Supplementary Table 2 – Estimated soil characterization for PTK A site paleosol using Vertisol pedotransfer functions of Nordt and Driese (2010a).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  | |  | |  |  | |  | | |  |  |  | |
| **Paleosol Horizon** | **Clay**  **(%)** | | **Clay**  **(%)** | | **COLE**  **(cm cm-1)** | | **BD**  **(g cm-3)** | | | **CEC**  **(cmolc kg-1)** | | **pH**  **(H2O)** | **BS**  **(%)** | | **CaCO3**  **(%)** | | **Fed**  **(%)** | **ESP**  **(%)** | **EC**  **(dS m-1)** | **Org. C**  **(%)** | **Org. N**  **(%)** | **Depth** |
| **(SE)** | <5%CaO  **(+ 4)** | | <10%CaO  **(+ 5)** | | <10% CaO  **(+ 0.019)** | | Noncalc**.**  **(+ 0.1)** | | | <10%CaO  **(+ 8)** | | <30%CaO  **(+ 0.6)** | <30%CaO  **(+ 8)** | | <30%CaO  **(+ 4%)** | | <30%CaO  **(+ 0.4)** | <30%CaO  **(+ 4)** | <30%CaO  **(+ 3)** | **(+ 0.53)** | **(+ 0.04)** | **(**cm) |
|  | 46 | | 47 | | 0.12 | | 1.13 | | | 43 | | 8.2 | 110 | | 7.6 | | 4.4 | 79 | 181 | 0.64 | 0.11 | -2.5 |
|  | 47 | | 48 | | 0.12 | | 1.17 | | | 43 | | 8.2 | 109 | | 5.6 | | 2.4 | 85 | 205 | 0.63 | 0.11 | -7.5 |
|  | 48 | | 49 | | 0.13 | | 1.21 | | | 44 | | 7.9 | 105 | | 2.0 | | 1.3 | 86 | 209 | 0.53 | 0.09 | -12.5 |
|  | 48 | | 48 | | 0.13 | | 1.21 | | | 44 | | 7.9 | 105 | | 2.1 | | 1.4 | 85 | 205 | 0.55 | 0.09 | -17.5 |
|  | 47 | | 48 | | 0.14 | | 1.22 | | | 44 | | 7.9 | 104 | | 1.6 | | 1.4 | 86 | 210 | 0.59 | 0.10 | -22.5 |
|  | 45 | | 46 | | 0.13 | | 1.21 | | | 43 | | 8.2 | 109 | | 5.8 | | 1.1 | 91 | 230 | 0.50 | 0.09 | -27.5 |
|  | 45 | | 47 | | 0.14 | | 1.23 | | | 44 | | 8.0 | 105 | | 1.1 | | 1.0 | 108 | 321 | 0.42 | 0.07 | -32.5 |

(Notations: **SE** = Standard Error of Regression; **COLE** = Coefficient of Linear Extensibility; **BD** = Bulk Density; **CEC** = Cation Exchange Capacity; **BS** = Base Saturation; **Fed** = Dithionite-Citrate Extractable Iron; **ESP** = Exchangeable Sodium Percentage; **EC** = Electrical Conductivity; **Org. C** = organic Carbon; **Org. N** = organic Nitrogen).