SOIL DATA CHARACTERIZED IN A HIGH PRECISION PROBE STATION

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| **SOIL SAMPLE NAME** | **NITROGEN (kg/ha)** | **CURRENT** |
| Ujawala Phata | 112.28 | 11.44 μA |
| Jintur | 136.32 | 35.98 μA |
| Manwat | 154.64 | 29.92 μA |
| Italapur | 186.48 | 80.35 μA |

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| **SOIL SAMPLE NAME** | **PHOSPHOROUS (kg/ha)** | **CURRENT** |
| Ujawala Phata | 8.35 | 23.03 μA |
| Jintur | 6.34 | 20.83 μA |
| Manwat | 9.33 | 38.10 μA |
| Italapur | 8.21 | 24.40 μA |

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| **SOIL SAMPLE NAME** | **POTASSIUM (kg/ha)** | **CURRENT** |
| Ujawala Phata | 476.45 | 6.13 μA |
| Jintur | 719.72 | 57.56 μA |
| Manwat | 591.13 | 12.15 μA |
| Italapur | 590.1 | 11.09 μA |

Output Data of the Actual Sensor after testing Jintur and Manwat soils

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| **SAMPLE** | **NITROGEN (kg/ha)** | **CURRENT** | **Stage-1 output (in Volts)** | **Stage-2 output (in Volts)** |
| None | NA | 0 μA | 0.95 | 4.20 |
| Nitrogen Specific RGO | NA | 3.7 μA | 1.1 | 4.05 |
| Jintur Soil | 136.32 | 37.2 μA | 1.51 | 2.82 |
| Manwat Soil | 154.64 | 42.8 μA | 1.59 | 2.6 |

Data of the circuit when CD 4007 is used.

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| **INPUT CURRENT** | **Stage-1 output (in Volts)** | **Stage-2 output (in Volts)** |
| 5 μA | 0.97 | 4.23 |
| 20 μA | 1.1 | 3.87 |
| 35 μA | 1.25 | 3.62 |
| 45 μA | 1.35 | 3.2 |
| 60 μA | 1.51 | 2.77 |
| 80 μA | 1.68 | 2.28 |