

KANSAS DRILLERS LOG

API No. 15 — 009 — 21,387
County Number

Operator

Arrowhead Petroleum, Inc.

Address

Box 8287 Munger Station Wichita, Kansas 67208

Well No.

#1

Lease Name

Bitter

Footage Location

1650 feet from (N) line 1320 feet from (E) line

Principal Contractor

BIG SPRINGS DRILLING INC.

Geologist

STEPHEN POWELL

Spud Date

5/21/78

Total Depth

3404

P.B.T.D.

Date Completed

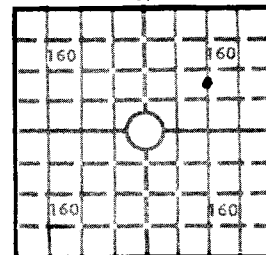
5/29/78

Oil Purchaser

S. 11 T. 16 R. 14 NE

Loc. N2 S2 NE

County Barton

640 Acres
N

Locate well correctly

Elev.: Gr. 1917

DF 1920 KB 1922

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	20#	266	COMMON	175	2% G-21 30% CMC
Production	7 7/8	5 1/2	14	3403	60-40 Poz	100	10% salt

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			4/ft	DP	3346-3349

TUBING RECORD

Size	Setting depth	Packer set at
2 3/8	3350	—

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
6000 gal 28% ₂₀	3346-3349

INITIAL PRODUCTION

Date of first production 6/28/78		Producing method (flowing, pumping, gas lift, etc.) PUMPING			
RATE OF PRODUCTION PER 24 HOURS	Oil 62 bbls.	Gas MCF	Water 0 bbls.	Gas-oil ratio CFPB	
Disposition of gas (vented, used on lease or sold) used on lease			Producing interval(s) 3346-3349		

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 ARROWHEAD PETROLEUM INC		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:
Well No. 1	Lease Name BITTER	OIL
S 11 T 16 R 14 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
LS cream to tan med cry oolitic + oolitic. good ϕ Gd sh Free oil good oolitic.	3345	-3350	ANHYDRITE	894
			HOWARD	2784
			TOPEKA	2856
DST #1 3340-60			HEEBNER	3095
FB Throat			TORONTO	3111
30-45-60-45			DOUGLAS	3127
IFP 30-44 IFP 51-73			LANSING	3163
IBAP 962 FBAP 932			Base K.C.	3364
Re 480' GIP			CONG.	3396
60' HOGCM			ARB	Not reached
60' MO				
60' CO			TD	3404

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

Date Received	<i>En. Shultz</i> Signature <i>Lee Prunard</i> Title <i>July 19 1978</i> Date
---------------	--