

CORE LABORATORIES, INC.  
*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

LITHOLOGICAL ASSOCIATIONS

|        |                                      |        |                                                 |
|--------|--------------------------------------|--------|-------------------------------------------------|
| ANR(Y) | ANHYDRITE, ANHYDRITIC                | LM(Y)  | LIMESTONE, LIME                                 |
| ARK    | ARKOSE, ARKOSIC                      | RG     | MEDIUM GRAINED                                  |
| BAN    | BAND, BANDED                         | MTX    | MATRIX                                          |
| BREC   | BRECCIA, BRECCIATED                  | NA     | INTERVAL NOT ANALYZED<br>(AT REQUEST OF CLIENT) |
| CALC   | CALCITE, CALCAREOUS                  | NOD    | NODULE, NODULAR                                 |
| CARB   | CARBONACEOUS                         | OOD    | OOOLITIC                                        |
| CG     | COARSE GRAINED                       | PISO   | PISOLITIC                                       |
| CHR(Y) | CHALK, CHALKY                        | PP     | PINPOINT POROSITY                               |
| CHT(Y) | CHERT, CHERTY                        | PT     | PARTING                                         |
| CONGL  | CONGLOMERATE, CONGLOMERITIC          | PYR    | PYRITE, PYRITIC                                 |
| CXLN   | COARSELY CRYSTALLINE                 | SD(Y)  | SANDSTONE, SANDY                                |
| DNS    | DENSE                                | SH(Y)  | SHALE, SHALY                                    |
| DOL(C) | DOLOMITE, DOLOMITIC                  | SHR    | SOLID HYDROCARBON RESIDUE                       |
| F      | RANDOMLY ORIENTED FRACTURES          | SL/    | SLIGHTLY                                        |
| FG     | FINE GRAINED                         | SLT(Y) | SILT, SILTY                                     |
| FOSS   | FOSSILIFEROUS                        | STY    | STYLOLITE, STYLOLITIC                           |
| FR     | FRIABLE                              | SUC    | SUCROSLIC                                       |
| FXLN   | FINELY CRYSTALLINE                   | SUL    | SULPHUR                                         |
| GAL    | GALENA                               | TBFA   | 100 BROKEN FOR ANALYSIS                         |
| GLAUC  | GLAUCONITE, GLAUCONITIC              | TRIP   | TRIPOLITE                                       |
| GRAN   | GRANITE                              | V/     | VERY                                            |
| GYP    | GYPSEM, GYPSIFEROUS                  | VF     | PREDOMINANTLY VERTICALLY FRACTURED              |
| HP     | PREDOMINANTLY HORIZONTALLY FRACTURED | V      | VEGULAR                                         |
| INC    | INCLUSION                            | XBD    | CROSSBEDDED                                     |
| INTBD  | INTERBEDDED                          | XLN    | MEDIUM CRYSTALLINE                              |
| LAN    | LAMINATED                            | XLL    | CRYSTALL                                        |

THE FIRST WORD IN THE DESCRIPTION COLUMN OF THE CORE ANALYSIS REPORT DESCRIBES THE ROCK TYPE. FOLLOWING ARE SOME MODIFIERS IN INCREASING ABUNDANCE AND MISCELLANEOUS DESCRIPTIVE TERMS.