

*JAD* *SEP*

**KANSAS**

**WELL COMPLETION REPORT AND DRILLER'S LOG** *State Geological Survey*  
**WICHITA BRANCH**

API No. 15 — 025 — 20,486  
 County Number

S. 9 T. T32S-R. R21W E. W  
 Loc. 1200' FWL & 2400' FNL  
 County CLARK

Operator  
**CALVIN EXPLORATION, INC.**

Address  
**1125 SEVENTEENTH ST., SUITE 2000, DENVER, COLORADO 80202**

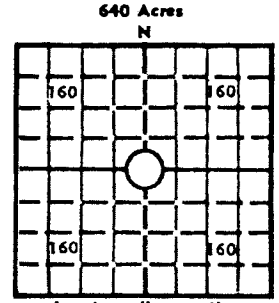
Well No. 4-9 Lease Name HARDEN

Footage Location  
2400' FWL feet from (N) (S) line 1200' FWL feet from (E) (W) line

Principal Contractor Ramco Drilling Corporation Geologist Paul Gerlach

Spud Date 08-31-81 Date Completed 09-17-81 Total Depth 5206' P.B.T.D. ----

Directional Deviation 1-1/4° @ 4070' Oil and/or Gas Purchaser ---



Locate well correctly  
 Elev.: Gr. 2001'  
 DF 2010' KB 2012'

**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
Conductor	30"	20"		61'	grout	6 yds	
Surface Csg	12-1/4"	8-5/8"	23#	789'	35/65 poz	300 sx	6% gel, 2% CaCl, 1/4# D-29/sx
					Class H	200 sx	3% CaCl

**LINER RECORD**

**PERFORATION RECORD**

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
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Size	Setting depth	Packer set at
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**ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD**

Amount and kind of material used	Depth interval treated
none	

**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
	bbis.	MCF	bbis.	CFPB

Disposition of gas (vented, used on lease or sold) P&A 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, 245 No. Water, Wichita, Kansas 67202. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on an open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator CALVIN EXPLORATION, INC.		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:
Well No. 4-9	Lease Name HARDEN	P&A - REDRILL LOCATION
S <u>9</u> T <u>T32S-R21W</u> R <u>W</u>		

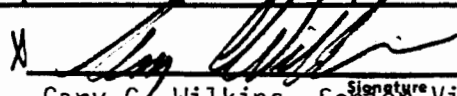
**WELL LOG**

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
SAMPLE TOP: CHEROKEE  UNABLE TO LOG.	5064'			

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

Date Received	
	Gary C. Wilkins, Senior Vice President
	Title
	October 12, 1981
	Date