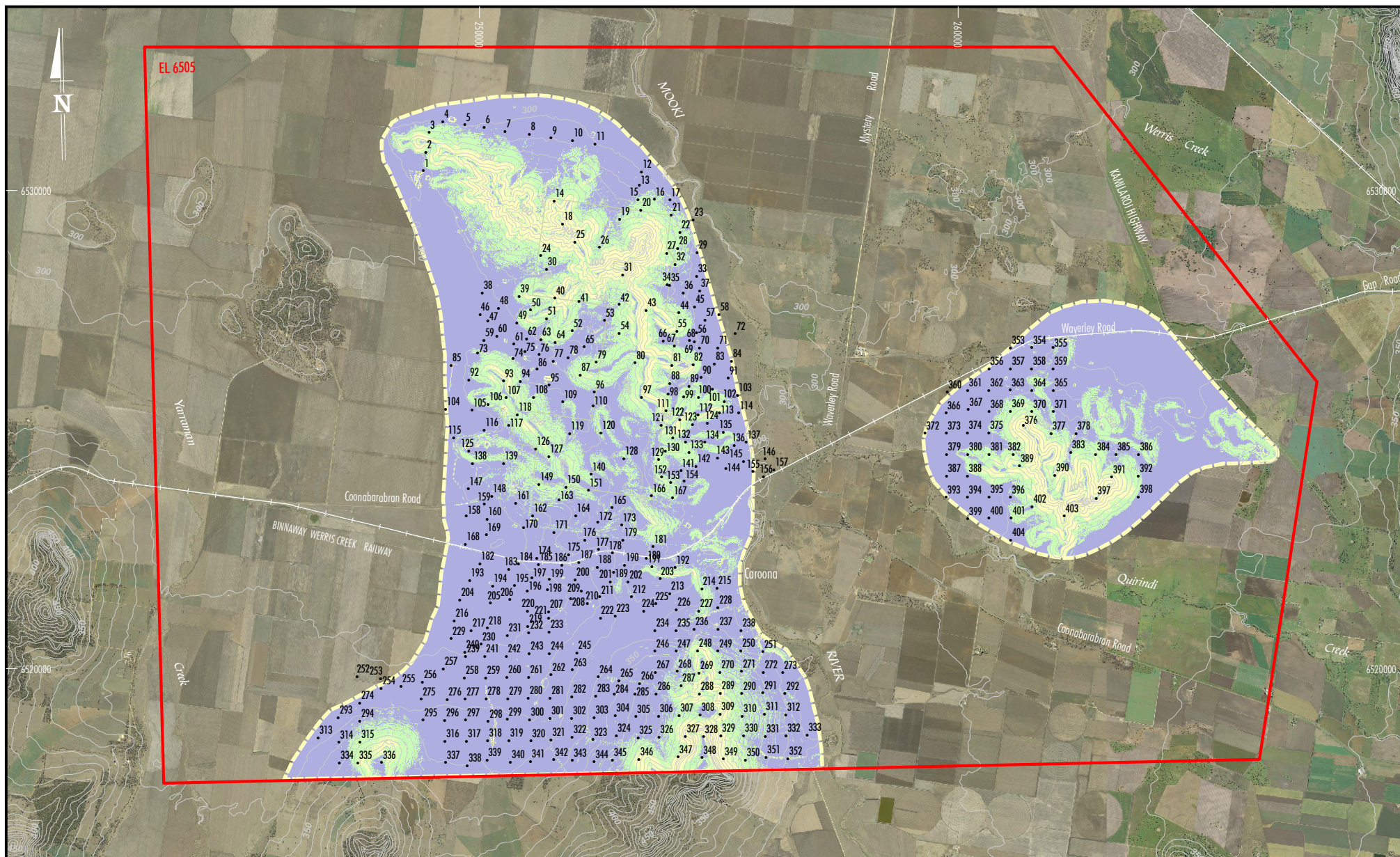


MAPS 1 TO 14



0 1 2 3 4
Kilometres
GDA 94 MGA Zone 56

Source: Land and Property Management Authority - Topographic Base 2010 and
Orthophoto (Curlewis 2011 & Tamworth 2010)



- LEGEND**
- Exploration Licence (EL 6505)
 - Project Assessment Area
 - Soil Test Pit

Slope

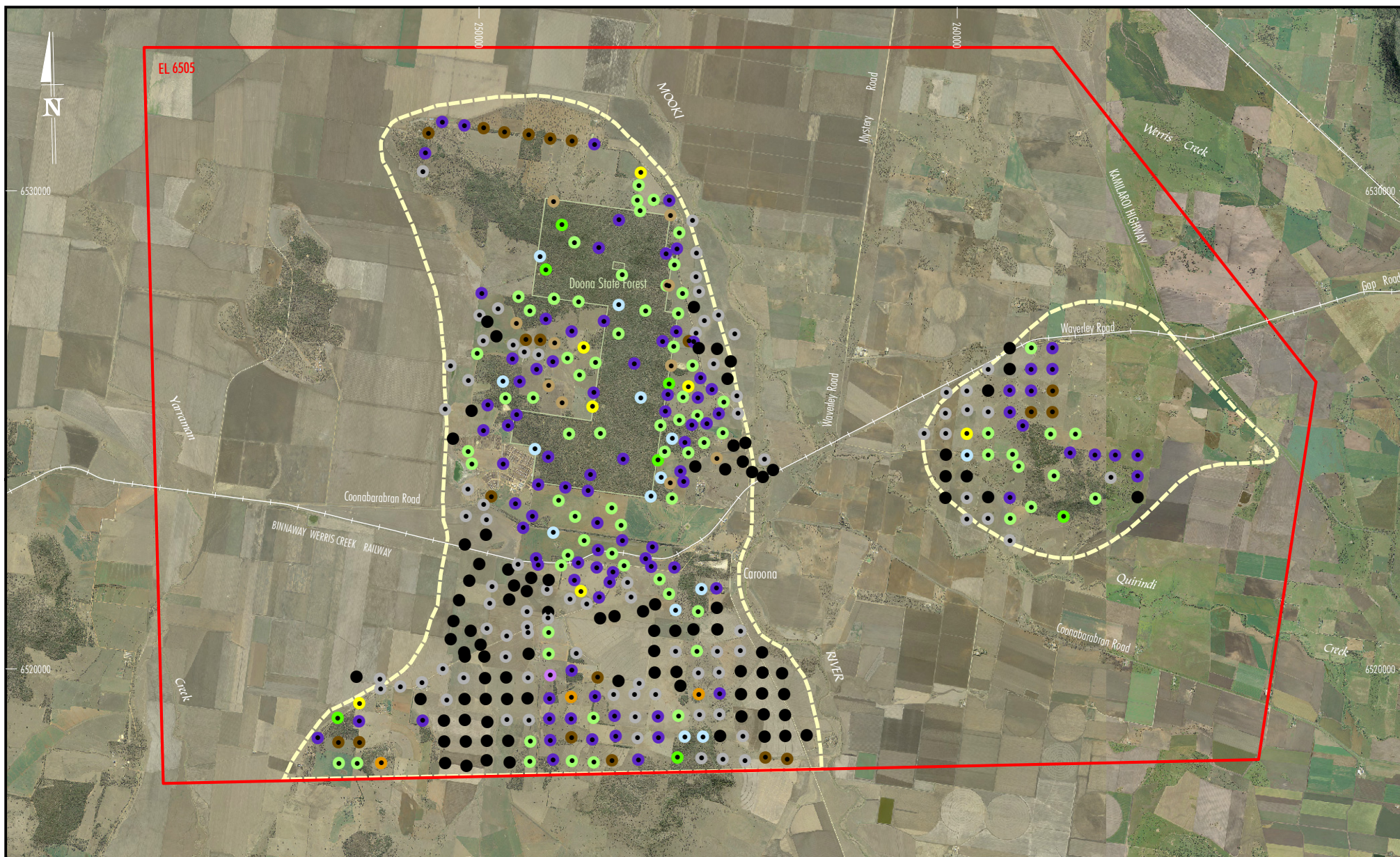
- > 10%
- 5 - 10%
- < 5%

CARON COAL PROJECT

MAP 1

Pit Position in Relation to BSAL
Slope Categories





0 1 2 3 4
Kilometres

GDA 94 MGA Zone 56

Source: Land and Property Management Authority - Topographic Base 2010 and
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- - - Project Assessment Area
- Soil Test Pit

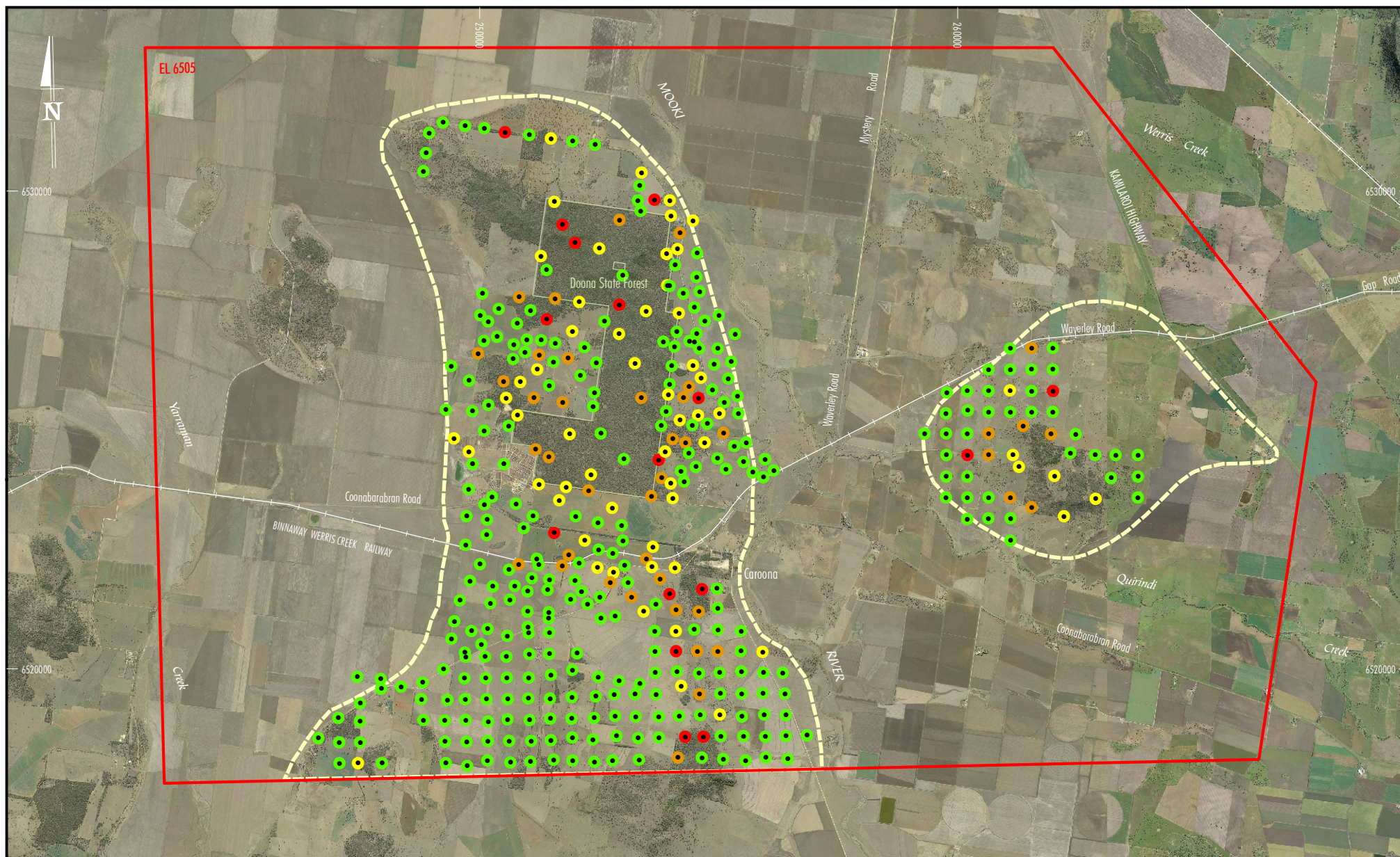
- | | | |
|------------------|------------|--------------|
| ● Black Vertosol | ● Ferrosol | ● Sodosol |
| ● Vertosol | ● Kandosol | ● Tenosol |
| ● Chromosol | ● Kurosol | ● Calcarosol |
| ● Dermosol | ● Rudosol | |

CARON COAL PROJECT

MAP 2

Soil Types - Australian Soil Classification





0 1 2 3 4
Kilometres

GDA 94 MGA Zone 56

Source: Land and Property Management Authority - Topographic Base 2010 and
Orthophoto (Curlewis 2011 & Tamworth 2010)

LEGEND

- Exploration Licence (EL 6505)
- - - Project Assessment Area
- Soil Test Pit

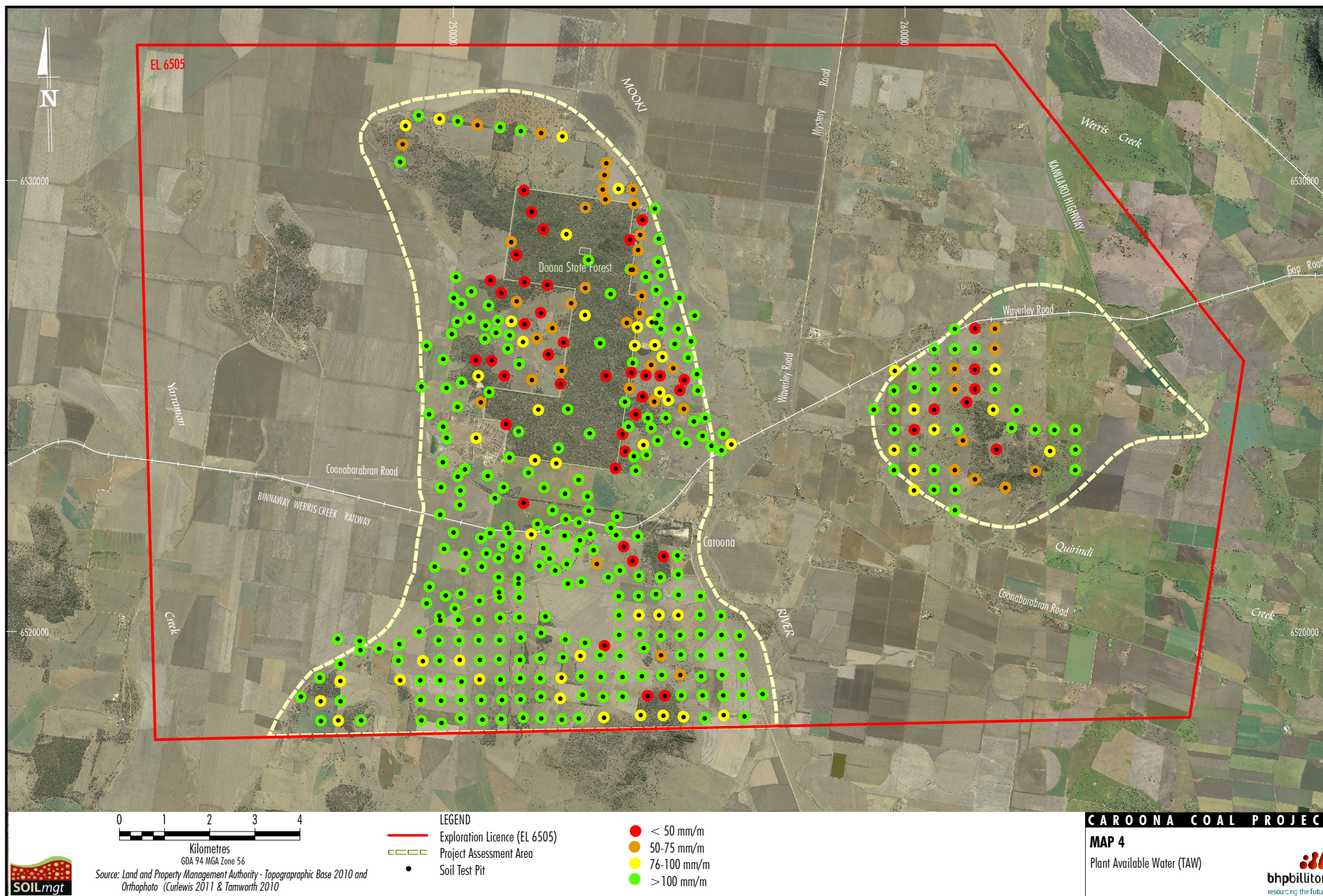
- < 50 cm
- 50-75 cm
- 76-100 cm
- > 100 cm

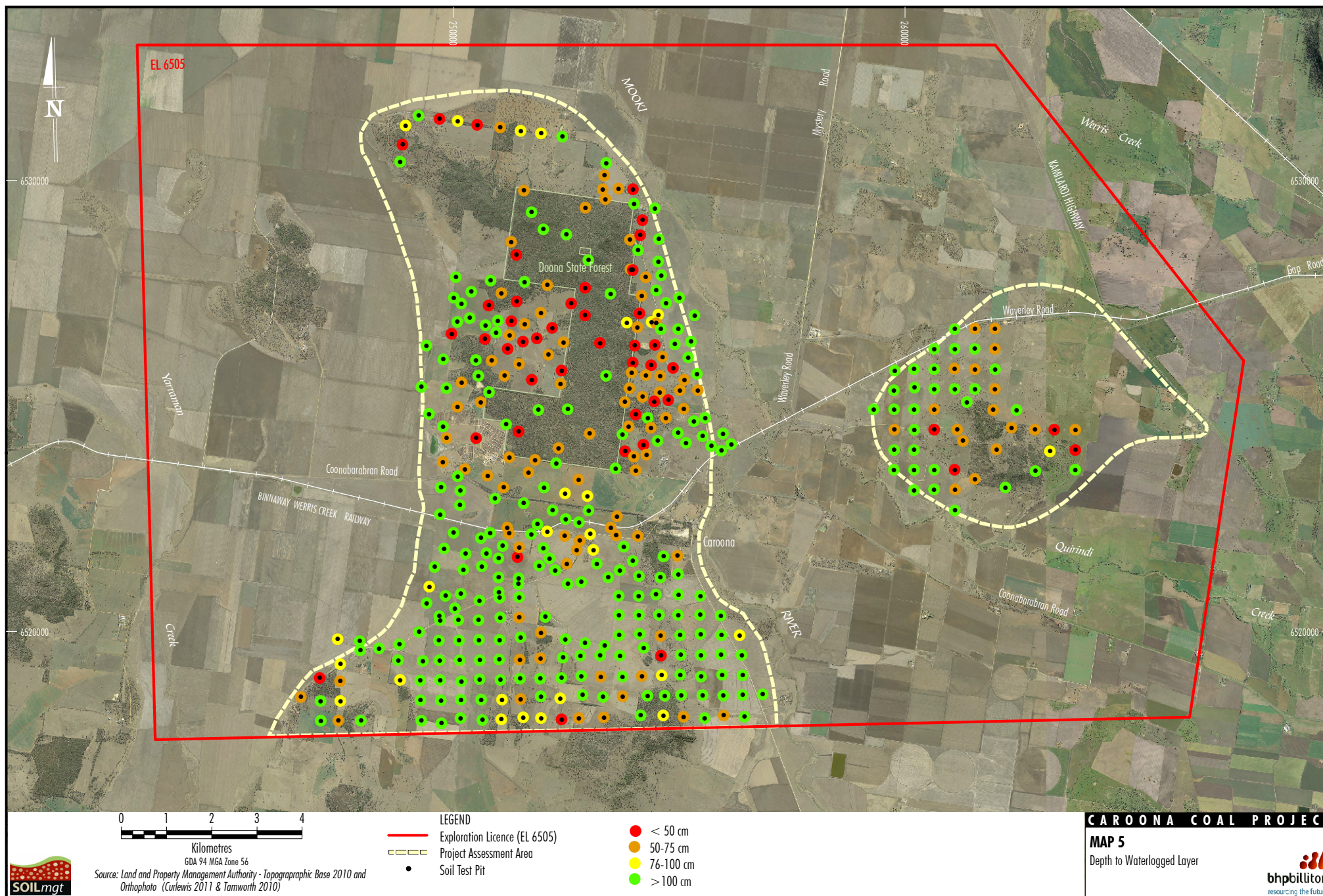
CARON COAL PROJECT

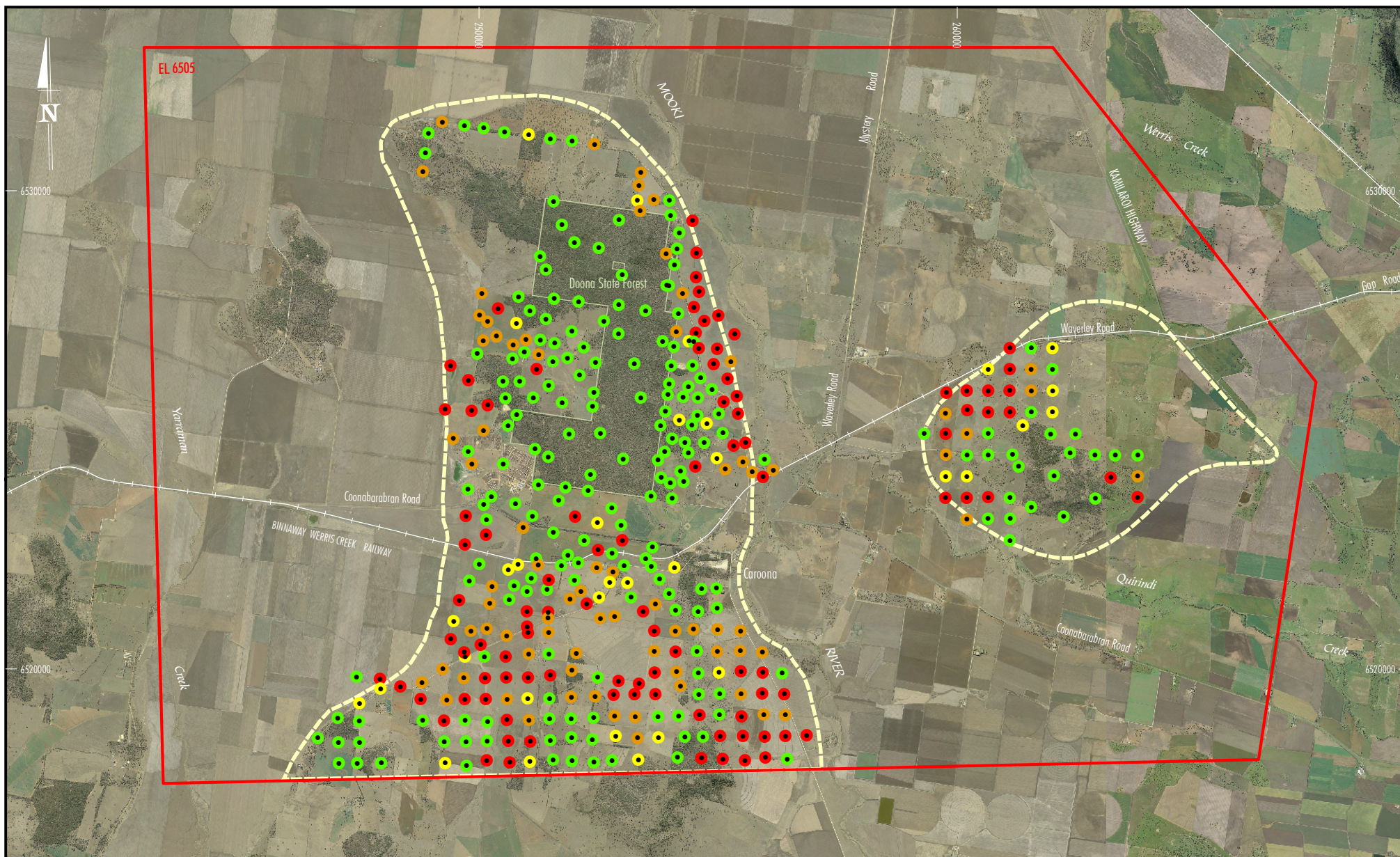
MAP 3

Depth to Rock









0 1 2 3 4
Kilometres

GDA 94 MGA Zone 56

Source: Land and Property Management Authority - Topographic Base 2010 and
Orthophoto (Curlewis 2011 & Tamworth 2010)

LEGEND

- Exploration Licence (EL 6505)
- - - Project Assessment Area
- Soil Test Pit

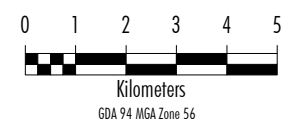
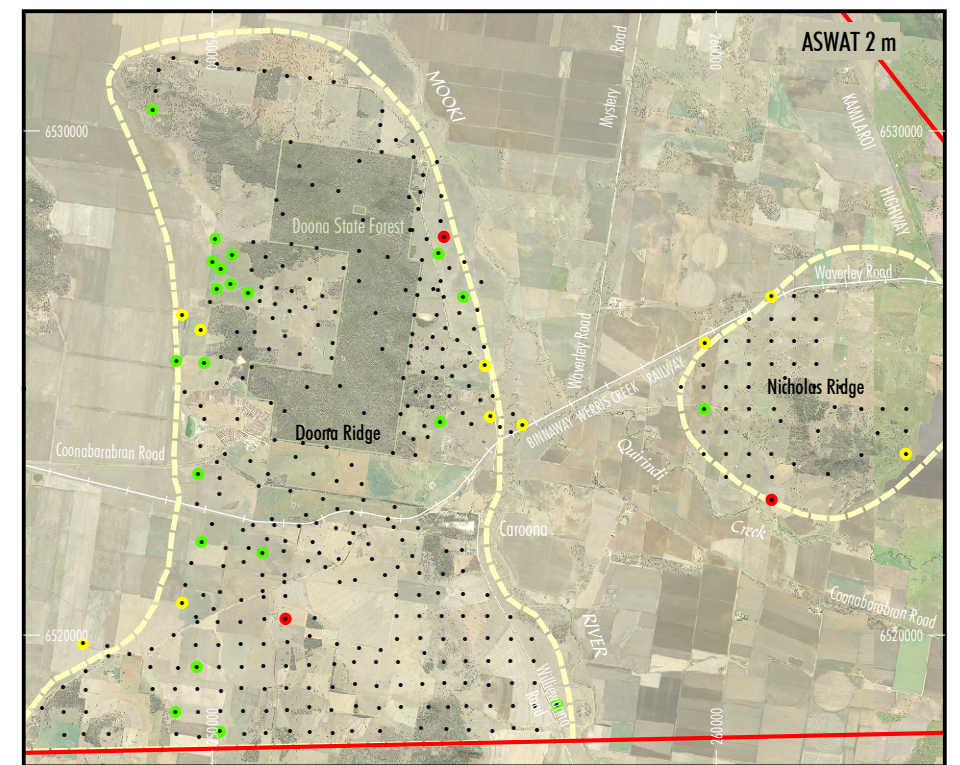
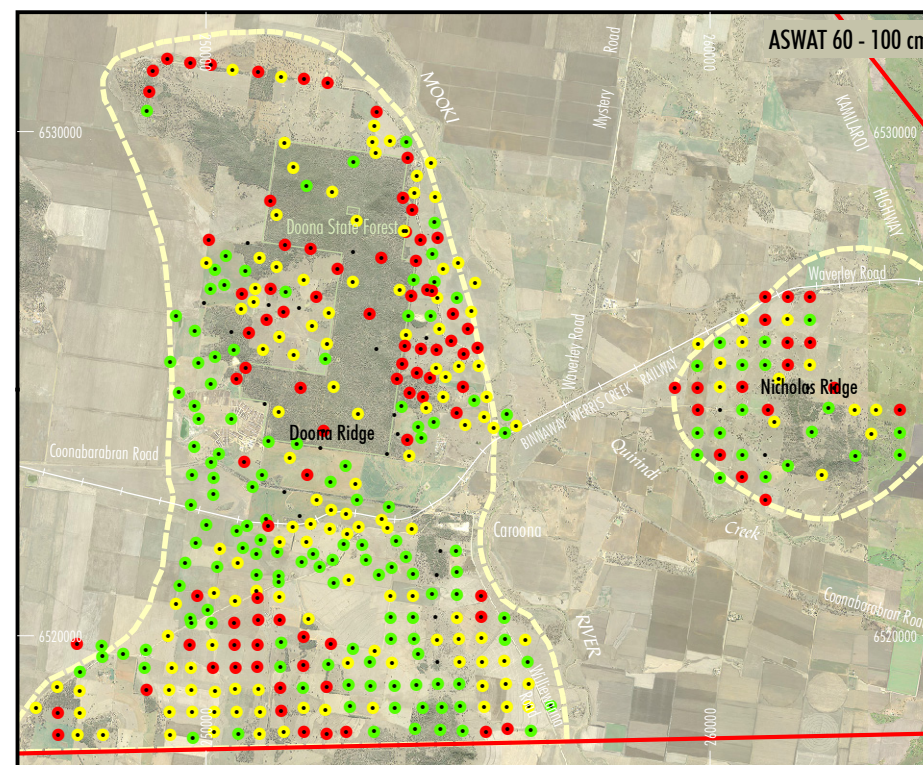
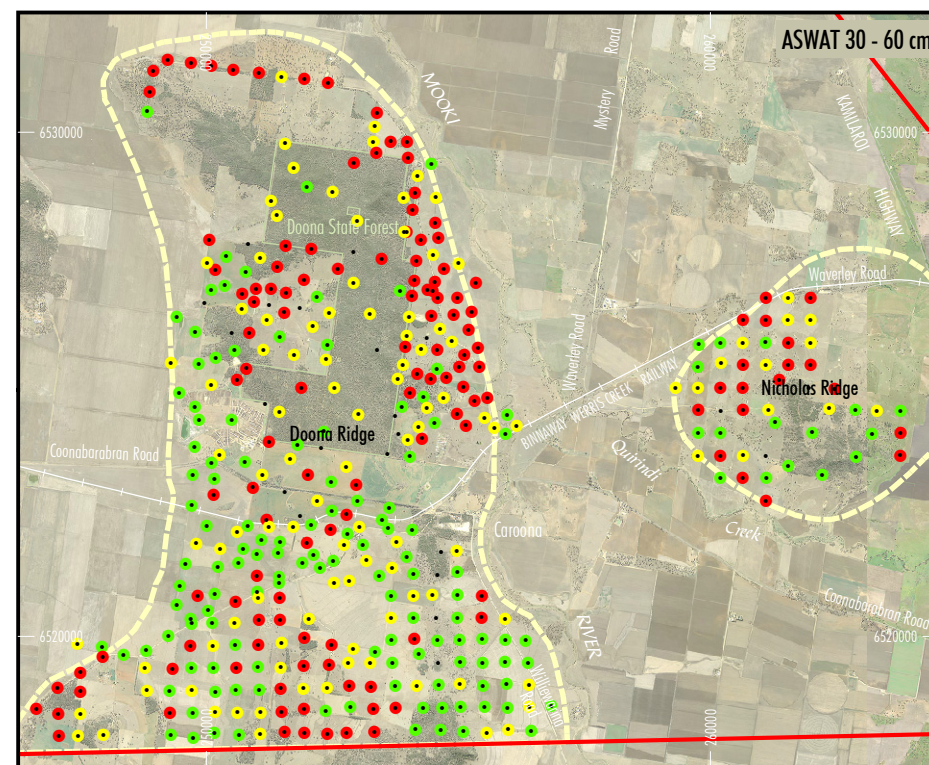
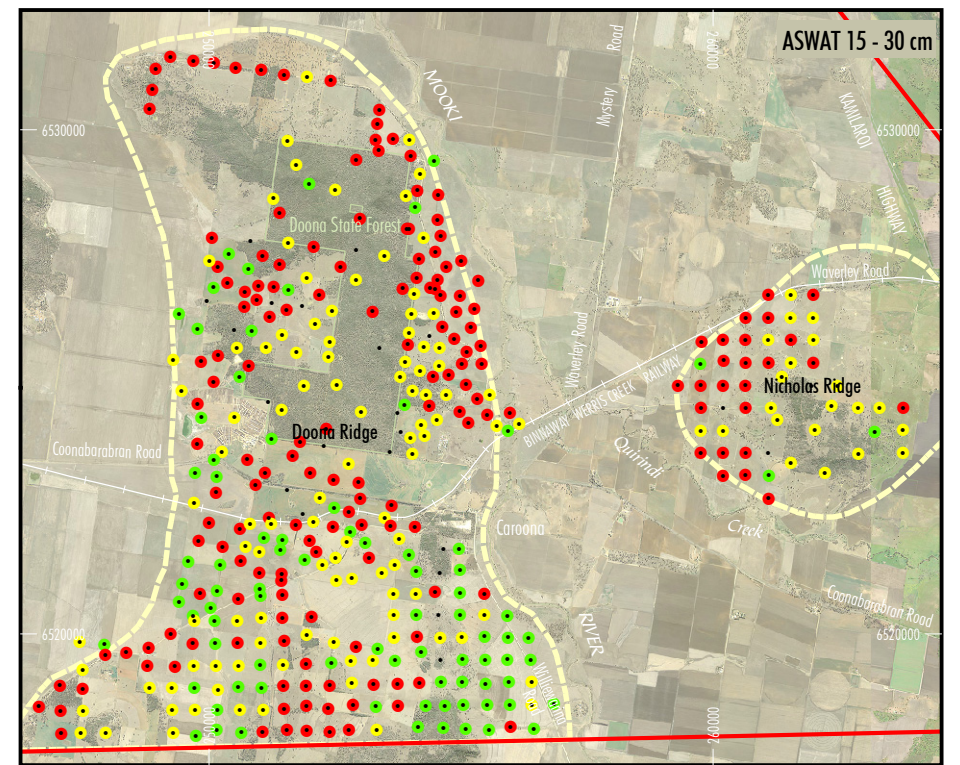
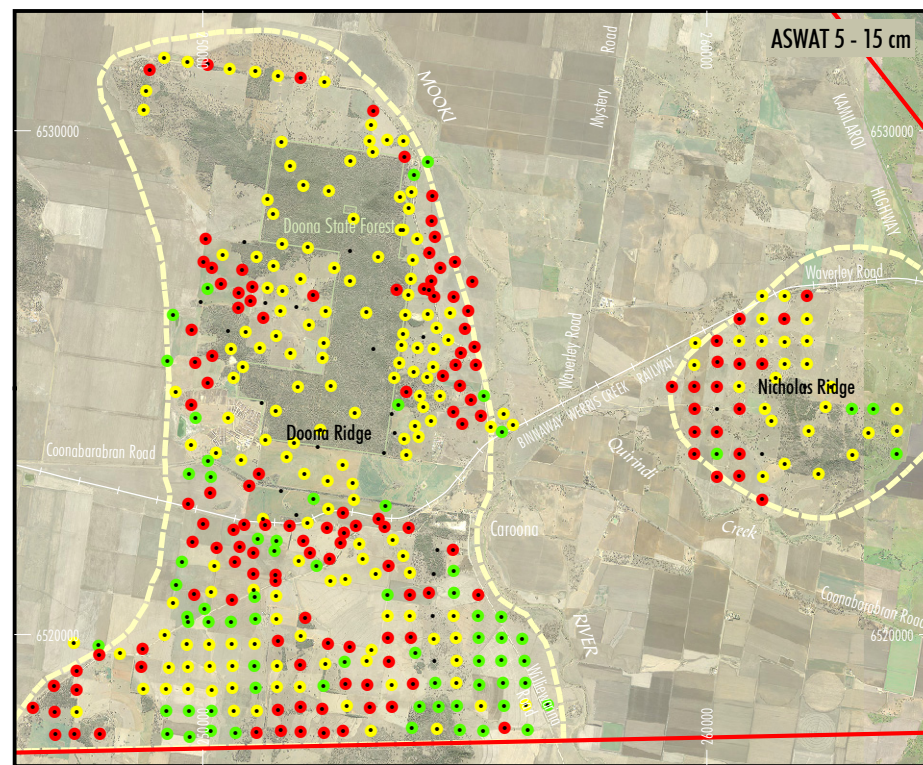
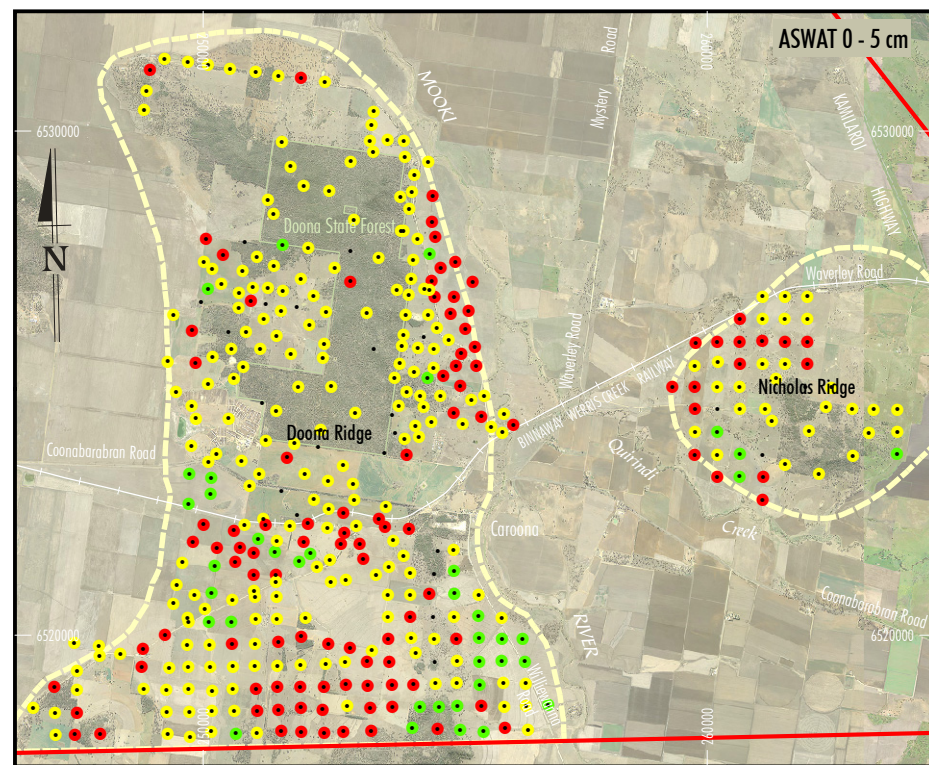
- < 50 cm
- 50-75 cm
- 76-100 cm
- > 100 cm

CAROONA COAL PROJECT

MAP 6

Depth to Layer with Lime





Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND
 — Exploration Licence (EL 6505)
 Project Assessment Area
 • Soil Test Pit

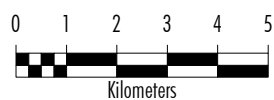
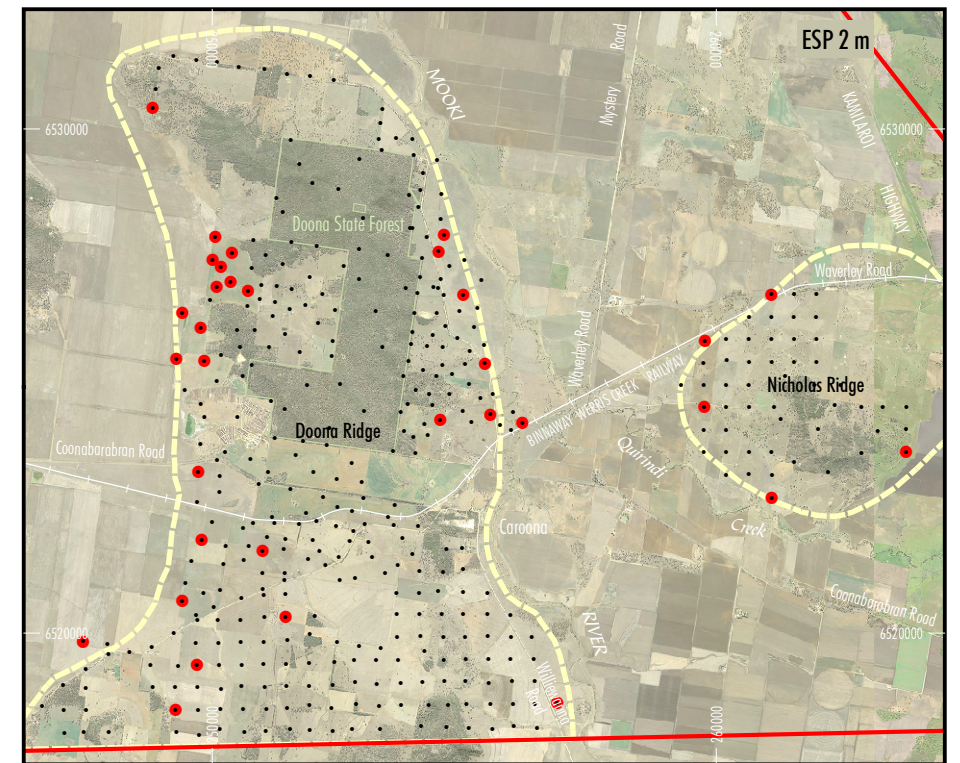
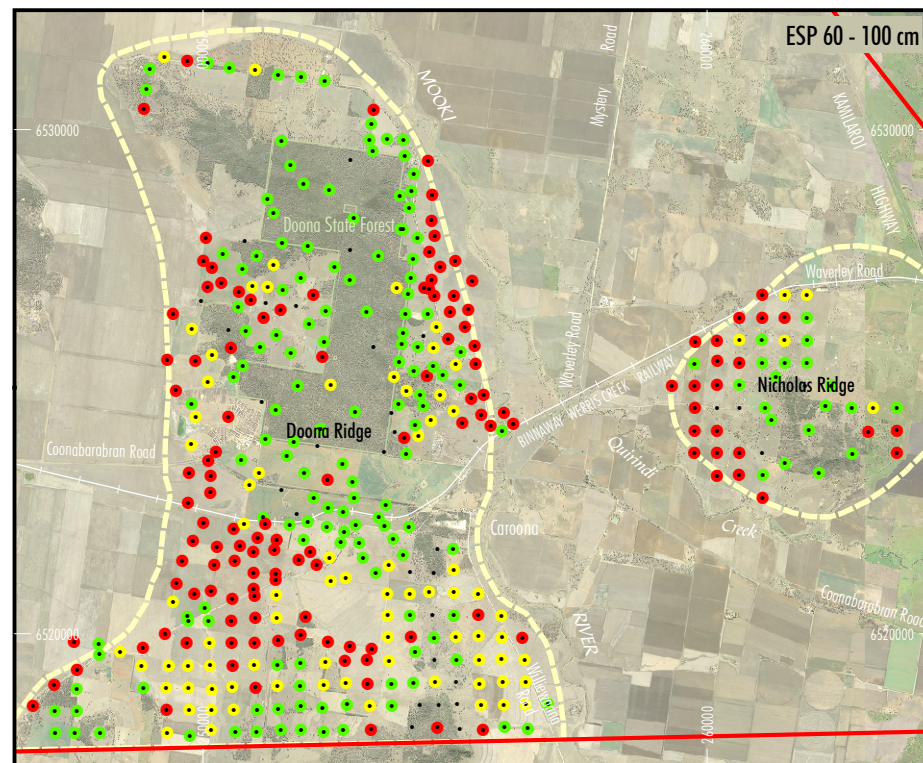
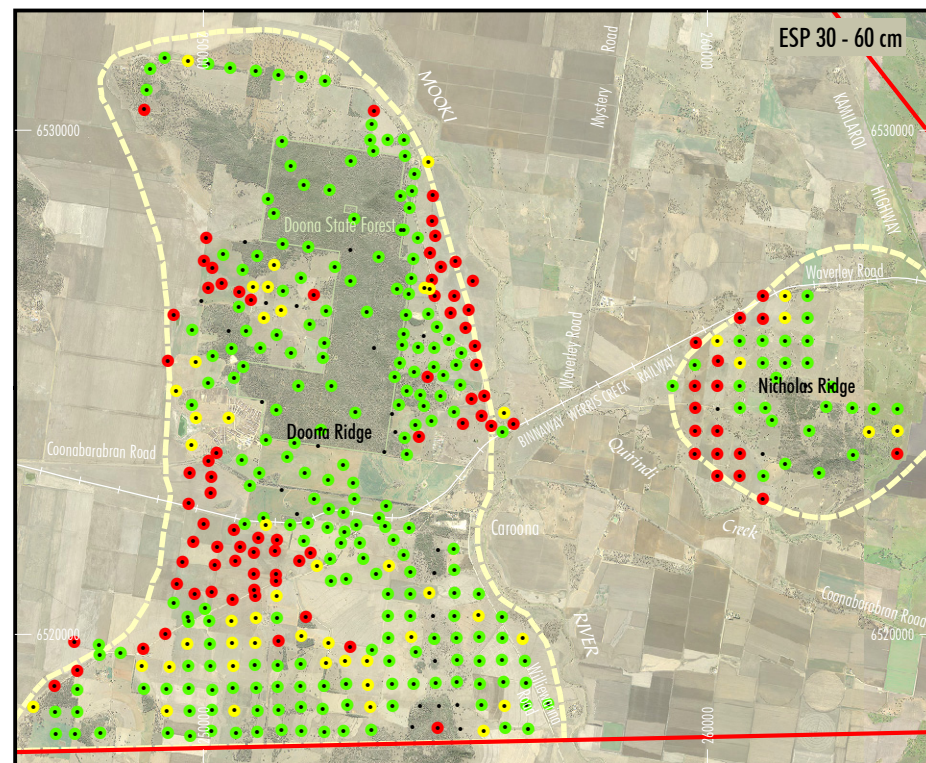
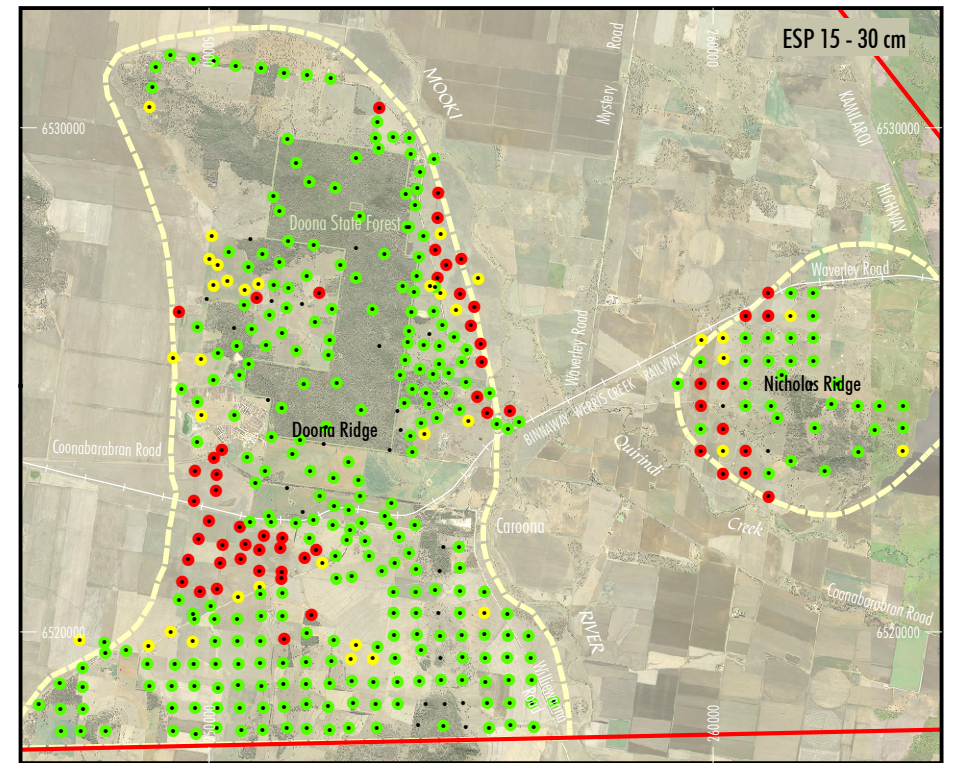
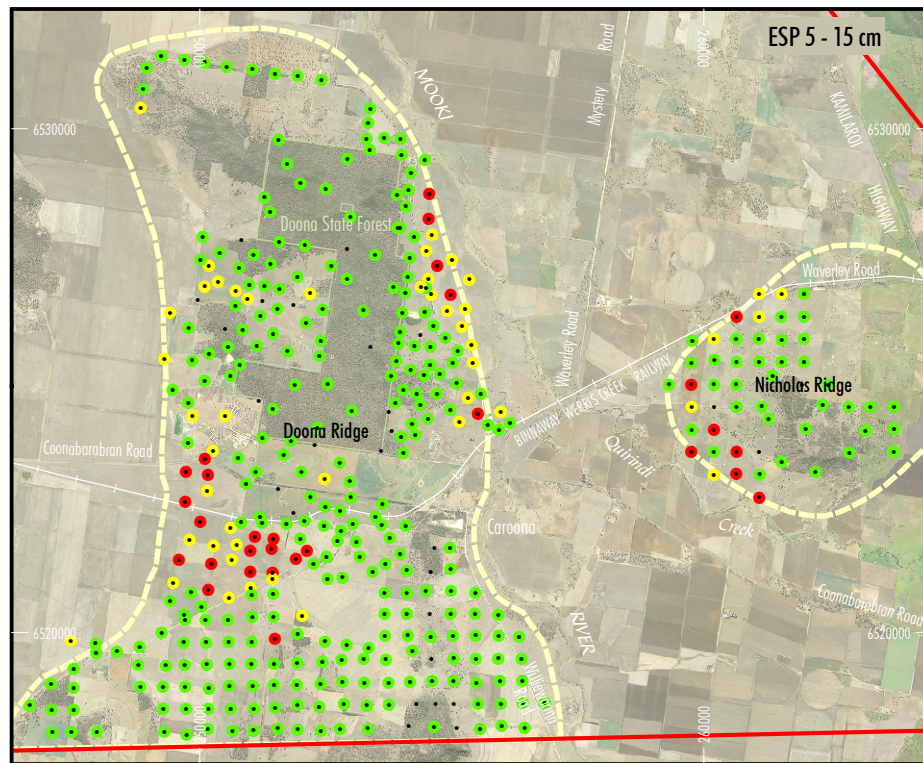
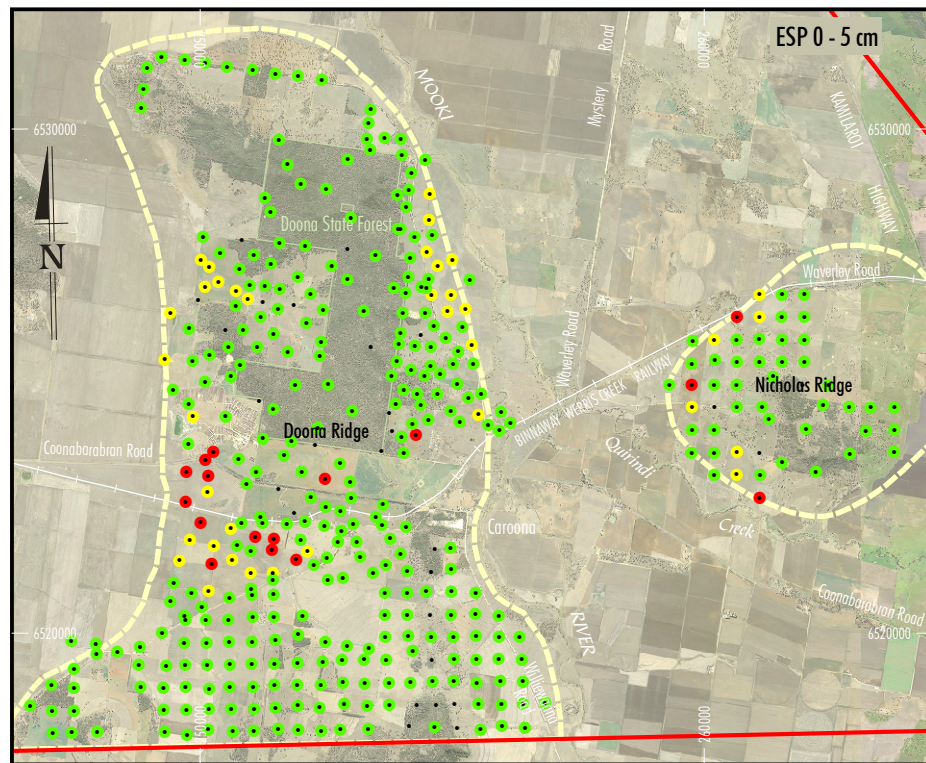
• > 6
 • 2 - 6
 • < 2

CAROONA COAL PROJECT

MAP 7

Dispersion
(ASWAT Scores)





GDA 94 MGA Zone 56
Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

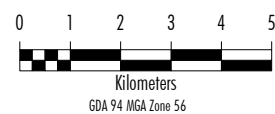
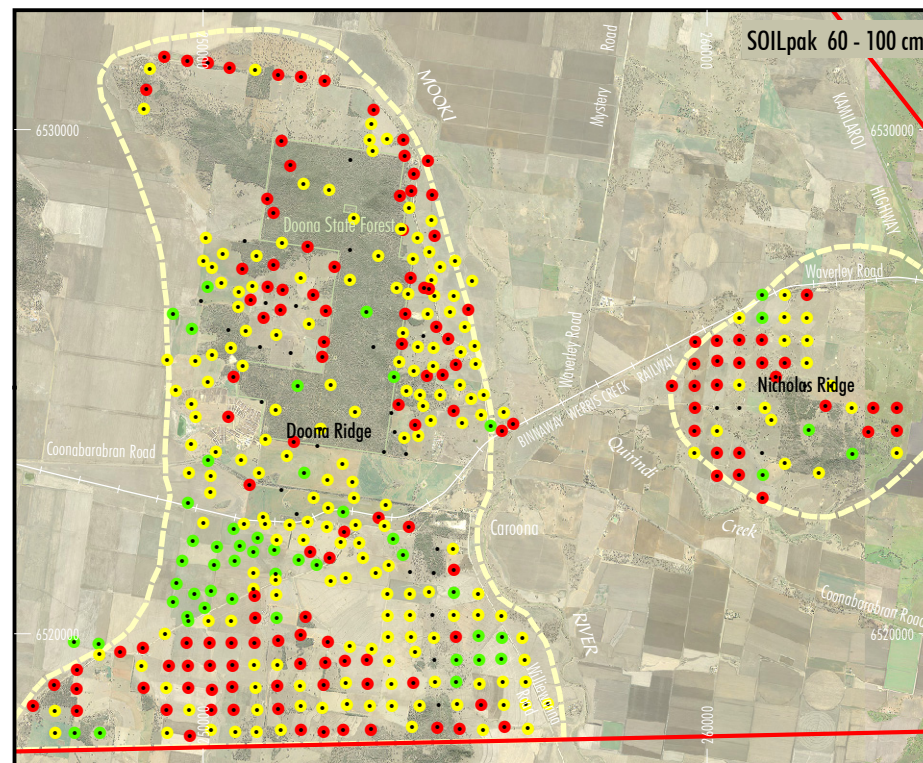
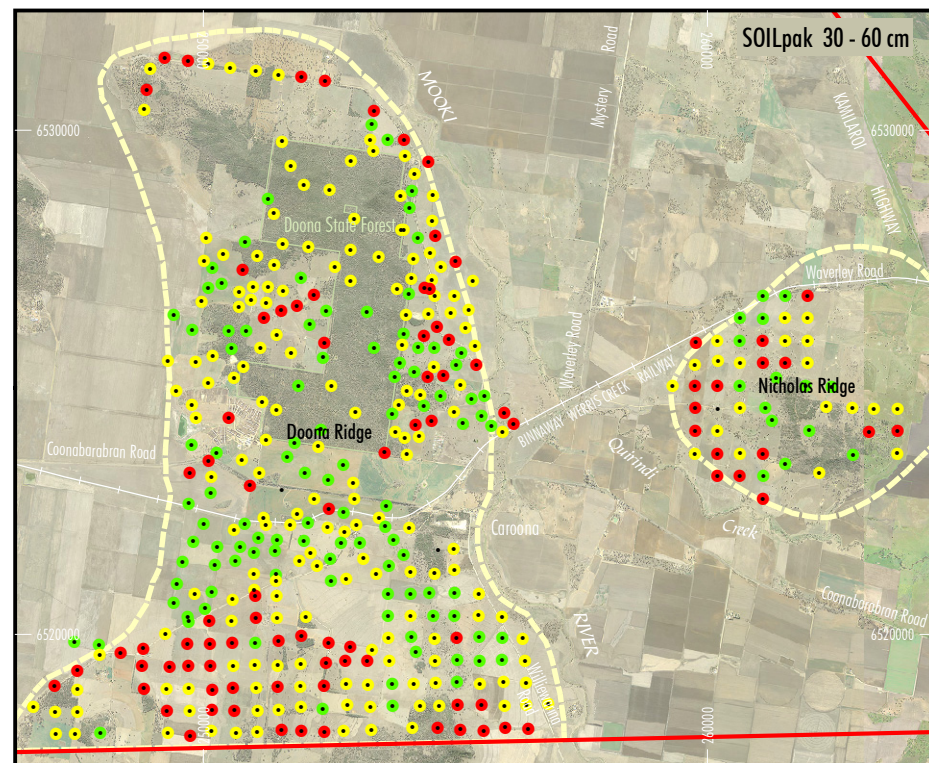
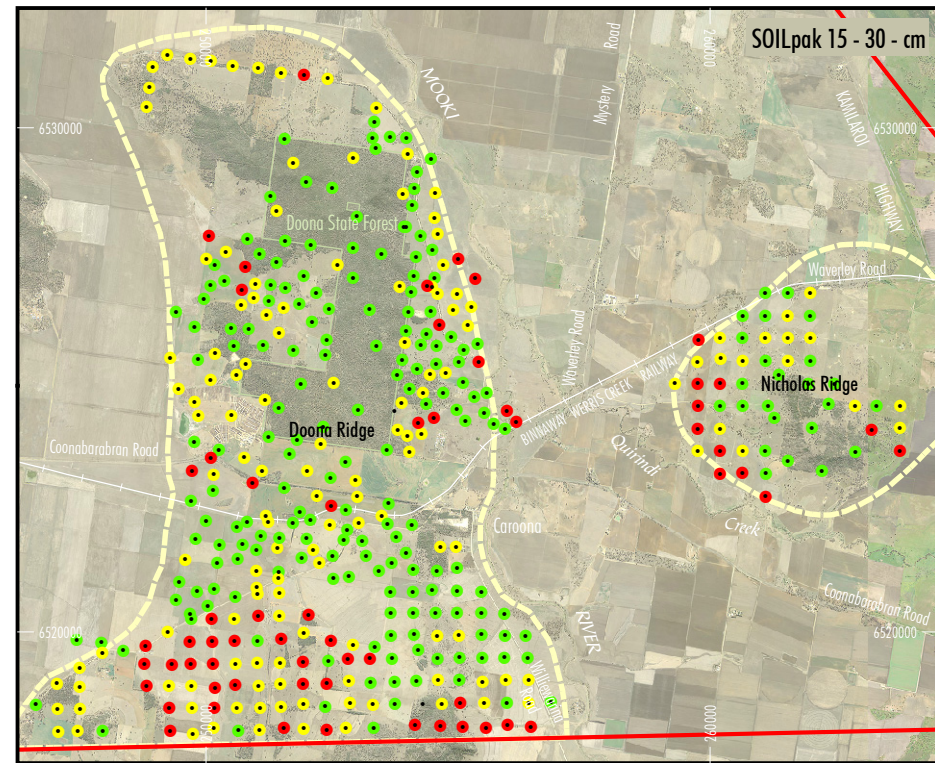
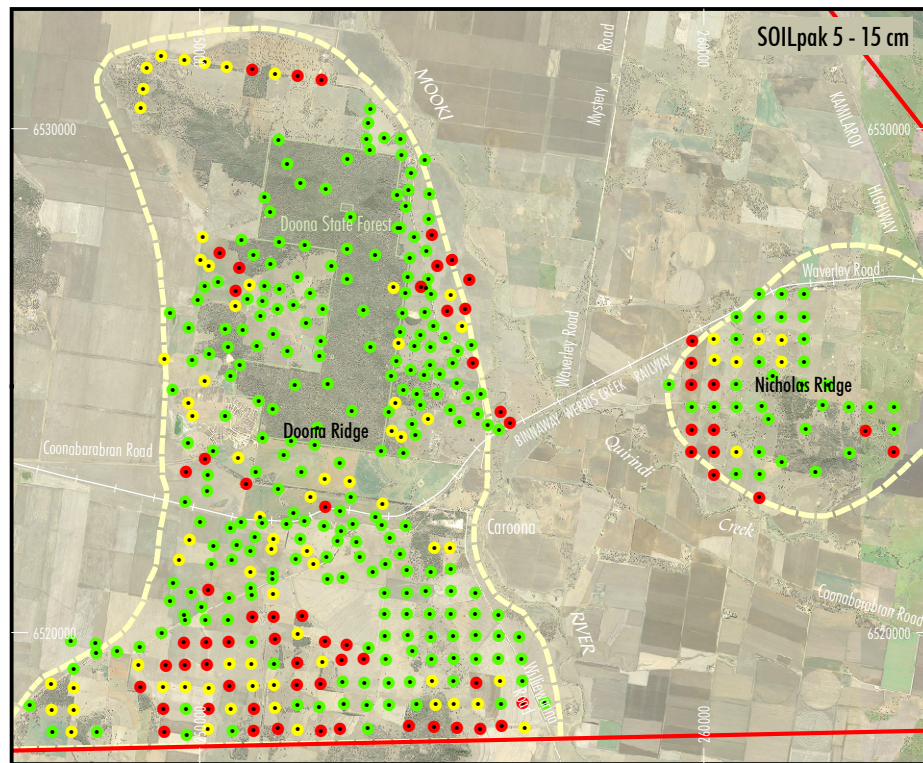
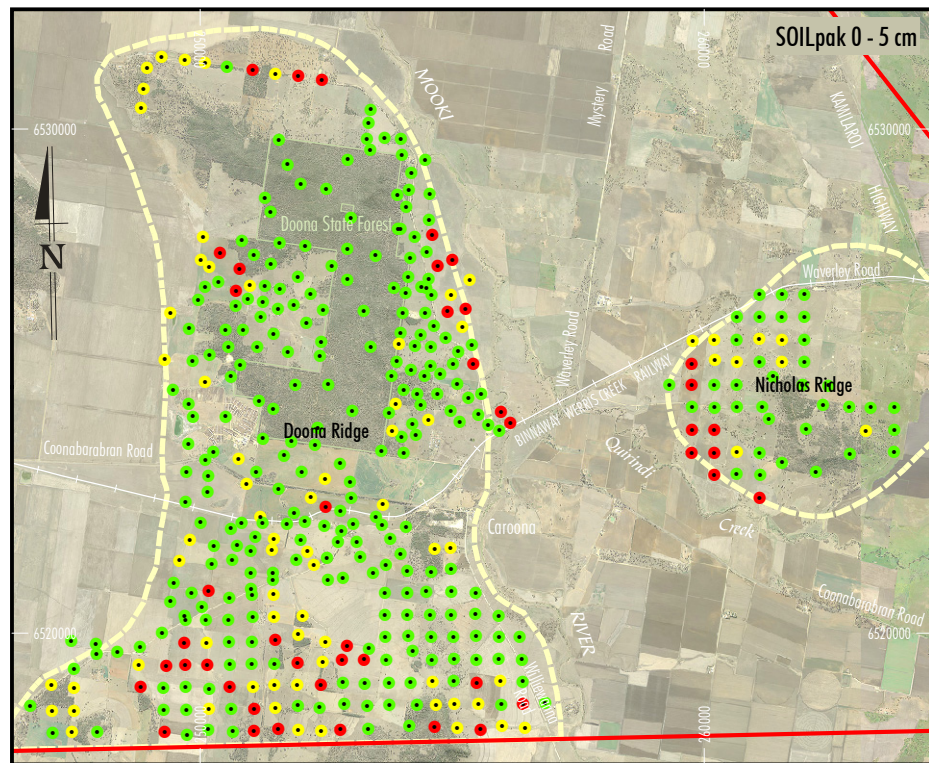
- > 6
- 3 - 6
- < 3

CAROONA COAL PROJECT

MAP 8

Dispersion (ESP Value)





LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

- < 1.0
- 1.0 - 1.5
- > 1.5

Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlis 2011 & Tamworth 2010)



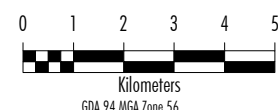
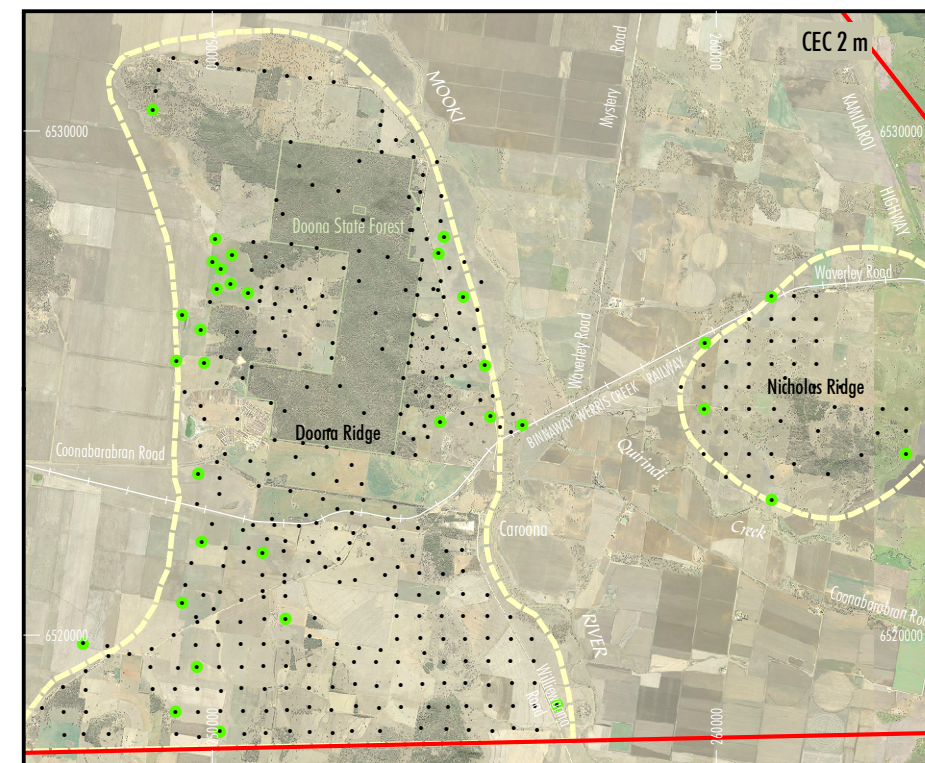
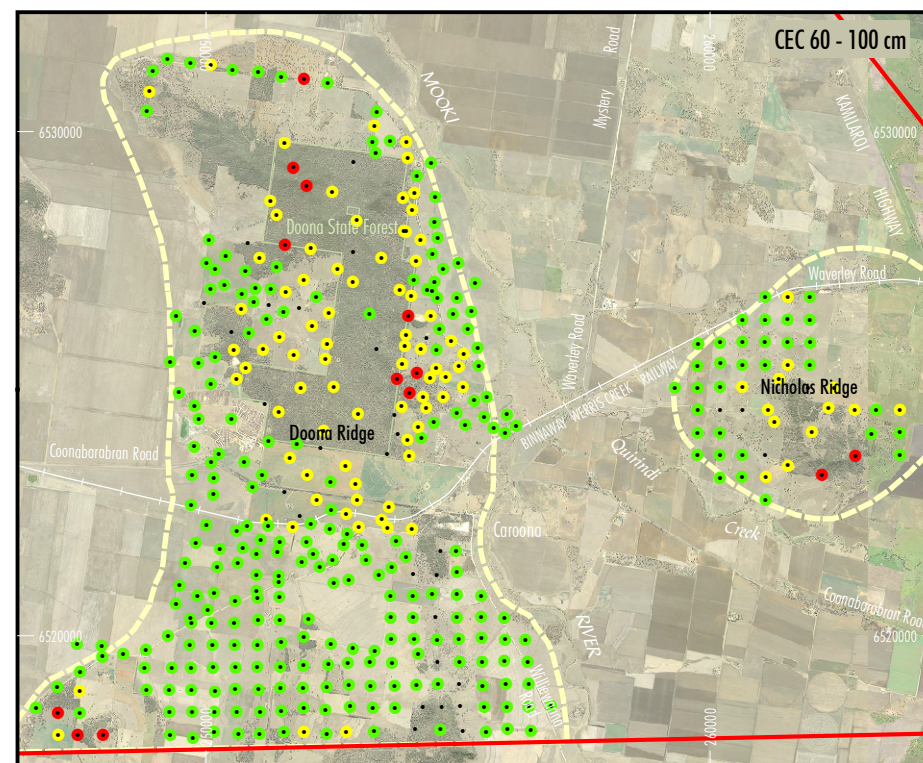
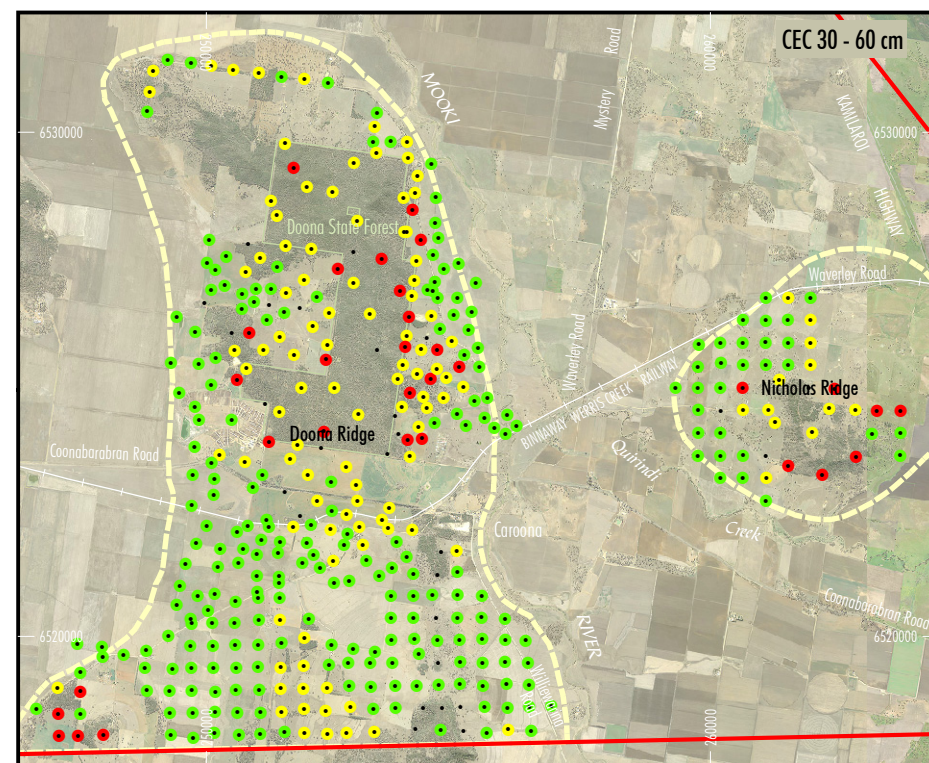
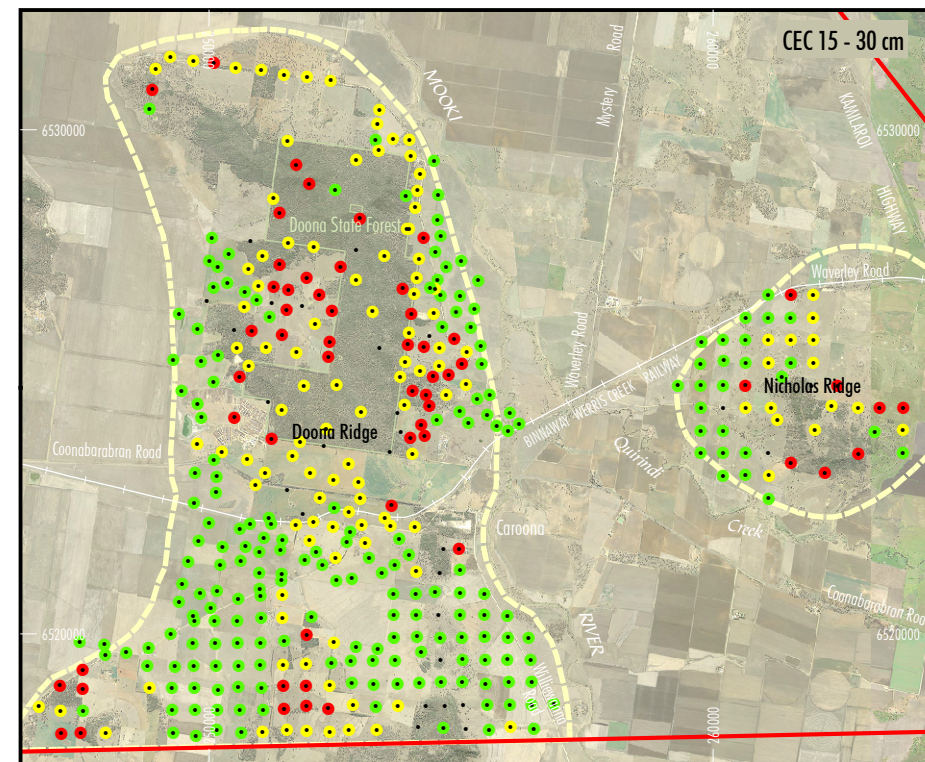
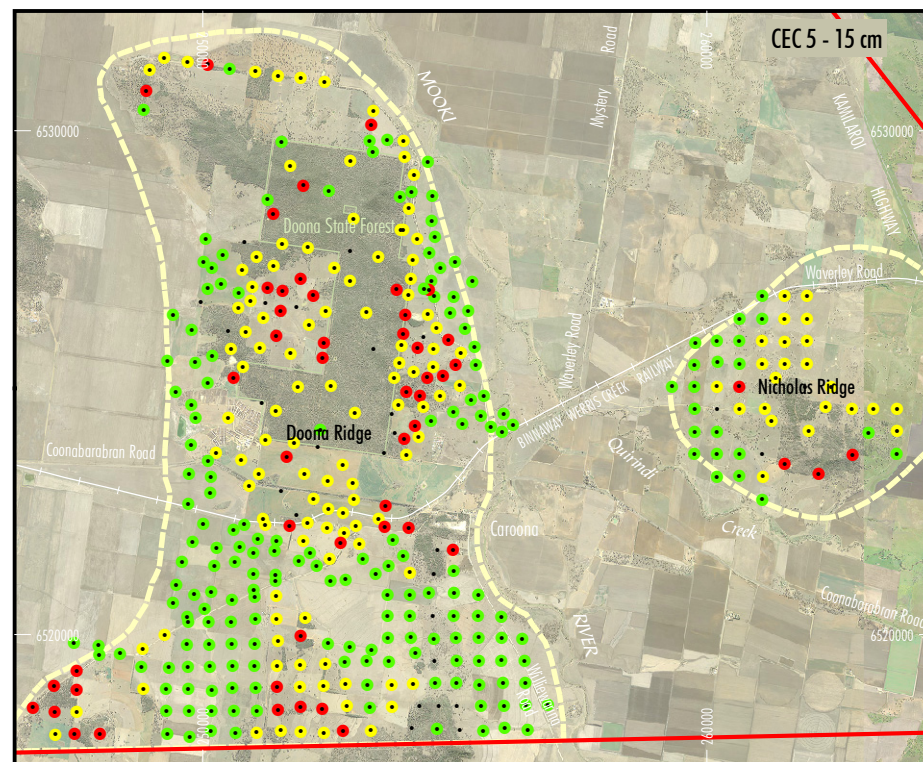
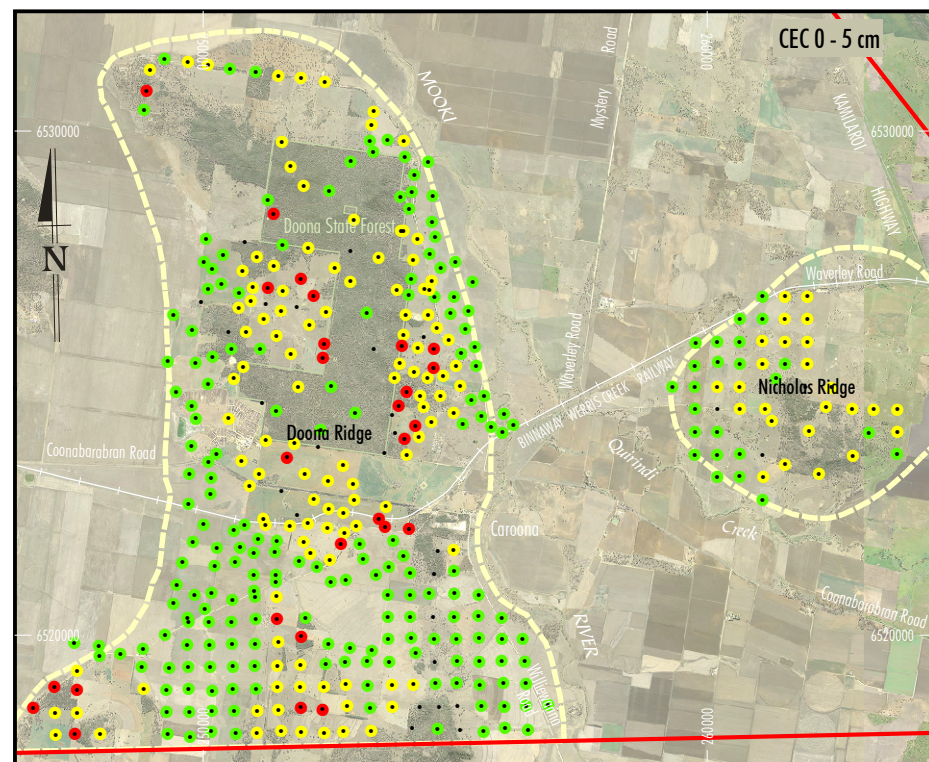
HVE-13-02_Gateway_ARA Maps_209D

CARONA COAL PROJECT

MAP 9

Campaction Severity
(SOILpak Score)





Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

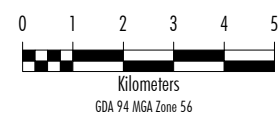
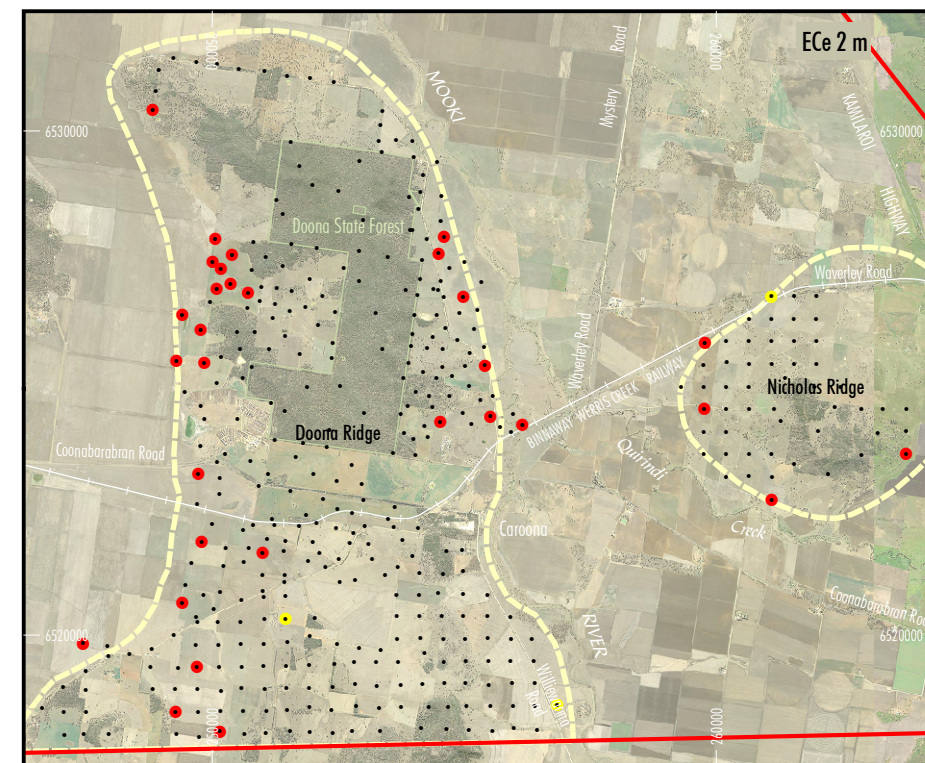
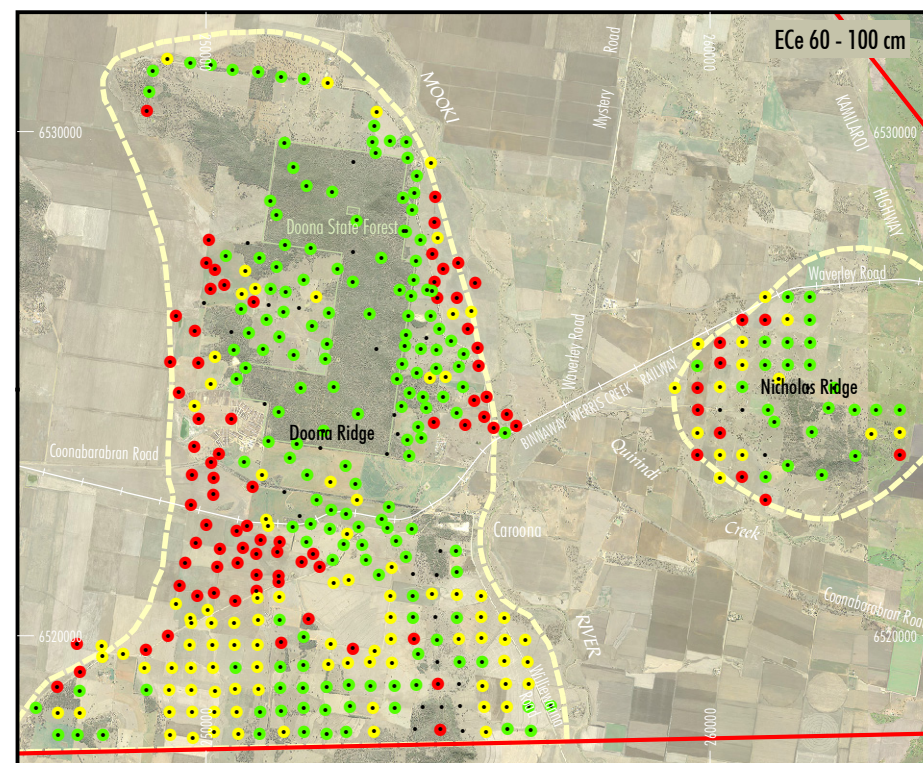
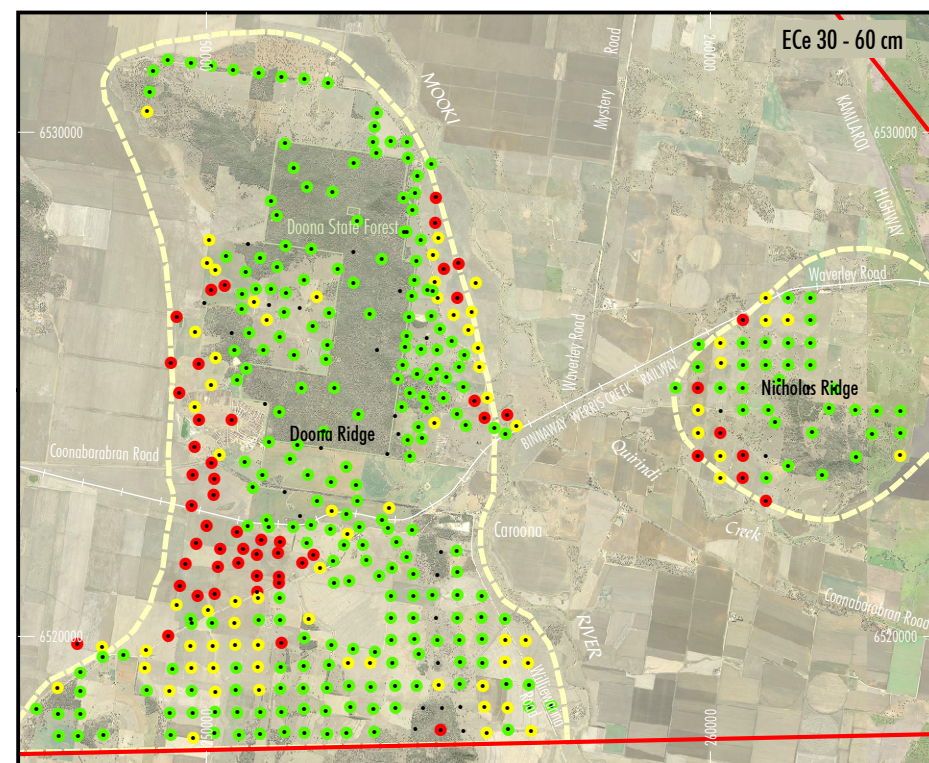
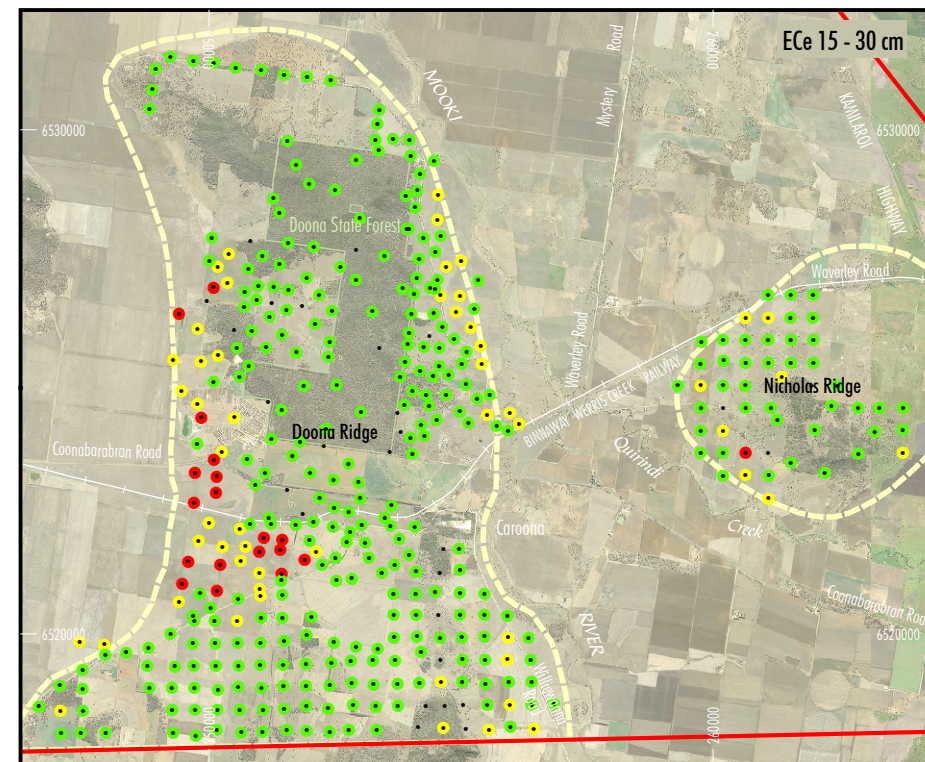
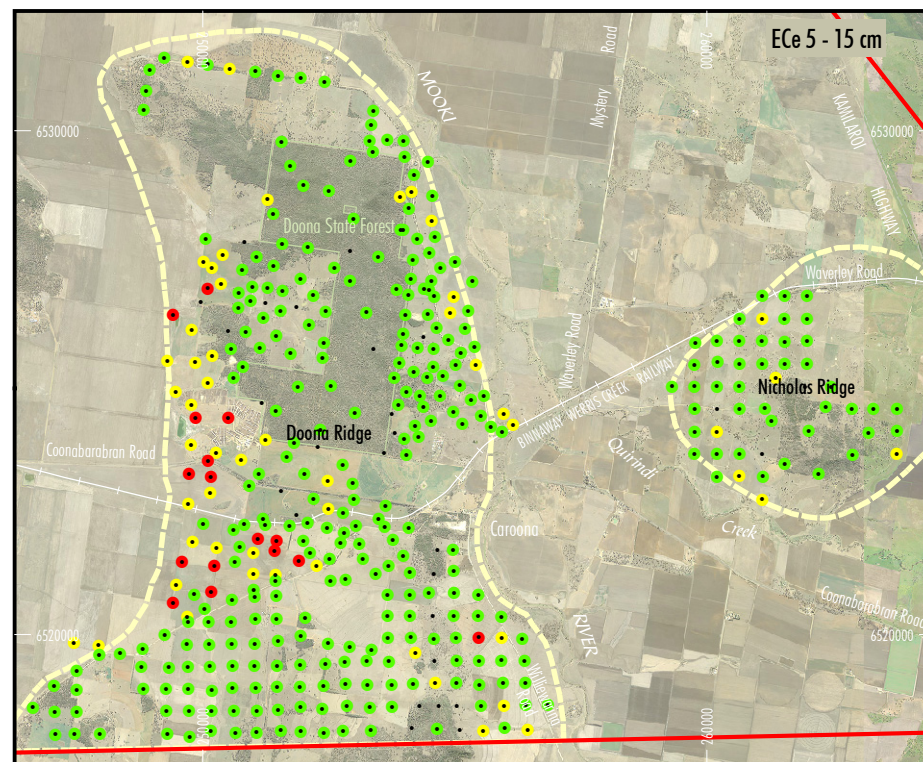
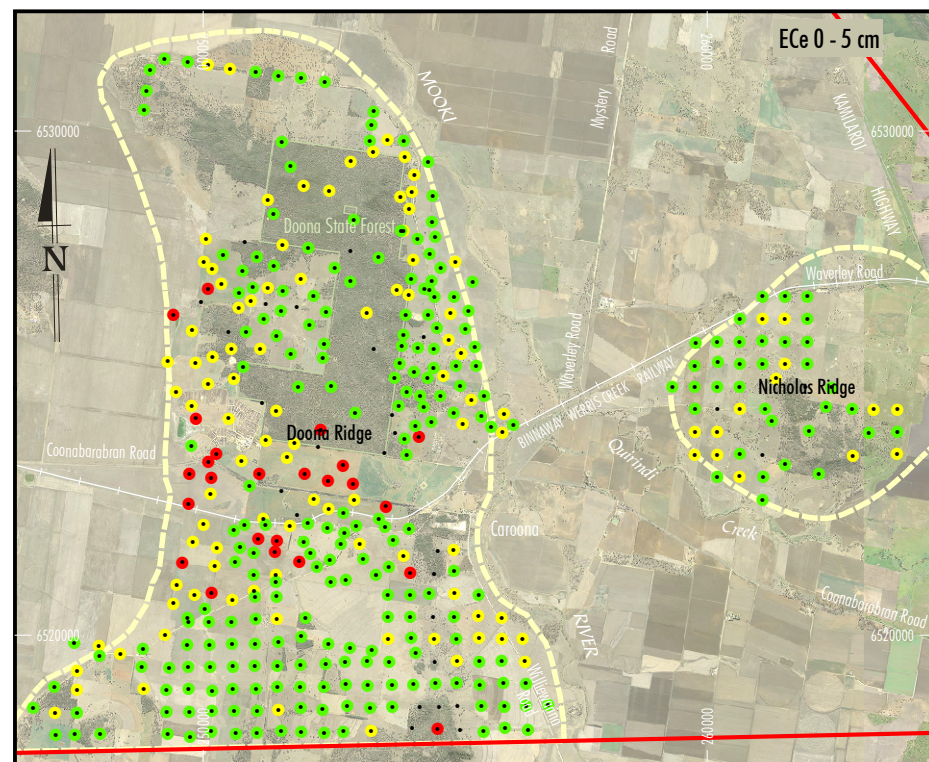
- < 5 (meq/100g)
- 5 - 15 (meq/100g)
- > 15 (meq/100g)

CAROONA COAL PROJECT

MAP 10

Cation Exchange Capacity





Source: Land and Property Management Authority - Topographic Base 2010, Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

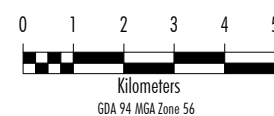
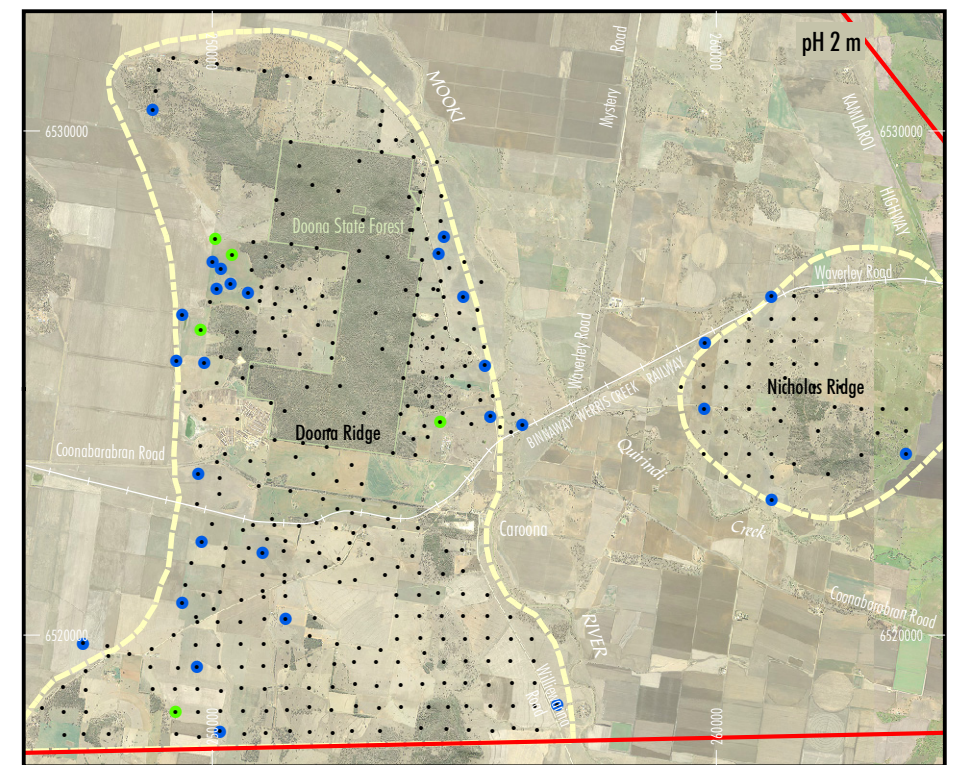
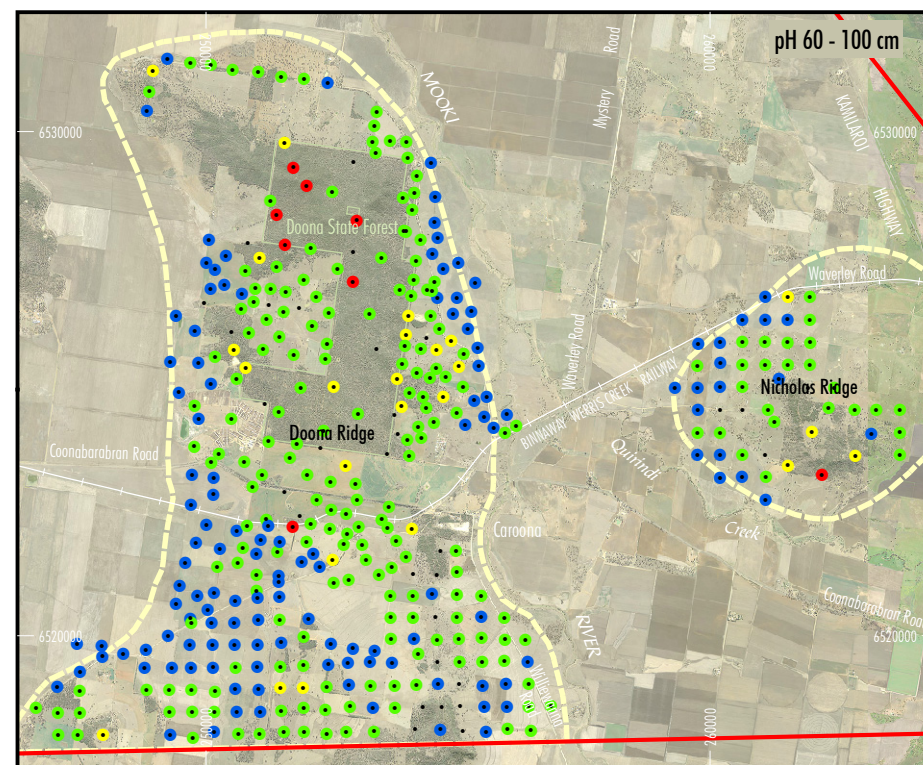
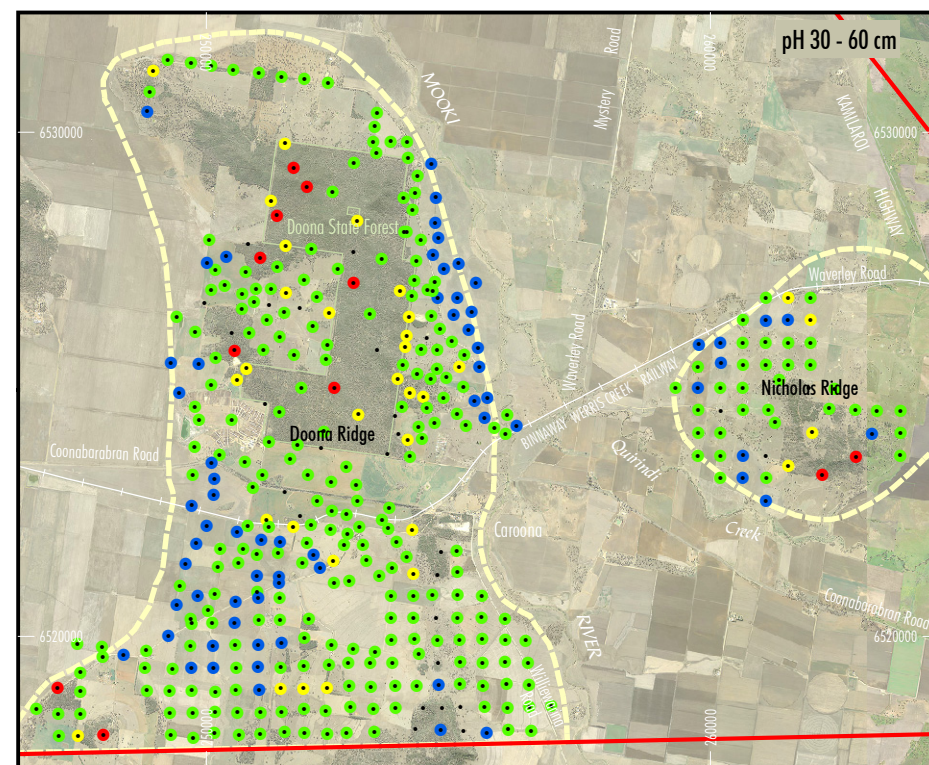
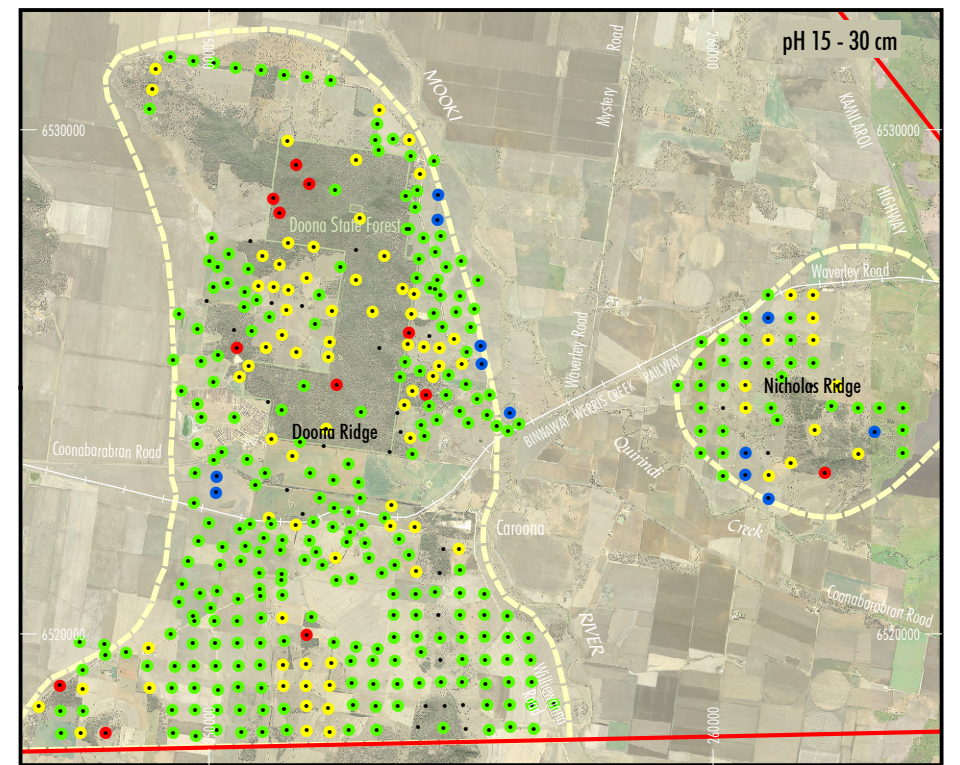
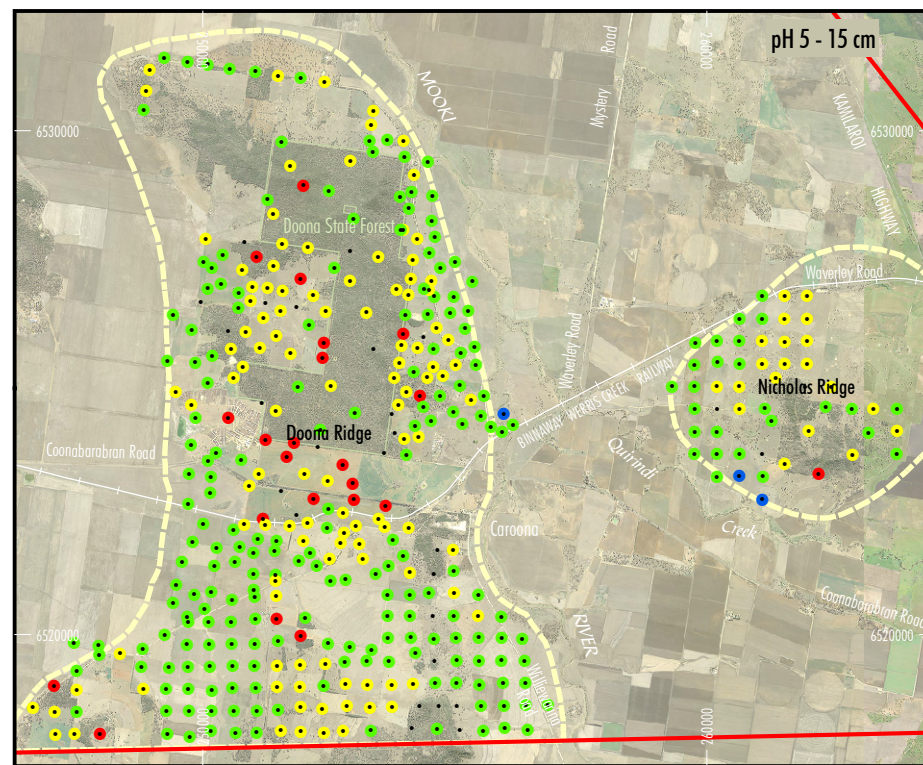
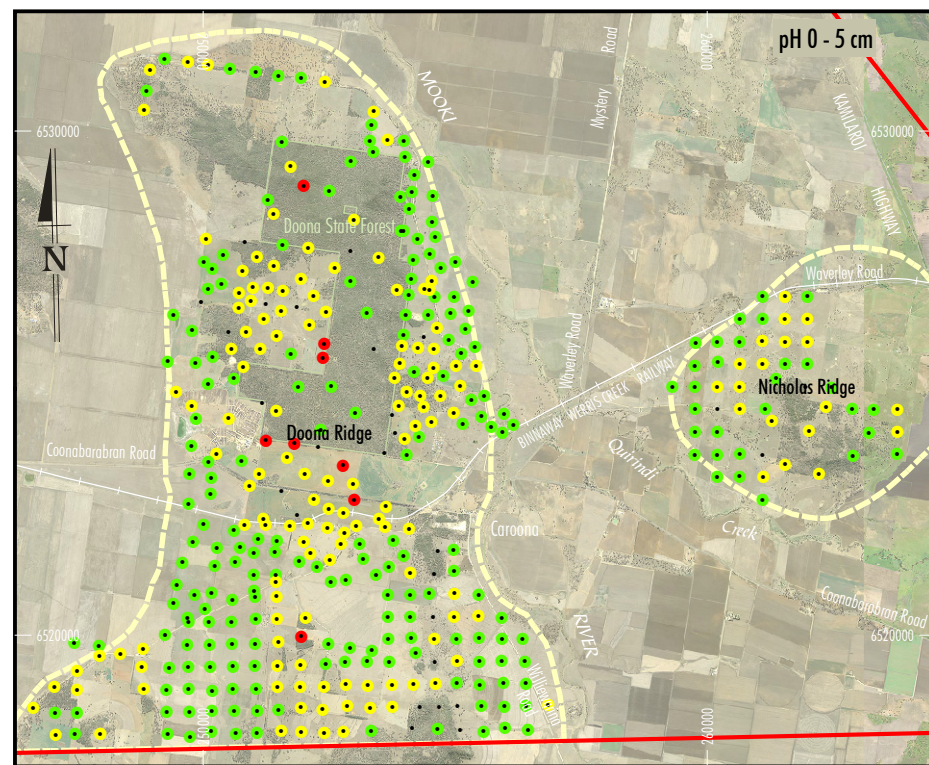
- > 4.0 dS/m
- 1.5 - 4.0 dS/m
- < 1.5 dS/m

CAROONA COAL PROJECT

MAP 11

Salinity (Electrical Conductivity - ECe)





Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

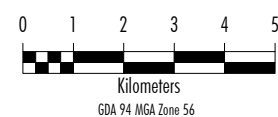
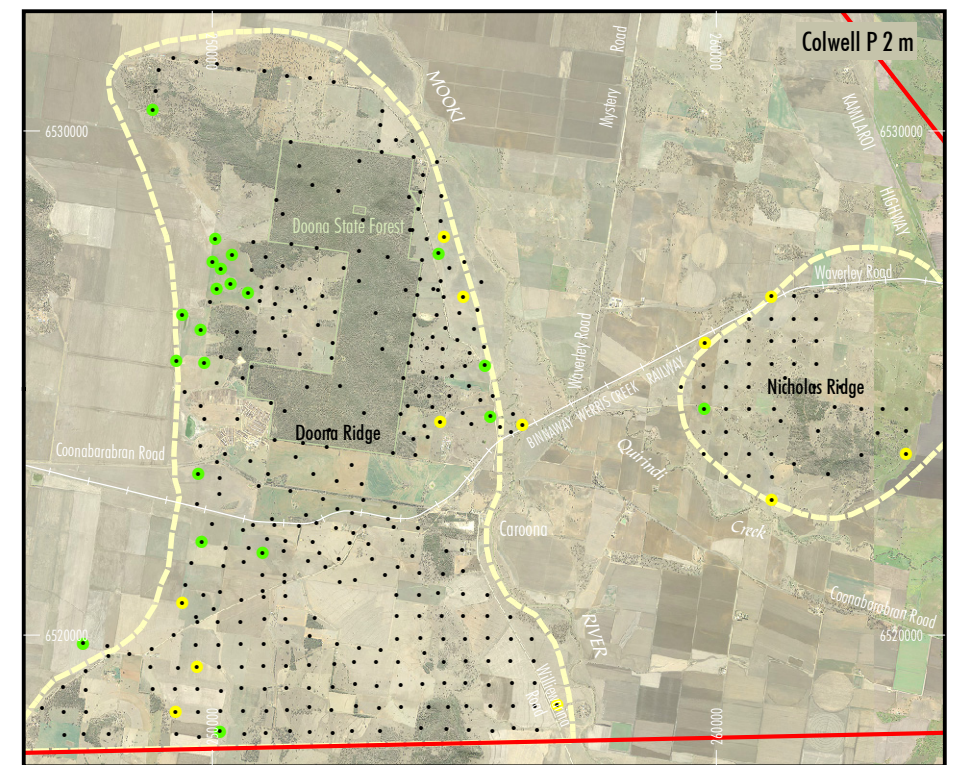
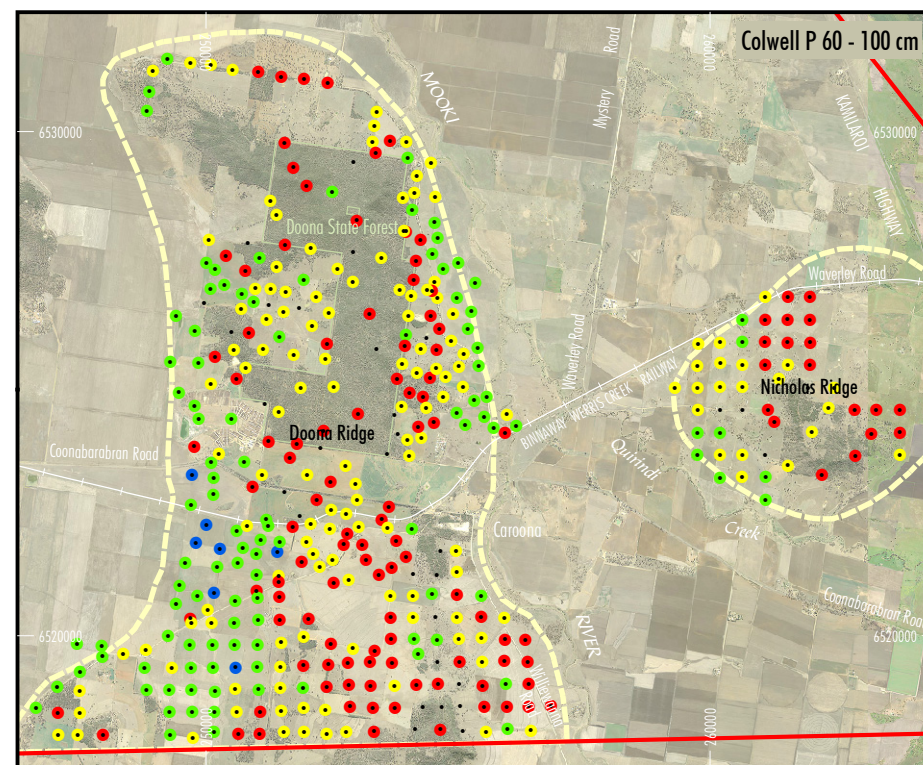
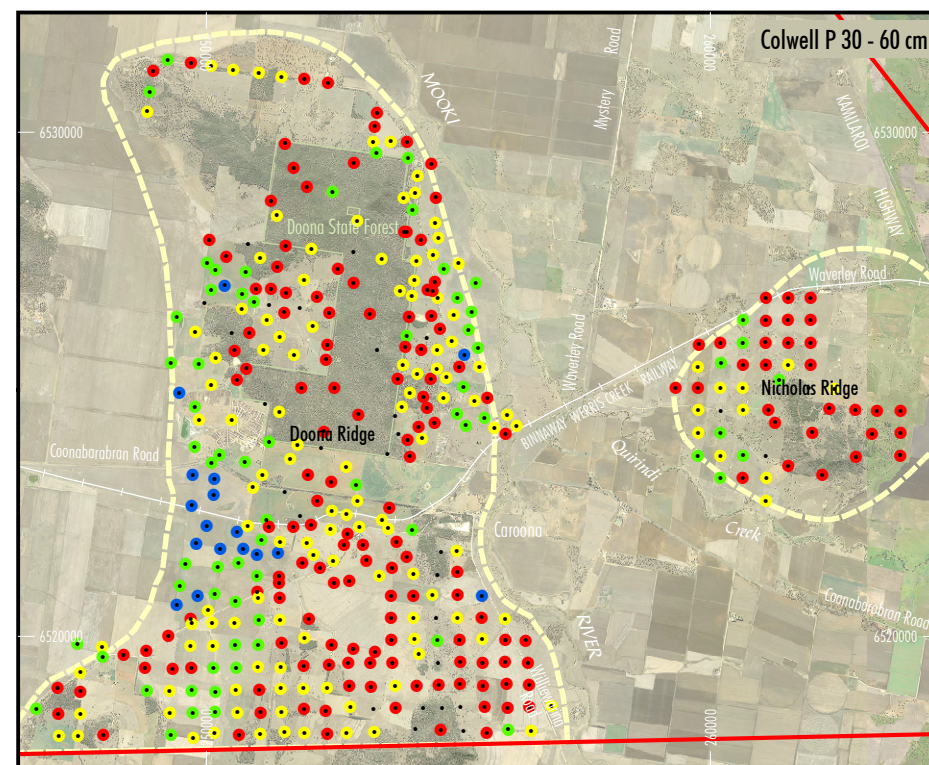
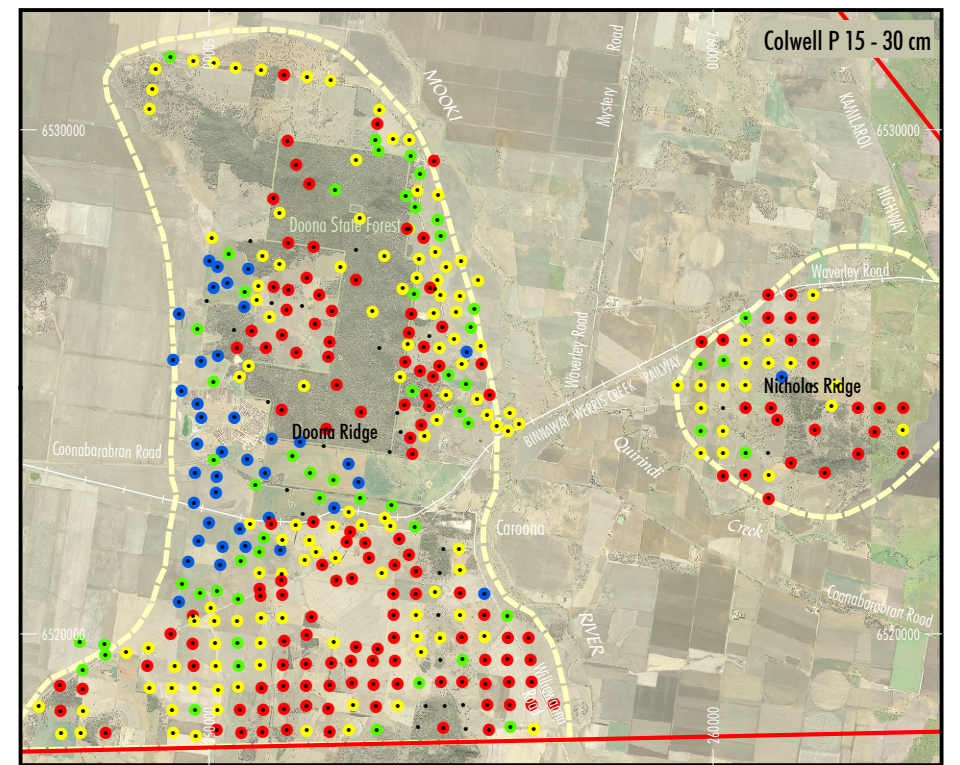
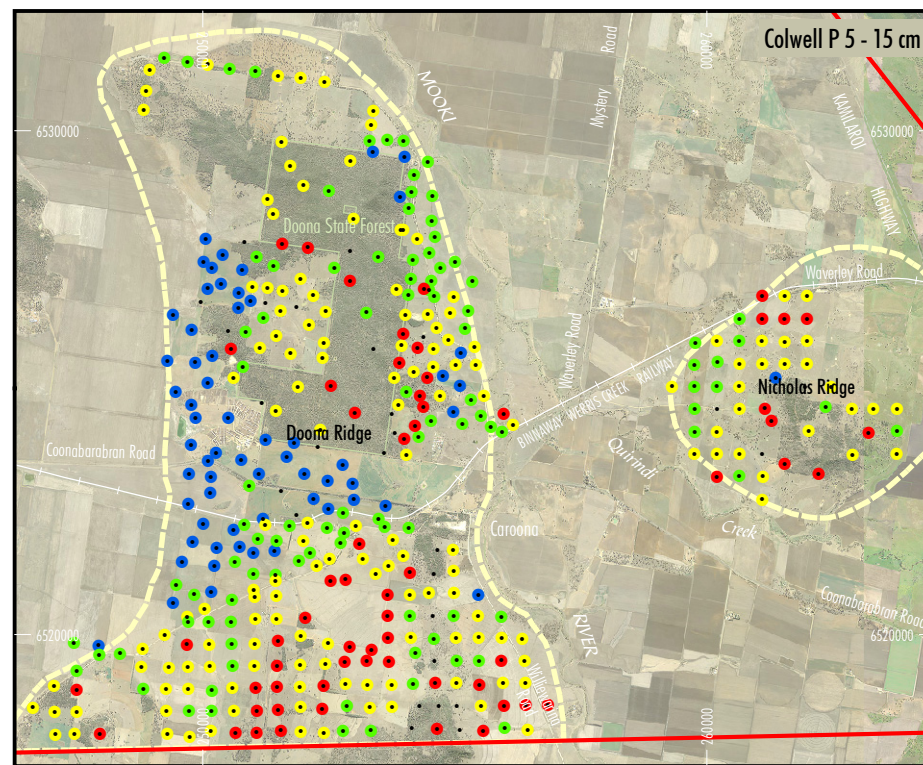
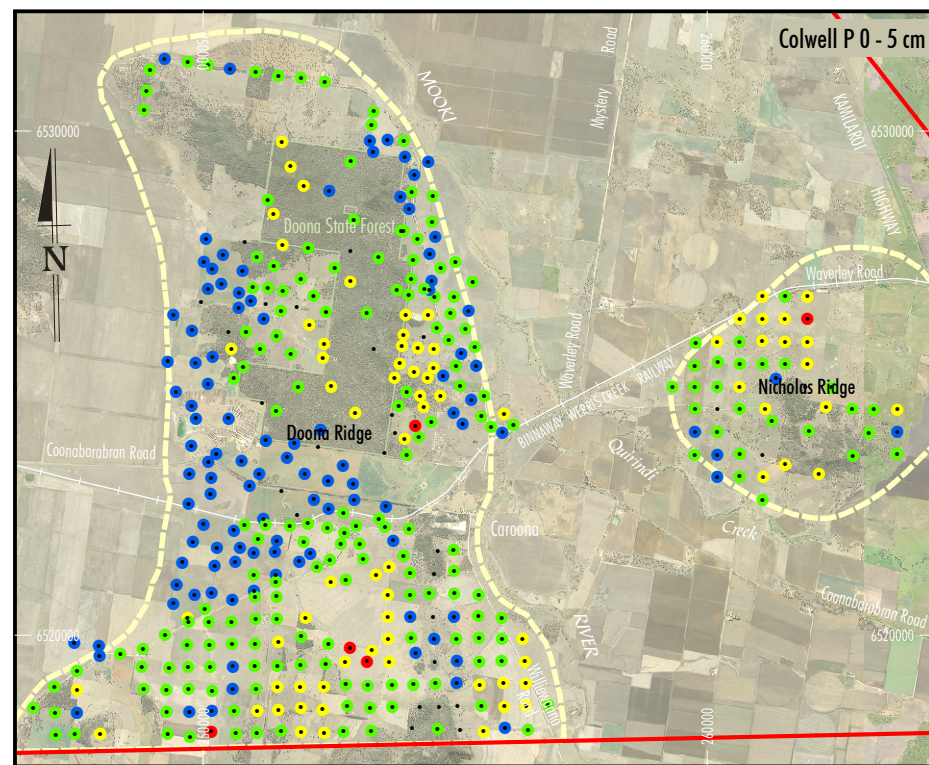
- < 4.5
- 4.5 - 5.5
- 5.6 - 8.1
- > 8.1

CAROONA COAL PROJECT

MAP 12

pH (CaCl₂)





Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

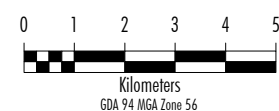
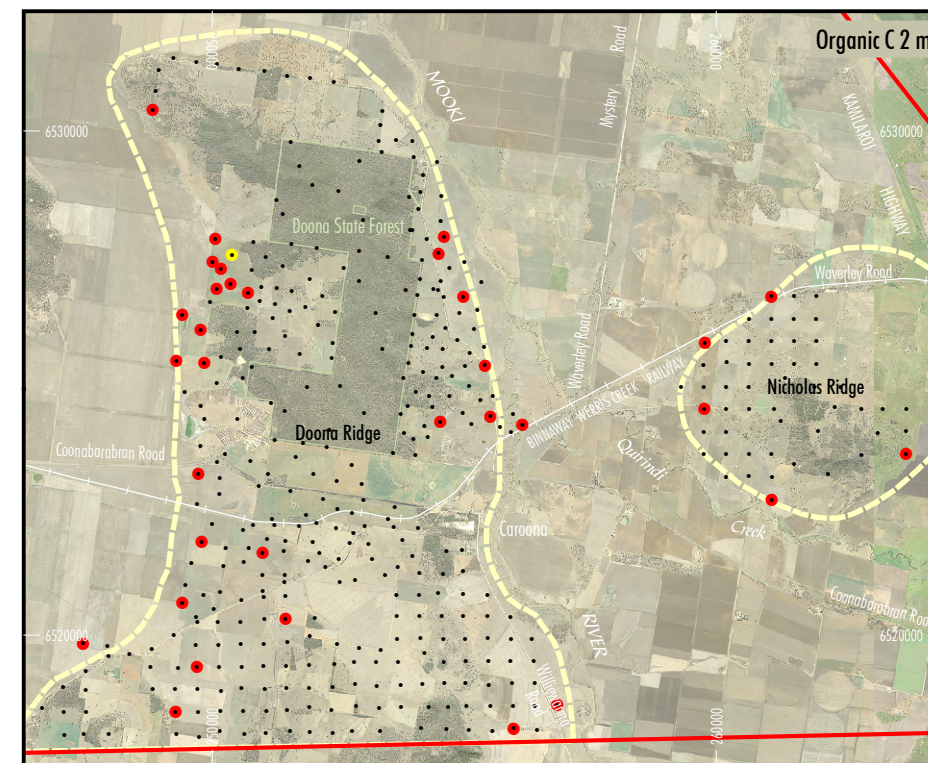
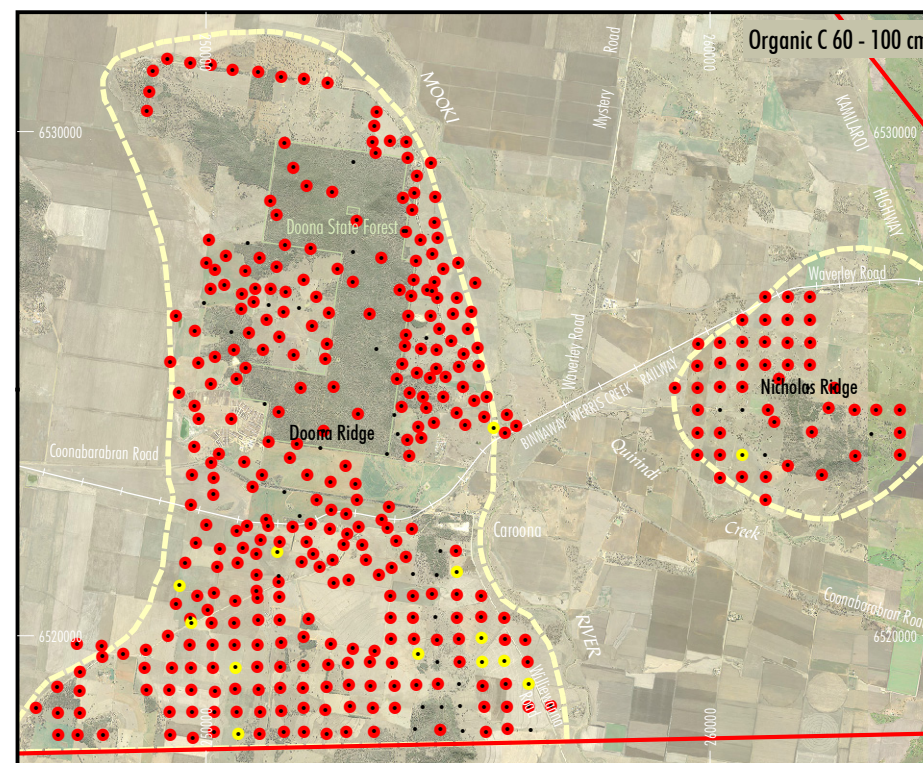
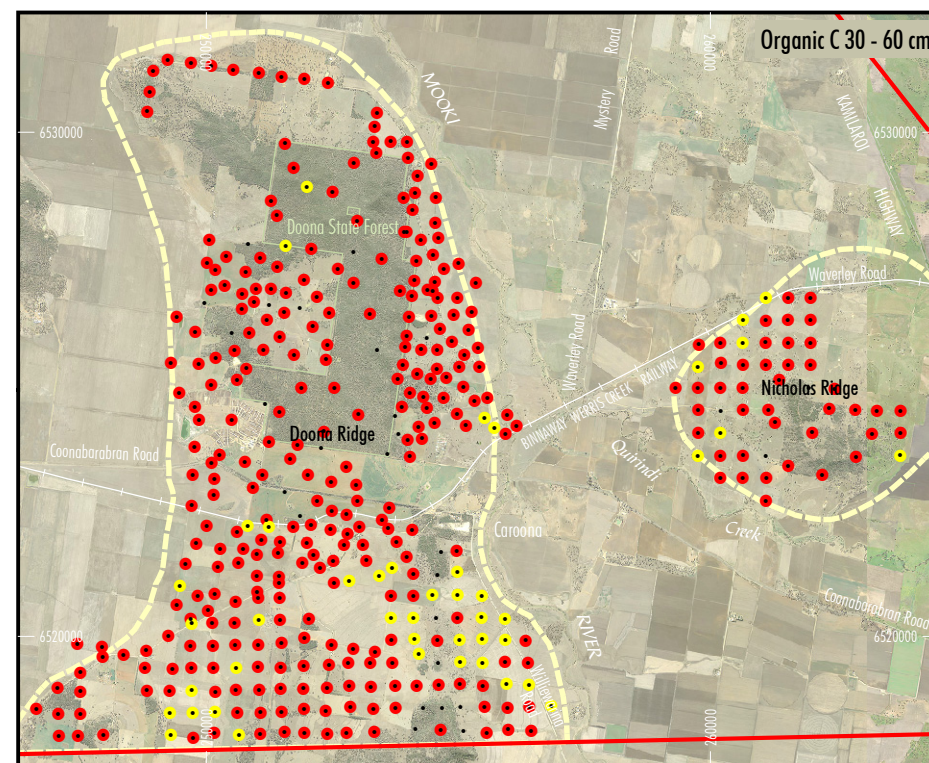
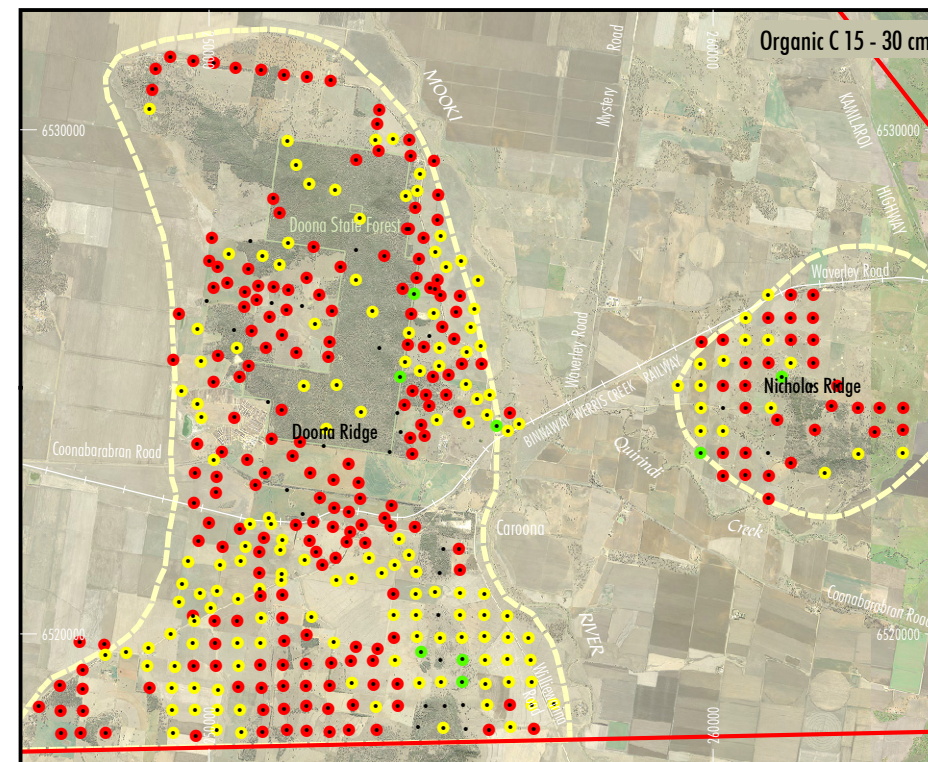
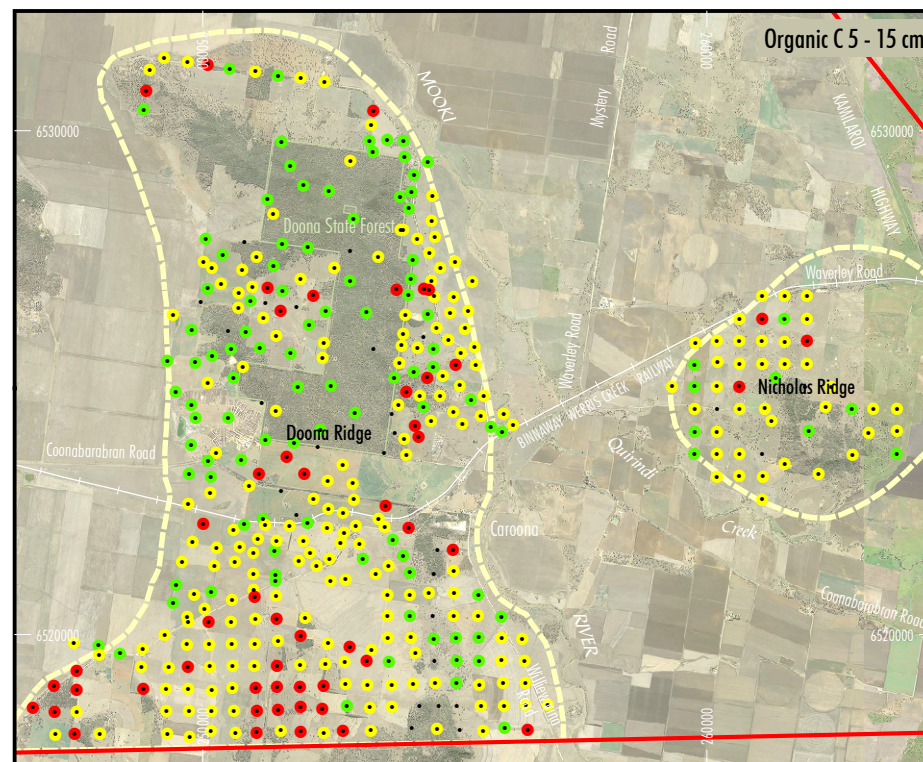
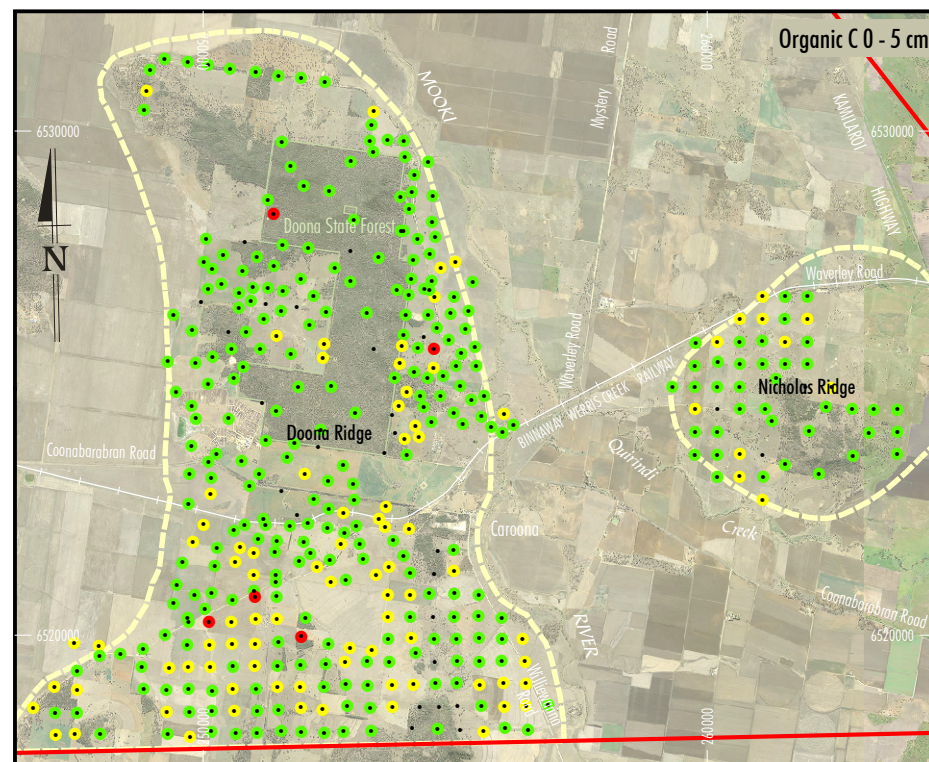
- < 10 mg/kg
- 10 - 30 mg/kg
- 31 - 100 mg/kg
- > 100 mg/kg

CAROONA COAL PROJECT

MAP 13

Phosphorus (Colwell P)





Source: Land and Property Management Authority - Topographic Base 2010,
Orthophoto (Curlewis 2011 & Tamworth 2010)



LEGEND

- Exploration Licence (EL 6505)
- Project Assessment Area
- Soil Test Pit

- < 0.8%
- 0.8 - 1.5%
- > 1.5%

CAROONA COAL PROJECT

MAP 14

Organic Carbon

