

Geological Survey

NICHITA, BRANCH

KANSAS DRILLERS LOG

IMPORTANT

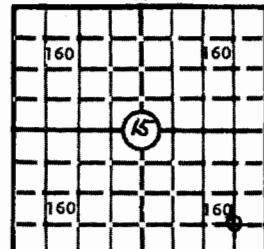
Kans. Geo. Survey request
samples on this well.

15-22-23W

S. 15 T. 22 R. 23 K
W

Loc. C SE SE

County Hodgeman

640 Acres
NAPI No. 15 — 083 — 20,323
County Number

Operator

Hershberger Enterprises, Inc.

Address Suite 230, 200 West Douglas
Wichita, Kansas

Well No. Lease Name

#1 Armstrong

Footage Location

660 feet from (N) (S) line

660

feet from (E) (W) line

Principal Contractor

H-30

Geologist

Bill SLADEK

Spud Date

9-21-73

Total Depth

4601

P.B.T.D.

Date Completed

10-7-73

Oil Purchaser

Elev.: Gr. 2321
DF 2326 KB

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 3/4"	8 1/2"	22	285'	Common	180	

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval

TUBING RECORD

Size	Setting depth	Packer set at

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

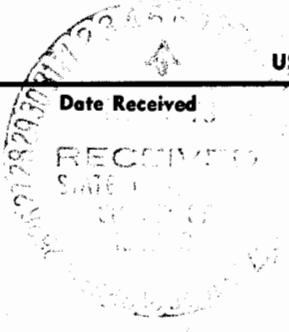
Amount and kind of material used	Depth interval treated

INITIAL PRODUCTION

Date of first production	Producing method (flowing, pumping, gas lift, etc.)				
RATE OF PRODUCTION PER 24 HOURS	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio	CFPB

Disposition of gas (vented, used on lease or sold) Producing interval(s)

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 HERSHBERGER ENTERPRISES, INC.		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC. DRY HOLE		
Well No. 1	Lease Name ARMSTRONG			
S 15 - T 22 R 23 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.				
FORMATION DESCRIPTION, CONTENTS, ETC.		TOP	BOTTOM	NAME
<i>See ATTACHED GEOLOGICAL REPORT</i>				
USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.				
Date Received 	<div style="text-align: right; margin-bottom: 10px;">  William A. Haslek Signature </div> <div style="text-align: right; margin-bottom: 10px;"> Vice-Pres Title </div> <div style="text-align: right;"> 10-11-73 Date </div>			

State Geological Survey
WICHITA, BRANCH

15-22-23W

GEOLOGICAL REPORT
#1 ARMSTRONG
C SE SE Sec 15
T 22S R 23W
HODGEMAN COUNTY, KANSAS



Company: Hershberger Enterprises, Inc.
Contractor: H-30, Inc.
Pool: Armstrong
Commenced: 9-21-73

Elevation: 2326 KB
R.T.D.: 4601
Production: D & A
Completed: 10-7-73

Surface Casing: 8 5/8 @ 285 with 180 sacks

Formation Testing: Arrow (1 test) Halliburton (2 tests)

Electrical Surveys: None

One foot drilling time was plotted from 3800 to total depth. 10 foot samples were examined from 4330 to 4550. Five foot samples were examined from 4550 to total depth. Circulated samples were examined at 4570, 4575, 4586 and 4601.

FORMATION TOPS (SAMPLES)

Lansing	3950 (-1624)
Marmaton	4326 (-2000)
Pawnee	4411 (-2085)
Cherokee Shale	4468 (-2142)
Warsaw	4552 (-2226)
Osage	4596 (-2270)
Total Depth	4601 (-2275)

Evidence of Hydrocarbons

Warsaw - 4552-96 (porosity 4578-89; 4565-72)

White to light gray finely crystalline to sucrosic dolomite, generally tight, and white blocky opaque chert to light gray and brown unweathered translucent chert. White, blocky chert is partly tripolitic. Fair stain and saturation, with a fair scattered show of dark free oil in the dolomite and tripolitic chert. Good odor in wet samples.

DST #1 - 4563-75- Open 30 min., shut in 30 min., open 30 min., shut in 30 min. Weak blow for 20 min. recovered 20 feet mud, few specks of oil. All pressures 35#.

DST #2 - 4563-86 - Open 30 min., shut in 60 min., open 30 min., shut in 30 min. Weak blow throughout. Recovered 120 feet slightly oil specked mud. ICIP 1414#, IFP 26#, FFP 71#, FCIP 1378#.

15-22-23W

Osage - 4596-4601

White, blocky, opaque chert, tripolitic in part; and light gray translucent chert. Good scattered stain and saturation, with a show of dark free oil. Good odor.

DST #3 - 4578-4601 - Open 30 min., shut in 60 min., open 30 min., shut in 60 min.
Strong blow, recovered 695 ft. muddy salt water. ICIP 1432#, IFP 53#,
FFP 339#, FCIP 1432#

RTD - 4601 - 10-7-73 - D & A

William A. Shadet

William A. Sladek
Geologist

