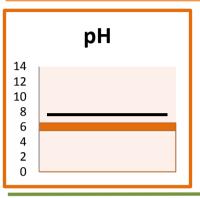
Soil ID code: 400-2012-40018007 Cation Exchange Capacity (CEC): 25.53meq/100 g Soil type: Silty Clay Loam

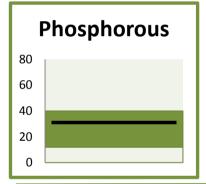
#### Soil analysis prepared by:





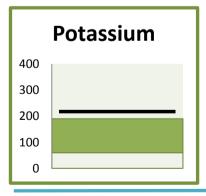
### pH: 7.6

- » Your pH is too high, different grass species prefer different conditions, but broadly speaking most species can thrive between a pH of 5.5 and 6.5 » A soil pH that is too high can result in inefficient use of fertiliser by turf, excess thatch build-up and increased pest problems.
- » Lowering soil pH e.g. golf greens to encourage fine grasses ammonium sulphate based fertilisers will acidify the soil. Sulphate will acidify soil as well e.g. ferrous, potassium and ammonium sulphates.



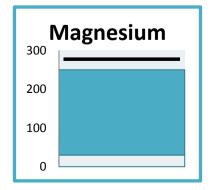
# Phosphorous: 31mg/l

» Our baseline data indicates that your phosphorous levels fall within the preferred parameters, no amendments are required.



## Potassium: 218mg/l

- » Your potassium levels are too high.
- » Potassium toxicity is not usually a problem. High levels of potassium can result in the burning of the turf by the creation of highly soluble salt levels. Theoretically, high potassium levels can induce magnesium and calcium deficiency although this very rarely happens.
- » Because potassium is very reactive, levels will fall rapidly quite naturally.



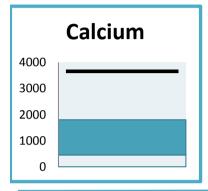
# Magnesium: 277mg/l

- » Your magnesium levels are too high.
- » Magnesium toxicity is not usually a problem in turf grass.
- » Magnesium levels will be utilised over time and will diminish naturally.

 $Soil\ ID\ code:\ 400\text{-}2012\text{-}40018007$  Cation Exchange Capacity (CEC): 25.53meq/100 g

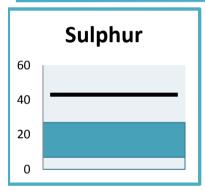
Soil type: Silty Clay Loam

Soil analysis prepared by:



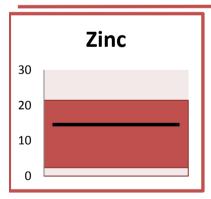
### Calcium: 3660mg/l

- » Your calcium levels are too high.
- » Calcium toxicity is not usually a problem in turf grass.
- » Ammonium sulphate based fertilisers will acidify the soil. Sulphate will acidify soil as well e.g. ferrous, potassium and ammonium sulphates, this can help counteract acidity problems.



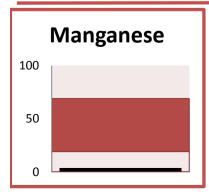
# Sulphur: 43mg/l

- » Your sulphur levels are too high.
- » A consequence of the abundance of sulphur within turf is 'black layer'. This is caused by an abundance of anaerobic bacteria which utilise sulphur as opposed to oxygen. Symptoms of sulphur toxicity can range from thinning and bronzing of the turf to outright loss.
- » Reduce the use of fertilisers that contain sulphur and aerate to allow oxygen to degrade the sulphur.



# Zinc: 14.5mg/l

» Our baseline data indicates that your zinc levels fall within the preferred parameters therefore no amendments are required.



# Manganese: 2.01mg/l

- » Your manganese level is too low and will require amending.
- » Manganese is a key element in the prevention of Take-all Patch. Symptoms of manganese deficiency include interveinal chlorosis of younger leaves, necrotic spots are sometimes observed, as are kinks in the leaves.
- » Manganese levels can be corrected with an appropriate fertiliser.

Soil ID code: 400-2012-40018007 Cation Exchange Capacity (CEC): 25.53meq/100 g

Soil type: Silty Clay Loam

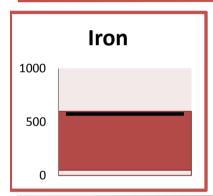
Soil analysis prepared by:

# Copper 15 10 5

0

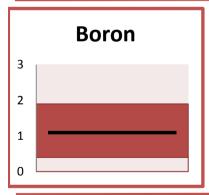
# Copper: 11.1mg/l

- » Your copper level is too high.
- » Copper is highly toxic to plants except when it occurs in very dilute soil concentrations. A major cause of copper toxicity is the excessive and repeated use of copper-based fungicides. Copper injury to turf has also been seen when using high rates of copper products in an attempt to kill moss
- » Copper toxicity can be relieved by raising pH, spraying turf with iron chelate solution or adding phosphorus, although a huge excess is difficult to overcome.



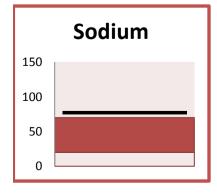
### Iron: 577mg/l

» Our baseline data indicates that your iron levels fall within the preferred parameters therefore no amendments are required.



# Boron: 1.1mg/l

» Our baseline data indicates that your boron levels fall within the preferred parameters therefore no amendments are required.



# Sodium: 77.4mg/l

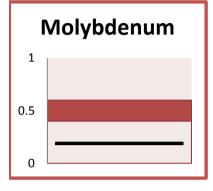
- » Your sodium level is too high.
- » Soils with high sodium levels exhibit symptoms such as physiological drought, even to the point of death, regardless of soil moisture levels. High salt levels result in impaired drainage and increased compaction.
- » The application of calcium sulphate and irrigation will leach the free sodium through the soil profile, restoring the soil's physical properties.

Soil ID code: 400-2012-40018007

Cation Exchange Capacity (CEC): 25.53meq/100 g

Soil type: Silty Clay Loam

Soil analysis prepared by:



# Molybdenum: 0.19mg/l

- » Your molybdenum level is too low and will require amending.
- » When molybdenum is deficient, older turf leaves turn pale green. Interveinal areas of leaf appear mottled and yellowish with withering and stunting of the plant.
- » Molybdenum can be supplied directly in the form of a liquid fertiliser, speak to a member of our sales team who can discuss your options.

