

KANSAS DRILLERS LOG

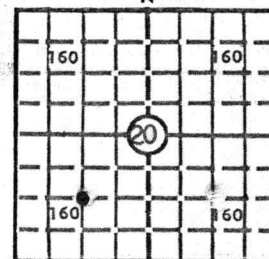
State Geological Survey

API No. 15 — 093 — 20,202
County Number

S. 20T. 26 R. 36W

Loc. C SW

County Kearny

640 Acres
N

Locate well correctly

Elev.: Gr. 3115

DF 3120 KB 3123

Operator

Helmerich & Payne, Inc.

Address

Box 558, Garden City, Kansas 67846

Well No.

#A-4

Lease Name

Hillyard

Footage Location

1320 feet from (N) (S) line

1320 feet from (E) (W) line

Principal Contractor

Service Drilling Co.

Geologist

David A. Brierly

Spud Date

7-8-75

Total Depth

2920

P.B.T.D.

2920

Date Completed

10-25-75

Purchaser — Gas

Colorado Interstate Gas Co.

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 $\frac{1}{4}$ "	8-5/8"	28 & 23	802	Class H Howco Lite	150 250	3% CaCl 2% CaCl
Production	7-7/8"	4 $\frac{1}{2}$ "	11.6, 9.5, 10.5	2920	Howco Lite Pozmix	750 100	10# Gilsonite/sack 18% Salt

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			2	Dynajet 1/2"	2881-2888
			4	" "	2859-2869
			4	" "	2827-2835

TUBING RECORD

Size	Setting depth	Packer set at
2-3/8"	2858	

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
Squeeze "C" zone with 100 sx common cement	2881-2888
2859-2869 Treat with 500 gals 15% HCl	2859-2869
Frac w/80,000 gal Fresh water & 80,000# washed river sand	2812-2869

INITIAL PRODUCTION

Date of first production		Producing method (flowing, pumping, gas lift, etc.)			
2-17-76		Flowing			
RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio	
	0	2071	0		
	bbls.	MCF	bbls.	CFPB	
Disposition of gas (vented, used on lease or sold)			Producing interval (s)		
Sold- Colorado Interstate Gas Co.			2812-2869- Council Grove		

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.

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Helmerich & Payne, Inc.

DESIGNATE TYPE OF COMP.: OIL, GAS,
DRY HOLE, SWD, ETC.:

Well No. A-4	Lease Name Hillyard	Gas
S 20 T 26 R 36 E W		

WELL LOG

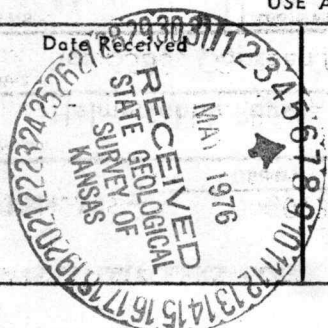
Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
Upper Krider- Dolomite & Dolomitic limestone	2516	2534	Base Stone Corral	1858
Lower Krider- Dolomite & dolomitic limestone	2534	2558	U. Krider	2516
Winfield- Porous dolomite- some gas	2574	2600	Lower Krider	2534
Upper Ft. Riley- Porous dolomite & limestone- some gas	2632	2660	Winfield	2574
Lower Ft. Riley- Dolomite & limestone. Limestone confined to lower 20' of zone. Some gas.	2680	2724	Upper Ft. Riley	2632
Wreford- Limestone, gas	2772	2794	Lower Ft. Riley	
Council Grove- limestone, gas	2802	2920	Florence	
			Wreford	2772
			Council Grove "A"	2802
			"B"	2850
			"C"	2886
			"D"	2899
			T.D.	2920
			Gamma Ray Neutron Log	1408-2908'

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received



Sam Carroll
Signature

District Production Superintendent

Title

3-19-74

Date

Merich & Payne, Inc.

Supplement to Kansas Drillers Log

Hillyard A-4 Sec 20, T26S, R36W

20-26-36W

API No. 15-093-20,202

Perforation Record

Shots per ft.	Size & type	Depth Interval
4	Dynajet 1/2"	2812-2815'

Acid, Fracture, Shot, Cement Squeeze Record

Amount & kind of material used	Depth Interval Treated

