

KENNETH W. JOHNSON

PETROLEUM GEOLOGIST

203 BROWN BLDG.

WICHITA, KANSAS 67202

RES. PHONE MU 2-7586

BUS. PHONE AM 2-5354

August 10, 1964

PACK OIL CO., INC.
665 Fourth National Bank Building
Wichita, Kansas

Re: PACK OIL CO., INC.
1 Moore
NW SW NW Sec. 14-30S-10E
Elk County, Kansas

Comm. 8-5-64
Comp. 8-8-64
Contr. White & Ellis
Ctg. 8 5/8" @100'
Pro. D & A

Gentlemen:

I have examined samples on the above well from 700' to total depth of 2015', and was present to supervise drilling of all important zones and formations from 1075' to total depth. Formation tops, porous zones, shows of oil, etc. are listed below. A copy of my drilling-time and sample-analysis log is attached to this report.

	Lansing Limestone	747	+279
	Base Lansing	971	+55
	Drum Limestone (top of Kansas City Group)	1117	-91
	Layton Sand	1139	-113
1139-60	Sandstone, gray, very fine grain, sub-angular, micaceous, partly friable and porous. No shows of oil. Shaley in lower part.		
	Dennis Limestone	1170	-144
	Kansas City Limestone	1218	-192
1253-69	Limestone, creamy - tan, fine to medium crystalline and slightly oolitic. Fair porosity, no show of oil.		
	Swope Limestone	1319	-293
	Hertha Limestone	1350	-324
1356-63	Limestone, tan, medium crystalline with some good pinpoint and oolitic porosity. Slight odor, trace stain, fluorescence and free oil in few widely scattered fragments. (non-commercial).		
	Base Kansas City	1395	-369
	Lenape Limestone	1442	-416
	Altamont Limestone	1493	-467

Pawnee Limestone	1598	-572
Ft. Scott Limestone	1648	-622
1648-67	Limestone, tan, fine crystalline and chalky, no visible porosity.	
Cherokee Shale	1682	(-656)
Peru Sand Zone	1697	(-671)
1697-1707	Sandstone, gray, very fine grain, sub-angular, micaceous, friable and partly porous. Shaley. No show of oil.	
Conglomerate	1983	-957
1683-93	Chert, gray, vitreous, opaque to translucent, with little white chalky limestone and some gray, green and brown shale.	
Mississippi	1993	-967
1993-96	Chert, blue-gray, vitreous, opaque to translucent with trace vugular and weathered porosity.	
1996-05	Limestone, light gray, medium and coarse crystalline, slightly chalky, slightly glauconitic. Little dead oil stain.	
2005-11	Limestone, tan, slightly dolomitic, cherty poor to fair porosity. Good odor, slight show of free oil, stain and fluorescence.	
2011-15	Limestone, brown, fine crystalline, slightly dolomitic, tight. Little dark stain.	

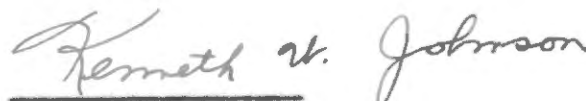
DRILL STEM TEST #1

1990 - 2015, open 30 minutes.
 Weak blow for 3 minutes.
 Recovered 20' slightly oil-specked mud.
 ISIP - 668 # in 20 minutes
 FS IP - 405 # in 15 minutes
 IFP - 39# FFP - 39#
 Temperature - 99 degrees

CONCLUSIONS AND RECOMMENDATIONS:

On the Mississippi this well was structurally about 20' low to the old abandoned producers in the Mills Pool located 1/2 mile South. Results of drill-stem testing in the Mississippi were negative and it was my recommendation that the test be abandoned at a depth 2015', in the Mississippi Limestone.

Yours truly,


 Kenneth W. Johnson