

# Geoscience Information: what's new and what's ahead

Tracey Rogers

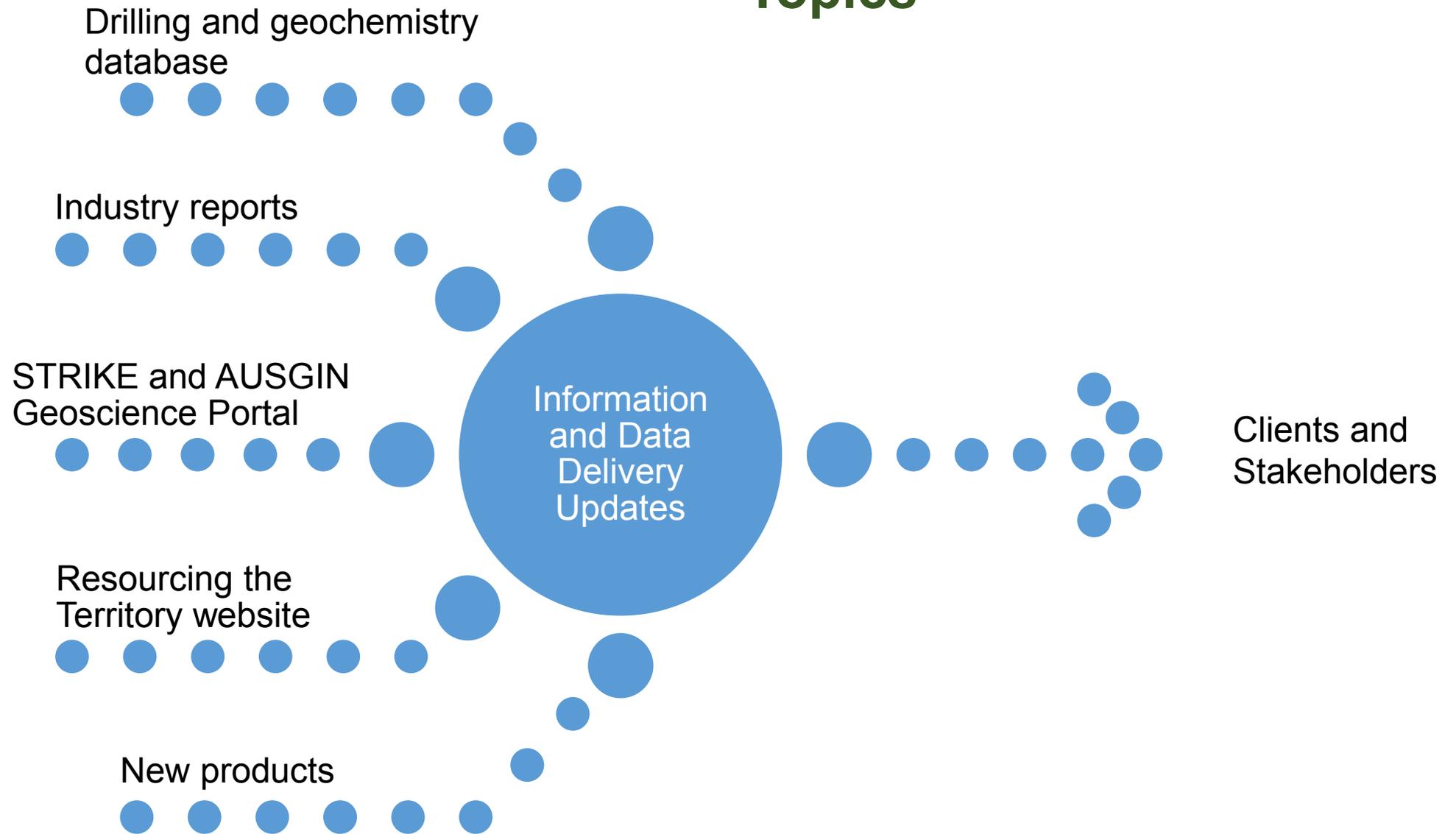


NORTHERN TERRITORY GEOLOGICAL SURVEY

# AGES2019

ANNUAL GEOSCIENCE EXPLORATION SEMINAR  
19–20 March 2019, Alice Springs, Northern Territory

# Topics



# Industry drilling and geochemical data

## GOAL:

Database for all drilling and geochemistry data in the NT

## The Roadmap:

1. Data capture and validation on new submissions 
2. Back capture of all data from current titles as at October 2016 
  - 5037 reports for 2205 titles reviewed, 99% completed
3. Ongoing release of open file data from current title back capture project 
4. Regular release of data in standard open filing workflow 
5. Capture of legacy data on ceased titles 

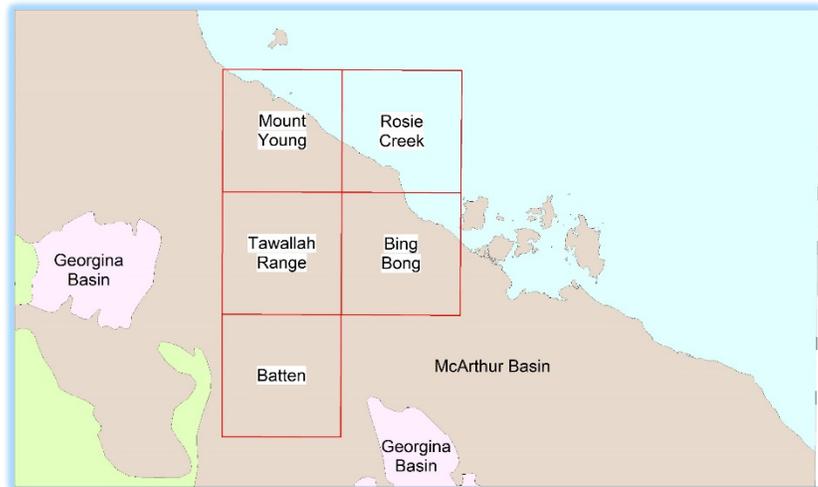
# Geochemistry and drilling – 2018-2019 data releases

Data Type	DIP 001 March 2018	DIP 001 March 2019	Data in Holding	2018-2019 Release
Drill hole collars	137,600	152,600	110,900	15,000
Drill samples	531,400*	745,100	2,324,900	213,700
Surface samples	274,200	292,700	189,200	18,500

As at 14 March

Note: figures rounded to nearest hundred

\* correction to figures reported in March 2018



## Legacy data capture

- Batten Fault Zone area – 5 x 100k map sheets
- >200 reports
- Data released August 2018

Batten Fault Zone	
Data Type	Released August 2018
Drill hole collars	607
Drill samples	5,946
Surface samples	9,485

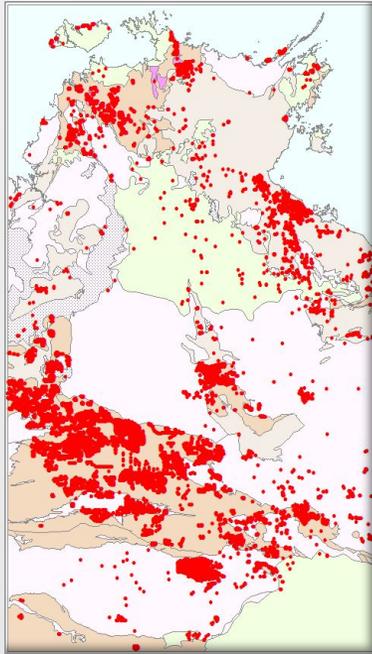
# Geochemistry and drilling – Data distribution

As at 14 March

DRILL HOLES

>152,000 total

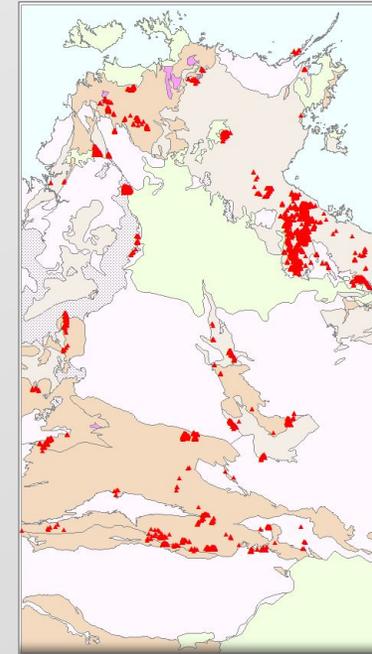
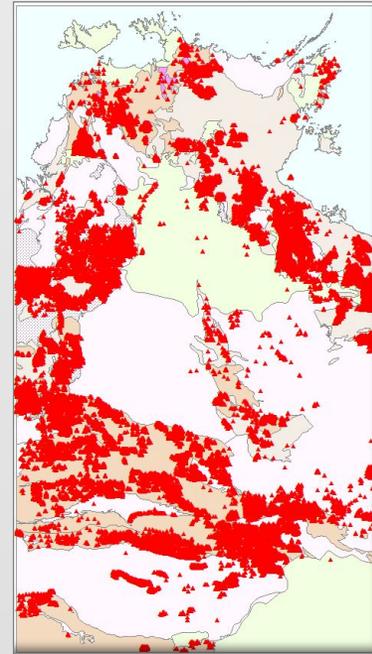
>15,000 new



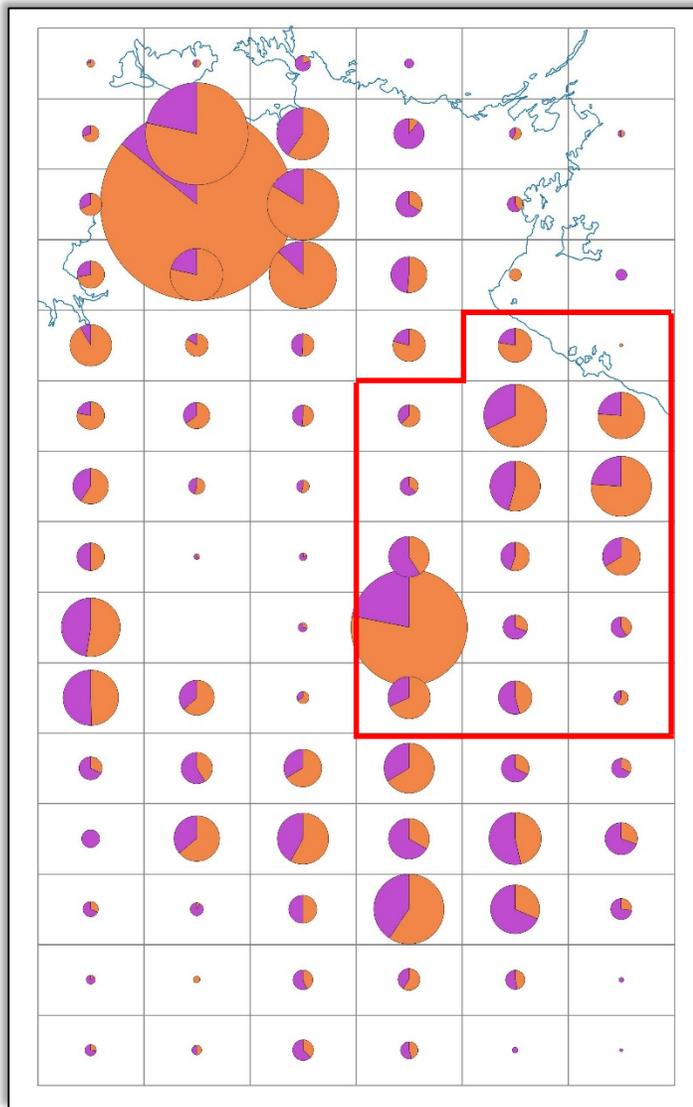
SURFACE SAMPLES

>292,000 total

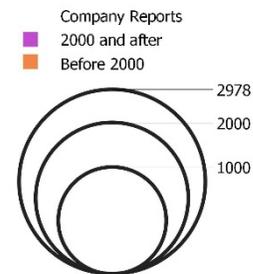
>18,000 new



# Geochemistry and drilling – future data capture



- Approximately 12,100 reports across the NT
- Reports identified using MEX keywords
- Initial focus on the Tennant Creek and Barkly Regions to the Queensland border – approximately 2900 reports



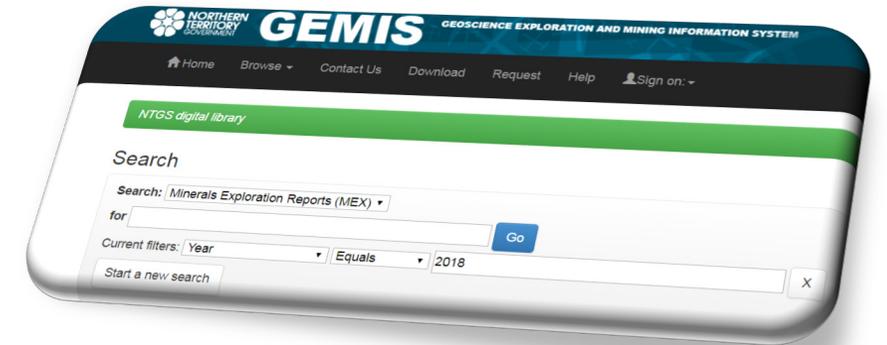
# Industry reports

- PEX Geophysics

- Reports and associated data files for seismic and other geophysical surveys
- 411 of 470 records now have files that can be downloaded

- MEX - Last 12 months

- Reports received 2009 to 2010 have been released under the five year sunset clause of the *Mineral Titles Act*
- 25377 open file MEX records
- 666 MEX records now have geophysical data for download – roughly 1/3 completed.



REMINDER – Availability of additional, usually large, datasets is indicated in the Notes field. Use the GEMIS Request Cart to obtain copies

# PEX Tenure

- The PEX Tenure collection is being added to GEMIS, completing the online PEX collections
- Search and access reports and associated data files for geological and other surveys or regional studies
- New collection replaces the original PEX database
- Records have been reviewed, updated and migrated to development database
- 202 open file records in PEX Tenure, including 4 reports under the Geothermal Energy Act.
- 112 records have files that can be downloaded
- *Coming soon*

## Petroleum Exploration Reports (PEX)

### NT Onshore and Coastal Areas

Use PEX (tenure) to find PETROLEUM EXPLORATION REPORTS submitted to NTGS under the NT Petroleum Act, GEOPHYSICAL SURVEY and WELL REPORTS including data can be searched and downloaded through the industry report collections in [GEMIS](#).

Title  
AND

Tenure (EP123)  
AND

Tenure Type  
AND

Basin  
AND

Year  
AND

Personal/Corporate Author  
AND

Petroleum Report No. (PR1934-0024)  
AND

Records per page  
 1 |  2 |  10 |  20 |  50



[Northern Territory Government](#) | [Interpreter Services](#) | [Disclaimer/Copyright/Privacy](#)

**Need Petroleum Data?**  
[Request reports here](#)

**Questions?**  
Contact the [InfoCentre](#)  
Phone: +61 8 8999 6443

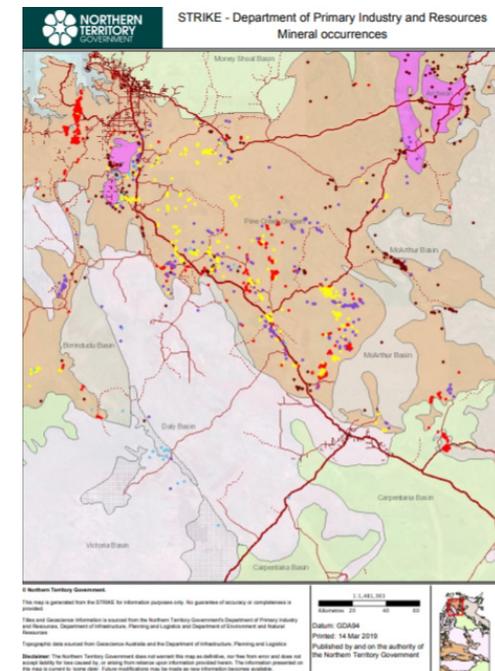
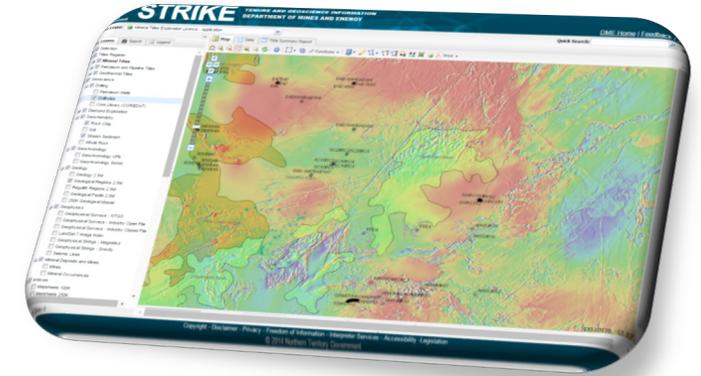
**Help:**  
[How to Search](#)  
[Search Tips](#)

**Links:**  
[InfoCentre](#)  
[NTGS Petroleum Data Databases, Wells, Surveys and Fields](#)  
[GA's PIMS Database](#)  
[GA's Petroleum Wells Database](#)

# STRIKE – strike.nt.gov.au

- Enhancements in 2018

- Fixes to attribute labels and display on various layers
- Metadata – added and updated for a few layers
- Search functionality added to 13 layers
  - 1:250k and 1:100k map indexes, mineral occurrences, geochemistry layers, geophysical survey indexes
- Advanced search functionality added to 21 layers
  - petroleum titles, geochronology, open file mineral report index and Native Title and Indigenous Land Use Agreements
- Another 15 layers have upgraded Advanced Search functionality
  - mineral titles, historical petroleum titles, petroleum wells and drillholes



# STRIKE – Search

Data tab – search results

Direct link to downloads

- Select active layer
- Select *Search* tab
- Enter search parameters
- Click *New* button
- Results will appear in data panel
- Map will zoom to spatial extent of results
- Search results can be refined or added to other results

The screenshot displays the STRIKE web application interface. At the top, the Northern Territory Government logo and the text 'STRIKE TENURE AND GEOSCIENCE INFORMATION DEPARTMENT OF PRIMARY INDUSTRY AND RESOURCES' are visible. A navigation bar includes links for 'Downloads', 'Feedback', 'DPIR Home', and 'Help'. Below this, the 'Active Layer' is set to 'Mineral Occurrences'. The main interface is divided into a search panel on the left and a map on the right. The search panel contains several dropdown menus for 'Name', 'Modat ID (Integer)', 'Major Commodity', 'Minor Commodity', 'Geological Region', 'Geological Province', '100k Map Sheet', and 'Status', along with 'New', 'Add', 'Remove', and 'Refine' buttons. The map shows a geographical area with numerous colored dots representing search results. A 'Data' tab is selected, and a 'Data panel' is visible at the bottom of the map area. A 'Direct link to downloads' is highlighted in the top right corner.

Data panel – search results

# STRIKE – Advanced Search

Advanced Search icon

Data tab – search results

- Select active layer
- Click *Advanced Search* icon (binoculars)
- Enter search parameters and qualifiers, Boolean operators/filter definitions
- Click *New* button
- Results will appear in data panel
- Map will zoom to spatial extent of results
- Search results can be refined or added to other results

The screenshot displays the STRIKE web application interface. At the top, the Northern Territory Government logo and the text 'STRIKE TENURE AND GEOSCIENCE INFORMATION DEPARTMENT OF PRIMARY INDUSTRY AND RESOURCES' are visible. The 'Active Layer' is set to 'Mineral Occurrences'. The 'Data (15)' tab is selected, showing a table of search results. The 'Advanced Search' panel is open on the right, showing search parameters and a compound query definition.

Modal ID	Name	Mineral Category	Major Commodity	Minor Commodity
2622	Ywain	Gems	Diamonds	
2618	Gawain	Gems	Diamonds	

The 'Advanced Search' panel shows the following configuration:

- Search Layer: Mineral Occurrences
- Having: Geological Region
- Qualifier: containing
- Geological Region: McArthur
- Filter Definition: com\_major = 'Diamonds' AND geolregion LIKE '%McArthur%'

Data panel – search results

Compound query, Boolean operators

# AUSGIN Geoscience Portal – Before (2017)

**AUSGIN AUSTRALIAN GEOSCIENCE INFORMATION NETWORK | GEOSCIENCE PORTAL**

Search for data and publications  Advanced Search Clear Search Contact Us User Guide

SCANNED 250K GEOLOGICAL MAPS PRINT MAP CLEAR MAP REFRESH MAP PERMANENT LINK HELP Map coordinates (WGS84 decimal degrees) : -15.62, 134.62 / lat lng

**Featured Custom**

Search:

**Boreholes (2 items)**

- National Virtual Core Library

Filter data

Name:

Drilling year:

Provider: Northern Territory

**Add layer to Map** **Download Layer**

- All Boreholes

**ASTER Maps (17 items)**

**Tenements (1 item)**

**Geological Provinces (21 items)**

**Geological Maps (5 items)**

- Contacts, faults, dykes, marker beds
- Geological units (lithostratigraphy)
- Geological units (lithology)
- Geological units (age)
- Scanned 250K Geological Map Index

**Active Layers**

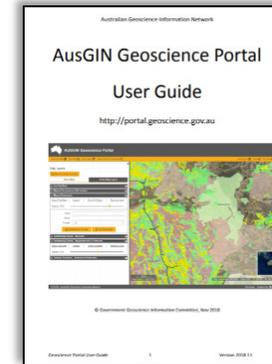
- Numburind
- Angurugu
- GROOTE EILAND REGION

Map data ©2017 Google Imagery ©2017 NASA, TerraMetrics Terms of Use Report a map error

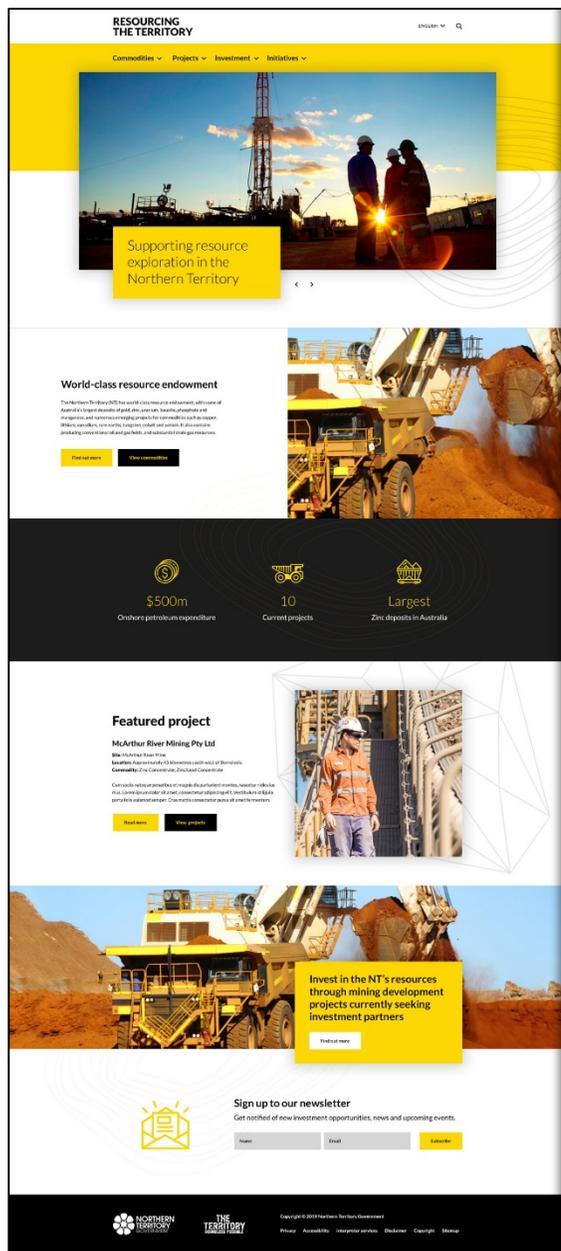
Australian Government Geoscience Australia | Department of Industry Resources & Energy | Queensland Government | Tasmanian Government | NORTHERN TERRITORY GOVERNMENT | VICTORIA State Government | Government of South Australia Department of State Development | Government of Western Australia Department of Mines and Petroleum

- Fully interoperable Geoscience Portal using international standards
- Launched June 2016

# AUSGIN Geoscience Portal – After (2019)



- Launched November 2018
- New look and feel
- Streamlined menu bar
- Selection tools work differently
- Mobile device compatible
- Updated user guide
- Share with others



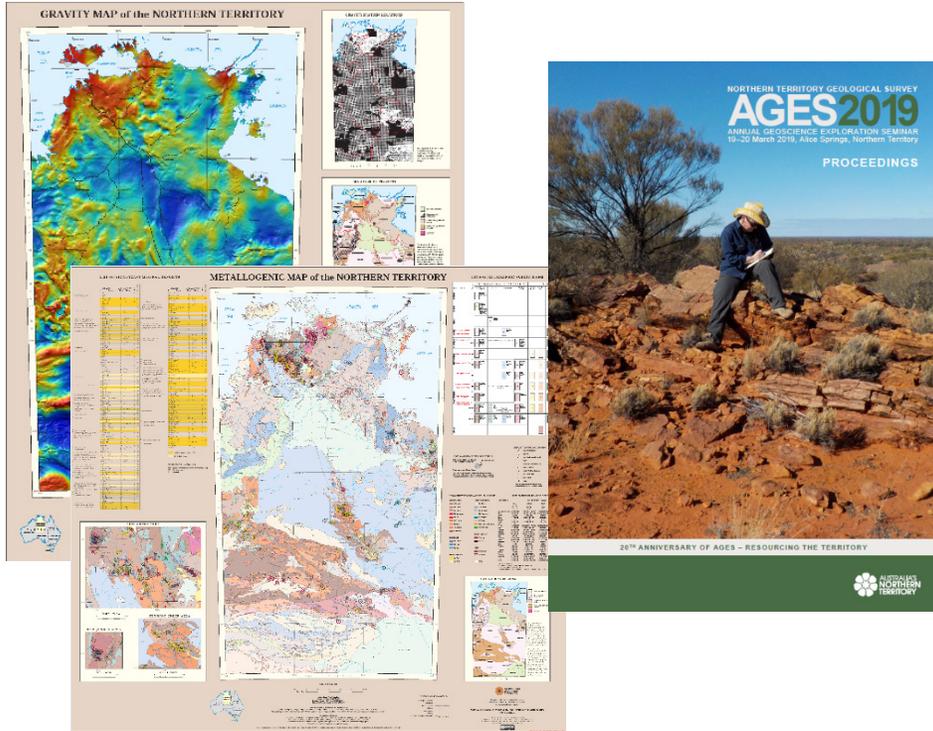
# Resourcing the Territory website

- Resourcing the Territory (RTT) initiative commenced July 2018
- Existing CORE site re-badged but needs refreshing
- New website commissioned
- Revitalised creative look, modern design and user experience
- Mobile device compatible
- *Coming soon.....*

The website aims to attract investors and explorers to the Territory by providing insights and relevant information on exploration, projects and commodities to provide clients with confidence to initiate investment decision-making process

[resourcingtheterritory.nt.gov.au](http://resourcingtheterritory.nt.gov.au)

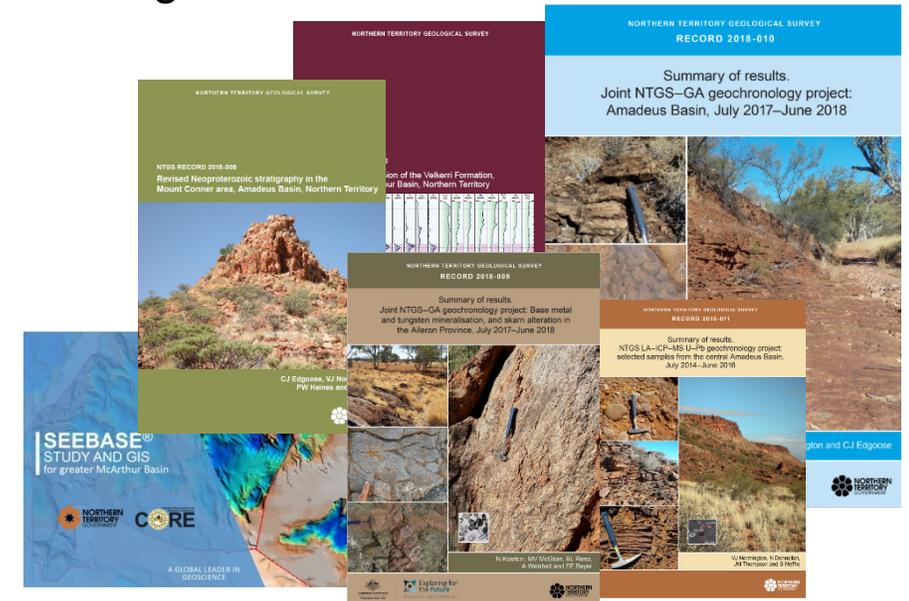
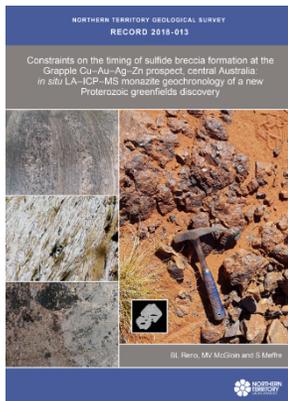
# New NTGS Products



- 12 new Records
- 8 HyLogger Data Packages
- 1 new Digital Information Package – DIP 018: McArthur Basin SEEBASE supplementary data
- 1 new and 4 revised 250k GIS datasets
- Tawallah Range 100k GIS dataset
- NT wide gravity grid and images

## Just released

- AGES 2019 Proceedings
- Updates to DIP001, DIP003, DIP008
- Metallogenic Map of the NT (2019)



# Feedback and Requests



**geoscience.info@nt.gov.au**  
**or 08 8999 6443**

Minerals and Energy InfoCentre  
3rd Floor, Paspalis Centrepont Bldg,  
Smith St Mall, Darwin



Arid Zone Research Institute  
Stuart Highway, Alice Springs