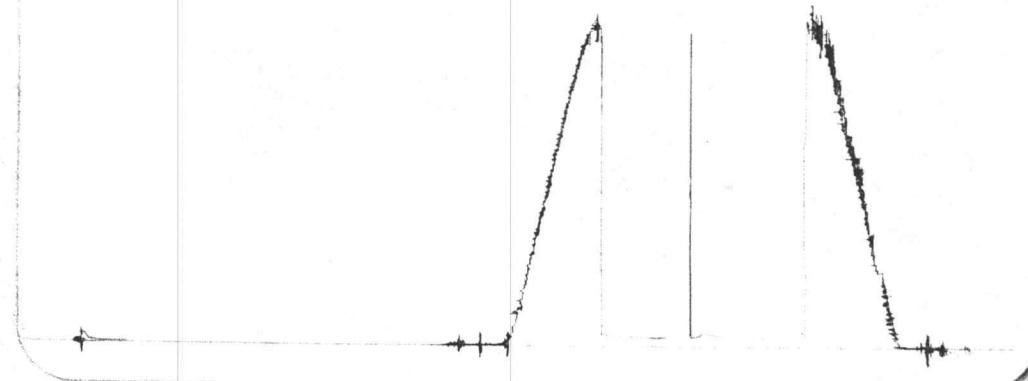
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2717



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2717



DRILL-STEM TEST DATA

Well Name	Bahr	Test No.	2
Well Number	2	Zone Tested	Arb
Company	J.A. Allison	Date	5-1-89
Comp. Rep.	O. Phelps	Tester	Don Fabricius
Contractor	Woodman Iannitti Drlg.	Ticket No.	2718
Location	23-18-18	Elevation	

Recorder No. 3088	Clock Range 12	Recorder No. 4377	Clock Range 12
Depth 3749	Depth 3753		
Initial Hydro Mud Press. 1935	Initial Hydro Mud Press. 1935		
Initial Shut-in Press. 1197	Initial Shut-in Press. 1203		
Initial Flow Press. 58-223	Initial Flow Press. 82-234		
Final Flow Press. 270-353	Final Flow Press. 293-375		
Final Shut-in Press. 1186	Final Shut-in Press. 1192		
Final Hydro Mud Press. 1935	Final Hydro Mud Press. 1935		
Temperature	Tool Open Before I. S. I. 30	Mins.	
Mud Weight 9.5	Viscosity 46	Initial Shut-in 45	Mins.
Fluid Loss 10	Flow Period 30	Mins.	
Interval Tested 3707-57	Final Shut-in 45	Mins.	
Top Packer Depth 3702	Surface Choke Size 1"		
Bottom Packer Depth 3707	Bottom Choke Size 3/4"		
Total Depth 3757	Main Hole Size 7 7/8		
Drill Pipe Size 4 1/2 X H	Wt. 16.60	Rubber Size 6 3/4	
Drill Collar I. D.	Ft. Run		
Recovery—Total Feet 705			
Recovered 207	Feet Of mud		
Recovered 44	Feet Of oil		
Recovered 454	Feet Of water		
Recovered	Feet Of		
Remarks			
Weak building to strong blow thru test			

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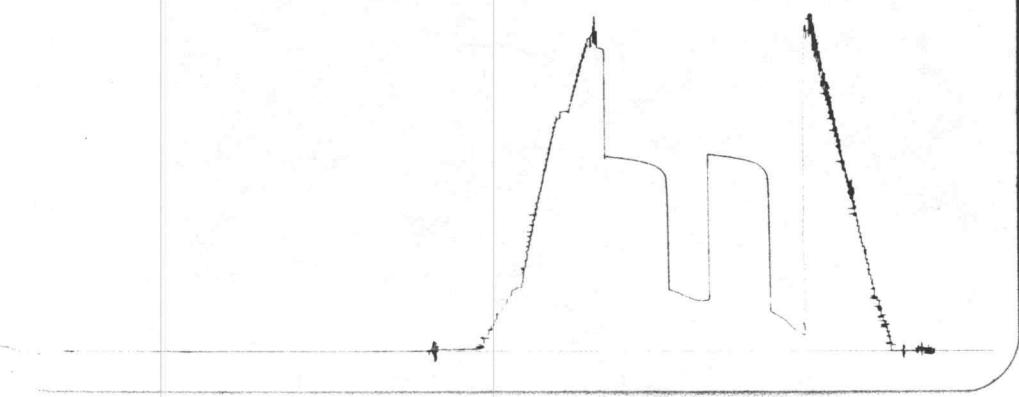
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By

Owner, Operator or his Agents

4377

2718



3088

2718

