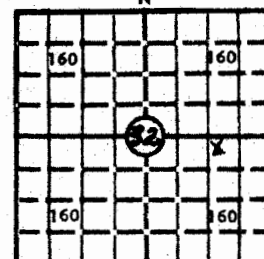


KANSAS DRILLERS LOG

State Geological Survey
WICHITA BRANCHAPI No. 15 — 075 — 20,069
County NumberS. 32 T. 26 R. 39 W
Loc. 1250' FEL & 2590' FSL

County Hamilton

640 Acres
N

Locate well correctly

Elev.: Gr. 3293

DF KB 3300

Operator Amoco Production Company	
Address P. O. Box 432 - Liberal, Kansas 67901	
Well No. 2	Lease Name Heltemes Gas Unit "B"
Footage Location 2590 feet from (N) (S) line 1250 feet from (E) (W) line	
Principal Contractor Service Drilling Company	Geologist
Spud Date 12-21-73	Total Depth 2938
	P.B.T.D. 2834
Date Completed 3-11-74	Oil Purchaser

CASING RECORD

Report of all strings set—surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs./ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12-1/4	8-5/8	23	630	Class "A"	400	3% CACL
Production	7-7/8	5-1/2	14	2938	Special	800	18% CACL

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			2	1/2	2913-2895, 2858-48
TUBING RECORD					2843-40, 2834-30
					2824-18, 2814-04
Size	Setting depth	Packer set at			2797-94, 2773-57
					2751-40, 2726-24

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

2720-18, 2709-04, 2691-84

Amount and kind of material used	Depth interval treated
Acidize with 900 Gals. 15% MCA and Squeezed with 150 sx. Cement	2913-2895
Acidize with 700 Gals. 15% MCA and Squeezed with 250 Sx. Cement	2858-2848 & 2843-2840
Acidize with 3200 Gals. 15% MCA and Frac with 100,000 Gals water and 100,000# sand.	2834-2684

INITIAL PRODUCTION

Date of first production 3-11-74		Producing method (flowing, pumping, gas lift, etc.) Flowing	
RATE OF PRODUCTION PER 24 HOURS	Oil bbls.	Gas 2,400 MCF bbls.	Water Gas-oil ratio CFPB
Disposition of gas (vented, used on lease or sold) Waiting on pipeline connection		Producing interval (s) 2684-2834	

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator Amoco Production Company		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.: Gas					
Well No. 2	Lease Name Heltemes Gas Unit "B"						
S <u>32</u> T <u>26</u> R <u>39</u> <u>W</u>							
WELL LOG Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.		SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.					
FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="padding: 5px; text-align: center;">NAME</th> <th style="padding: 5px; text-align: center;">DEPTH</th> </tr> <tr> <td style="padding: 5px; vertical-align: top;">Gamma-Neutron</td> <td style="padding: 5px; vertical-align: top;">1423'-2923'</td> </tr> </table>	NAME	DEPTH	Gamma-Neutron	1423'-2923'
NAME	DEPTH						
Gamma-Neutron	1423'-2923'						
Sand	0	400					
Redbed	400	631					
Sand, Redbed	631	1150					
Sand, Shale, Gyp.	1150	1622					
Shale, Gyp.	1622	1653					
Sand, Shale	1653	1886					
Shale, Anahydrate	1886	2175					
Lime, Shale	2175	2408					
Shale, Lime	2408	2664					
Lime, Shale	2664	2801					
Shale, Lime	2801	2938					
Test Info: 24 Hr. SIP 209# 20 Min. Open Flow 2.4 MMCFD							
USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.							
Date Received 1974 RECEIVED STATE GEOLOGICAL SOCIETY OF KANSAS		 J. W. VAUGHN Signature Area Administrative Supervisor Title March 18, 1974 Date					