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JOHNS AND MAGATHAN
CONSULTING GEOLOGISTS

WENDELL S. JOHNS
WILLIS JACK MAGATHAN

501 BITTING BUILDING
WICHITA 2, KANSAS

TELEPHONE 3-1540

September 15, 1954

MADE IN U.S.A.

Mr. H. L. Moore
311 National Bank of Tulsa Building
Tulsa, Oklahoma

Geological Report: H. L. Moore #2 Gobin
SE SE SW; 23-26S-13W
Pratt County, Kansas
Elevation: 1946 derrick floor
1949 rotary bushing
Contractor: Reserve Drlg. Co.

OWLL

Dear Sir:

The #2 Gobin was spudded July 26, 1954 and was drilled from the surface to a total depth of 4378' with rotary tools. Samples were saved and a time log was kept from 3500' to the total depth.

A Schlumberger Salt Mud Survey was run on this well and the measurements on this log agreed with the drilling measurements to within a foot or so. The drilling measurements have been used throughout this report.

The following is a list of formation tops and other data of interest, unless otherwise noted, all information has been taken from my sample log, which has been corrected for sample lag by use of the time log. All measurements are from the top of the rotary bushing which is three feet above the derrick floor. The derrick floor elevation has been used to compute all datums.

<u>Formation Name</u>	<u>Depth Below</u>	<u>Datum</u>	<u>Remarks</u>
8 5/8" surface casing	554		275 sacks cement 2% gel and 138# Flocele
Stone Corral Anhydrite	810 - 834	+1139 to +1115	Electric log top
Heebner Shale	3573 - 77	-1624 to - 1628	
Top Douglas	3607	-1658	
(1) Sand zone	3641 - 83		Spotted brown stain probably oil.
Top Brown Lime	3743 -	-1794	
Top Lansing	3766	-1817	
(1) Porous zone	3792 - 3808		Trace stain
(2) Porous zone	3818 - 22		Trace stain
(2a) Porous zone	3825 - 27		Trace stain
(2b) Porous zone	3831 - 33		Trace stain

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<u>Formation Name</u>	<u>Depth Below Surface</u>	<u>Datum</u>	<u>Remarks</u>
(2c) Porous zone	3838 - 41		Forous on electric log, no porosity detected in samples
(3) Porous zone	3859 - 64		Forous on electric log, no porosity detected in samples
(4) Porous zone	3874 - 84		No show
(5) Porous zone	3889 - 99		No show
(6) Porous zone	3903 - 11		No show
(7) Porous zone	3924 - 26		Slight to fair stain
(8) Porous zone	3939 - 43		Good stain
(9) Porous zone	3954 - 62		Good stain
(10) Porous zone	3970 - 78		Spotted fair stain
(11) Porous zone	3990 - 94		Fair spotted stain
(12) Porous zone	4013 - 16		Forous on electric log, no porosity detected in samples
(13) Porous zone	4039 - 41		Trace stain
Base Kansas City	4084	-2135	
Top Marmaton	4084	-2135	
Top Mississippi	4192	-2243	
(1) Chert zone	4192 - 4208		No show
Top Kinderhook	4208	-2259	
Top Viola	4222	-2273	
(1) Chert zone	4222 - 55		Fair show free oil, slight odor; D.S.T.
Top Simpson	4261	-2312	
(1) Shaly sand zone	4269 - 75		Slight to fair show free oil; D.S.T.
(2) Dolomite zone	4275 - 78		Slight to fair show free oil; D.S.T.
(3) Shaly sand zone	4288 - 94		Slight to fair show free oil; D.S.T.
(4) Sand zone	4294 - 97		Much gilsonite, no free oil; D.S.T.
Top Arbuckle	4359	-2410	
(1) Porous zone	4361 - 66		Very slight show free oil; D.S.T.
(2) Porous zone	4370 - 73		Very slight show free oil; D.S.T.
5½" casing	4361	-2412	125 sacks cement
Rotary Total Depth	4378	-2429	

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Drill Stem Test Data: The following drill stem tests were run on the #2 Gobin

Viola:

(1) 4213 - 55;

Open 1 hour - good blow throughout test.
Recovered: 150' slightly oil and gas cut mud
Bottom hole pressure: 640# (30 min.) still building up rapidly.

Simpson:

- (2) 4260 - 80; Open 1 hour - strong blow throughout test, gas to surface in 20 minutes.
Recovered: 15' heavily oil and gas cut mud
60' muddy oil
360' slightly muddy to clean oil.
Bottom hole pressure: 1015# (30 min.)
Initial flow pressure: 90#
Final flow pressure : 150#
- (3) 4285 - 4301; Open 1½ hours - weak blow for 3 minutes, flushed tool at 15 minutes and again had weak blow for 3 minutes.
Recovered 85' mud
Bottom hole pressure: 0# (20 min.)

Arbuckle:

- (4) 4361 - 78; Open 1 hour - strong blow throughout test.
Recovered: 120' gas
180' slightly oil and gas cut mud
120' heavily oil and gas cut mud
180' muddy oil
180' clean oil
Bottom hole pressure: missed
Initial flow pressure: 0#
Final flow pressure: 125#

Completion Data:

Drilled plug and cleaned out to total depth.
Bailed much mud with slight show oil.
Dumped barrel of mud acid and let set overnight.
Acidized with 300 gal. acid - treating pressure 1400#. Pressure did not break.
Swabbed back load.
Swab 5 to 6 barrels oil per hour, no water.
Ran tubing and rods and installed pumping equipment

Structural Position:

On top of the Lansing the #2 Gobin was 6' lower than the #1 Gobin, the west offset; 4' lower than the #1 Hoener, the south offset; and 8' lower than the #2 Hoener, the southwest diagonal offset.

On top of the Arbuckle the #2 Gobin was 8' lower than the #1 Gobin, 1' higher than the #1 Hoener and 4' lower than the #2 Hoener.

Future Prospects - Additional Prospective Producing Horizons:

Lansing - Kansas City:

Inspection of the electric log shows that all of the zones in the Lansing-Kansas City which will produce any fluid at all will almost certainly produce water. None of the zones looked unusually prospective in the samples.

Mississippi:

The chert zone 4192 - 4208 showed no free oil in the samples and the resistivity on the electric log is fairly high throughout the zone. It is probably not worth testing.

Viola:

There is a possibility that the chert zone (4222 - 55) might make a commercial producer if given a sand-oil frac treatment. However, the results of the treatment in this same zone in the #1 Gobin "A" were quite discouraging and seem to indicate that the Viola is not too prospective in this area. If recompletion in this zone in some of the surrounding wells finds good production, the zone might conceivably produce in the #2 Gobin.

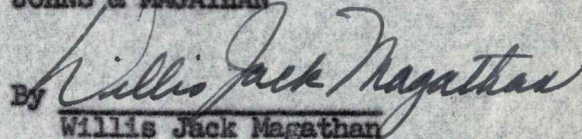
Simpson:

The results of the drill stem test covering the shaly sand 4268 - 74 and dolomite zone 4274 - 77 indicate that the zones will almost certainly produce commercial amounts of oil if treated with sand-oil frac. These zones should be tested before the well is abandoned.

Arbuckle:

The well is now producing in this formation from 4361 to the total depth of 4378. If, when present production is exhausted, the well is not making a large quantity of water, it should be deepened to a lower porous zone.

Very truly yours,
JOHNS & MAGATHAN

By 
Willis Jack Magathan