FORMATION LOG

Deep Rock & Barnett #2 Moore
NW/NW/SE; 20-8S-22W
Graham County, Kansas
Elevation: 2197 derrick floor

8 5/8" surface casing 139'; 125 sacks cement

WENDELL S. JOHNS

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

Depth	Formation Description	Remarks
0 - 22	Surface clay	Drillers log 0 - 3000
22 - 65	Sand	
65 - 620	Shale	
620 - 1115	Shale, shells and sand	
1115 - 1230	Shale & sand	
1230 - 1350	Shale	
1350 - 1550	Sand	
1550 - 1787	Shale & shells	
1787 - 1833	Anhydrite	Stone Corral (electric log)
1833 - 2450	Shale & shells	
2450 - 2535	Shale & limestone	
2535 - 2600	Shale & shells	
2600 - 2705	Shale & limestone	
2705 - 2950	Limestone & shale	
2950 - 3000	Shale & shells	
3000 - 3056	Shale, gray to brown, some silty gray shale; much sand, medium to fine, gray, angular, micaceous; streaks gray sub-crystalline limestone.	Sample log starts 3000
3056 - 3136	Mostly limestone, gray to brown, some silty; streaks gray & brown shale.	
3136 - 3175	Increase in sandy limestone & silty shale, as above	
3175 - 3197	Sand, light to dark gray, medium to fine, angular.	
3197 - 3253	Limestone, tan to gray, sub-crystalline to dense; streaks gray & brown shale.	Topeka
3253 - 3257	Limestone, cream to tan, very finely sucrose, oolitic; some vugular & pin-point porosity.	No show
3257 - 3260	Shale, brown	
3260 - 3268	Limestone, porous, as above	
3268 - 3278	Shale, brown & gray; limestone, dense as above; trace gray, opaque chert.	
3278 - 3285	Limestone, cream, sub-crystalline to finely crystalline, oolitic; some vugular porosity.	No show
3285 - 3317	Limestone, tan to gray-brown, sub-crystalline to dense; trace chert, as above; streaks gray-black shale.	
3317 - 3328	Limestone, cream, very finely sucrose to sub-crystalline.	Questionably porous on electric log.
3328 - 3332	Shale, brown & gray	
3332 - 3337	Limestone, tan, sub-crystalline, oolitic, fair vugular porosity; chert, gray to tan, opaque.	Possible trace stain
3337 - 3364	Mostly shale, gray to brown; streaks limestone, gray to brown, sub-crystalline to dense; chert, as above.	

(2) Formation log; Deep Rock & Barnett #2 Moore.

Depth	Formation Description	Remarks
3364 - 3374	Limestone, tan to brown, finely crystalline, oolitic & oolicastic; good oolicastic porosity.	Possible trace stain
3374 - 3384	Limestone, gray to tan sub-crystalline; shale, as above	
3384 - 3415	Limestone, tan, finely crystalline, oolitic & oolicastic; good vugular & oolicastic porosity.	Trace stain.
3415 - 3417	Shale, black, carbonaceous, soft	Heebner
3417 - 3422	Limestone, gray-blue to brown, dense	Leavenworth
3422 - 3437	Shale, greenish-brown to gray-green.	Snyderville
3437 - 3446	Limestone, cream, very finely sucrose to finely crystalline.	Toronto
3446 - 3454	Shale, gray-brown	Douglas
3454 - 3485	Limestone, gray, sub-crystalline to dense; chert, gray, opaque to translucent; shale, gray-green to brown.	Lansing
3485 - 3489	Limestone, gray, finely crystalline; some vugular porosity.	Fair show free oil, no odor
3489 - 3500	Limestone, dense, as above; shale, gray-brown	
3500 - 3504	Limestone, tan to gray, sub-crystalline, dolomitic; much chert, opaque to translucent; tan to ochre; trace porosity 3502-04	No show
3504 - 3521	Limestone, tan to gray, finely crystalline to sub-crystalline; streaks gray and brown shale	
3521 - 3523	Limestone; as above; fair vugular and pinpoint porosity	Fair show free oil
3523 - 3527	Limestone & shale	
3527 - 3532	Limestone, as above, oolitic; good inter-oolitic porosity	Good show free oil, no odor
3532 - 3596	Limestone, cream to gray, sub-crystalline to dense; chert, gray, opaque; shale streaks.	
3596 - 3600	Limestone, gray to brown, sub-crystalline; dolomitic, many large fusulinids, good porosity	Good show free oil, good stain
3600 - 3608	Limestone & shale	
3608 - 3612	Limestone, tan, sub-crystalline, oolitic; vugular and inter-oolitic porosity.	Slight show free oil.
3612 - 3624	Mostly shale, gray & brown; streak limestone 3620-24.	
3624 - 3626	Limestone, tan, sub-crystalline, oolitic & oolicastic; vugular & oolicastic porosity.	Good stain
3626 - 3632	Limestone, light tan, sub-crystalline	
3632 - 3635	Limestone, as above	Questionably porous on electric log.
3635 - 3644	Shale, green & brown, streaks limestone	
3644 - 3646	Limestone, tan, crystalline, pinpoint and vugular porosity	Good saturation
3646 - 3670	Mostly shale, green & brown; some limestone, gray & tan, dense, oolitic.	Base Kansas City 3670

(3) Formation log; Deep Rock & Barnett #2 Moore L

Depth	Formation Description	Remarks
3670 - 3744	Shale, gray-green & green to brown some gray siltstone; limestone tan, finely crystalline to dense.	Marmaton
3744 - 3761	Chert, buff to salmon, opaque to translucent, vitreous to devitrified; porous.	No show
3761 - 3770	Limestone, gray, sub-crystalline to dense; chert, as above	
3770 - 3801	Shale, as above, some maroon shale; some chert, as above; some yellow weathered limestone, at bottom.	
3801 - 3821	Some red & yellow jasperoid chert, mostly shale, brown, some silty, green-gray	Possible Conglomerate
3821 - 3868	Much chert, red, jasperoid, pink and white, opaque, chert, chert, red, yellow, gray, white, pink, salmon, opaque to translucent, vitreous to devitrified, much glassy translucent, druzy oolicastic chert, many large free sand grains.	Conglomerate
3868 - 3879	Mostly brown shale, some green shale, trace chert.	
3879 - 3891	Chert, white, opaque, much devitrified, oolitic chert.	
3891 - 3900	Dolomite, white, coarsely crystalline Dolomite, white, light gray & buff, crystalline to coarsely crystalline, streaks fine sand.	Arbuckle
3900 - 3911	Dolomite, white to buff, coarsely crystalline, rhombohedral, good vugular porosity.	No show
3911 - 3914	Dolomite, light gray, finely crystalline.	
3914 - 3920	Dolomite, white, coarsely crystalline, rhombohedral, good porosity.	No show
3920 - 3925	Dolomite, light gray, very finely crystalline.	
3925	Total Depth Dry & Abandoned 11/5/51	

DRILL STEM TESTS:

3514-40; open 1 hour; fair blow throughout test;
recovered 65' mud & 300' salt water
Bottom Hole Pressure 1080# (15 min.)

3592 - 3635; open 1 hour; small blow for 12 min.
recovered 20' heavily oil cut mud & 20' clean oil
Bottom hole pressure 0 (15 min.)

(Samples examined and log compiled by Wendell S. Johns and Willis Jack Magathan)