

15-159-22408

32-19s-10w

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

DRILL-STEM TEST DATA

Well Name Silica	Test No. 1
Well Number 2	Zone Tested KC
Company Hupfer Operating Inc.	Date 5/23/03
Comp. Rep. J Musgrove	Tester Don Fabricius
Contractor Sterling Drlg	Ticket No. 4091
Location 32-19-10	Elevation

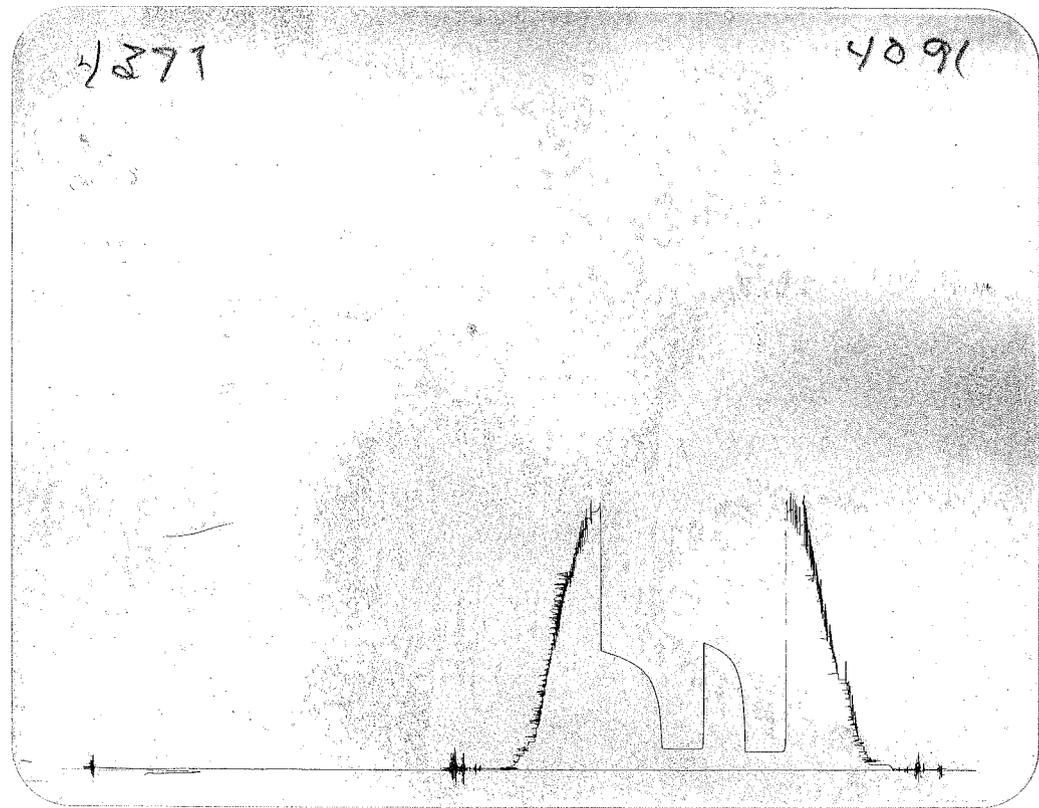
Recorder No. 3088	Clock Range 12	Recorder No. 4377	Clock Range 12
Depth 3140		Depth 3144	
Initial Hydro Mud Press. 1600		Initial Hydro Mud Press. 1604	
Initial Shut-in Press. 778		Initial Shut-in Press. 786	
Initial Flow Press. 94-105		Initial Flow Press. 93-105	
Final Flow Press. 105-117		Final Flow Press. 105-117	
Final Shut-in Press. 730		Final Shut-in Press. 739	
Final Hydro Mud Press. 1600		Final Hydro Mud Press. 1604	
Temperature _____		Tool Open Before I. S. I. 30	Mins.
Mud Weight 9.3	Viscosity 57.0	Initial Shut-in 30	Mins.
Fluid Loss 9.6		Flow Period 30	Mins.
Interval Tested 3048-3148		Final Shut-in 45	Mins.
Top Packer Depth 3043		Surface Choke Size 1	
Bottom Packer Depth 3048		Bottom Choke Size 3/4	
Total Depth 3148		Main Hole Size 7 3/8	
Drill Pipe Size 4 1/2 X Wt. 16.60		Rubber Size 6 3/4	
Drill Collar I. D. 2 1/4	Ft. Run 245		
Recovery—Total Feet _____			
Recovered 255	Feet Of Gas cut mud		
Recovered _____	Feet Of _____		
Recovered _____	Feet Of _____		
Recovered _____	Feet Of _____		
Remarks			
Gas to surface in 7 min Gage- 17,200 in 10 min			
15,400 in 20 - 10, 900 in 30 min Second open gauge 8,700			
in min to small to measure in 20 min			

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.

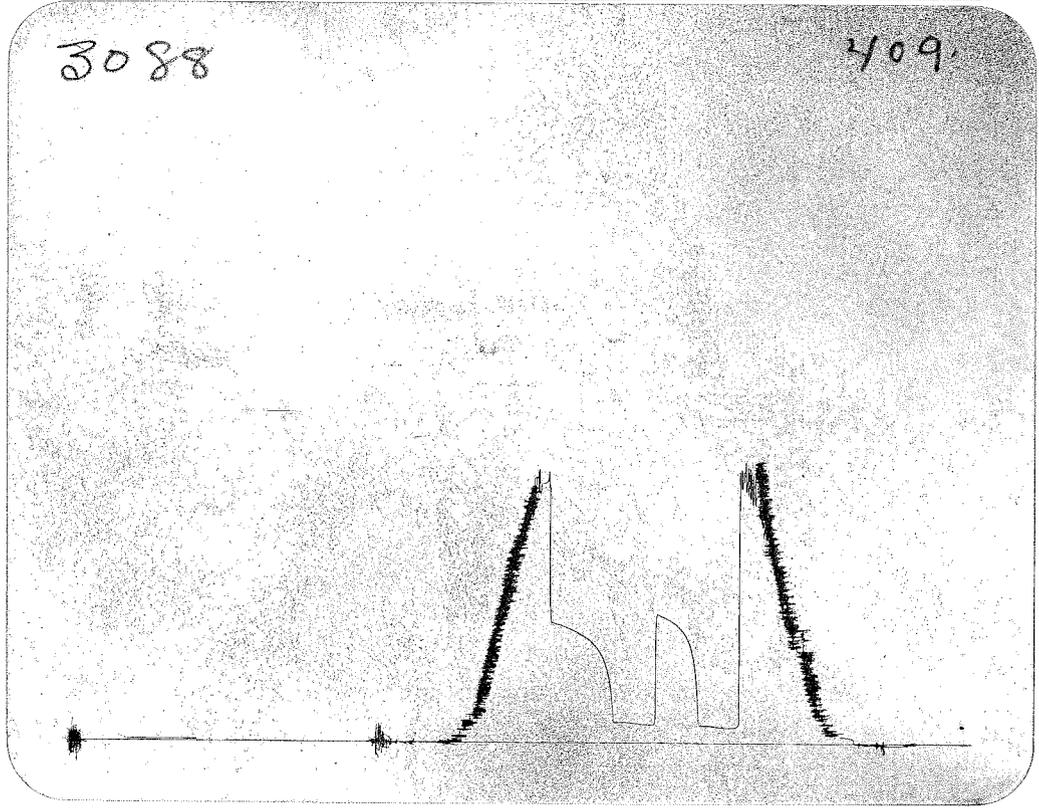
4271

4091



3088

4091



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

DRILL-STEM TEST DATA

Well Name Silica	Test No. 2
Well Number 2	Zone Tested Arb
Company Hupfer Operating Inc.	Date 5/24/03
Comp. Rep. R Schreiber	Tester Don Fabricius
Contractor Sterling Drlg	Ticket No. 4092
Location 32-19-10	Elevation

Recorder No. 3088 Clock Range 12 Recorder No. 4377 Clock Range 12

Depth 3295 Depth 3299

Initial Hydro Mud Press. 1635 Initial Hydro Mud Press. 1638

Initial Shut-in Press. 1000 Initial Shut-in Press. 997

Initial Flow Press. 94-317 Initial Flow Press. 93-316

Final Flow Press. 365-494 Final Flow Press. 363-422

Final Shut-in Press. 978 Final Shut-in Press. 974

Final Hydro Mud Press. 1635 Final Hydro Mud Press. 1638

Temperature _____ Tool Open Before I. S. I. 30 Mins.

Mud Weight 9.3 Viscosity 40.0 Initial Shut-in 30 Mins.

Fluid Loss 10.4 Flow Period 30 Mins.

Interval Tested 3263-3303 Final Shut-in 30 Mins.

Top Packer Depth 32-58 Surface Choke Size 1

Bottom Packer Depth 3263 Bottom Choke Size 3/4

Total Depth 3303 Main Hole Size 7 3/8

Drill Pipe Size 4 1/2 X Wt. 16.60 Rubber Size 6 3/4

Drill Collar I. D. 2 1/4 Ft. Run 255

Recovery—Total Feet _____

Recovered 480 Feet Of _____ Gas in pipe

Recovered 1250 Feet Of _____ muddy oil

Recovered 120 Feet Of _____ water

Recovered _____ Feet Of _____

Remarks

Stron blow thru-test

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3088

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4577

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