From data to maps to apps: what's new in NSW

4 May 2021

Data

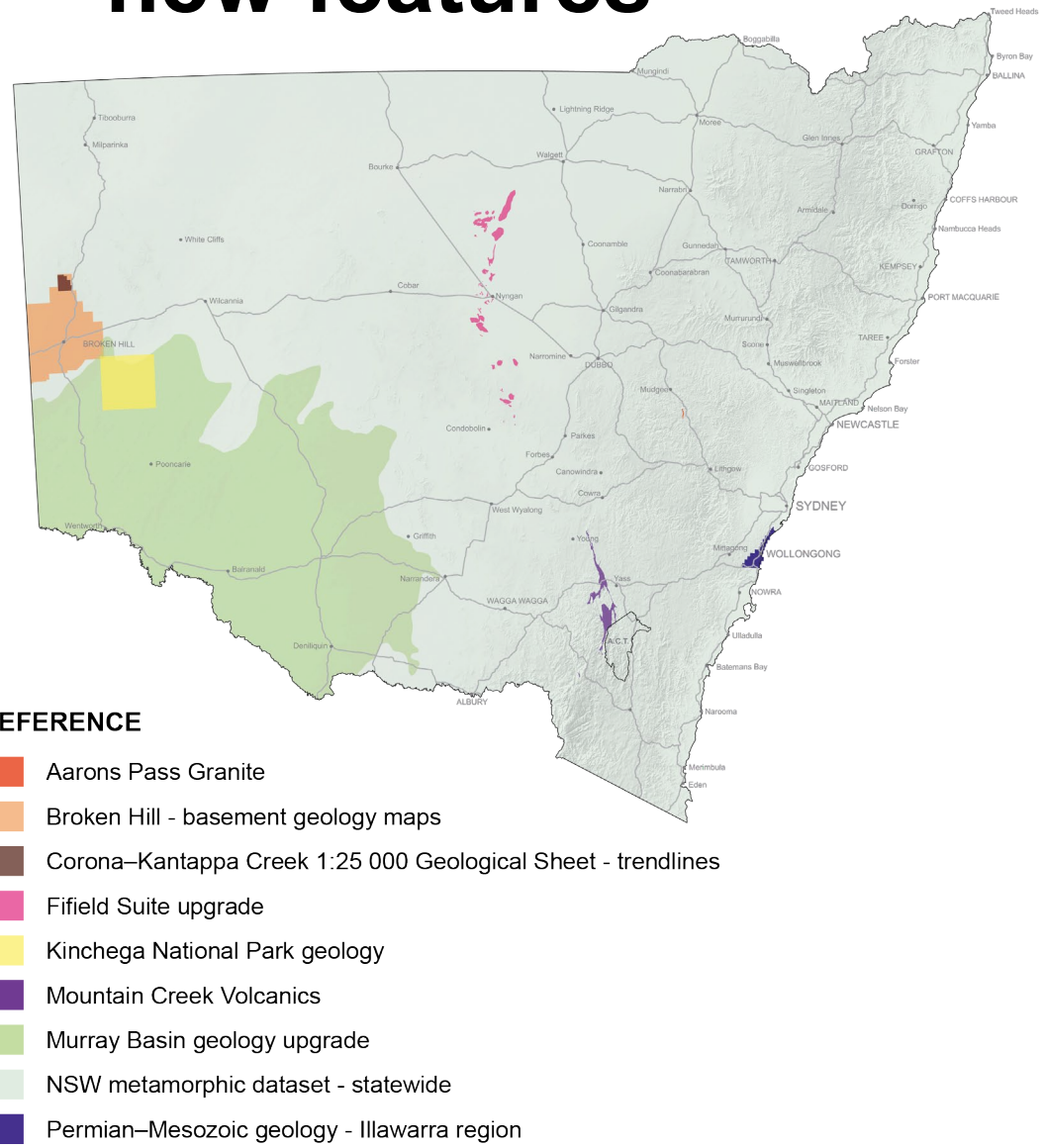
NSW GOVERNMENT

NSW Seamless Geology V2.1 – new features

- Updated geology of the Sydney Basin and Illawarra region
- Improved geological detail in the Broken Hill area
- Updated geology of Kinchega National Park, near Menindee
- Murray Basin – divided into constituent units
- Updated boundaries of sub-basins in the Darling Basin
- Updated stratigraphy and nomenclature of the Fifield Suite
- Metamorphic mapping – split into major geological events

Available:

- digs.geoscience.nsw.gov.au
- minview.geoscience.nsw.gov.au



Mineral potential data

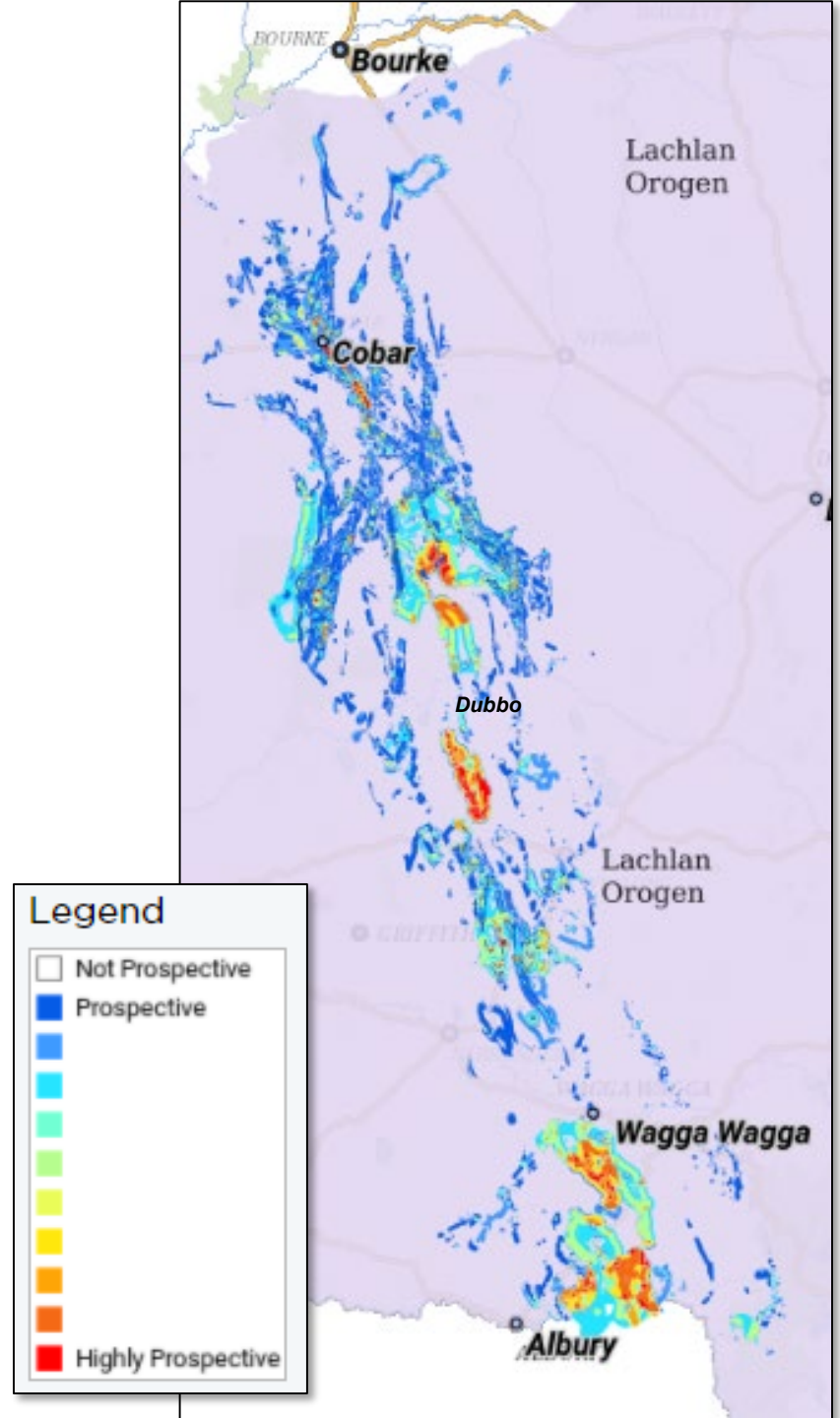
Mineral potential study areas:

- Central Lachlan Orogen
- Southern New England Orogen
- Eastern Lachlan Orogen
- Zone 54 – Curnamona Province and Delamerian – Thomas Orogen

Four mineral potential data package contains; training points, study area, predictive maps and mineral potential map for each model.

Available:

- digs.geoscience.nsw.gov.au/product/9261
- minview.geoscience.nsw.gov.au

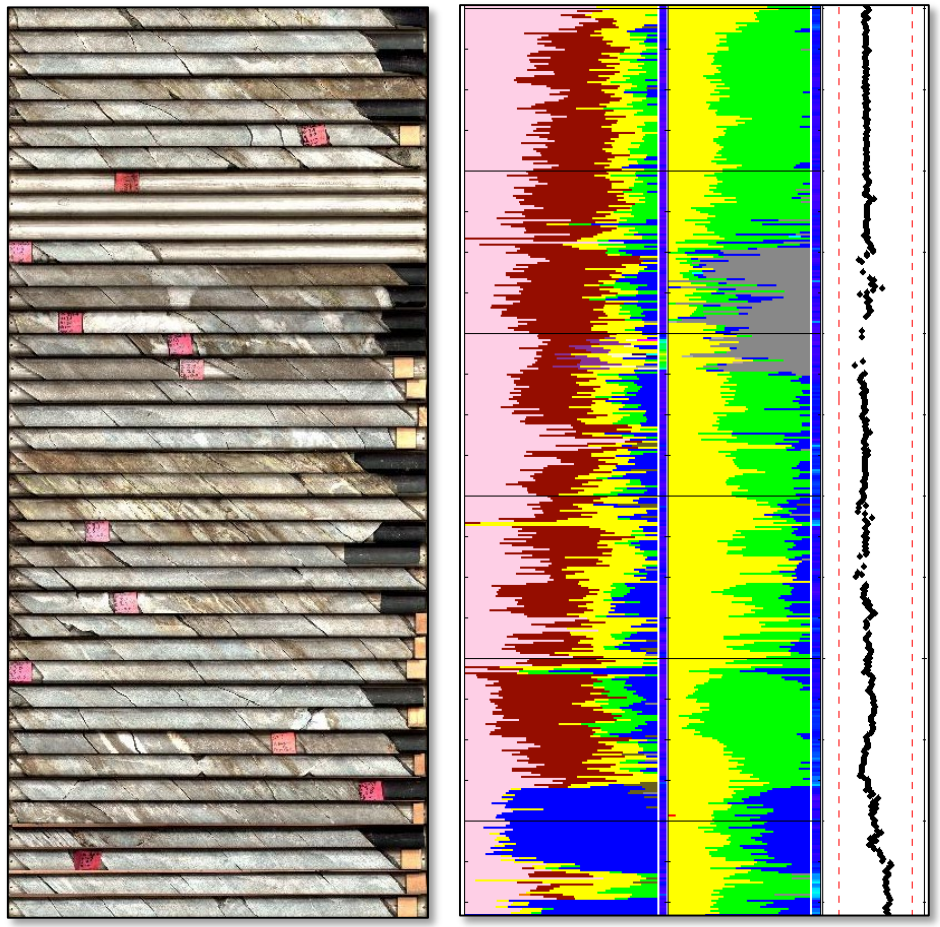


NVCL – update

Drill core scanning system for imaging and acquiring spectral information about rock, ore and alteration minerals in drill core, chips and pulps

HyLogger™ data

- 143 additional holes in 2020
- 630 total holes scanned
- 163 km drillcore



Available:

- Search for holes scanned on website
- www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/geoscience-information/services/drill-core-libraries/national-virtual-core-library
- minview.geoscience.nsw.gov.au

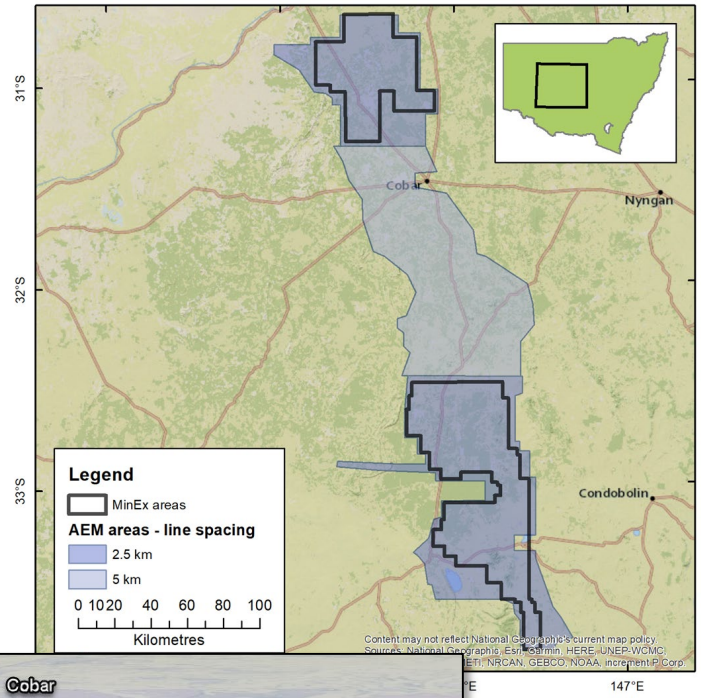
Discover

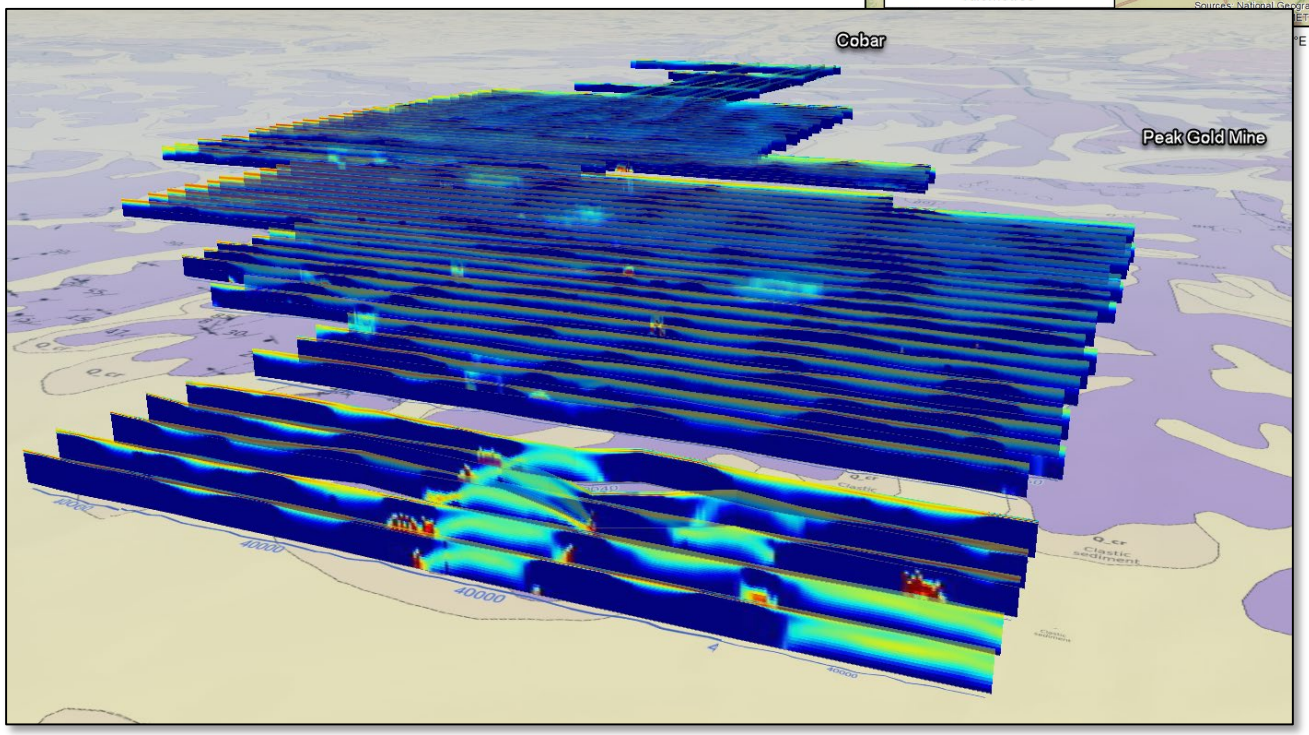
Drillhole name	Hyperspectral (A4 plot)	Hyperspectral (0.25 m bins)	Assays (1 m bins)	Drillhole info	Core image
Discovery Ridge DRDD002	A4 plot	View	Download	Details...	Preview
Discovery Ridge DRDD003	A4 plot	View	Download	Details...	Preview
Discovery Ridge DRDD011	A4 plot	View	Download	Details...	Preview
Discovery Ridge DRRCD006	A4 plot	View	Download	Details...	Preview

Cobar AEM survey

- MinEx CRC National Drilling Initiative
- Cobar AEM survey released 2020
- 4 new company infills surveys released 2021
- Cobar AEM Survey view

Available:
minview.geoscience.nsw.gov.au/





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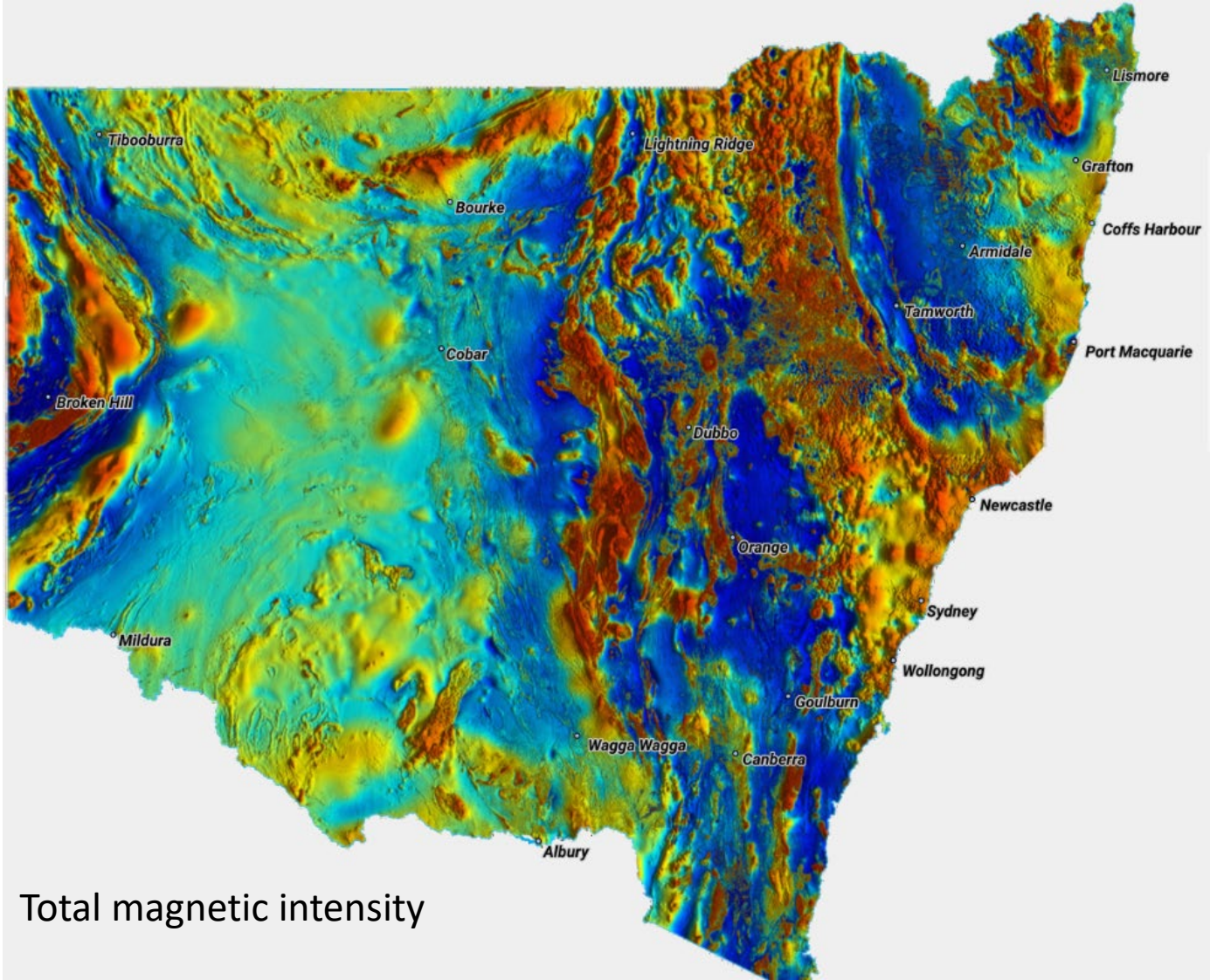
Statewide magnetic images – new merges

- Total Magnetic Intensity
- First Vertical Derivative
- Second Vertical Derivative
- Tilt Angle Filter

Available:

- digs.geoscience.nsw.gov.au/product/9263
- minview.geoscience.nsw.gov.au



Total magnetic intensity

Drilling and surface assay geochemistry database

Available to view and download:

minview.geoscience.nsw.gov.au

YEAR OPEN	Total # Reports with Data Released	Total Drillholes Released	Summary Drillhole Samples	Summary Drillhole Assays	Total Surface Samples Released	Summary Surface Assays
2011	64	1,664	29,354	130,323	6,604	73,263
2012	118	1,089	21,493	259,699	17,863	410,365
2013	233	5,166	54,887	587,981	56,467	793,200
2014	274	7,657	86,022	915,825	69,104	1,095,170
2015	209	5,399	51,560	1,090,743	45,091	1,017,932
2016	168	5,527	47,437	648,652	24,339	475,267
2017	82	3,757	90,186	758,330	38,160	466,821
2018	69	1,030	17,288	248,332	9,469	205,539
2019	180	5,530	56,461	1,609,580	73,531	1,258,700
2020	**97**	**3,150**	**28,261**	**904,129**	**30,251**	**569,440**
2021*	**12**	**148**	**8,333**	**98,945**	**1,771**	**57,680**

* At 14/4/2021

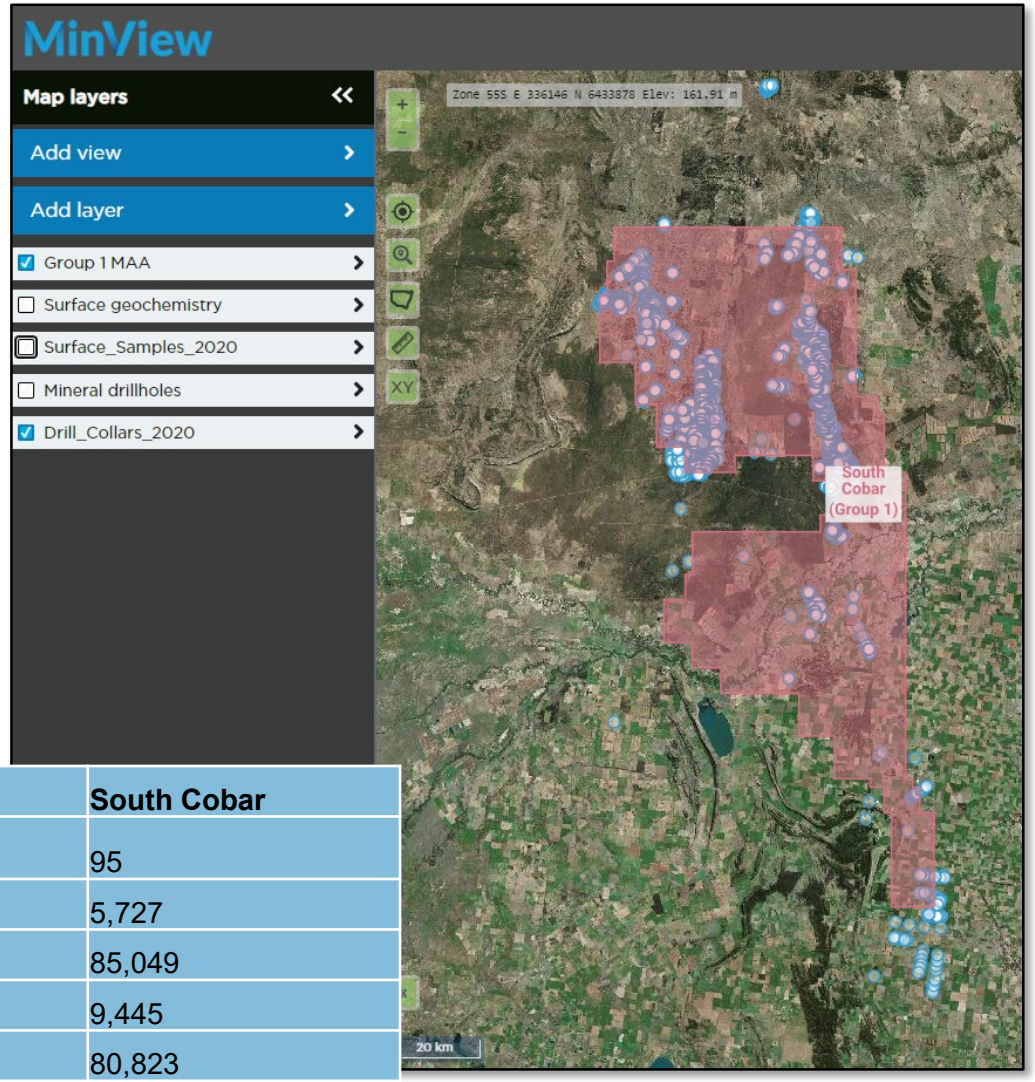
Exploration data mining results

Target areas:

- North Cobar 150 reports, 43% open file
- South Cobar 200 reports, 100% open file
- Macquarie Arc 16 reports, nil open file

Available:

minview.geoscience.nsw.gov.au



AREA	South Cobar
NO_RPTS	95
NO_HOLES	5,727
NO_DRILL_ASSAYS	85,049
NO_SURF_SAMPLES	9,445
NO_SURF_ASSAYS	80,823

Drillhole collar & downhole geochemistry

Quarterly Notes

QN152: Alteration response to mineralisation in the Cobar mineral district, central Lachlan Orogen, NSW: a HyLogger™ case study

Available:

digs.geoscience.nsw.gov.au/product/9259

QN153: Basal Darrawilian graptolites and associated conodonts from New South Wales and their biostratigraphic implications.

Available:

digs.geoscience.nsw.gov.au/product/9262

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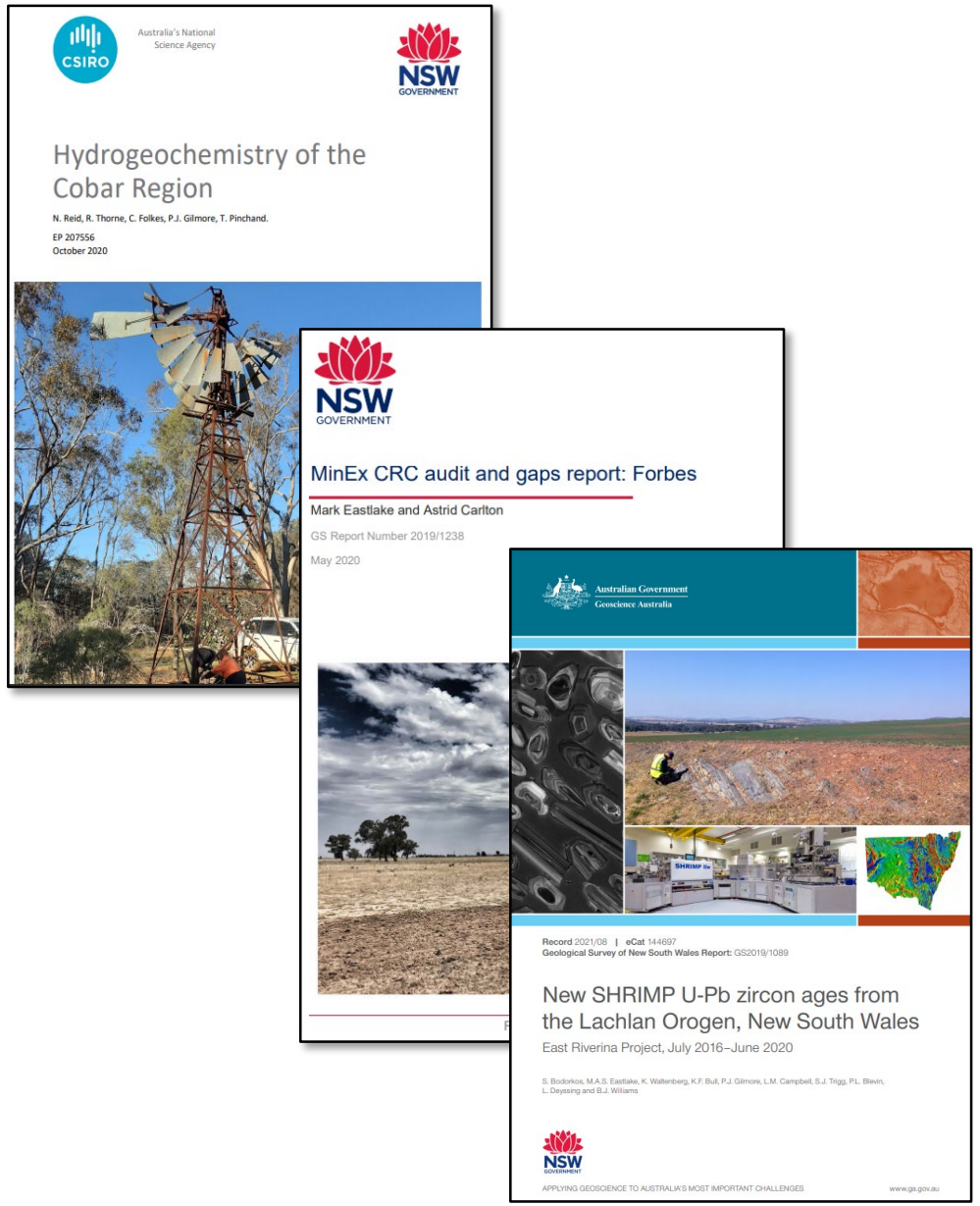
GS Reports

Hydrogeochemistry of the Cobar Region
digs.geoscience.nsw.gov.au/report/R00034704

New SHRIMP U–Pb zircon ages from the Lachlan Orogen, New South Wales: East Riverina Project, July 2016–June 2020. Record 2021/08, Geoscience Australia, Canberra; Report GS2019/1089

MinEx CRC audit and gaps reports for study areas

- Dubbo digs.geoscience.nsw.gov.au/report/R00055780
- Forbes digs.geoscience.nsw.gov.au/report/R00055771
- Mundi digs.geoscience.nsw.gov.au/report/R00055770
- South Cobar digs.geoscience.nsw.gov.au/report/R00055778
- North Cobar digs.geoscience.nsw.gov.au/report/R00055779



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Maps

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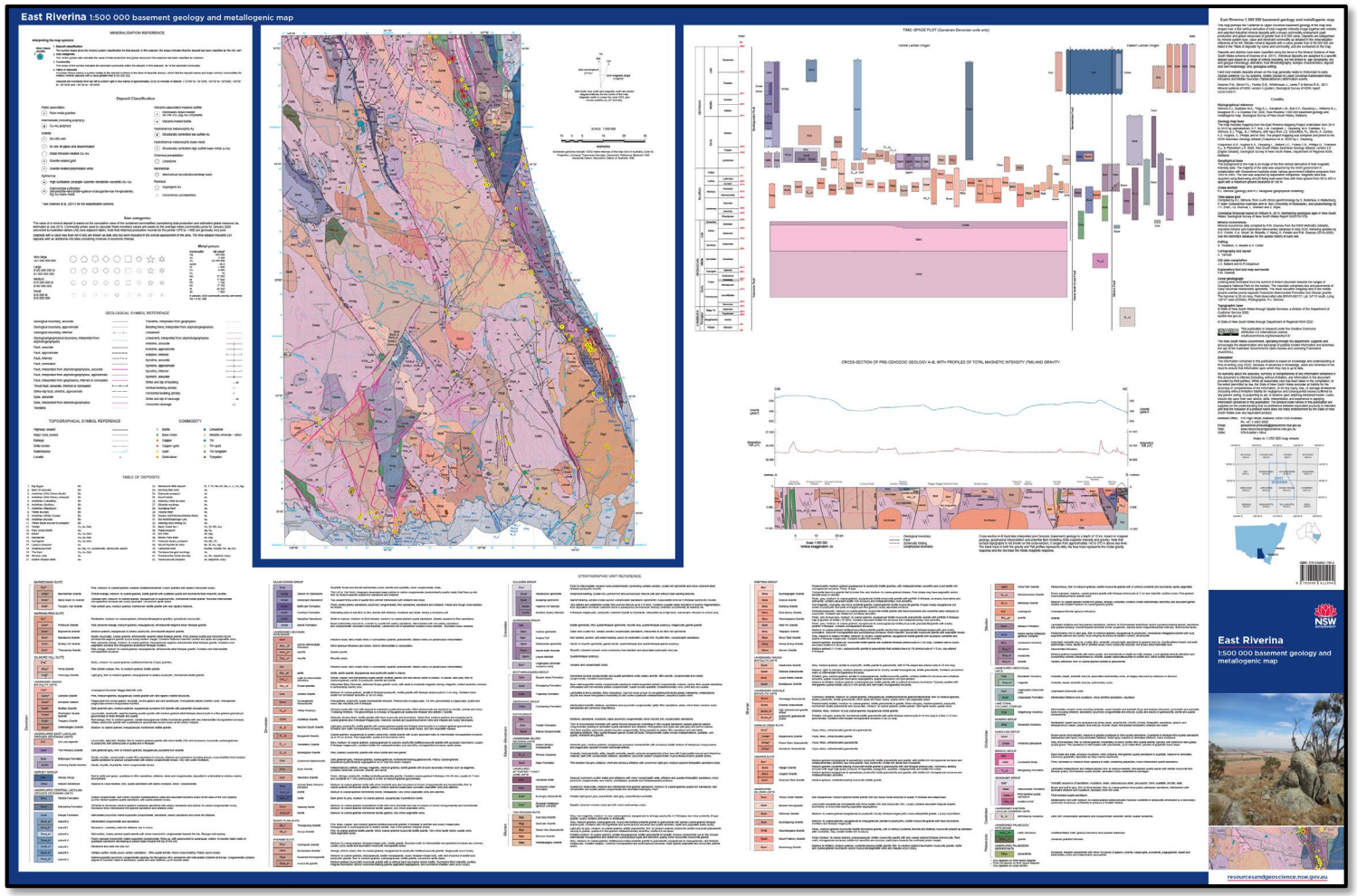
East Riverina metallogenic map

- Basement geology & mineral deposits
- 1:500,000 scale
- 10 km deep cross-section

Available:

- digs.geoscience.nsw.gov.au/product/9264
- minview.geoscience.nsw.gov.au
- GS2019/0922, GS2020/0519 and GS2020/0520



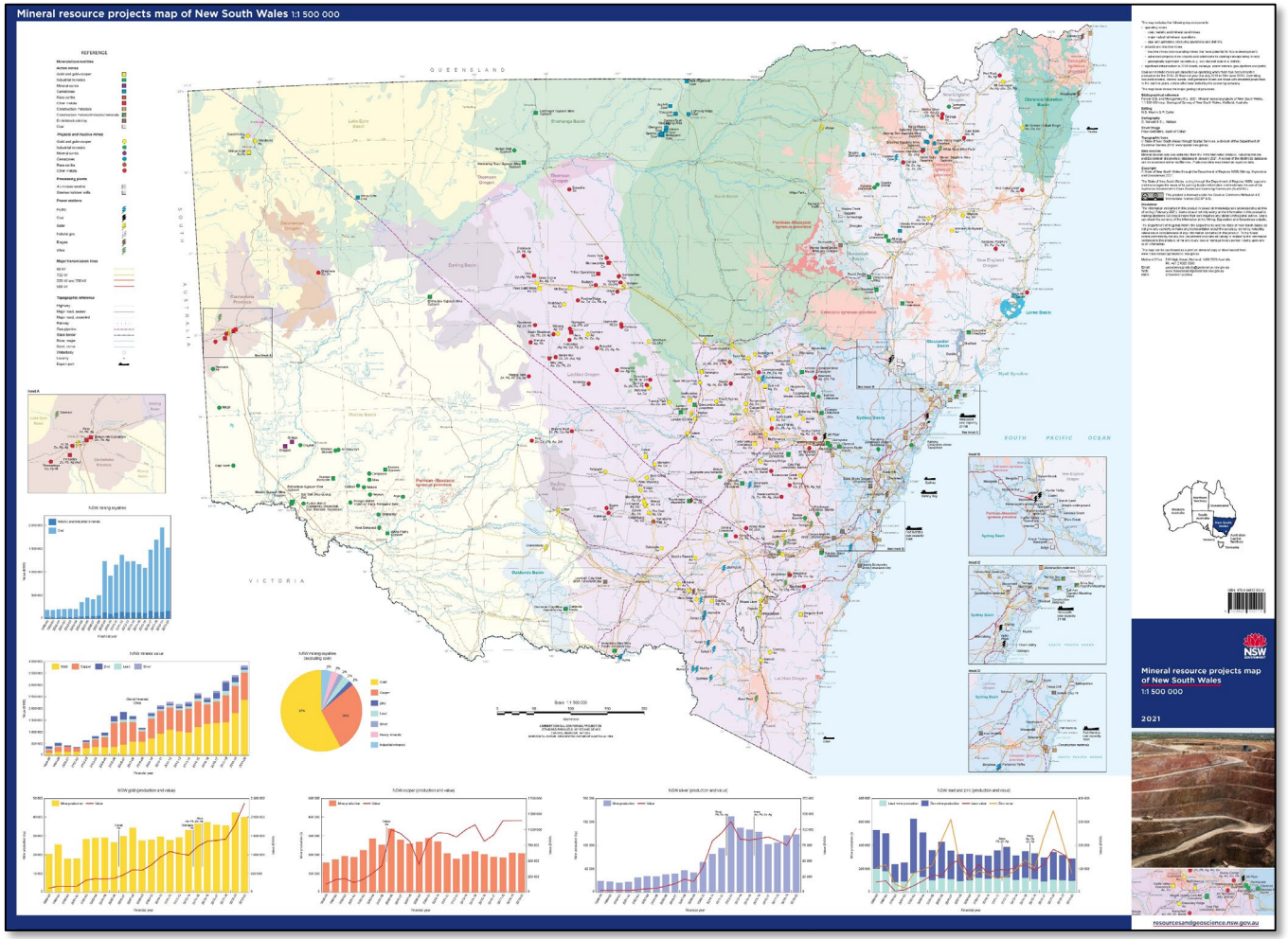
Mineral resource projects map

2021 edition

- Operating mines
- Major industrial mineral operations
- Opal & gemstone operations & districts
- Projects and inactive mines
- Geologically significant deposits
- 1:1,500,000 and 1:3 million scale

Available:

digs.geoscience.nsw.gov.au/product/9219



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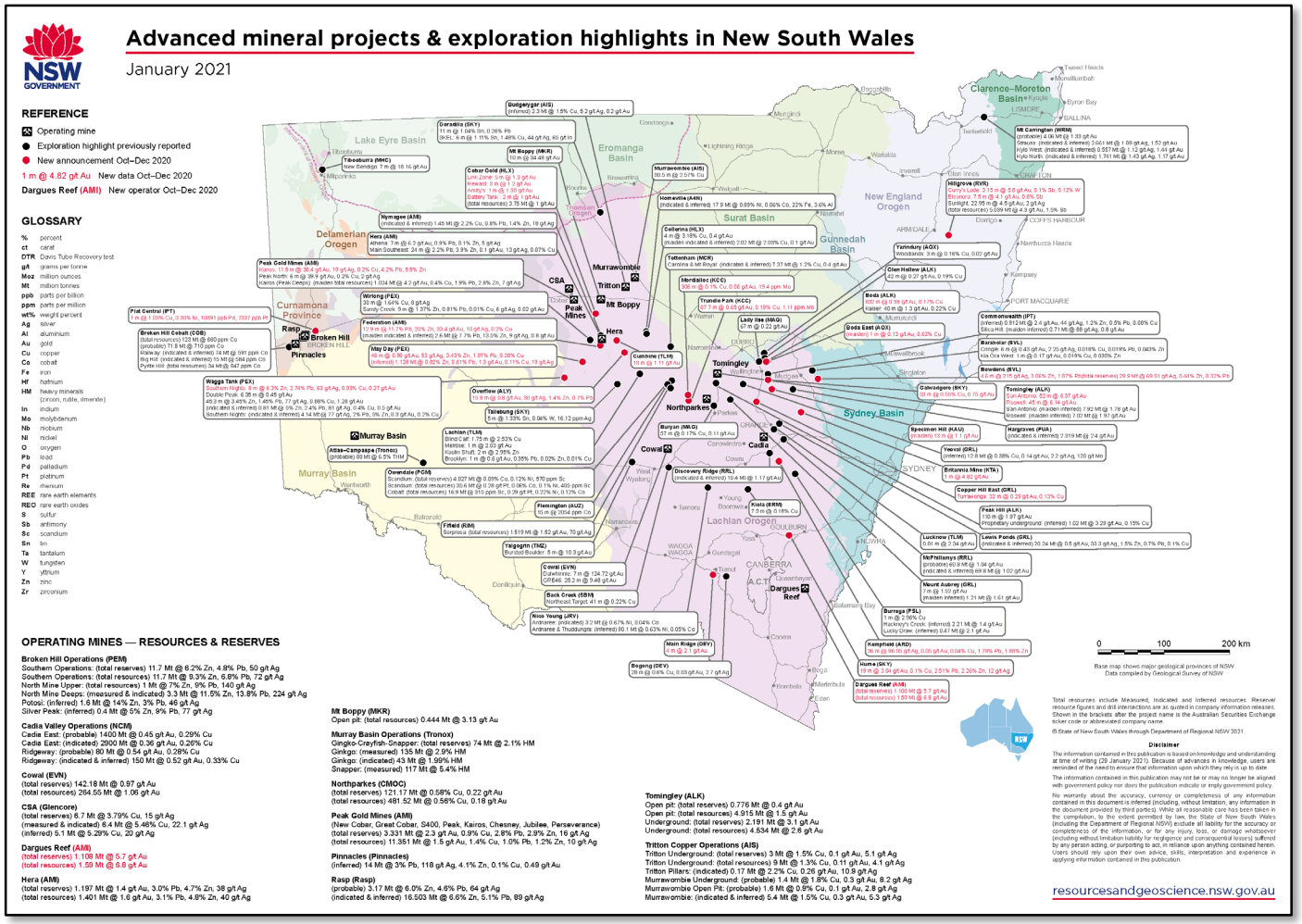
Advanced mineral projects & exploration highlights

- At a glance, A3 map
- 3 editions per year
- Operating mines
- Resources & reserves
- Exploration highlights
- New announcements



Apps

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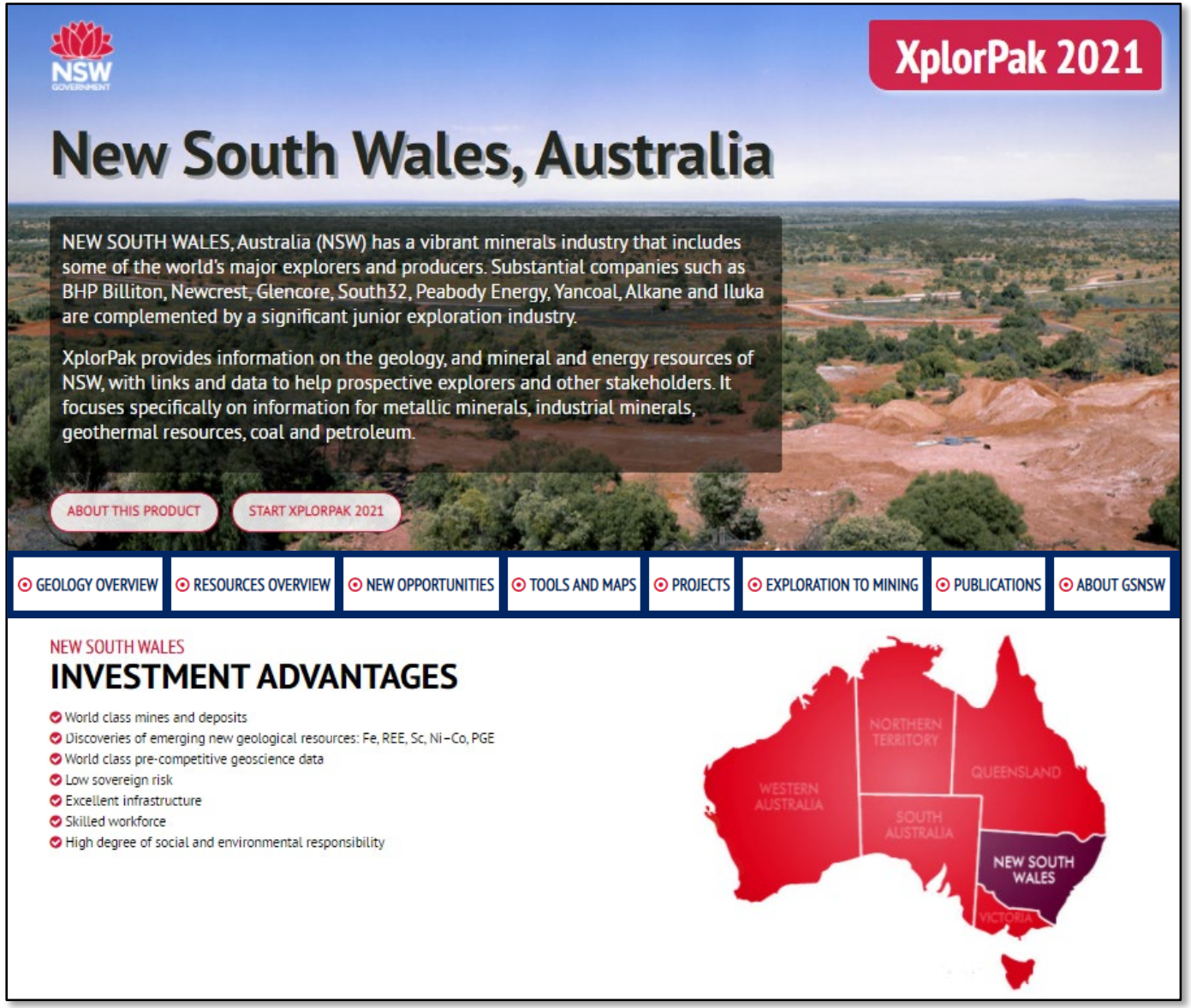
XplorPak – online

Available:

- https://xplorpak.geoscience.nsw.gov.au/
- updated annually in February
- released at PDAC.



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Mobile seamless geology – Explorer for ArcGIS

- Download offline maps
- Map interactivity
- Layer control/map legends
- User’s position on map is GPS located
- Navigate to a feature using ‘Compass Mode’
- Bookmark locations
- Measure distance/area
- Mark-up maps with points/lines/polygons
- Directions using Google Maps/Apple Maps (iOS version only)

available at amazon appstore

Download on the App Store

GET IT ON Google Play

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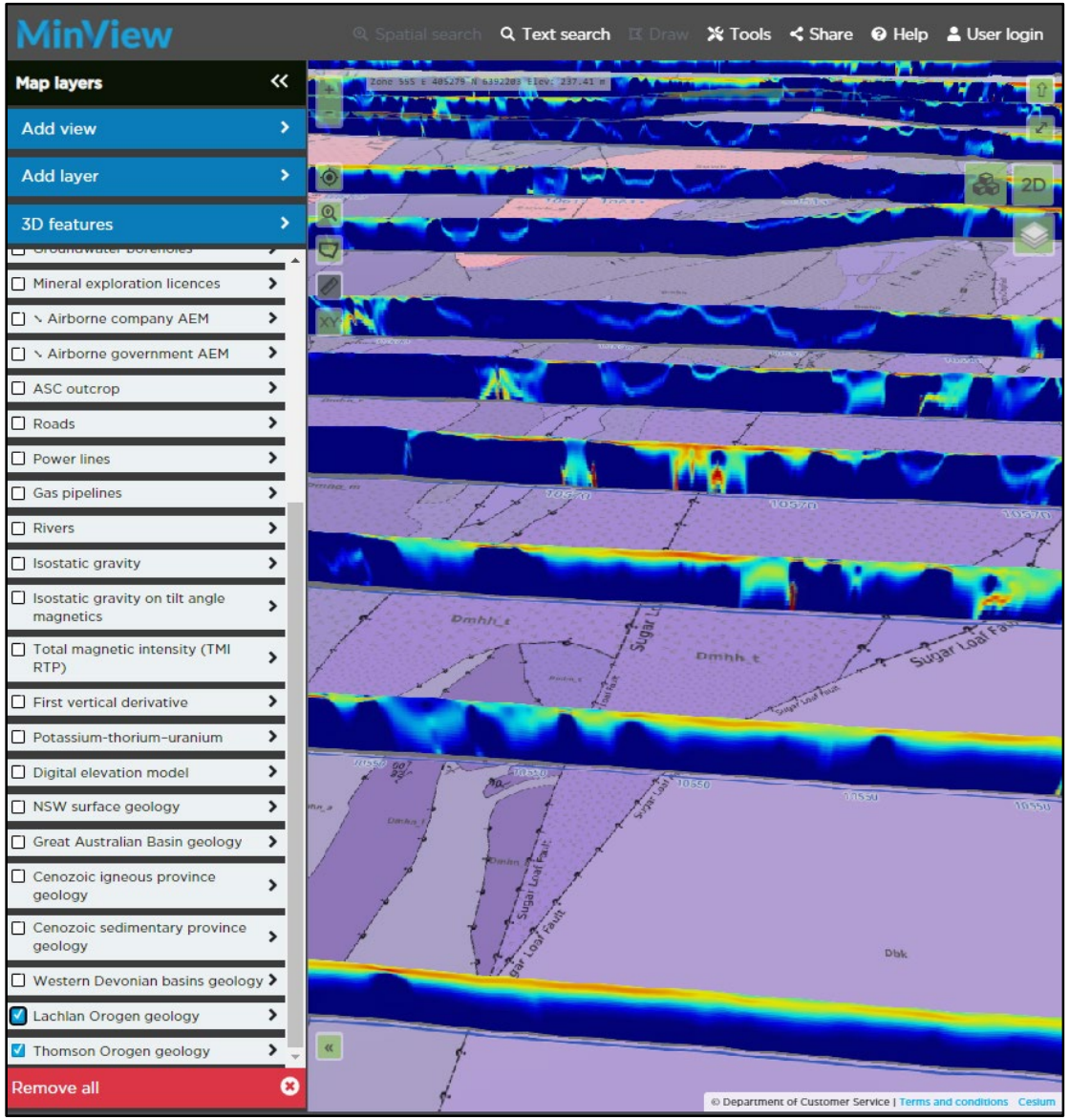
MinView – new features

- Quick title searches
- Search intersecting features using the quick selected title or application (search by selection)
- NSW Seamless Geology 2.1
- NSW statewide magnetics and gravity merges
- Mineral potential mapping for 16 key NSW mineral systems including Cu–Au porphyry
- AusLAMP MT depth slices and 3D Cobar AEM survey curtains
- Mineral collection specimen locations and photos



MinView – stratigraphic information tools

1. Create a report

Select stratigraphic units:
Based on area selection, query or filter
e.g. resource title area

Choose to create a report to compile stratigraphic information
Print or save

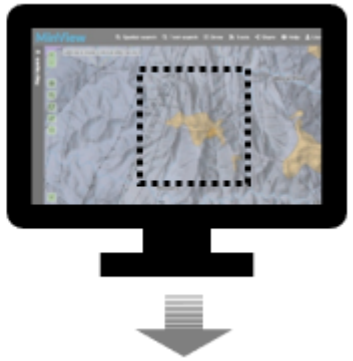
2. Dynamically view

Dynamically interact with and select, query or filter stratigraphic units

Choose to dynamically view stratigraphic information online

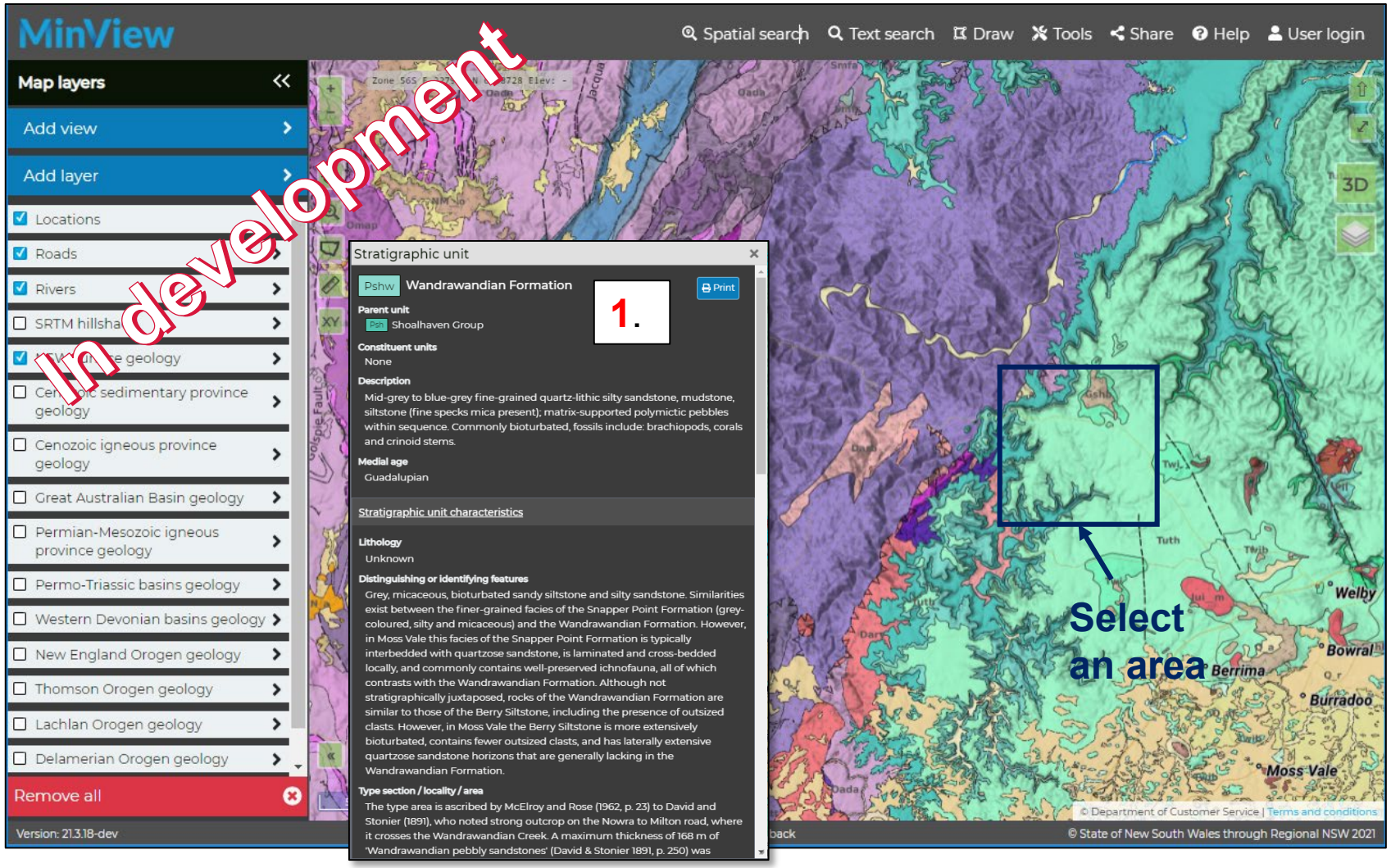
3. Download data

Select stratigraphic units:
Based on area selection, query or filter
e.g. user-specified area



Choose to download stratigraphic information in various formats
e.g. CSV

MinView – stratigraphic rock unit reports



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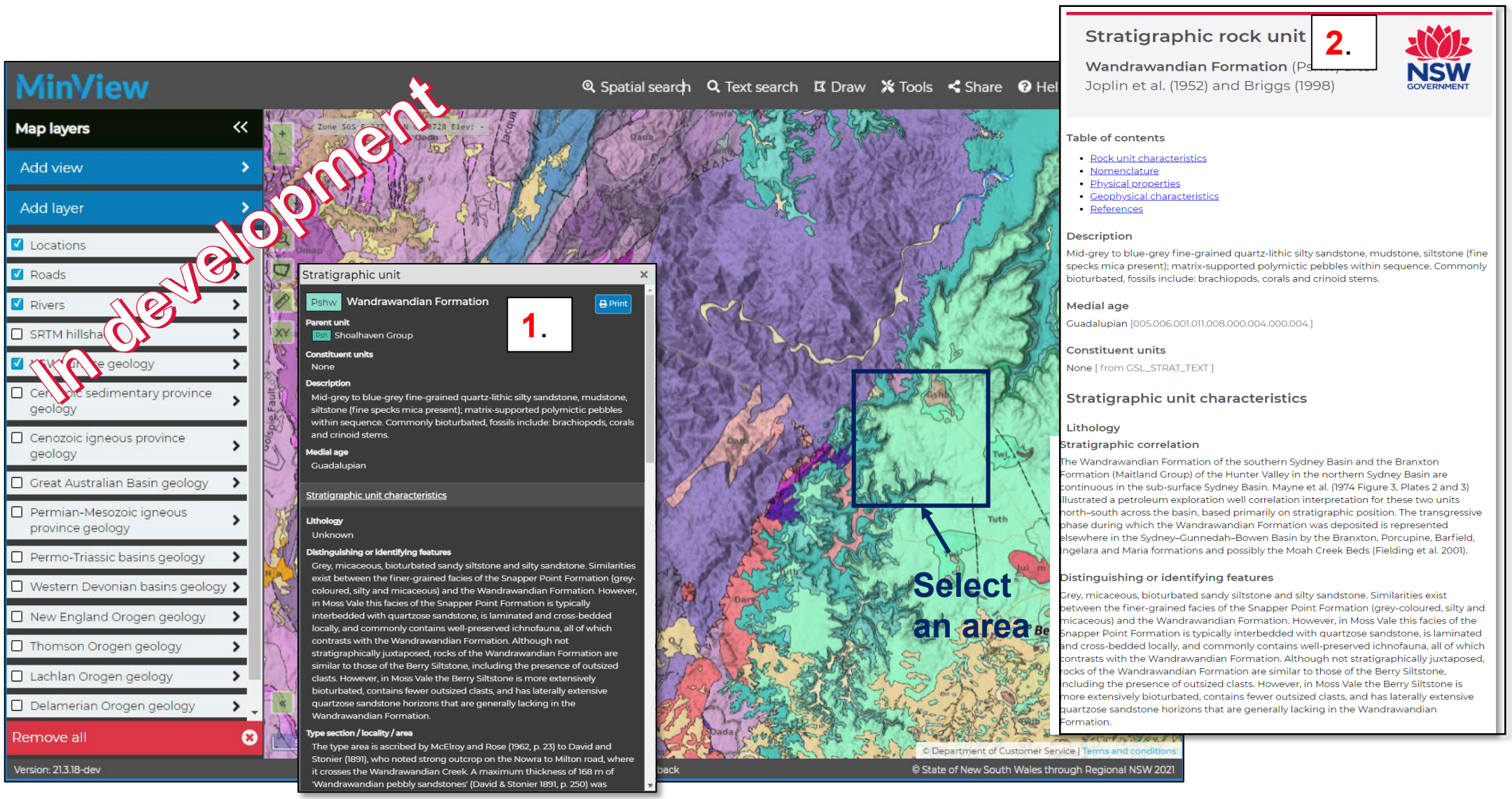
MinView – stratigraphic rock unit reports



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