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February 14, 1955

Tatlock Oil Company
5737 Rockwood Road
Wichita, Kansas

Geologic Report: Anschutz #1 Jones
SW SW SW; 13-27S-15W
Pratt County, Kansas
Elevation: 2047 derrick floor
2050 rotary bushing
Contractor: Anschutz Drlg. Co.

Gentlemen:

The #1 Jones was spudded December 24, 1954 and was drilled from the surface to a total depth of 4785 with rotary tools. Samples were saved and a time log was kept from 3700' to the total depth.

A Schlumberger Salt Mud Survey was run on this well and the measurements from 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 is 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 and the rotary bushing elevation has been used to compute all datums.

<u>Formation Name</u>	<u>Depth Below Surface</u>	<u>Datum</u>	<u>Remarks</u>
8 5/8" surface casing	323		225 sacks cement; 4% c.c. 2% gel.
Heebner Shale	3798-3804	-1748 to -1754	
Toronto	3818-39	-1768 to -1789	
Top Douglas	3939	-1789	
Top Brown Lime	3951	-1901	
Top Lansing	3976	-1926	
(1) Porous zone	3997-4002		No show
(2) Porous zone	4022-29		No show
(3) Porous zone	4064-70		Slight stain; D.S.T.
(4) Porous zone	4092-4103		Possible slight trace stain
(5) Porous zone	4106-10		Possible slight trace stain
(6) Porous zone	4122-27		No show

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<u>Formation Name</u>	<u>Depth Below Surface</u>	<u>Datum</u>	<u>Remarks</u>
(7) Porous zone	4141-44		Porous on electric log, no porosity detected in samples
(8) Porous zone	4188-92		Trace light to dark brown stain
(9) Porous zone	4203-08		Fair light to dark brown spotted stain
Base Kansas City	4285	-2235	
Top Marmaton	4285	-2235	
(1) Porous zone	4417-26		Trace light brown stain; D.S.T.
Top Mississippi	4440	-2390	
(1) Porous zone	4443-51		Trace light stain; D.S.T.
Top Kinderhook	4454	-2404	
(1) Sand zone	4463-70		Light brown stain, possibly oil
(2) Sand zone	4475-79		No show
Top Viola	4486	-2436	
(1) Porous zone	4486-94		No show
(2) Porous zone	4534-41		Slight dark oil stain, no free oil
(3) Porous zone	4566-70		No show
(4) Porous zone	4584-4610		No show
Top Simpson	4612	-2592	
(1) Sand zone	4670-73		No show
(2) Sand zone	4680-83		No show
(3) Sand zone	4691-94		No show
Top Arbuckle	4728	-2678	
(1) Porous zone	4730-38		No show
(2) Porous zone	4743-46		No show
(3) Porous zone	4757-60		No show
(4) Porous zone	4777-85		No show
Total Depth	4785	-2735	

Dry & Abandoned 1-11-55

Drill Stem Test Data: The following drill stem tests were run on the #1 Jones:

Lansing-Kansas City:

- (1) D.S.T. 4050-75; Open 1 hour
Recovered 265' salt water
Bottom Hole Pressure: 1335# (20 min.)

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Drill Stem Test Data:

Marmaton:

(2) D.S.T. 4403 - 29; Open 1 hour
Recovered: 33' mud
Bottom Hole Pressure 45# (20 min.)

Mississippi:

(3) D.S.T. 4440-60: Open 1 hour-gas to the surface in 25 minutes
Gauge 310,000 CFG
Recovered: 32' mud
Bottom Hole Pressure: 1200# (20 min.)

Structural Position:

On the Lansing the #1 Jones was 11' higher than the Armer #1 Robbins, a Marmaton gas producer approximately 2 miles west (NE NE NE; 21-27S-15W); 12' lower than the R-S-T #1 Ward, a dry hole approximately 2 miles north (NE NENW; 12-27S-15W) and 27' higher than the Ohio #1 Lemon, a dry hole approximately 2½ miles southeast (SE NE SE; 25-27S-15W).

On the Arbuckle the #1 Jones was 18' higher than the #1 Robbins, 48' lower than the #1 Ward and 17' higher than the #1 Lemon.

Discussion:

Lansing-Kansas City:

A study of the electric log shows that all of the zones in the Lansing-Kansas City on the #1 Jones would produce mostly water if any fluid at all. None of these zones looked prospective in the samples.

Marmaton:

The porosity in the zone from 4417-26 is very poorly developed which accounts for the fact that the drill stem test covering this section failed to recover anything more than a few feet of mud.

Mississippi:

Although the gas recovered in the drill stem test which covered the Mississippi chert is not commercial in this well, it certainly indicates that the Mississippi is to be regarded as a prospective producer in this immediate area. This zone should be watched carefully on any test which you may subsequently make in this area. If the chert appears to be well developed the zone should be drill stem tested even though a show of free oil may not be evident in the samples.

Kinderhook:

There are two sands present in the Kinderhook in the #1 Jones (4463-70 and 4475-79). The upper sand carried a light brown stain which might possibly be an oil stain. Although I did not arrive at the well until they were drilling in the Viola, the Geologist who was sitting on the well told me that he had found no ~~xxxx~~ free oil in the samples.

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Kinderhook: continued

However, the zone looks wildly prospective on the electric log and should be watched closely on future exploration in this area.

Viola:

Of the porous zones in the Viola, all of which were very poorly developed in this well, only one zone (4534-41) showed any oil stain in the samples. This zone contained only a slight dark stain with no free oil and was not considered worth testing.

There were no shows of oil in the Simpson or Arbuckle in this well.

Due to the lack of prospective shows ~~in~~ the #1 Jones was abandoned January 11, 1955.

Very truly yours,
Johns and Magathan

By /s/ Willis Jack Magathan
Willis Jack Magathan

FORMATION LOG

Anschutz #1 Jones
 SW SW SW; 13-27S-15W
 Pratt County, Kansas
 Elevation: 2047 derrick floor

8 5/8" surface casing; 323'
 Conn: 12-24-54
 Comp: 1-11-55

Note: All measurements are from the top of the rotary bushing which is 3' above the derrick floor.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
	Partial sample log 3700'-4417' describing only marker beds and porous zones	
3798-3804 3804-08	Shale, brown-black soft, brown streak Limestone, cream to tan, very finely sucrose.	Heebner Shale Leavenworth
3808-18 3818-39	Shale, gray; trace gray-green shale Limestone, white to cream, subcrystal- line to finely crystalline, chalky; streak gray shale 3825-30	Snyderville Toronto
3951-55	Limestone, brown to dark gray, dense, fossiliferous	Top Brown Lime 3951
3955-61 3961-64 3964-76	Shale, gray Limestone, as above Shale, as above; streaks limestone as above	
3976-91	Limestone, cream to brown, chalky, crypto-oolitic	Top Lansing 3976
3991-97 3997-4002	Shale, gray and brown Limestone, cream to white, subcrystal- line, oolitic, chalky; spotted poorly de- veloped oolitic porosity	No show
4022-29	Limestone, tan to buff, finely crystal- line, chalky; fair spotted vugular por- osity; trace tan to gray, oolitic, semi- translucent chert.	No show
4064-70	Limestone, tan, finely sucrose, chalky; spotted vugular porosity	Slight stain; D.S.T.
4092-4103	Limestone, tan to cream, subcrystalline to dense, crypto oolitic; spotted vugular and oolitic porosity.	Possible trace spotted Stain

Formation Log
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<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4106-10	Limestone, porous, as above	Show oil, as above
4122-27	Limestone, tan, sucrose; good oolitic porosity	No show
4188-92	Limestone, cream, subcrystalline, slightly oolitic; spotted oolitic porosity	Trace light to dark brown stain
4203-08	Limestone, tan, very finely sucrose, oolitic; fair spotted oolitic and honeycomb porosity	Fair, light to dark brown stain
Complete Sample Log 4417 to T.D.		
4417-26	Limestone, tan to gray, subcrystalline, some silicified; chert, gray to tan to white, vitreous to devitrified	Light brown stain; D.S. T.
4426-30	Limestone and chert, as above, no porosity	
4430-34	Shale, gray, gray-green and maroon	
4434-40	Limestone and chert, as above, very shaly	
4440-54	Chert, white opaque, vitreous to subvitreous; chert, white, flesh and blue-white, subvitreous, semi-translucent to opaque, figured	Top Mississippi 4440; Trace light stain 4443-51; D.S.T.
4454-56	Shale, gray, gray-green and maroon	Top kind erhook 4454
4456-61	Limestone, tan, subcrystalline, resinous; shaly	
4461-63	Shale, as above	
4463-70	Sand, tan to gray, medium, well sorted, glauconitic	Light brown stain possibly oil stain?
4470-75	Shaly limestone, as above	
4475-79	Sand, as above, some fine, gray-green sand	No show
4479-86	Shaly limestone, as above; chert, salmon to cream, subvitreous to vitreous, opaque to translucent	
4486-4534	Limestone, white, coarsely crystalline, to pink and white coarsely crystalline, dolomitic toward bottom; some tan, subcrystalline limestone; much white to tan to cream, vitreous, semi-translucent to translucent chert; porous 4486-94	Top Viola 4486; No show

Formation Log
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<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4534-41	Dolomite, white to gray, finely crystalline; spotted vugular porosity	Slight dark oil stain
4541-46	Dolomite, cream to tan, very finely sucrose	
4546-70	Limestone, white, coarsely crystalline, chalky, dolomitic; dolomite, cream, to gray, finely crystalline; chert, white to cream, vitreous to subvitreous, semi-translucent to opaque; porous 4566-70	No show
4570-76	Limestone, brown, subcrystalline to dense; much brown to tan, vitreous, semi-translucent chert.	
4576-95	Limestone, cream to white, medium crystalline, dolomitic grading into dolomite, dirty brown, finely crystalline; chert, white to salmon, opaque to translucent, vitreous to subvitreous; spotted porosity 4584-95	No show
4595-4604	Limestone, tan to brown, subcrystalline to dense; chert, brown, opaque; spotted porosity	No show
4604-10	Limestone and dolomitic limestone, as above, less chert; spotted porosity	No show
4610-42	Dolomite, tan to cream, finely sucrose; limestone, cream to buff, medium to coarsely crystalline, dolomitic; chert, salmon, semi-translucent, vitreous; much finely crystalline, resinous, sandy limestone near base	
4642-68	Shale, pale to dark gray-green; streaks green, glassy, very shaly, well sorted sand; streaks tan to brown, medium crystalline, sandy dolomite	Top Simpson 4642
4668-73	Sand, white to pink, feldspathic, medium, well sorted, small green mudball inclusions; porous 4670-73	No show
4673-83	Sand, as above, finer, very hard, dolomitic to very sandy dolomite; much green sandy shale; streak porosity 4680-83	No show
4683-86	Limestone, cream, medium crystalline dolomitic, sandy	
4686-94	Sand, gray to white, as above; much dark green shale; porous 4691-94	No show
4694-4728	Mostly shale, gray to dark green; thin streaks sand as above; thin streaks cream, finely crystalline to finely sucrose dolomite	

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Formation Log
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<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4728-30	Dolomite, tan, finely crystalline; trace white, opaque, oolitic chert	Top Arbuckle 4728
4730-38	Dolomite, cream to buff, finely crystalline to medium crystalline, oolitic; good oolitic porosity; thin streaks dark green shale	No show
4738-43	Dolomite, gray, subcrystalline to dense	
4743-46	Dolomite, tan to brown, medium crystalline, rhombohedral, spotted vugular porosity; chert, white, translucent, vitreous, oolitic	No show
4746-57	Dolomite, tan to gray, finely crystalline to subcrystalline; streak green shale 4753-56	
4757-60	Dolomite, cream, finely crystalline; spotted vugular porosity	No show
4760-77	Dolomite, cream to gray, medium crystalline to dense; chert, brown to white, mottled, opaque, oolitic; streaks shale, as above	
4777-85	Dolomite, probably porous, as above	No samples circulated up at total depth.
4785	Total Depth	
D & A 1-11-55		

Samples examined and log compiled by Willis Jack Magathan