

KANSAS DRILLERS LOG

S. 31 T. 6 R. 23 ^E/_W

API No. 15 — 065 — 21,019
County Number

Loc. SE NW

County Graham

Operator
Irv Hardman c/o Arthur Scott

Address
601 - 120 Bldg. Wichita, Kansas 67202

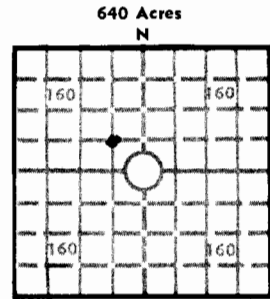
Well No. #1 Lease Name Irwin

Footage Location
feet from (N) (S) line feet from (E) (W) line

Principal Contractor Geologist
Abercrombie Drilling Co., Inc. Bill Jahar

Spud Date 5/11/78 Total Depth 4,005' P.B.T.D.

Date Completed 6/16/78 Oil Purchaser Koch Oil Company



Elev.: Gr. 2533'

DF _____ KB 2538'

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"	28#	327' KB	common	230	3% Ca.Cl., 2% gel.
Production	7-7/8"	5 1/2"	14#	4002'	common	125	

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			4 total of 16		3,964 - 3,968
			4 " of 16		3,942 - 3,946

TUBING RECORD

Size	Setting depth	Packer set at
2 1/2" EUE	3982	

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
1000 gal 15% Demulsion	3,964-3,968
1000 gal 15% Demulsion	3,942-3,946
2000 gal 28% Demulsion	3,964-3,968
2000 gal 28% Demulsion	3,942-3,946

INITIAL PRODUCTION

Date of first production 6/16/78 Producing method (flowing, pumping, gas lift, etc.) pumping

RATE OF PRODUCTION PER 24 HOURS	Oil avg. 54 bbls per day 9 days	Gas 0 MCF	Water 0 bbls.	Gas-oil ratio all oil	CFPB
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Disposition of gas (vented, used on lease or sold) (see other side) 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 IRV HARDMAN DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.: oil

Well No. 1 Lease Name Irwin

S31 T 6S R 23 ^{XX} W SE NW

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
Shale & Sand	0	328		
Shale	328	1655		
Shale & sand	1655	1783		
Sand	1783	1980		
Shale & sand	1980	2155		
Shale	2155	2217		
Anhydrite	2217	2250		
Shale	2250	2590		
Shale & lime	2590	2960		
Lime & shale	2960	3295		
Lime	3295	3440		
Lime & shale	3440	3846		
Lime	3846	3860		
Lime & shale	3860	3888		
Lime	3888	3960		
Lime & shale	3960	4005		
Rotary total depth		4005		

production
 6/16-6/24 9 days average 54 bbls per day
 next 7 days " 33 " " "
 next 7 days " 17½ " " "
 next 7 days " 15 " " "
 9/23/78 well now makes 5½ to 6½ bbls per day

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

Date Received _____

 Signature
 for Irv Hardman Oil Operator
 Title
 9/28/78
 Date

CONTRACTOR'S WELL LOG

31-6-23W

OPERATOR: Irv Hardman
 CONTRACTOR: Abercrombie Drilling, Inc.
 WELL NAME: Irwin #1
 LOCATION: SE NW Section 31-6S-23W
 Graham County, Kansas
 SPUD DATE: May 11, 1978
 COMPLETION DATE: May 19, 1978

0	328	Shale & sand
328	1655	Shale
1655	1783	Shale & sand
1783	1980	Sand
1980	2155	Shale & sand
2155	2217	Shale
2217	2250	Anhydrite
2250	2590	Shale
2590	2960	Shale & lime
2960	3295	Lime & shale
3295	3440	Lime
3440	3846	Lime & shale
3846	3860	Lime
3860	3888	Lime & shale
3888	3960	Lime
3960	4005	Lime & shale
	4005	Rotary Total Depth

Spud hole at 10:45 a.m., May 11, 1978. Drilled 328' of 12 $\frac{1}{4}$ " hole. Ran 8 joints of 8-5/8" - 28# surface casing. Set at 327' K.B. with 230 sacks of common cement, 3% CaCl, 2% gel. Pumped plug to 310'. Cement did circulate. Job was complete at 4:00 p.m., May 11, 1978.

T.D. 4005'. Ran 112 joints of ^{5/2"}4 $\frac{1}{2}$ " - 10 $\frac{1}{2}$ # casing. Set at 4002' with 125 sacks common cement. Job complete at 4:15 p.m., May 19, 1978.

SAMPLE TOPS:

Heebner	3759	(-1221)
Toronto	3783	(-1245)
Lansing-K.C.	3798	(-1260)

STATE OF KANSAS)
) ss
 COUNTY OF SEDGWICK)

Jack L. Partridge, Assistant Secretary-Treasurer of Abercrombie Drilling, Inc., does hereby state that the above and foregoing is a true and correct copy of the log of the Irwin #1, SE NW Section 31-6S-23W, Graham County, Kansas.

ABERCROMBIE DRILLING, INC.