|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Depth [ft]** | **EHGR [GAPI]** | **PHI-D [v/v]** | **PHI-N [v/v]** | **[g/cc]** |
| Shale point | 5710.46 | 64.2973 | 0.286 | 0.3688 | 2.1781 |
| Sandstone | 6827.64 | 28.0833 | 0.3284 | 0.6727 | 2.1081 |
| Limestone | 7331.76 | 18.9014 | 0.1589 | 0.0465 | 2.4382 |

To obtain the corrected sandstone porosity and fluid density considering , we use the following:

|  |  |
| --- | --- |
|  | (4) |

We assign the “pure” shale density and neutron porosity to be 0.286 v/v and 0.3688 v/v, respectively

|  |  |  |
| --- | --- | --- |
|  | **Depth [ft]** | **Lithology** |
| Zone 1 | 5856 - 7137.41 | Shale |
| Zone 2 | 6813.86 – 6961.09 | Sandstone |
| Zone 3 | 6961.09 - 7004.01 | Shale |
| Zone 4 | 7004.01 – 7034.97 | Sandstone |
| Zone 5 | 7034.97 – 7248.64 | Shale |
| Zone 6 | 7248.64 – 7400.99 | Limestone |
| Zone 7 | 7400.99 – 7432.1 | Shale |
| Zone 8 | 7432.1 – 7721.2 | Limestone |
| Zone 9 | 7721.2 – 8640.42 | Shaly Limestone |