

# Drilled Sidewall Core Analysis Report

Company : Union Oil Company of California

Field : Red Hills

Well : Red Hills "28" Federal Com. No.2

Formation : Wolfcamp

Location : 1980' FNL &amp; 660' FWL Sec.28 T25S R33E

Lea County, New Mexico

| Sample Number | Depth    | Air Permeability | Porosity | Grain Density | Sw    | So   | Gas   | Fluorescence | Sample Description                                               |
|---------------|----------|------------------|----------|---------------|-------|------|-------|--------------|------------------------------------------------------------------|
|               | ft       | mD               | %        | g/cc          | %     | %    | Units | %            | Description                                                      |
| 1             | 13,406.0 | .012             | 1.50     | 2.78          | 47.99 | 0.00 | 39    | 0            | Silst blk ang w/srt w/consol calc shy pyr                        |
| 2             | 13,419.0 | .128             | 3.86     | 2.71          | 30.45 | 0.00 | 200   | 0            | Ss gy-dk gy vfg-mg sba p/srt w/consol calc cgl shlam tr pyr frac |
| 3             | 13,445.0 | .018             | 4.21     | 2.68          | 62.12 | 0.00 | 35    | 0            | Ss gy-dk gy vfg-mg sba p/srt w/consol calc cgl shlam shy tr pyr  |
| 4             | 13,462.0 | .012             | 2.82     | 2.76          | 28.66 | 0.00 | 200   | 0            | Silst blk ang w/srt w/consol calc shy pyr                        |
| 5             | 13,486.0 | .009             | 0.36     | 2.70          | 37.24 | 0.00 | 37    | 0            | La gy vfxln mdst-wkst sdy sily fos nvp                           |
| 6             | 13,532.0 | .033             | 6.35     | 2.73          | 34.06 | 0.00 | 52    | 0            | La lt gy fxln wkst cgl sdy fos lnpar por                         |
| 7             | 13,546.0 | .011             | 1.96     | 2.69          | 36.44 | 0.00 | 4     | 0            | La gy vfxln mdst-wkst sdy sily fos lnbln por                     |
| 8             | 13,571.0 | .094             | 28.80    | 2.57          | 87.15 | 0.00 | 19    | 0            | Trip cht ln vfxln mdst-wkst sdy sily clay chky por               |
| 9             | 13,585.0 | .068             | 1.39     | 2.69          | 18.16 | 0.00 | 200   | 0            | La gy vfxln mdst-wkst sdy sily styl lnbln por                    |
| 10            | 13,617.0 | .010             | 1.20     | 2.82          | 35.13 | 0.00 | 200   | 0            | Dol gy vfxln mdst-wkst sily calc lnbln por                       |
| 11            | 13,664.0 | .087             | 0.45     | 2.70          | 93.49 | 0.00 | 7     | 0            | La gy-dk gy vfxln mdst-wkst cgl sily fos sl shy lnpar por        |
| 12            | 13,673.0 | .011             | 0.89     | 2.70          | 55.60 | 0.00 | 3     | 0            | La gy-dk gy vfxln mdst-wkst cgl sily fos sl shy lnpar por        |
| 13            | 13,927.0 | .011             | 6.85     | 2.65          | 40.28 | 0.00 | 150   | 0            | Silst blk ang w/srt w/consol v calc carb v shy                   |
| 14            | 14,168.0 | .008             | 1.38     | 2.56          | 38.77 | 0.00 | 200   | 0            | Silst blk ang w/srt w/consol carb v shy calc lam                 |
| 15            | 14,214.0 | .008             | 4.67     | 2.61          | 43.29 | 0.00 | 150   | 0            | Silst blk ang w/srt w/consol v sl calc carb v shy                |
| 16            | 14,289.0 | .007             | 0.13     | 2.59          | 66.44 | 0.00 | 5     | 0            | Silst blk ang w/srt w/consol carb v shy                          |
| 17            | 14,420.0 | .008             | 0.61     | 2.67          | 59.62 | 0.00 | 14    | 0            | Ss gy-dk gy vfg ang-sba mod/srt w/consol calc sily shy           |

