|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Depth [ft]** | **EHGR [GAPI]** | **PHI-D [v/v]** | **PHI-N [v/v]** | **[g/cc]** |
| Shale point | 7371.52 | 56.1664 | 0.1745 | 0.4221 | 2.4116 |
| Sandstone | 7202.87 | 20.9332 | 0.3170 | 0.2589 | 2.1269 |
| Limestone | 7830.19 | 3.3967 | 0.1523 | 0.1369 | 2.4496 |

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 0.1745 and 0.4221, respectively,

|  |  |  |
| --- | --- | --- |
|  | **Depth [ft]** | **Lithology** |
| Zone 1 | 6303 - 7137.41 | Shale |
| Zone 2 | 7137.41 – 7351.03 | Sandstone |
| Zone 3 | 7351.03 - 7625.7 | Shale |
| Zone 4 | 7625.7 - 7727.81 | Limestone |
| Zone 5 | 7727.81 - 7773.59 | Shale |
| Zone 6 | 7773.59 - 8054.12 | Limestone |
| Zone 7 | 8054.12 - 9000 | Shaly Limestone |