

# Computer Inventoried

## FORMATION LOG

WENDELL S. JOHNS

Francis Oil & Gas Co.  
#1 Wiseman  
1721' north of south line  
1848' east of west line  
5-26S-24W  
Ford County, Kansas  
Elevation: 2522 Derrick Floor

commenced: 2/17/49  
completed: 3/7/49  
10 3/4" Surface casing 300'  
300 sacks cement

Note: All measurements used in this log are from the top of the rotary bushing which is 2 feet above the derrick floor.

| <u>Depth</u> | <u>Formation Description</u>                                                                                           | <u>Remarks</u>                        |
|--------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 0 - 70       | Surface hole                                                                                                           | Drillers log                          |
| 70 - 1400    | Shale and shells                                                                                                       | 0 - 1400'                             |
| 1400 - 1500  | Shale, gray and red, some red and gray sand, fine, gypsiferous                                                         | 1400 to total depth <i>Sample log</i> |
| 1500 - 50    | Shale, brick red                                                                                                       |                                       |
| 1550 - 1600  | Increase in sand as above, some red shale                                                                              |                                       |
| 1600 - 1629  | Shale, gray                                                                                                            |                                       |
| 1629 - 1670  | Anhydrite, white to gray crystalline, gypsiferous                                                                      | Stone Corral                          |
| 1670 - 1690  | Dolomite, gray and brown, traces of fine sand                                                                          |                                       |
| 1690 - 1750  | Shale, gray                                                                                                            |                                       |
| 1750 - 1780  | Shale, gray and brown, traces of fine sand                                                                             |                                       |
| 1780 - 1895  | Shale, brown, some gray                                                                                                |                                       |
| 1895 - 1910  | Sand, light gray fine, some brown shale                                                                                |                                       |
| 1910 - 2020  | Shale, gray and brown, streaks sand as above, some anhydrite at 1920 - 30                                              |                                       |
| 2020 - 2050  | Shale, brown and gray, streaks gray gypsum.                                                                            |                                       |
| 2050 - 2080  | Shale, brown and gray, with increase in sand                                                                           |                                       |
| 2080 - 2289  | Shale, gray and brown, with thin streaks, gypsum, anhydrite and dolomite.                                              |                                       |
| 2289 - 2307  | Gypsum and some anhydrite                                                                                              |                                       |
| 2307 - 2476  | Shale, gray and brown, much gypsum, some anhydrite, many salt casts.                                                   | Possible top salt section 2307.       |
| 2476 - 2492  | Anhydrite, light brown translucent to gray-white finely crystalline, gypsiferous                                       |                                       |
| 2492 - 2568  | Gypsum, anhydrite and brown shale                                                                                      |                                       |
| 2568 - 2583  | Anhydrite & gypsum                                                                                                     |                                       |
| 2583 - 2605  | Dolomite, sub-crystalline to dense gray-brown, many small black inclusions possibly oolites, bottom definitely oolitic | Top Hollenberg                        |
| 2605 - 2615  | Anhydrite gypsum and gray shale                                                                                        |                                       |
| 2615 - 2629  | Dolomite, as above                                                                                                     |                                       |
| 2629 - 2634  | Shale, green and brown                                                                                                 |                                       |
| 2634 - 2647  | Dolomite, tan to gray dense to crystalline oolitic.                                                                    |                                       |
| 2647 - 2662  | Shale, green and brown, some fine gray siltstone                                                                       |                                       |

| <u>Depth</u> | <u>Formation Description</u>                                                                               | <u>Remarks</u> |
|--------------|------------------------------------------------------------------------------------------------------------|----------------|
| 2662 - 2678  | Dolomite, tan to brown, sub-crystalline, much chert, opaque vitreous, white to gray china                  |                |
| 2678 - 2695  | Dolomite, gray to brown, granular, some speckled dolomite, some speckled chert, some porosity              |                |
| 2695 - 2699  | Dolomite as above, no porosity                                                                             |                |
| 2699 - 2705  | Dolomite, brown, finely crystalline, fair porosity                                                         |                |
| 2705 - 2710  | Dolomite, as above, no porosity                                                                            |                |
| 2710 - 2720  | Shale, green and brown                                                                                     |                |
| 2720 - 2742  | Dolomite, brown and black mottled finely crystalline, some porosity                                        |                |
| 2742 - 2752  | Dolomite, as above, fair to good porosity                                                                  |                |
| 2752 - 2755  | Dolomite, as above, good porosity                                                                          |                |
| 2755 - 2788  | Dolomite, as above, slightly calcareous                                                                    |                |
| 2788 - 2801  | Shale, green and brown                                                                                     |                |
| 2801 - 2826  | Dolomite, gray granular, sub-crystalline to crystalline, no porosity, slightly shaly and calcareous        |                |
| 2826 - 2828  | Anhydrite and gypsum, white and red, crystalline                                                           |                |
| 2828 - 2837  | Shale, green-gray, micaceous                                                                               |                |
| 2837 - 2880  | Limestone, tan crystalline, trace chert                                                                    |                |
| 2880 - 2912  | Shale, green-gray and brown, streaks limestone                                                             |                |
| 2912 - 2925  | Limestone, buff to tan, finely crystalline, trace chert, brown to white opaque                             |                |
| 2925 - 2936  | Shale gray                                                                                                 |                |
| 2936 - 2945  | Limestone and chert as above, streaks gray shale                                                           |                |
| 2945 - 2970  | Limestone, tan to yellow crystalline, fossiliferous, much chert at bottom, blue-gray opaque to translucent |                |
| 2970 - 3000  | Shale gray and brown, with limestone streaks                                                               |                |
| 3000 - 3040  | Shale, gray and brown                                                                                      |                |
| 3040 - 3052  | Limestone, gray to dark gray dense                                                                         |                |
| 3052 - 3056  | Limestone, tan finely crystalline, black oolites, some porosity                                            |                |
| 3056 - 70    | Limestone and shale                                                                                        |                |
| 3070 - 3075  | Shale, brown and gray                                                                                      |                |
| 3075 - 3110  | Limestone, white to brown, finely crystalline                                                              |                |
| 3110 - 3119  | Shale, green and brown                                                                                     |                |
| 3119 - 3142  | Limestone, white to tan, finely crystalline, slightly oolitic and oolitic, some porosity                   |                |
| 3142 - 3161  | Limestone, as above, no oolitic or porosity                                                                |                |
| 3161 - 3185  | Shale, green-gray and brown streaks limestone                                                              |                |
| 3185 - 3195  | Limestone, tan, dense to very finely sucrose                                                               |                |
| 3195 - 3208  | Shale and limestone                                                                                        |                |
| 3208 - 3233  | Limestone, white to tan sub-crystalline                                                                    |                |
| 3233 - 3239  | Shale, green-gray                                                                                          |                |
| 3239 - 3260  | Limestone, white to tan finely crystalline, brown shale streaks.                                           |                |

| <u>Depth</u> | <u>Formation Description</u>                                                              | <u>Remarks</u>  |
|--------------|-------------------------------------------------------------------------------------------|-----------------|
| 3260 - 3270  | Shale, green-gray                                                                         |                 |
| 3270 - 3324  | Limestone, tan, soft porous, some oolites                                                 |                 |
| 3324 - 3330  | Shale, gray                                                                               |                 |
| 3330 - 3342  | Limestone, gray to tan, finely crystalline, chert, gray to black fossiliferous, speckled. |                 |
| 3342 - 3362  | Limestone, tan, finely crystalline, finely oolitic, trace porosity                        |                 |
| 3362 - 3370  | Limestone, gray dense                                                                     |                 |
| 3370 - 3383  | Limestone, dark gray and tan crystalline, large oolites, fossiliferous porous             |                 |
| 3383 - 3400  | Shale, gray                                                                               |                 |
| 3400 - 3440  | Limestone, tan and black mottled very oolitic, many black oolites                         |                 |
| 3440 - 3458  | Limestone, tan to white soft sub-crystalline                                              |                 |
| 3458 - 3475  | Limestone, tan finely crystalline                                                         |                 |
| 3475 - 3538  | Shale, gray and brown, with limestone streaks                                             |                 |
| 3538 - 3575  | Limestone, tan finely crystalline, brown shale streaks                                    |                 |
| 3575 - 3595  | Shale and limestone                                                                       |                 |
| 3595 - 3644  | Limestone, light tan finely crystalline to dense, streaks porosity                        |                 |
| 3644 - 3670  | Shale, gray with limestone streaks                                                        |                 |
| 3670 - 3699  | Limestone, tan to gray, finely crystalline                                                |                 |
| 3699 - 3706  | Gray shale, trace hard dark gray sand                                                     |                 |
| 3706 - 3720  | Limestone, buff to brown, fossiliferous oolitic sandy, good porosity, no odor or stain    |                 |
| 3720 - 3735  | Shale gray                                                                                |                 |
| 3735 - 3740  | Limestone, as above                                                                       |                 |
| 3740 - 3744  | Brown shale                                                                               |                 |
| 3744 - 3765  | Limestone, white to tan dense                                                             | Top Howard 3744 |
| 3765 - 3790  | Limestone, white, granular, finely crystalline, dense, chert white, brown opaque          |                 |
| 3790 - 3794  | Shale, brown                                                                              |                 |
| 3794 - 3813  | Limestone, as above, less chert                                                           |                 |
| 3813 - 3829  | Limestone, buff, finely crystalline, fossiliferous, oolitic, good porosity                |                 |
| 3829 - 3849  | Limestone, gray dense to tan finely crystalline trace gray opaque chert                   | Top Topeka 3829 |
| 3849 - 3862  | Limestone, light gray to buff, sub-crystalline t. oolites and chert                       |                 |
| 3862 - 3876  | Limestone, as above, much chert                                                           |                 |
| 3876 - 3904  | Limestone, as above, trace oolites                                                        |                 |
| 3904 - 3910  | Limestone, as above, very cherty                                                          |                 |
| 3910 - 3926  | Limestone, tan to buff crystalline, fossiliferous possible trace oolitic                  |                 |
| 3926 - 3950  | Limestone, gray to white dense                                                            |                 |
| 3950 - 3992  | Limestone, gray to tan finely crystalline, much chert, white to light blue-gray opaque    |                 |
| 3992 - 4000  | Streaks gray and brown shale                                                              |                 |
| 4000 - 4033  | Limestone, tan, finely crystalline, chert white to gray opaque                            |                 |

| <u>Depth</u> | <u>Formation Description</u>                                                                            | <u>Remarks</u>   |
|--------------|---------------------------------------------------------------------------------------------------------|------------------|
| 4033 - 4093  | Limestone, tan to brown finely crystalline to sucrose, porous                                           |                  |
| 4093 - 4095  | Shale, soft black                                                                                       |                  |
| 4095 - 4104  | Limestone, light gray to tan soft finely crystalline, some chert                                        |                  |
| 4104 - 4118  | Shale, gray to green                                                                                    |                  |
| 4118 - 4183  | Limestone and shale                                                                                     |                  |
| 4183 - 4205  | Shale, gray and green, some fine shaly sand                                                             |                  |
| 4205 - 4220  | Limestone                                                                                               |                  |
| 4220 - 4269  | Limestone and shale                                                                                     |                  |
| 4269 - 4273  | Limestone, brown crystalline to gray dense                                                              | Top Lansing 4269 |
| 4273 - 4277  | Limestone, tan to light brown finely crystalline, finely oolitic, trace porosity                        |                  |
| 4277 - 4290  | Limestone tan to brown finely crystalline, oolitic, fossiliferous, no porosity, trace chert             |                  |
| 4290 - 4299  | Limestone, tan dense very oolitic, some sucrose limestone, oolitic, fair porosity, much chert at bottom |                  |
| 4299 - 4301  | Shale, brown and gray                                                                                   |                  |
| 4301 - 4306  | Limestone as above, no oolites, less chert                                                              |                  |
| 4306 - 4308  | Shale, gray and brown                                                                                   |                  |
| 4308 - 4332  | Limestone, light gray to tan finely crystalline, good porosity, 4320 - 32                               |                  |
| 4332 - 4366  | Limestone as above, probably some shale streaks                                                         |                  |
| 4366 - 4370  | Limestone tan sucrose, trace porosity, possible trace oolites and chert                                 | Gas zone         |
| 4370 - 4376  | Limestone tan to gray, finely crystalline                                                               |                  |
| 4376 - 4380  | Limestone, tan crystalline, some vugular porosity                                                       |                  |
| 4380         | Total Depth                                                                                             | D & A            |
| 4320 - 4350  | D.S.T.; open 30 minutes; <sup>recovered</sup> received 150' salt water, 1400 lb. Bottom Hole Pressure   |                  |

Samples examined and log compiled by Wendell S. Johns.