

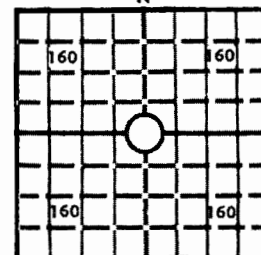
KANSAS DRILLERS LOG

State Geological Survey
WICHITA, BRANCH

34-32-31W

API No. 15 — 175 — 20,206
County NumberS. 34 T. 32 R. 31 ~~X~~ WLoc. C S $\frac{1}{2}$ SE

County Seward

640 Acres
N

Locate well correctly

Elev.: Gr. 2769

DF 2776 KB 2779

Operator

Investors Drilling & Exploration Co., Inc.

Address

505 Cravens Building
Oklahoma City, Oklahoma

Well No.

#A-1

Lease Name

Singley

Footage Location

662

feet from (S) line

1108

feet from (E) line of SE/4

Principal Contractor

Investors Drilling

Geologist

Bill Broughton

Spud Date

8-5-73

Total Depth

3220

P.B.T.D.

3120

Date Completed

8-28-73

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	24	600	35-65% Pos	350 150 Com	2% gel,
Production	7 7/8	4 1/2	9.5	3220	50-50 Pos	180	2% gel, 10% NaCl

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			2	DP Jets	3028-38 3050-56
Size	Setting depth	Packer set at	2	DP Jets	3078-84
2 3/8	3091	3140			

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
1,500 gal, 15% hydrochloric acid	3028-38, 3050-56
	3078-84

INITIAL PRODUCTION

Date of first production		Producing method (flowing, pumping, gas lift, etc.)			
RATE OF PRODUCTION PER 24 HOURS		Oil	Gas	Water	Gas-oil ratio
		bbls.	8850 MCF	1 bbls.	CFPB
Disposition of gas (vented, used on lease or sold)			Producing interval (s) 3028-38, 3050-56, 3078-84		

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 Investors Drilling & Exploration Co., Inc.		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:
Well No. #A-1	Lease Name Singley	Gas Well
S 34 T 32 R 31 ⁵ / _W		

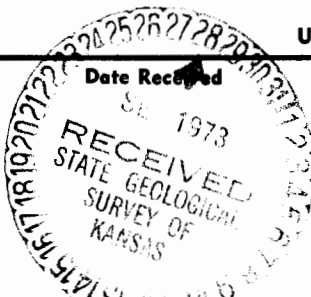
WELL LOG

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
Surface sand and clay	0	300		
Sand & Clay	300	600		
Red bed	600	835		
Sand & shale	836	950		
Sand	1050	1150		
shale & sand	1150	1500		
anhydrite	1500	1630		
shale	1630m	1925		
anhydrite & salt	1925	2650	Hugoton	2650
dolomite	2650	2878		
limestone & shale	2878-3220		Council Grove	2966

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

	Date Received
	Signature <i>Bill D. Broughton</i>
	Title <i>President</i>
	Date <i>9-26-73</i>