



SSR-1001 (DH 16638) drillhole report

Sedimentary Copper Mineral Systems of the Stuart Shelf
GSSA–CSIRO project

C Krapf, A Fabris, S Schmid and V Crombez



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Acknowledgement of Country

As guests on Aboriginal land, the Department for Energy and Mining (DEM) acknowledges everything this department does impacts on Aboriginal country, the sea, the sky, its people, and the spiritual and cultural connections which have existed since the first sunrise. Our responsibility is to share our collective knowledge, recognise a difficult history, respect the relationships made over time, and create a stronger future. We are ready to walk, learn and work together.

Preferred way to cite this publication

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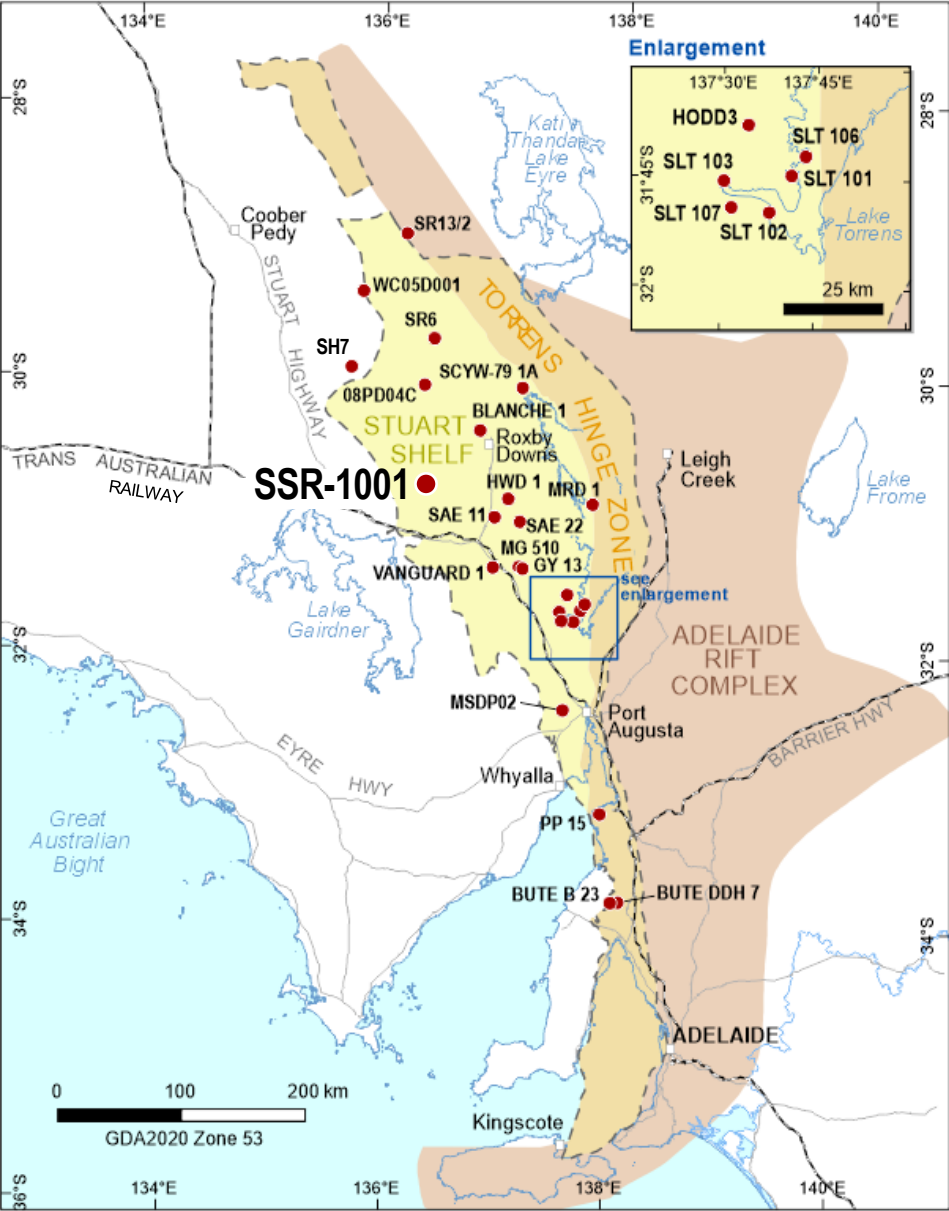
Drillhole information

Drillhole name	SSR-1001	
Drillhole number	16638	
Tenement	EL 628	
Location	136.3492648 Long -30.8397984 Lat	629029.53E 6587373.29N GDA2020, Zone 53
Date drilled	23/05/1983	
Drillhole depth	499.50 m	
Cored interval	499.50 m	
Azimuth/Dip	0	-90
Reference	ENV03878	

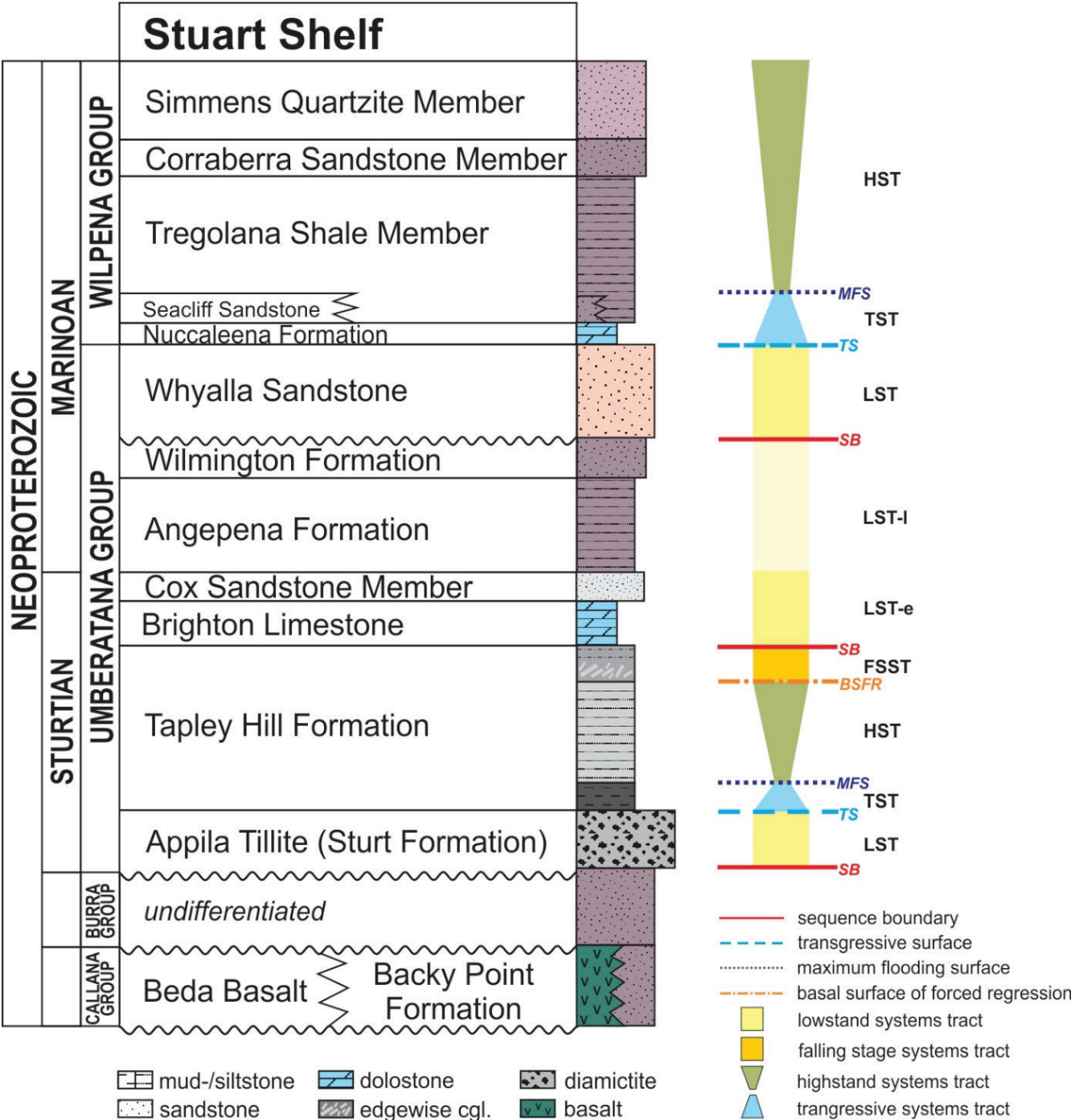
This drillhole report provides a summary of new logging and data collection undertaken as part of the Sedimentary Copper Mineral Systems of the Stuart Shelf GSSA-CSIRO project.

Associated newly collected handheld gamma, portable XRF and HyLogger™ data are available for download via the [blue hyperlinks](#) in this report.

Drillhole location



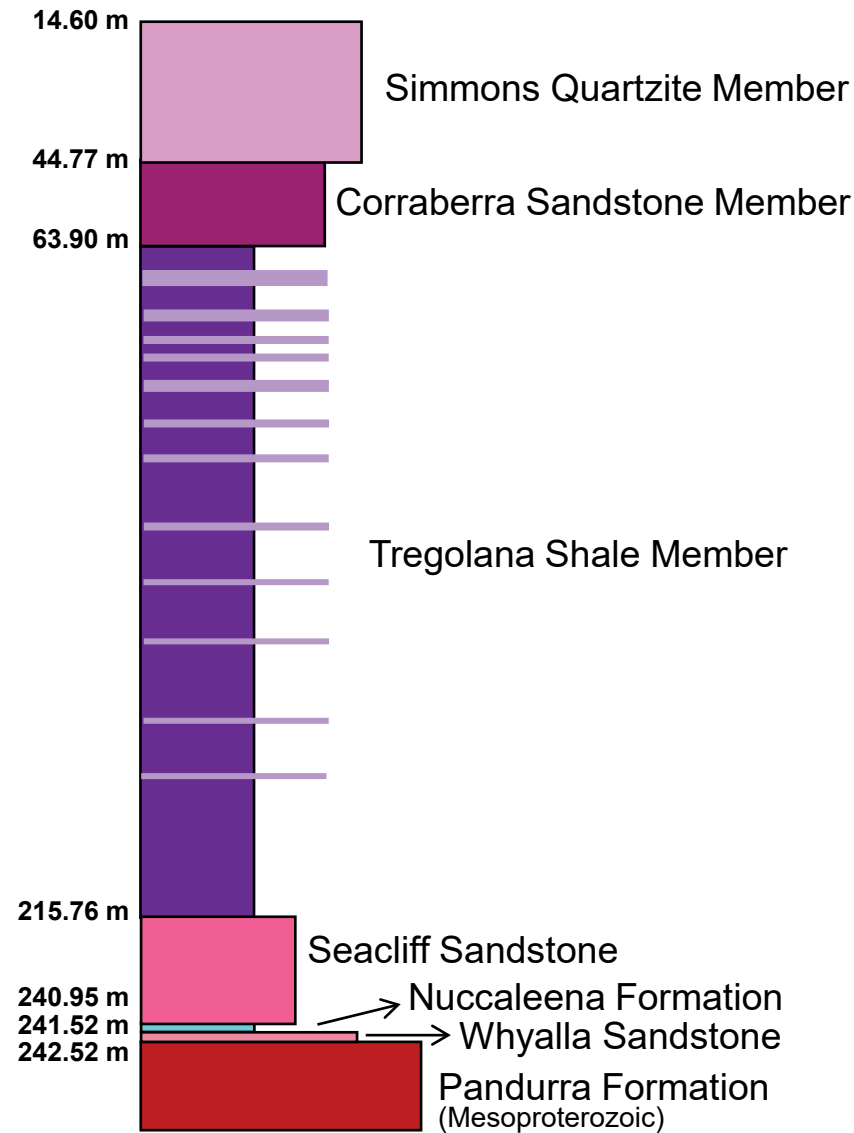
Generalised stratigraphy and sequence stratigraphy of the Stuart Shelf*



*Note: not all stratigraphic units were deposited or preserved throughout the Stuart Shelf

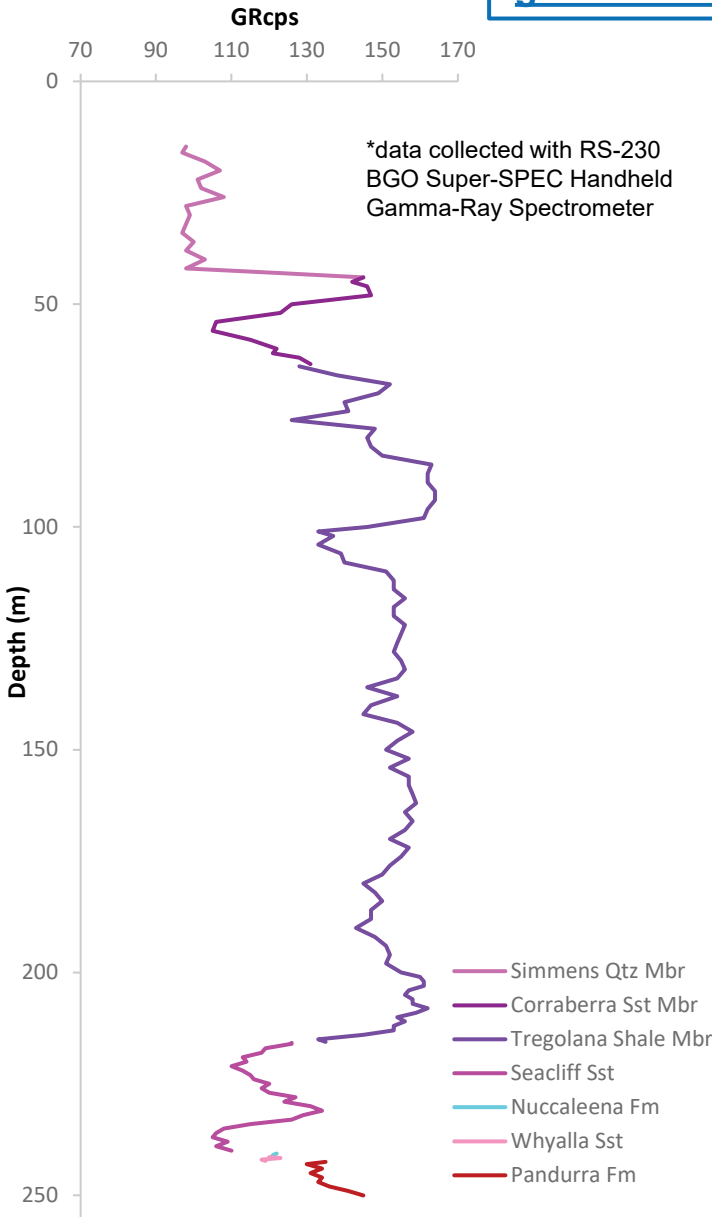
SSR-1001

generalised stratigraphic log
(depth interval 14.60 – 260.00 m)



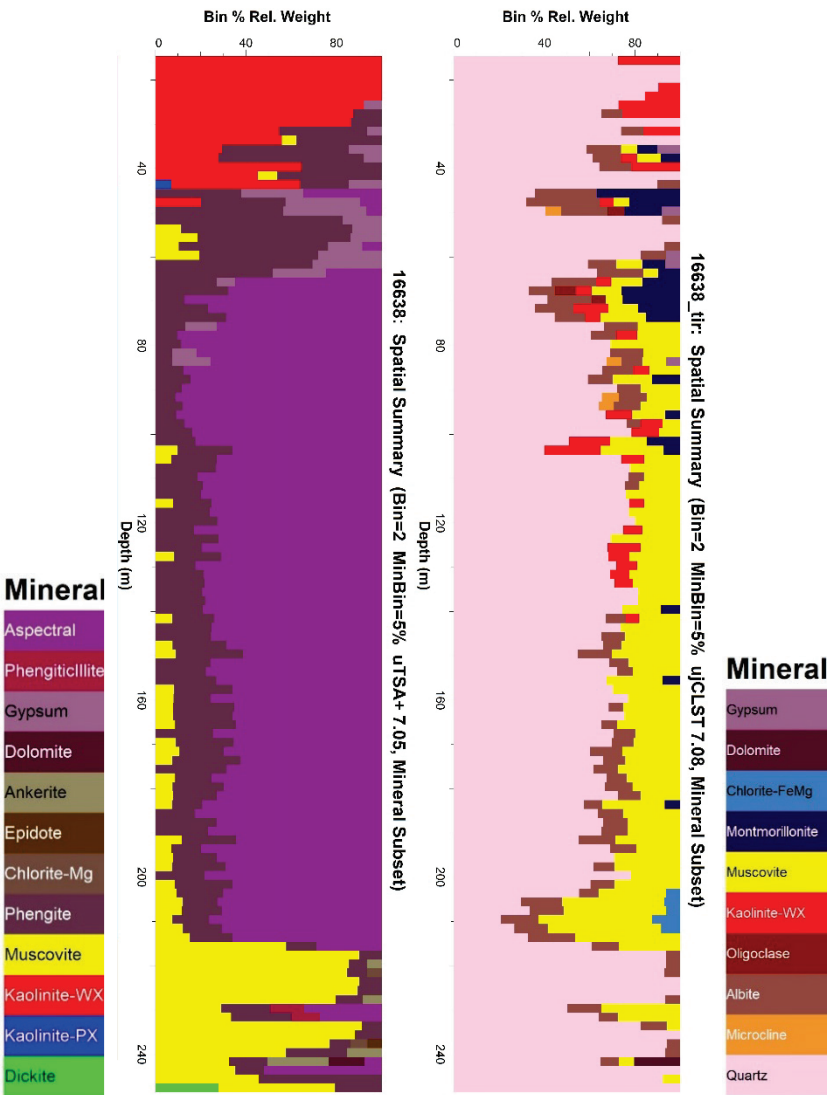
Handheld gamma*

[Download gamma data](#)



HyLogger™

[Download HyLogger™ data](#)

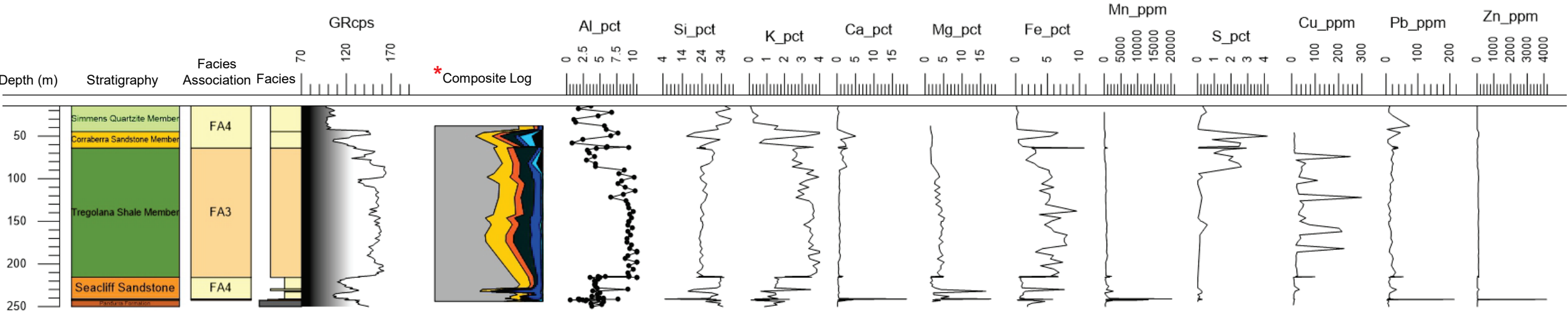


Combined STRATER log (stratigraphy, facies, gamma and handheld pXRF* - corrected)

SSR-1001 (depth interval 14.6 – 260 m)



[Download pXRF data](#)



Facies Association (FA)

- | | |
|---------------------------------|-----------------------------------|
| FA1: offshore | FA5: shallow subtidal to subtidal |
| FA2: offshore transition | FA6: intertidal to supratidal |
| FA3: lower shoreface - prodelta | FA7: glacial to fluvio-glacial |
| FA4: shoreface to delta front | |

- * Legend for elemental tracks:
- | | |
|--------|--------|
| Mg_pct | Ca_pct |
| Al_pct | Fe_pct |
| Si_pct | Cu_ppm |
| S_pct | Pb_ppm |
| K_pct | Zn_ppm |

*data collected with Vanta™ Handheld XRF

Pandurra Formation – Whyalla Sandstone – Nuccaleena Formation – Seacliff Sandstone



Pandurra Formation (depth 242.52 – 300 m)

fluvial redbed deposits



Transition Pandurra Formation – Whyalla Sandstone



Whyalla Sandstone (depth 241.52 – 242.52 m)



Nuccaleena Formation (depth 240.95 – 241.52 m) — **cap carbonate**



Seacliff Sandstone (depth 215.76 – 240.95 m)

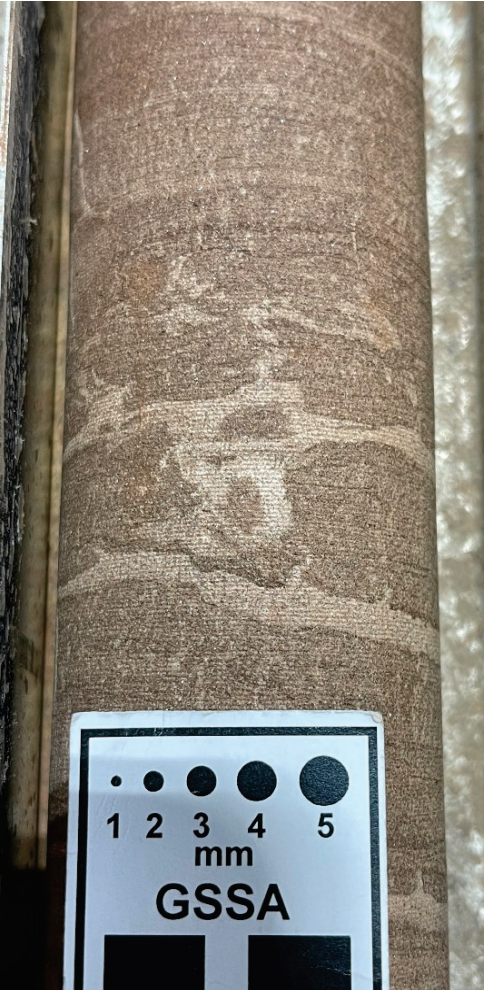
base



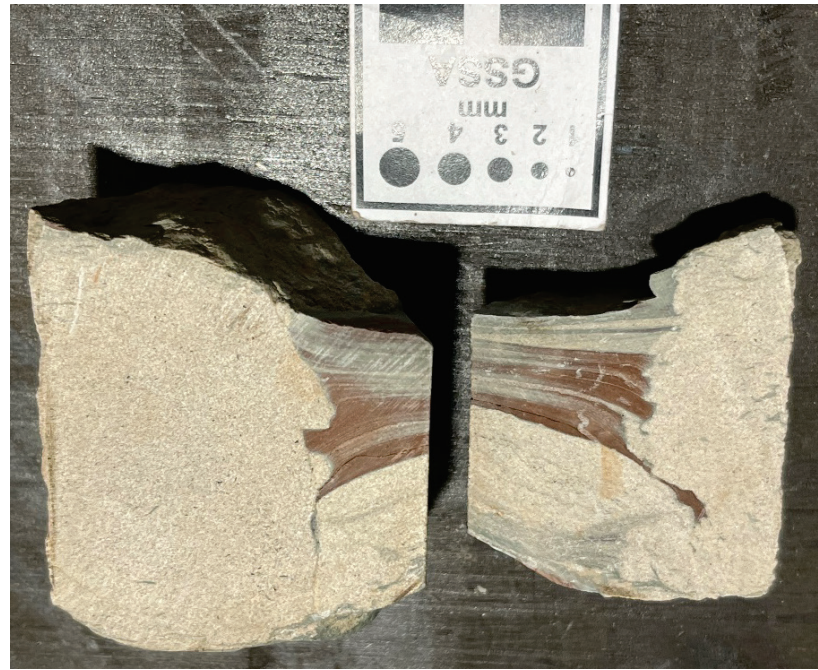
top



Seacliff Sandstone



Transition Seacliff Sandstone – Tregolana Shale Member



Tregolana Shale Member

(depth 63.9 – 215.76 m)



Corraberra Sandstone Member

(depth 44.77 – 63.69 m)



Simmens Quartzite Member

(depth 6 – 44.77 m)

