

# Drilled Sidewall Core Analysis Report

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Company : Edge Petroleum Operating Company, Inc.

File No. : 05377

Well : Red Lake 29 "I" State No. 2

Location : 2310' FSL &amp; 330' FEL, Sec 29, T17S, R28E

Field: Red Lake

Formation:

County : Eddy County, New Mexico

| Sample Number | Depth<br>ft | Grain Density<br>g/cc | Porosity<br>%                    | Air Perm<br>mD | Kk Perm<br>mD | Porosity<br>%                    | Air Perm<br>mD | Kk Perm<br>mD | Porosity<br>%                      | Air Perm<br>mD | Kk Perm<br>mD |
|---------------|-------------|-----------------------|----------------------------------|----------------|---------------|----------------------------------|----------------|---------------|------------------------------------|----------------|---------------|
|               |             |                       | <b>Confining Pressure 500psi</b> |                |               | <b>Confining Pressure 600psi</b> |                |               | <b>Confining Pressure 1,000psi</b> |                |               |
| 1             | 675.0       | 2.92                  | 1.10                             | 0.0142         | 0.0070        | 1.03                             | 0.0116         | 0.0054        |                                    |                |               |
| 2             | 677.5       | 2.78                  | 24.98                            | 59.5           | 57.4          | 24.76                            | 59.5           | 57.4          |                                    |                |               |
| 3             | 680.0       | 2.93                  | 1.07                             | 0.0135         | 0.0065        | 0.97                             | 0.0119         | 0.0057        |                                    |                |               |
| 4             | 697.0       | 2.77                  | 20.03                            | 28.9           | 27.6          | 19.93                            | 28.9           | 27.5          |                                    |                |               |
| 5             | 1,440.0     | 2.70                  | 10.00                            | 0.2639         | 0.2018        | 9.77                             | 0.2234         | 0.1690        |                                    |                |               |
| 6             | 1,796.0     | 2.77                  | 1.02                             | 0.0212         | 0.0113        | 0.97                             | 0.0154         | 0.0077        |                                    |                |               |
| 7             | 1,798.0     | 2.84                  | 2.05                             | 0.0494         | 0.0310        | 1.92                             | 0.0368         | 0.0221        |                                    |                |               |
| 8             | 1,825.0     | 2.73                  | 5.56                             | 0.0500         | 0.0312        | 5.44                             | 0.0366         | 0.0215        |                                    |                |               |
| 9             | 1,896.0     | 2.70                  | 7.78                             | 0.1789         | 0.1336        | 7.56                             | 0.1405         | 0.1009        |                                    |                |               |
| 10            | 1,964.0     | 2.65                  | 13.98                            | 1.42           | 1.19          | 13.72                            | 1.33           | 1.12          |                                    |                |               |
| 11            | 2,090.0     | 2.85                  | 15.76                            | 2.44 (frac)    | 2.11 (frac)   | 15.56                            | 2.38 (frac)    | 2.05 (frac)   |                                    |                |               |
| 12            | 2,437.0     | 2.85                  | 10.49                            | 1.47           | 1.24          | 10.24                            | 1.42           | 1.20          |                                    |                |               |
| 13            | 2,522.0     | 2.86                  | 7.21                             | 0.5117         | 0.4191        |                                  |                |               | 6.80                               | 0.3072         | 0.2377        |
| 14            | 2,673.0     | 2.82                  | 6.41                             | 0.0219         | 0.0119        |                                  |                |               | 4.79                               | 0.0050         | 0.0019        |
| 15            | 2,688.0     | 2.74                  | 18.42                            | 3.50           | 3.12          |                                  |                |               | 18.04                              | 3.32           | 2.95          |
| 16            | 3,018.0     | 2.83                  | 5.66                             | 0.0718         | 0.0480        |                                  |                |               | 5.04                               | 0.0480         | 0.0297        |
| 17            | 3,146.0     | 2.83                  | 10.38                            | 1.61           | 1.38          |                                  |                |               | 10.19                              | 1.52           | 1.30          |
| 18            | 3,340.0     | 2.71                  | 9.13                             | 0.0922         | 0.0629        |                                  |                |               | 8.58                               | 0.0463         | 0.0278        |
| 19            | 3,426.0     | 2.84                  | 9.78                             | 7.30           | 6.71          |                                  |                |               | 9.28                               | 4.08           | 3.66          |
| 20            | 3,508.0     | 2.87                  | 6.37                             | 0.2595         | 0.2001        |                                  |                |               | 6.20                               | 0.2258         | 0.1729        |

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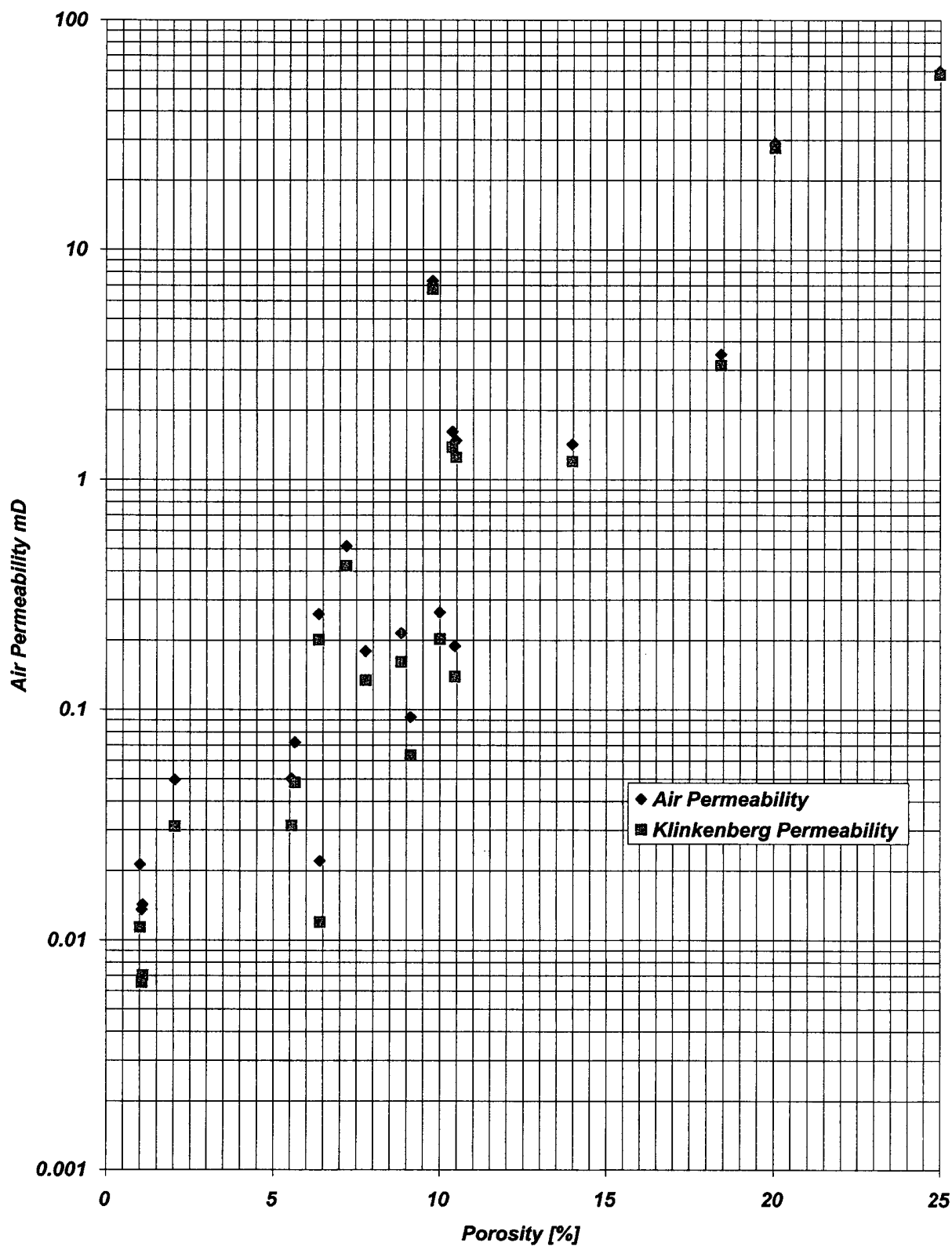
**Field:** Red Lake

**Formation:**

**County :** Eddy County, New Mexico

| Sample | Depth   | Grain   | Porosity                         | Air    | Kk     | Porosity                         | Air  | Kk   | Porosity                           | Air    | Kk     |
|--------|---------|---------|----------------------------------|--------|--------|----------------------------------|------|------|------------------------------------|--------|--------|
| Number |         | Density |                                  | Perm   | Perm   |                                  | Perm | Perm |                                    | Perm   | Perm   |
|        | ft      | g/cc    | %                                | mD     | mD     | %                                | mD   | mD   | %                                  | mD     | mD     |
|        |         |         | <b>Confining Pressure 500psi</b> |        |        | <b>Confining Pressure 600psi</b> |      |      | <b>Confining Pressure 1,000psi</b> |        |        |
| 21     | 3,549.0 | 2.84    | 8.85                             | 0.2144 | 0.1604 |                                  |      |      | 8.66                               | 0.1960 | 0.1457 |
| 22     | 3,563.0 | 2.88    | 10.45                            | 0.1883 | 0.1383 |                                  |      |      | 10.14                              | 0.1254 | 0.0874 |

**Permeability versus Porosity @ 500psi**



**Permeability versus Porosity @ Confining Pressure**

