

RESOURCING THE TERRITORY

Mineral exploration in the NT in 2020

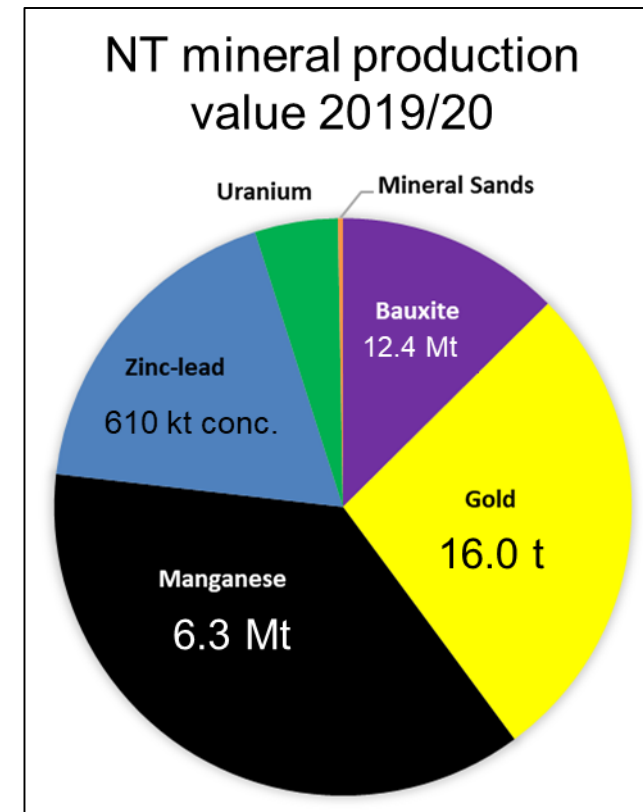
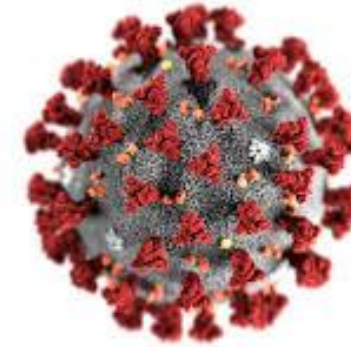


Ian Scrimgeour
Executive Director, Northern Territory Geological Survey
NT Dept of Industry, Tourism and Trade

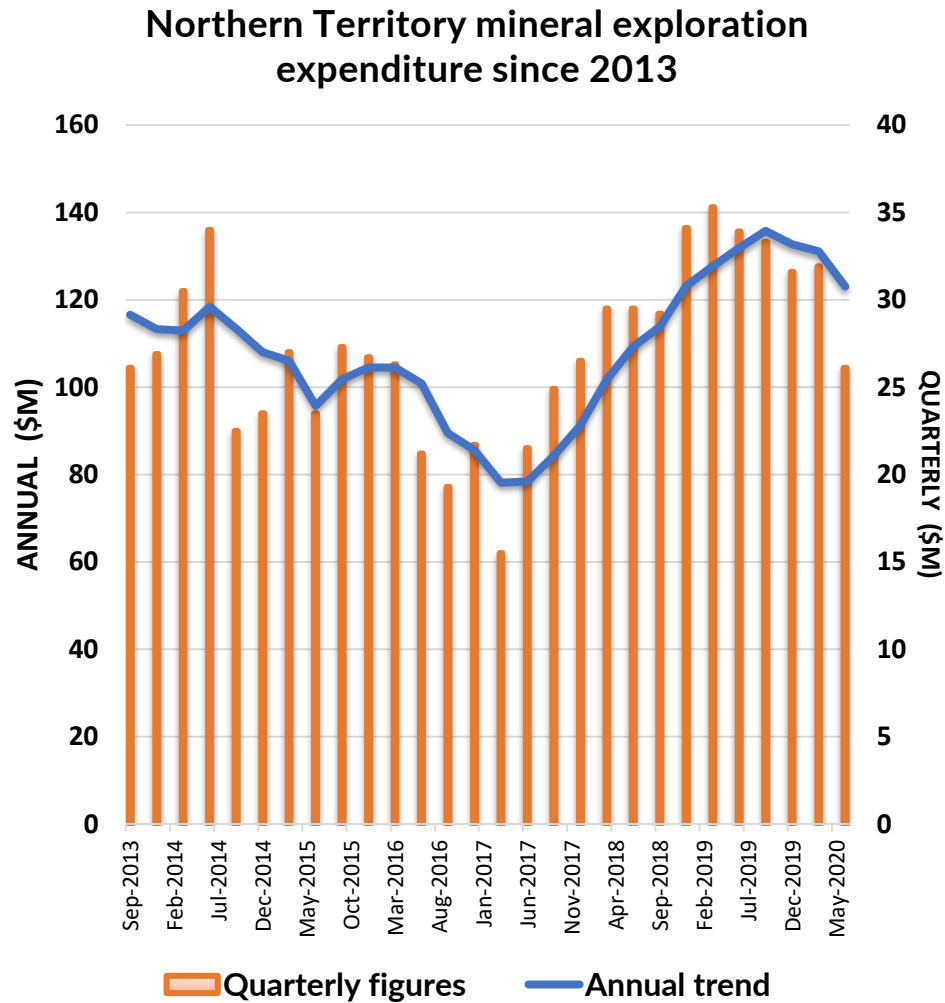
Mining the Territory

12 November 2020

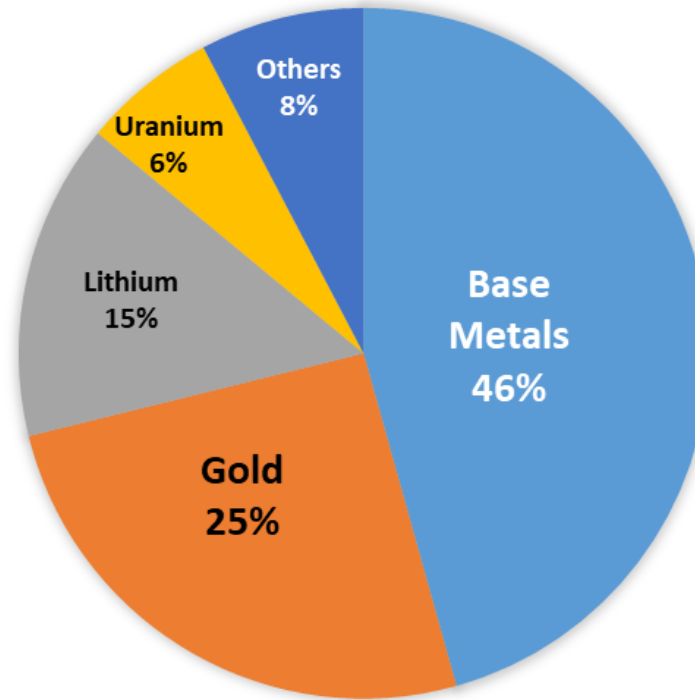
- Mineral exploration in the Northern Territory has been heavily impacted by Covid-19
- On-ground exploration effectively on-hold from March to June
- Challenges given the interstate location of most explorers and contractors
- Biosecurity restrictions lifted in June, but border closures and tightened restrictions on access to ALRA land continued to impact exploration
- Mining operations continued to operate successfully in a Covid-safe way, with \$4.4B of production in 2019/20
- Mineral exploration is now recovering, but field season has been dramatically shortened
- Copper and gold have been the main commodities of interest for exploration in the NT in 2020



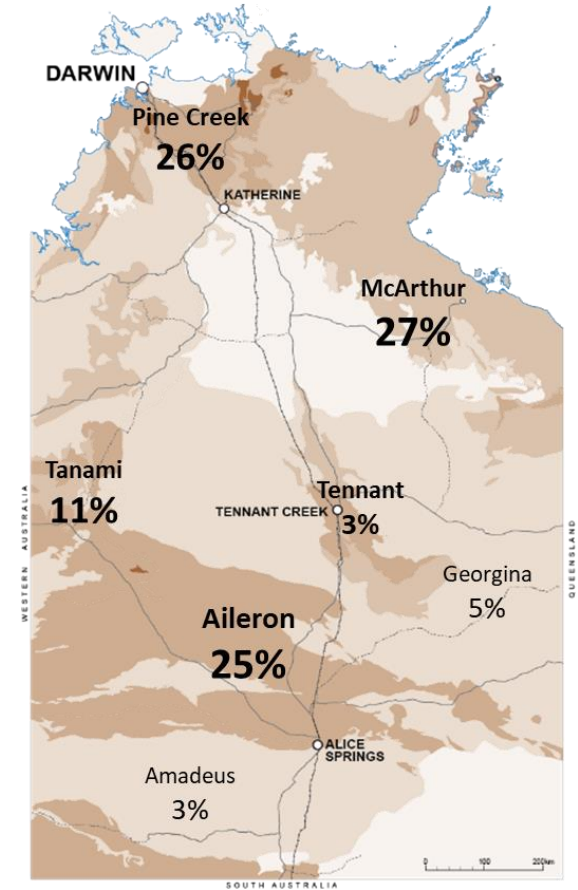
\$123 million mineral exploration expenditure in NT in 2019/20

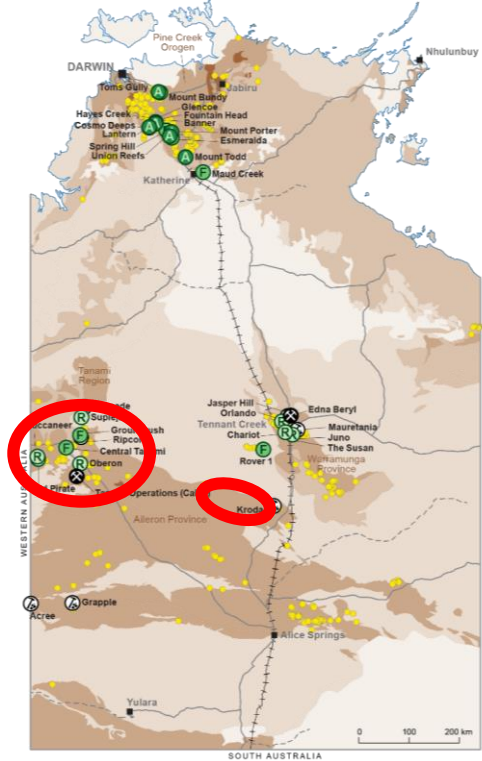


On-ground mineral exploration expenditure by commodity reported to DPIR in 2019



Mineral exploration expenditure by region reported to DPIR in 2019





A challenging year for exploration in the Tanami

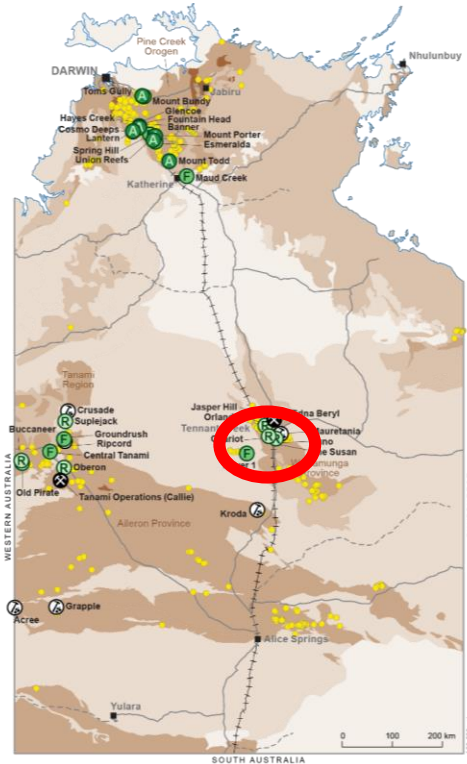
Newmont – *Tanami Operations*

- 10 Moz production, over 5 Moz resources
- Current Ore Reserves: **26.6 Mt @ 5.5 g/t Au**
- 450 km gas pipeline and power station completed in 2019
- 1400m shaft development in progress
- Exploration JVs with Nova Minerals and Prodigy Gold

Prodigy Gold – 2020 drilling at North Arunta and Tanami Projects

- Tulsa: 28 aircore holes for 1,551m
- Bonanza West: 110 aircore holes for 9,288m at 3 targets
- Bluehart: 57 aircore holes for 1,869m at 3 targets





Castile Resources - *Rover 1 Cu-Au-Co*

Drilling and feasibility studies in progress

First 2020 result: 30.4m @ 35.6g/t Au, 1.46% Cu, 0.18% Bi, 0.09% Co and 3.31g/t Ag from 506.5m

Emmerson Resources - *Tennant Creek*

Native Title and equity agreement with Marnturla Aboriginal Corporation over Jasper Hills/Golden Slipper

Drilling planned at Mauretania (previous result 11m @ 54 g/t Au)

Rio Tinto – commencing exploration west and north of Tennant Creek

King River Resources – drilling east of Mauretania

ICA Mining – planning to process Peko tailings

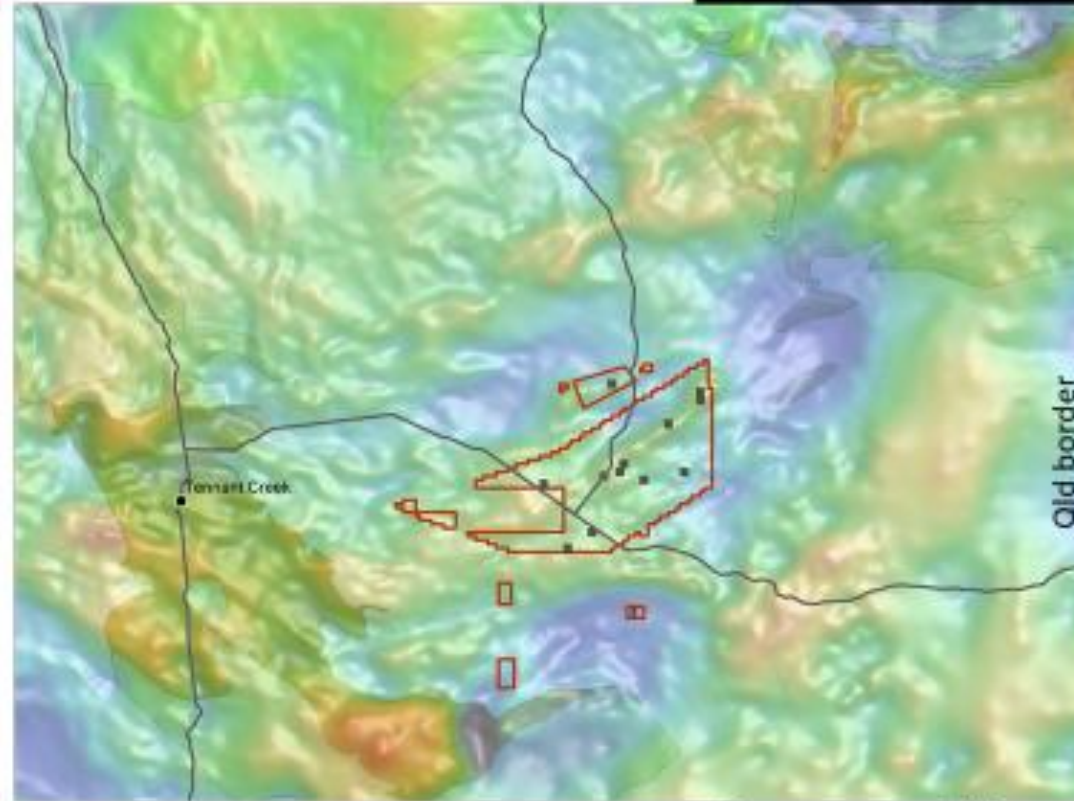


Unlocking the resource potential of the Barkly and Gulf regions

RESOURCING THE TERRITORY

New exploration opportunity in Barkly region

- East Tennant "No Applications Allowed" status will be lifted 07 October 2019
- 12 smaller areas will remain as "No Applications Allowed" to allow further drilling to be undertaken under MinEx CRC National Drilling Initiative
- Applications must be received by 4pm on 7 October
- Areas can be viewed on STRIKE
- Applications in conflict will be assessed and awarded to applicant with the superior work program and expenditure
- Remaining 'No Applications Allowed' areas will be lifted upon completion of drilling program

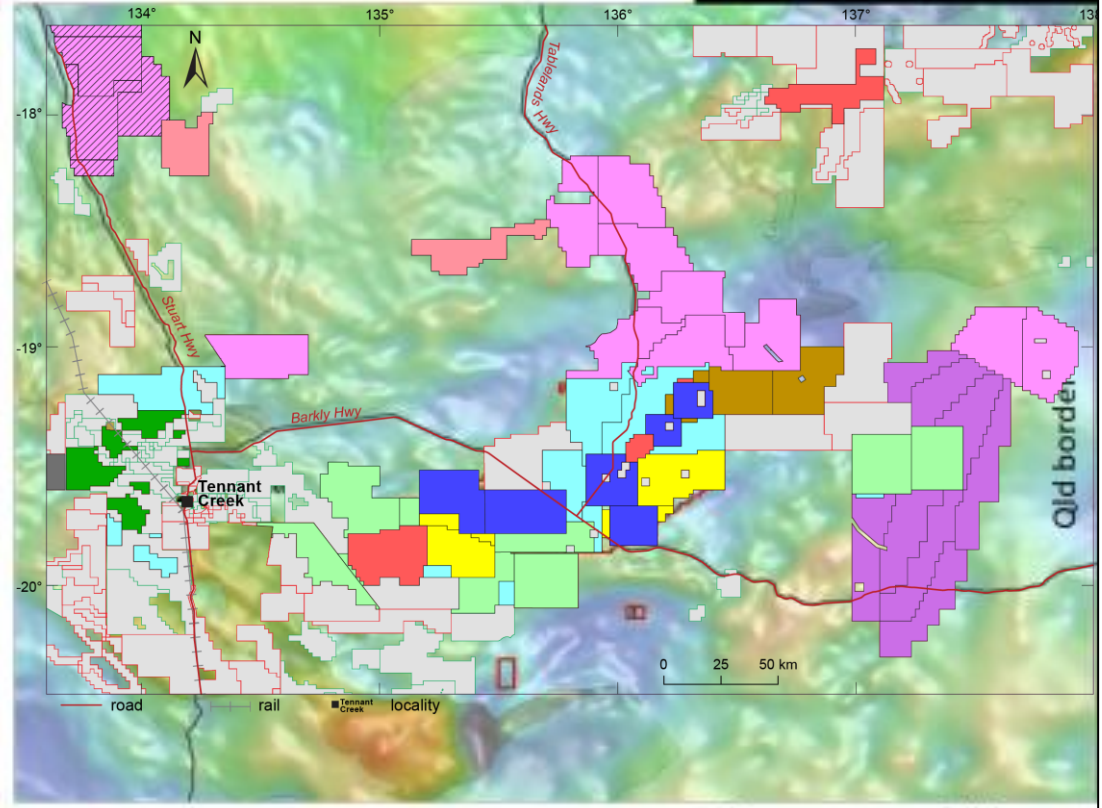


New exploration tenure across the Barkly Tableland

Unlocking the resource potential of the Barkly and Gulf regions

New exploration opportunity in Barkly region

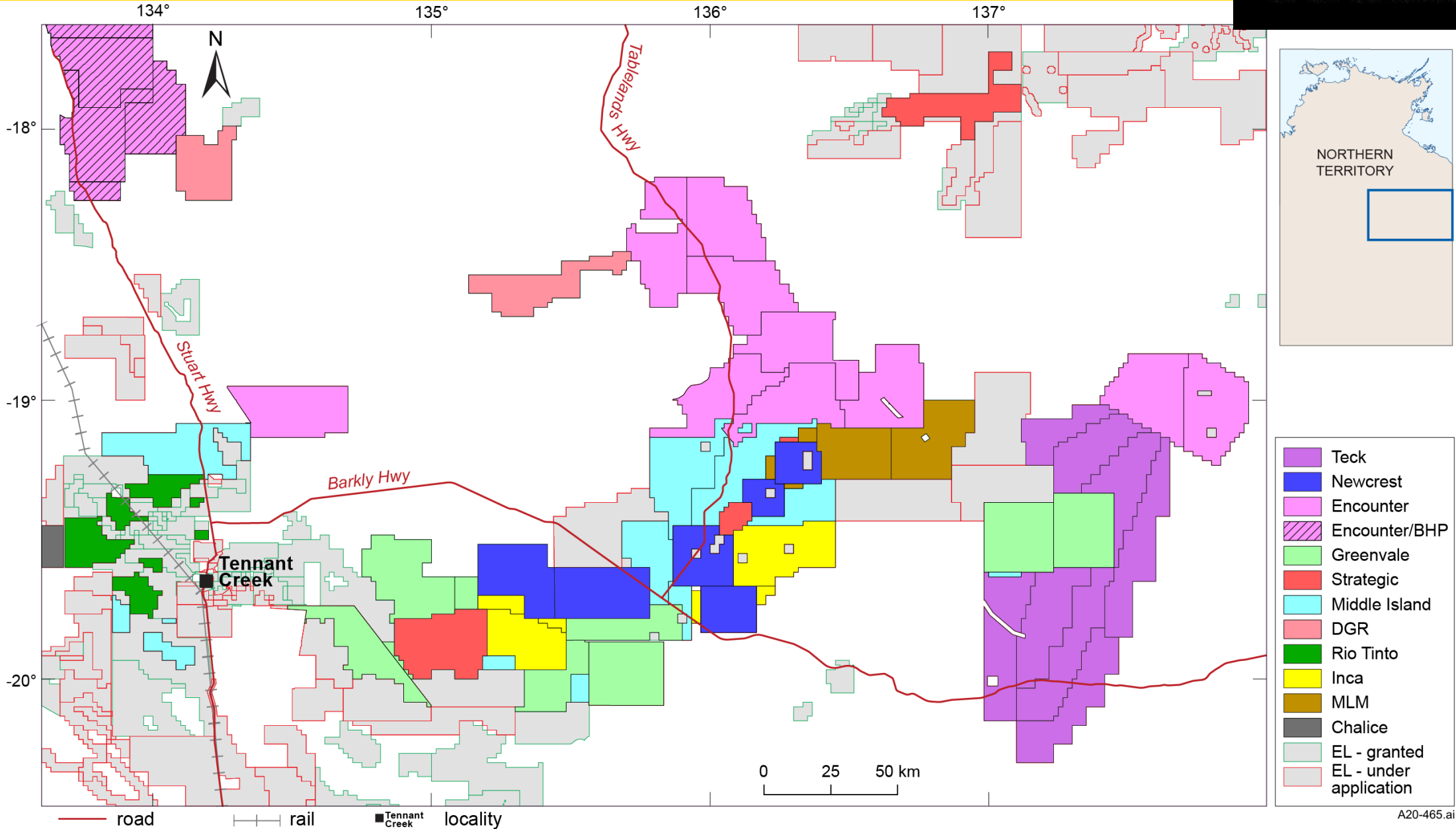
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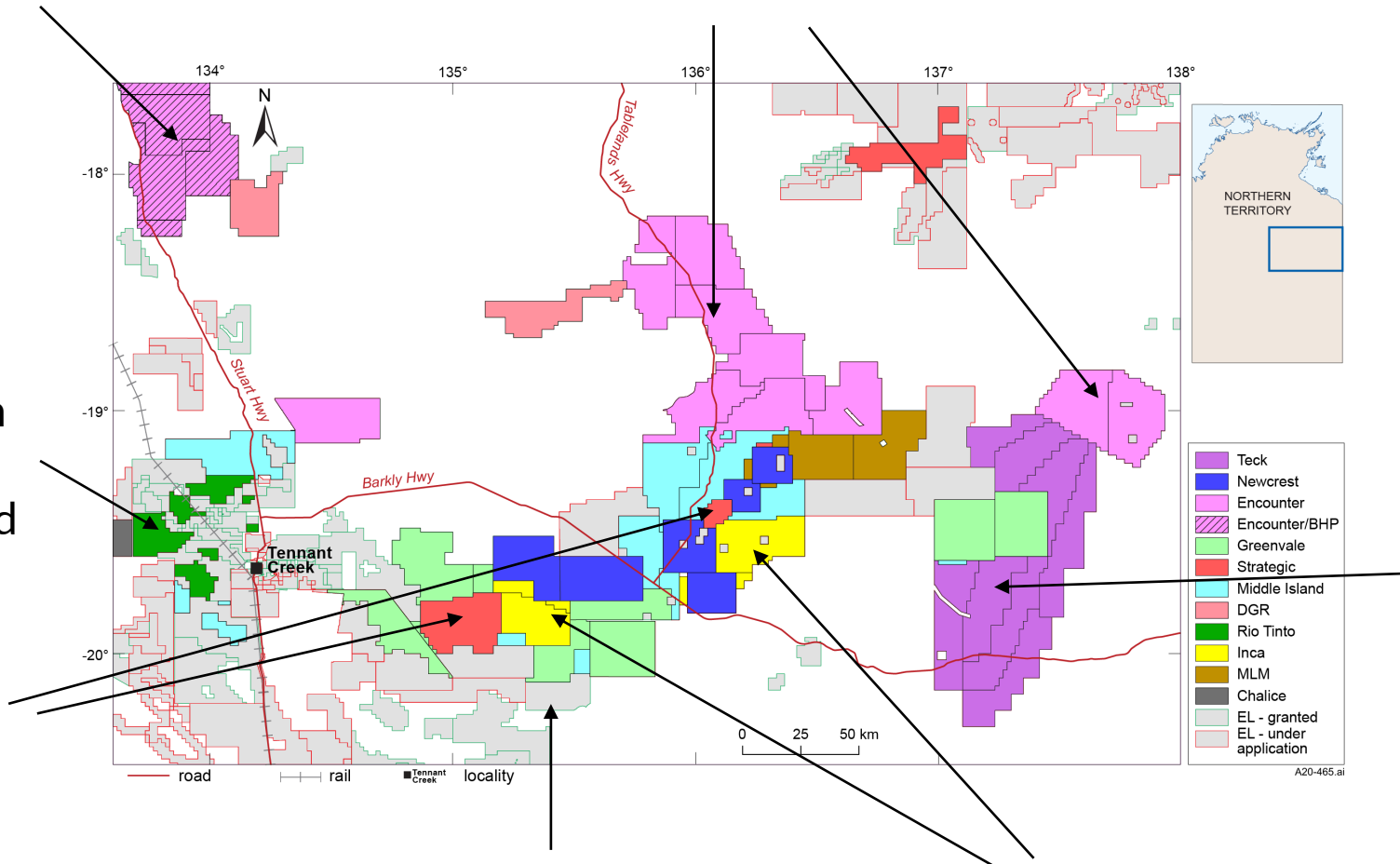
New exploration tenure across the Barkly Tableland



East Tennant – unprecedented exploration interest in Barkly

BHP – Option to invest \$22 million in Encounter Resources’ Elliott project

Encounter Resources – large areas of titles for sediment-hosted copper



Rio Tinto Exploration – Greenfields tenure in Tennant Creek field

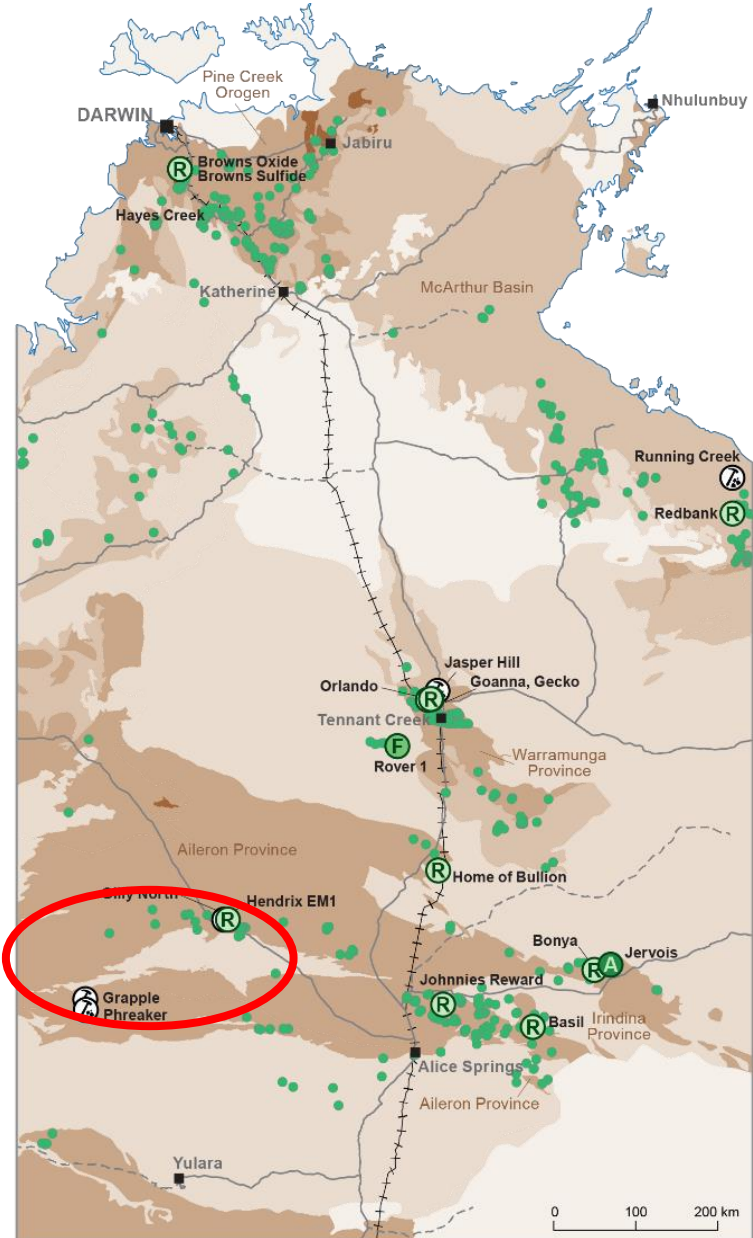
Strategic Energy Resources – 500m-1 km gravity co-funded by NTGS

King River Resources – mag-rad survey co-funded by NTGS

Inca Minerals – 50m-spaced mag-rad survey co-funded by NTGS

Newcrest Mining Early mover in East Tennant – exploration to commence early 2021

Teck Resources – large area of new applications covering undercover South Nicholson/Lawn Hill basins



Todd River Resources – *Mount Hardy*

Emerging camp of massive sulphide breccia deposits

Hendrix: July 2019 Maiden Resource

2.6 Mt @ 6.7% Zn, 0.9% Cu, 1.5% Pb, 35 g/t Ag

IGO/Prodigy Gold – *Lake Mackay*

2019: 73 holes for 15,528m in 2019, at 63 targets

Phreaker : 11m @ 1.15% Cu

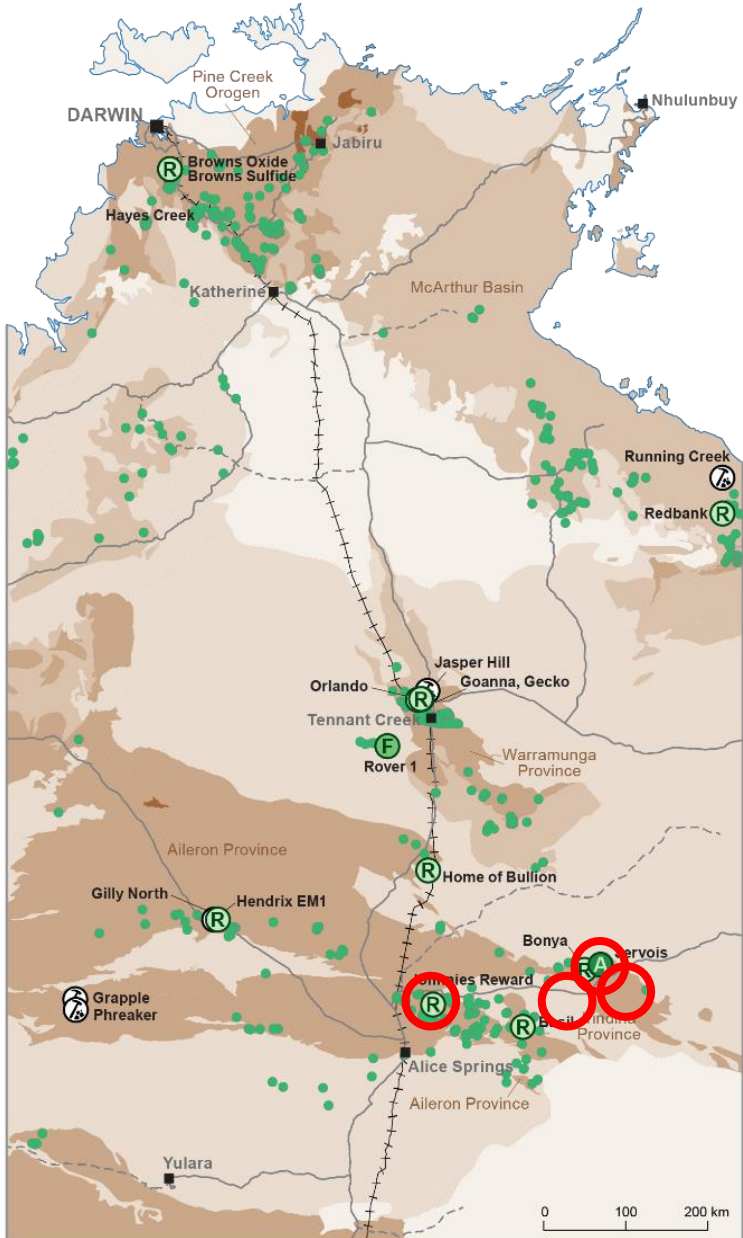
Grimlock: 4m @ 0.6% Co, 0.49% Ni

Arcee: New gold discovery on NT-WA border
12m @ 3.5 g/t Au

2020: 65 holes for 1,944m across 6 targets -

Grimlock and Swoop (Ni-Co), Goldbug (Au) and Grapple, Cluster and Raw (Cu-Au)





KGL Resources – Jervois Cu-Ag-Au

21.0 Mt @ 2.03% Cu, 31.9 g/t Ag

- Higher-grade resource through improved geological model
- Environmental approvals in place, mining approvals in latter stages
- > 12 year mine life with scope to substantially grow resources
- Final investment decision planned for H1 2021

New explorers in eastern Aileron and Irindina Provinces

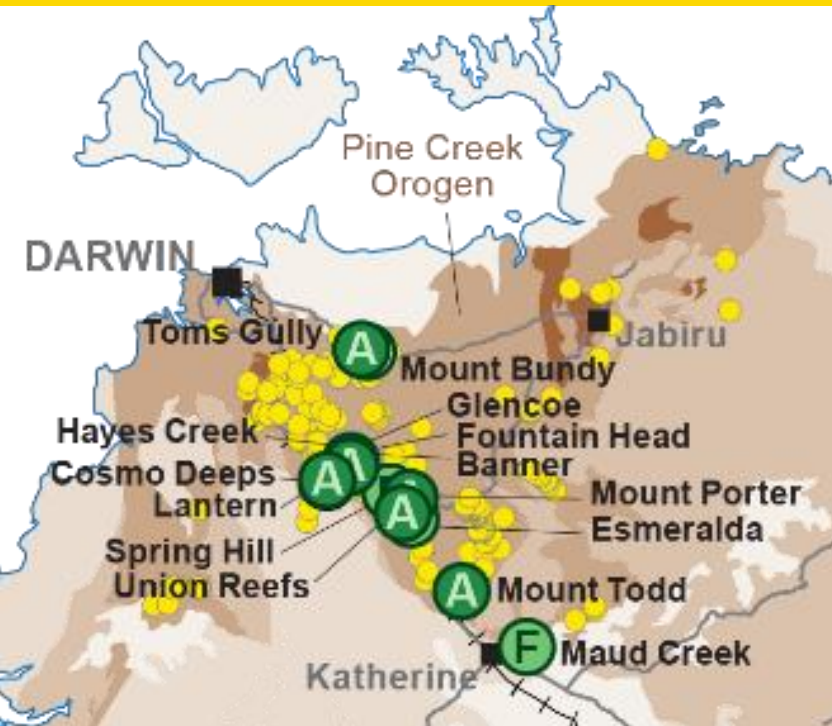
Inca Minerals – *Lorna May and Jean Elson Cu-Au projects*

- Multiple greenfields Cu-Au targets

Shree Minerals – *Bruce's Au-Cu*

- Following up 53 g/t Au rockchip from NTGS; new Cu and Au bearing veins identified

Aureus Resources – *Johnnies Reward Au-Cu*



Kirkland Lake Gold - *Cosmo Deeps/Lantern*

Development operations at Cosmo Deeps suspended in March

Union Reefs U/G: NT EPA Assessment Report completed June 2020

PNX Metals - *Fountain Head*

2.58Mt @ 1.7 g/t Au

- EIS in preparation; submission due Q2 2021
- Proposed investment of \$40 million by Halifax Capital to fund a new Carbon-in-Leach gold plant at Fountain Head

Bacchus Resources - *Woolwonga*

52m @ 3.0 g/t Au incl. 7m @ 15.6 g/t Au

China Hanking Pty Ltd - *Toms Gully*

NT EPA Assessment Report completed in Feb 2020



Core Lithium – *Finniss Li*

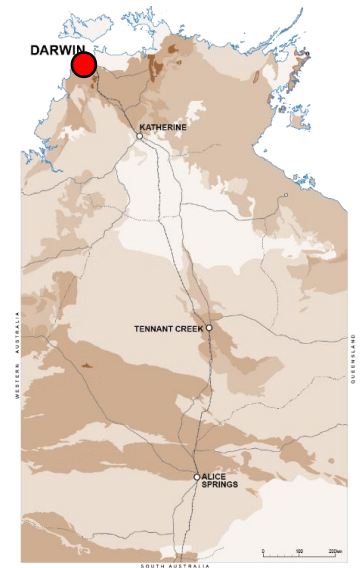
Multiple pegmatite-hosted spodumene resources

Upgraded total resource: **14.7 Mt @ 1.3% Li_2O_3**

4000-5000m resource expansion drilling underway

Grants: All approvals in place

BP33: Supplementary Environmental Report in prep;
107m @ 1.70% Li_2O_3



Core Lithium – *Bynoe Au*

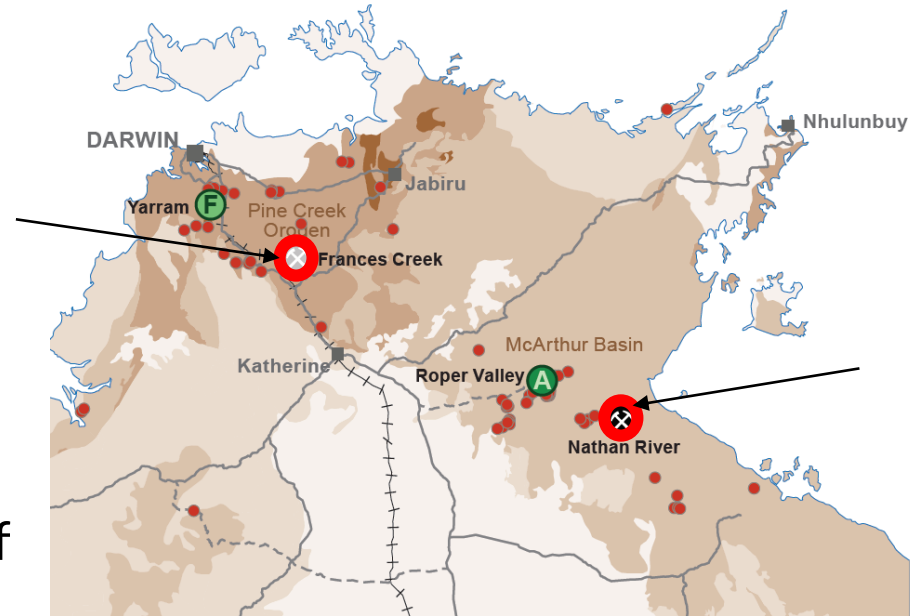
Rock chips up to 106 g/t Au

Significant gold-in-soil anomalies

Recommencement of iron ore mining in the NT

Linecrest Pty Ltd (NT Bullion) – Frances Creek

- Marketing agreement signed with Anglo American
- 300,000t of stockpiled ore, beneficiated through ore-sorting
- First export planned by end of 2020, through Darwin Port

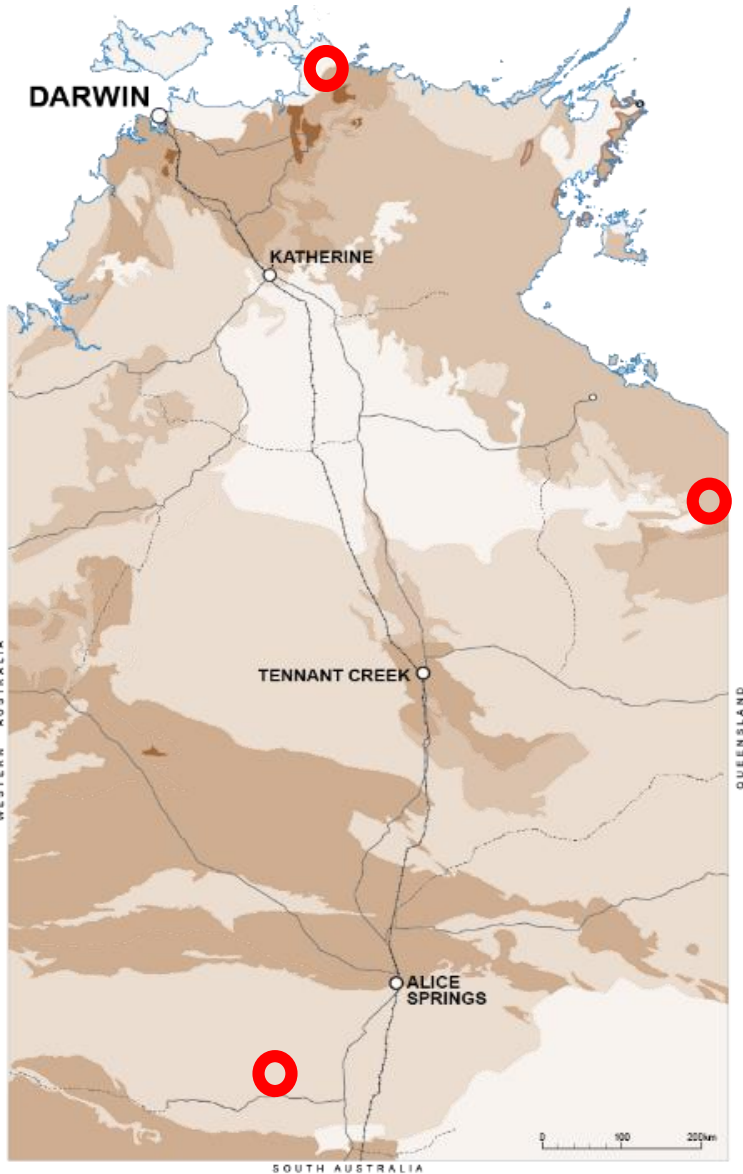


Nathan River Resources – Nathan River (Roper Bar)

Reserve – 5.6 Mt at 60% Fe
Resource – 446 Mt at 40% Fe

- Commenced loading first shipment of stockpiles (56,000t) in late October
- Offtake through Glencore
- Equity from Amur Minerals





Vimy Resources – *West Arnhem Land U*

- On ground exploration in August; planned drilling delayed due to Covid-19 issues

Redbank Copper – *southern McArthur Basin*

- 302 hole drill program in Sandy Flat tailings; regional soil sampling and mapping
- Large area of new exploration titles extending to McArthur River

Parkway Minerals/Verdant Resources – *Karinga Lakes potash*

- PFS released last week, based on potash resources in brine solutions within eight lakes
- 20 year initial mine life with annual production of 40,000 tonnes per annum SOP (sulfate of potash)

4 year (2018-2022), \$26 million NT Government initiative to grow the exploration sector

Tanami airborne survey: Photo courtesy of Prodigy Gold

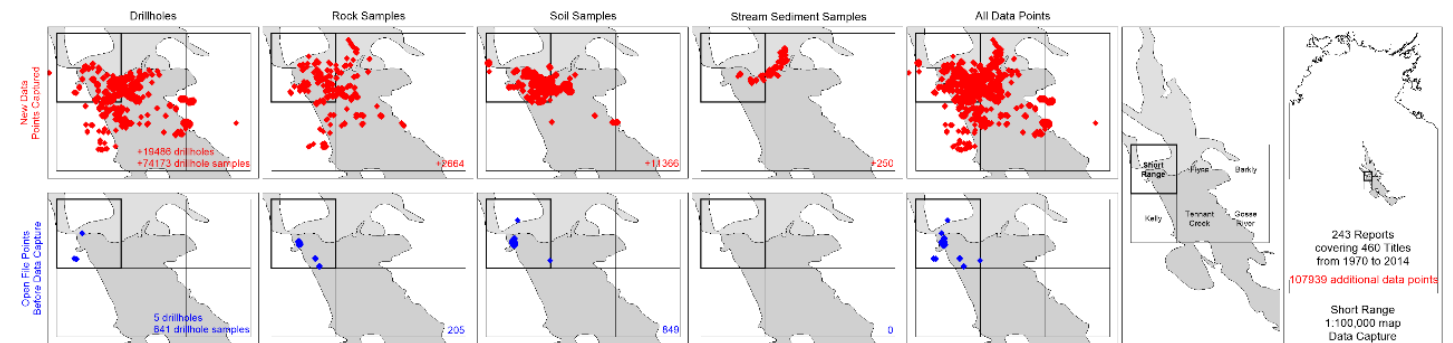
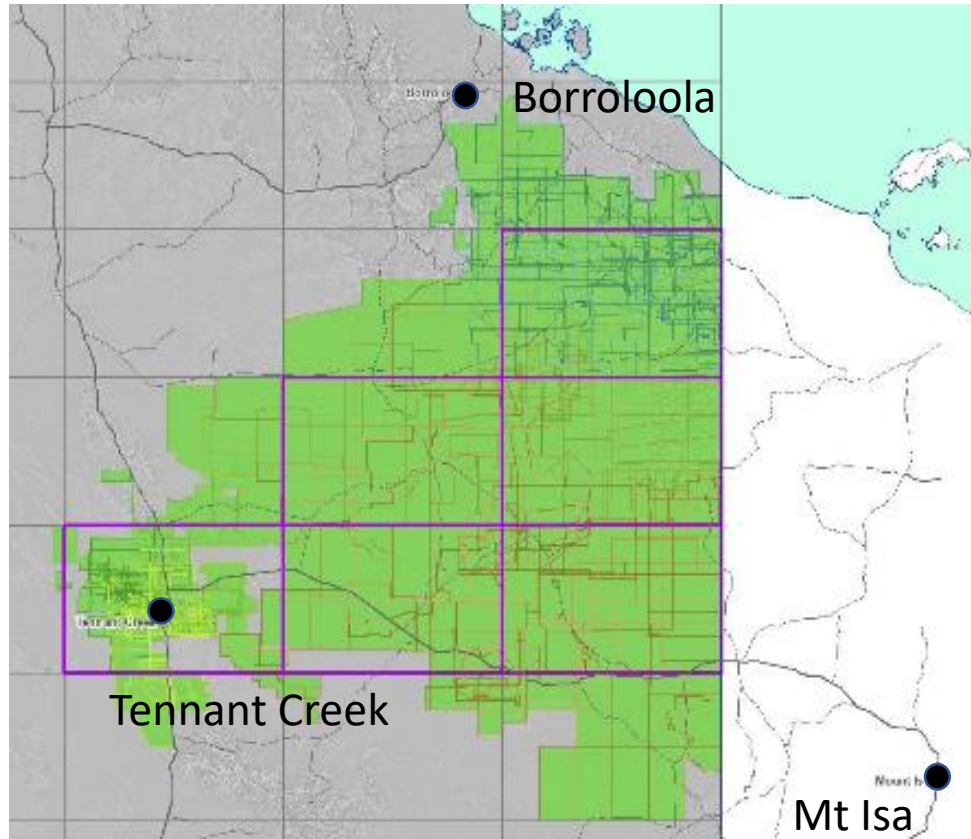


- Supporting industry innovation through grants for greenfields exploration
- Upgrading the Territory's coverage of geophysical data
- Unlocking the resource potential of the Barkly and Gulf regions
- Stimulating greenfields exploration in central Australia
- Promoting the Territory's resource potential and investment opportunities; and
- Making exploration and geoscience data more accessible

Legacy exploration data capture

Major campaign underway to complete capture all historic exploration drilling and geochemistry in Tennant Creek region, Barkly Tableland and southern McArthur Basin

42,000 drillholes and 3 million geochemistry datapoints captured in past year



- The Territory's exploration sector has experienced significant challenges in 2020
- Copper and gold have been the standout commodities
- Numerous projects progressing towards development
- Exploration interest in the Barkly is booming, especially in undercover areas
- More information will be flowing over the coming months on exploration potential in the Barkly and elsewhere
- Final session tomorrow: **OPENING UP NEW CONCEPTS AND AREAS FOR EXPLORATION IN THE NORTHERN TERRITORY**



AGES 2021 – April 20-21, 2021 *Note changed date*

Alice Springs Convention Centre



For more information:

RESOURCING THE TERRITORY

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TOOLBOX

CONTACTS



NTGS About RTT ▾ Minerals ▾ Oil and Gas ▾ Data and Publications ▾ News and Events ▾

Supporting resource exploration in the Northern Territory

The \$26 million Resourcing the Territory initiative includes a range of geoscience and exploration stimulus programs designed to support mineral and petroleum exploration and development in the Territory.

Find out more



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Resourcing the Territory website

www.resourcingtheterritory.nt.gov.au

Geoscience data and products

gemis.nt.gov.au

or email: geoscience.info@nt.gov.au

Geoscience and titles web mapping

strike.nt.gov.au

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