**Hill Laboratories**
BETTER TESTING **BETTER RESULTS**

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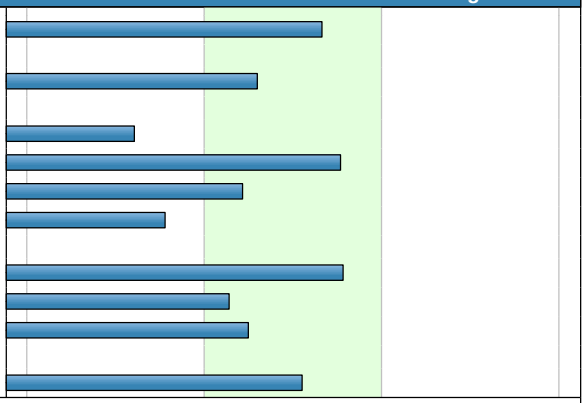
# ANALYSIS REPORT



| | | | |
|---|---|---|---|
| **Client:** | NPK Simpson | **Lab No:** | 713010 shpv1 |
| **Address:** | MoreDosh Farms | **Date Registered:** | 21-Aug-2009 |
| | Somewhere | **Date Reported:** | 21-Aug-2009 |
| | NORTH ISLAND | **Quote No:** | |
| | | **Order No:** | |
| | | **Client Reference:** | Example soil report |
| | | **Submitted By:** | Hill Labs internal jobs |

**Sample Name:** Drystock Block **Lab Number:** 713010.1
**Sample Type:** SOIL Mixed Pasture, Dry Stock (S82)

| Analysis | | Level Found | Medium Range |
|---|---|---|---|
| pH | pH Units | 5.9 | 5.7 - 6.0 |
| Olsen Phosphorus | mg/L | 18 | 15 - 25 |
| Potassium | me/100g | 0.36 | 0.50 - 0.80 |
| Calcium | me/100g | 10.4 | 5.0 - 12.0 |
| Magnesium | me/100g | 1.27 | 0.80 - 3.00 |
| Sodium | me/100g | 0.16 | 0.20 - 0.50 |
| CEC | me/100g | 22 | 12 - 25 |
| Total Base Saturation | % | 55 | 50 - 85 |
| Volume Weight | g/mL | 0.70 | 0.60 - 1.00 |
| Sulphate Sulphur | mg/kg | 11 | 7 - 15 |




| | | | | |
|---|---|---|---|---|
| Base Saturation % | K 1.6 | Ca 47 | Mg 5.7 | Na 0.7 |
| MAF Units | K 5 | Ca 9 | Mg 20 | Na 5 |

The above nutrient graph compares the levels found with reference interpretation levels. NOTE: It is important that the correct sample type be assigned, and that the recommended sampling procedure has been followed. R J Hill Laboratories Limited does not accept any responsibility for the resulting use of this information. IANZ Accreditation does not apply to comments and interpretations, i.e. the 'Range Levels' and subsequent graphs.

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## SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

**Sample Type: Soil**

| Test | Method Description | Default Detection Limit | Samples |
|---|---|---|---|
| Sample Registration* | Samples were registered according to instructions received. | - | 1 |
| Soil Prep (Dry & Grind)* | Air dried at 35 - 40°C overnight (residual moisture typically 4%) and crushed to pass through a 2mm screen. | - | 1 |
| pH | 1:2 (v/v) soil:water slurry followed by potentiometric determination of pH. | 0.1 pH Units | 1 |
| Olsen Phosphorus | Olsen extraction followed by Molybdenum Blue colorimetry. | 1 mg/L | 1 |
| Sulphate Sulphur | 0.01M Calcium phosphate extraction followed by Ion Chromatography. | 1 mg/kg | 1 |
| Potassium (MAF) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 2 MAF units | 1 |
| Calcium (MAF) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 2 MAF units | 1 |
| Magnesium (MAF) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 2 MAF units | 1 |
| Sodium (MAF) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 2 MAF units | 1 |
| Potassium | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.01 me/100g | 1 |
| Calcium | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.5 me/100g | 1 |
| Magnesium | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.04 me/100g | 1 |
| Sodium | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.05 me/100g | 1 |
| Potassium (Sat) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.1 %BS | 1 |
| Calcium (Sat) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 1 %BS | 1 |
| Magnesium (Sat) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.2 %BS | 1 |
| Sodium (Sat) | 1M Neutral ammonium acetate extraction followed by ICP-OES. | 0.1 %BS | 1 |
| CEC | Summation of extractable cations (K, Ca, Mg, Na) and extractable acidity. | 2 me/100g | 1 |
| Total Base Saturation | Calculated from Extractable Cations and Cation Exchange Capacity. | 5 % | 1 |
| Volume Weight | The weight/volume ratio of dried, ground soil. | 0.01 g/mL | 1 |

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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Fiona Calvert NZCS
Client Services Manager - Agriculture Division