

Computer Inventory

WENDELL S. JOHNS

FORMATION LOG

Ambassador #1 Oyer
SW SE SW; 13-23S-9W
Reno County, Kansas
Elevation: 1705 Kelly Bushing
1703 Derrick Floor
1701 Ground

8 5/8" Casing 198'
5 1/2" Casing 3745'
Comm: 9-14-56
Comp: 10-11-56

Note: (1) All measurements are from the top of the kelly bushing.

(2) A measurement correction was made at 3697 equal 3709. This log is corrected from 3680' (corrected) to the bottom of the hole. Most of this correction goes back to almost the top of the hole so that all depths above 3680 should be corrected down the hole 12 feet.

| <u>Depth</u> | <u>Formation Description</u> | <u>Remarks</u> |
|--------------|---|----------------------|
| 0 - 155 | Sand and shale | Drillers log 0-2900 |
| 155 - 515 | Red beds | |
| 515 - 1415 | Shale and shells | |
| 1415 - 1585 | Limestone and shale | |
| 1585 - 1875 | Limestone | |
| 1875 - 2735 | Shale and limestone | |
| 2735 - 2900 | Limestone | Sample log 2900-T.D. |
| 2900 - 20 | Limestone, light tan, sub-crystalline to sucrose, to finely crystalline. Some chert, white to blue-white, vitreous, opaque to translucent | |
| 2920 - 23 | Shale, gray | No show |
| 2923 - 60 | Limestone as above, increase in chert, light gray, blue-gray, brown, mottled vitreous, sub-translucent with fossils. Some porosity | |
| 2960 - 73 | Limestone, light tan, finely crystalline, fossiliferous some vugular porosity | No show |
| 2973 - 85 | Limestone, light gray to white, dense | Trace dark stain |
| 2985 - 87 | Shale, gray | |
| 2987 - 97 | Limestone, red-buff, crystalline | |
| 2997 - 3004 | Limestone, tan sucrose, probably some porosity | |
| 3004 - 06 | Limestone, light tan to light gray, dense | |
| 3006 - 08 | Shale, gray | |
| 3008 - 10 | Limestone, as above | |
| 3010 - 13 | Shale, black | |

-2- Formation Log: Ambassador #1 Oyer.

| <u>Depth</u> | <u>Formation Description</u> | <u>Remarks</u> |
|--------------|--|--------------------------------|
| 3013 - 3034 | Limestone, as above | Heebner (3046-52 corr.) |
| 3034 - 40 | Shale, black soft | |
| 3040 - 44 | Limestone, dark gray to brown, dense | Leavenworth (3052-56 corr.) |
| 3044 - 48 | Shale, gray, green, and maroon, silty | Snyderville (3056-60 corr.) |
| 3048 - 56 | Limestone, light gray-tan to white, dense to chalky, trace chert, white, devitrified, fossiliferous. | Toronto 3060-68 |
| | Streak gray shale 3052-53 | |
| 3056 - 64 | Shale, gray, micaceous | Top Douglas (3068 corr.) |
| 3064 - 3105 | Sand, gray, submedium, angular, micaceous, shaly. Some shale streaks | |
| 3105 - 17 | Shale, gray, green and brown | |
| 3117 - 18 | Limestone, brown, dense | |
| 3118 - 22 | Sand as above | |
| 3122 - 93 | Shale, gray, green, brown; streak limestone 3146-47 | |
| 3193 - 3206 | Limestone, dark gray, dense | Brown Lansing (3205 corr.) |
| 3206 - 12 | Shale, gray | |
| 3212 - 20 | Limestone as above | |
| 3220 - 23 | Shale, gray | |
| 3223 - 28 | Limestone, gray, tan and brown, dense to subcrystalline. Trace chert, gray to white, devitrified | Lansing (3235 corr.) |
| 3228 - 29 | Shale, gray | |
| 3229 - 41 | Limestone as above, fossiliferous, oolitic. Chert as above, fossiliferous | |
| 3241 - 90 | Limestone as above, less fossils and chert. Some thin streaks of gray-green and brown shale | |
| 3290 - 99 | Limestone as above, some vugular porosity | No show |
| 3299 - 3301 | Shale, green and brown | |
| 3301 - 17 | Limestone, green-gray to brown, dense. A few streaks shale as above | |

-3- Formation Log: Ambassador #1 Oyer.

| <u>Depth</u> | <u>Formation Description</u> | <u>Remarks</u> |
|--------------|--|----------------|
| 3317 - 3320 | Limestone, brown, fossiliferous. Some dark brown vitreous chert. Possibly some porosity | No show |
| 3320 - 24 | Limestone, brown, dense | |
| 3324 - 25 | Shale, green, gray, and brown | |
| 3325 - 35 | Limestone, brown, dense to sub-crystalline, fossiliferous. Much brown chert. Possibly some porosity | No show |
| 3335 - 44 | Limestone, gray to brown, dense | |
| 3344 - 46 | Shale green and brown | |
| 3346 - 57 | Limestone, gray to brown, sub-crystalline, fossiliferous. Trace porosity | No show |
| 3357 - 82 | Limestone as above, much chert, gray-blue, and tan, vitreous to subvitreous, opaque fossiliferous. Some slightly porous streaks | No show |
| 3382 - 92 | Limestone, gray to brown, dense, a little chert as above | |
| 3392 - 3400 | Shale, green and brown, possible thin limestone streaks | |
| 3400 - 02 | Limestone, tan, dense | |
| 3402 - 05 | Limestone, light brown, finely crystalline, oolitic, trace of oolcasts and porosity | No show |
| 3405 - 28 | Limestone, light gray to light tan dense, streaks green and brown shale 3411-12 & 3416-18 | |
| 3428 - 86 | Limestone as above, some chert, dark brown to black, semi-translucent. A few thin shale streaks and a few streaks of slightly porous limestone | No show |
| 3486 - 90 | Shale, black | |
| 3490 - 92 | Limestone, gray, dense, trace oolites. | |
| 3492 - 99 | Limestone, tan, sucrose, very oolcastic, very porous | No show |
| 3499 - 3524 | Limestone, tan subcrystalline to dense | |
| 3524 - 26 | Shale, black | |
| 3526 - 38 | Limestone as above, with some thin streaks of gray and black shale | |

-4- Formation Log: Ambassador #1 Oyer.

| <u>Depth</u> | <u>Formation Description</u> | <u>Remarks</u> |
|--------------|---|--|
| 3538 - 3556 | Limestone, gray to brown dense, some chert, light brown to amber, translucent. Possible trace porosity 3546-51 | No show |
| 3556 - 57 | Shale, dark gray | |
| 3557 - 64 | Limestone, gray, subcrystalline, some large black oolites, some chert, brown and gray, translucent | |
| 3564 - 69 | Shale, gray | |
| 3569 - 80 | Limestone, gray to buff to brown, dense, blocky. Trace oolites | Base Kansas City (3592 corr.) |
| 3580 - 94 | Shale, green-gray, purple, variegated, silty | Marmaton |
| 3594 - 3602 | Limestone, gray to tan, dense. Trace chert, brown, translucent | |
| 3602 - 13 | Shale as above, increase in maroon-brown shale | |
| 3613 - 27 | Limestone as above, increase in chert as above | |
| 3627 - 31 | Shale as above | |
| 3631 - 44 | Limestone, gray-green to brown dense | |
| 3644 - 49 | Shale as above | |
| 3649 - 67 | Limestone, green-gray to brown, dense. Increase in chert, brown to amber, translucent; salmon and gray opaque | |
| 3667 - 72 | Shale as above | |
| 3672 - 78 | Limestone and chert as above, shaly | |
| 3678 - 80 | Shale as above | |
| 3680 - 92 | Correction | |
| 3692 - 96 | Shale as above | |
| 3696 - 3700 | Chert, gray, white, amber, opaque, vitreous to devitrified | Top Conglomerate 3696 Trace stain no odor or free oil D.S.T. #1 |
| 3700 - 01 | Shale green and brown | |
| 3701 - 14 | Chert, gray, white, brown, amber, citrine, red, pink, jasperoid and chalcedonic, vitreous and devitrified, translucent and opaque | Fair odor. Fair show free oil. Spotted stain D.S.T. #1 and #2 |

-5- Formation Log: Ambassador #1 Oyer.

| <u>Depth</u> | <u>Formation Description</u> | <u>Remarks</u> |
|----------------------------------|---|---|
| 3714 - 3719 | Shale, gray-green, brown to maroon; some silty shale | |
| 3719 - 31 | Chert as above, some purple and yellow chert | No odor. Trace of free oil. Slight spotted stain. D.S.T. #3 |
| 3731 - 33 | Shale, gray, brown and purple | |
| 3733 - 45 | Chert, white, light tan, green, opaque, subvitreous. Some green and white de-vitrified porous chert | Top Mississippi 3733. No odor. Trace free oil. Fair Stain. D.S.T. #4 |
| 3745 | Total Depth | Still in Mississippi |
| Ran electric log. Took no cores. | | |

Drill Stem Tests:

- (1) D.S.T. 3694-3709 - open 30 minutes - Conglomerate.
Gas in 2 minutes - too much to gauge - estimated 10,000,000 CF/day. Sprayed oil in 20 minutes.
Recovered 40' clean oil. No sign of water.
Initial Shut In Pressure: 1340 p.s.i. (30 min.).
Initial Flow Pressure: 730 p.s.i.
Final Flow Pressure: 940 p.s.i.
Final Shut In Pressure: 1300 p.s.i. (30 min.).
Oil 34.2 gravity.
- (2) D.S.T. 3709-15 - open 1 hour - Conglomerate.
Gas in 30 minutes - not enough to gauge.
Recovered 300' slightly oil cut and heavily gas cut watery mud.
2640' very slight oil cut and gas cut salt water.
Initial Shut In Pressure: 1340 p.s.i. (30 min.).
Initial Flow Pressure: 185 p.s.i.
Final Flow Pressure: 1300 p.s.i.
Final Shut In Pressure: 1300 p.s.i. (30 min.).
- (3) D.S.T. 3715-23 - open 1 hour - Conglomerate.
Good blow throughout test.
Recovered 120' watery mud.
2900' salt water. No oil or gas.
Initial Shut In Pressure: 1340 p.s.i. (25 min.).
Initial Flow Pressure: 145 p.s.i.
Final Flow Pressure: 1340 p.s.i.
Final Shut In Pressure: 1340 p.s.i. (25 min.).

-6- Formation Log: Ambassador #1 Oyer.

Drill Stem Tests Contd.:

(4) D.S.T. 3734-45 - open 1 hour - Mississippi.
Very small blow throughout test.
Recovered 40' watery mud.
No oil or gas.
Initial Shut In Pressure: 1340 p.s.i. (30 min.).
Initial Flow Pressure: Zero.
Final Flow Pressure: 15 p.s.i.
Final Shut In Pressure: 1300 p.s.i. (30 min.).

Completion Data:

Set 5 1/2" casing 3745 (3747 electric log measurements)
with 150 sacks cement.
Perforated 8 jet shots 3705½-07½ (electric log measurements).
Hole filled up 600' clean oil in 8 hours - no water.
Ran tubing and rods and put well on pump.

Samples examined and log compiled by Wendell S. Johns.