

# Potential Mining Developments in the Northern Territory

March 2020

**Cautionary Notice - Due to the impact of the coronavirus COVID-19 on market demand, commodity prices, supply chains, stock markets and financial markets, the majority of resource companies are advising investors to remain cautious on relying on any previous or recent guidance in relation to project performance and project development. The majority of companies developing mining projects in the Northern Territory are junior companies and will be impacted by financial market restrictions. National, State and Territory border closures combined with internal access restrictions to regional and remote areas will also contribute to delays in proposed development schedules.**

This document contains a summary of potential new mining developments in the Northern Territory over the next 1-5 years. It is not intended to be comprehensive and does not contain a number of projects that are at various stages of feasibility study.

Information presented in this report is supplied by the proponent company or from ASX and other public documents. All information should be confirmed with the proponent Company. For further information on mining developments, contact the Director Project Facilitation & Development of the Northern Territory Department of Primary Industry and Resources or visit the website at [www.minerals.nt.gov.au](http://www.minerals.nt.gov.au) or <https://resourcingtheterritory.nt.gov.au>.

## 1. Recent (Past 24 months)

Company	Project	Location	Product	Development
Newmont Mining	Tanami Ops	Tanami	Gold	Gas Pipeline & Power Stations

## 2. Pending (Next 12 months)

Company	Project	Location	Product	Development
Arafura Resources	Nolans	Alice Springs	Rare Earths	New mine
Core Lithium	Grants	Darwin	Lithium	New mine
KGL Resources	Jervois	Alice Springs	Base metals	Reopen mine
NRR Mining	Nathan River	Gulf	Iron Ore	Reopen mine
Primary Gold	Toms Gully	Darwin	Gold	Reopen mine
TNG	Mt Peake	Alice Springs	V, Ti, Fe	New mine

## 3. Potential (Next 12-60 months)

Company	Project	Location	Product	Development
Avenira	Wonarah	Tennant	Phosphate	New mine
Crossland	Charlie Creek	Alice Springs	Rare Earths	New mine
Kirkland Lake	Union Reefs UG	Pine Creek	Gold	Mine Expansion
Korab Resources	Winchester	Batchelor	Magnesite	New mine
NTIO	Roper Valley	Roper River	Iron Ore	Reopen mine
PNX Metals	Hayes Creek	Pine Creek	Base metals	Reopen mines
South 32 (Gemco)	Eastern Leases	Groote Eylandt	Manganese	Mine Expansion
Tellus Holdings	Chandler	Alice Springs	Salt products	New mine
Thor Mining	Molyhil	Alice Springs	Mo, W	Reopen mine
Verdant Minerals	Ammaroo	Tennant	Phosphate	New mine
Vista Gold	Mt Todd	Katherine	Gold	Reopen mine
Yarram Iron	Yarram	Batchelor	Iron Ore	New mine

## Pending Mine Developments - Next 12 months

Mine Name	NOLANS
Company	Arafura Resources Limited
Contact	Brian Fowler – General Manager Northern Territory & Sustainability Phone: (08) 8947 5588 Email: <a href="mailto:arafura@arultd.com">arafura@arultd.com</a>
Location	135 km northwest of Alice Springs
Description	New mine. Open cut mining, beneficiation to a mineral concentrate and subsequent chemical processing to rare earth products for export. Additionally a merchant grade phosphoric acid product will be exported.
Product	Rare earths & Phosphoric acid.
Resource	56 Mt containing 2.6% REO, 12% P <sub>2</sub> O <sub>5</sub>
Reserve	29.5 Mt containing 2.9% REO, 13% P <sub>2</sub> O <sub>5</sub>
Mine Life	33 years based on ore reserve.
Approvals	Environmental – NT EIS assessment completed with NT EPA Assessment Report & Recommendations issued Dec 2017. Assessment completed by DoEE Canberra with approval issued in May 2018 (consistent with NT EPA recommendations). Section 14A variation (under the Environmental Assessment Act) assessment completed with NT EPA Statement of Reasons issued September 2019. In principle ILUA reached with Native Title Holders awaiting CLC full council endorsement.
Proposed Schedule	Mining – subject to Mining Management Plan approvals. DFS completed in Feb 2019. Investment decision in 2020. Construction – Q4 2020, subject to approvals and finance Production – Q4 2022
Jobs	Construction – 650 Production – 280 (full time)
Capex	A\$1,006 Million (US\$726 Million)

Mine Name	GRANTS LITHIUM PROJECT
Company	Core Lithium Limited
Contact	Blair Duncan – Chief Operations Officer Phone: 0448 883 204 Email: <a href="mailto:bduncan@corelithium.com.au">bduncan@corelithium.com.au</a>
Location	32 kms SSW of Darwin and 36 kms WNW of Berry Springs
Description	Proposed open cut mining operation using conventional mining techniques. The ore is an inert pegmatite which will be processed by crushing, screening and dense media separation to produce a pegmatite concentrate. No chemical processing is required. Product will be transported 88 kms by road to Darwin Port for export. Definitive Feasibility Study completed in April 2019. Feasibility update in Q2 2020.
Product	Pegmatite concentrate (5.5% Li <sub>2</sub> O).
Resource	2.89 million tonnes @ 1.48% Li <sub>2</sub> O at Grants deposit. Global Resource of 9.63 million tonnes @ 1.3%Li <sub>2</sub> O for Finniss Project.
Mine Life	Initial 3.5 years (from DFS)
Approvals	Environmental – In Progress – The Draft EIS submitted in November 2018 and Supplement to EIS submitted in March 2019. Environmental approvals June 2019. Mining – MMP approvals expected March/April 2020.
Proposed Schedule	Construction – H2 2020, subject to finance Production – 2021
Jobs	Construction – 169 Production – 132
Capex	\$73M (from DFS April 2019)

Mine Name	JERVOIS
Company	KGL Resources Limited
Contact	Paul Richardson – Project Director Phone: (07) 3071 9003 Email: <a href="mailto:prichardson@kgresources.com.au">prichardson@kgresources.com.au</a>
Location	Approx 380 kms by road north-east of Alice Springs
Description	Reopen old mine based on open cut and underground operation. Ore will be processed via conventional flotation processing facility to produce a copper concentrate. A second product of lead zinc concentrate will also be produced in certain ore zones. Project undergoing further optimisation studies.
Product	Copper concentrate with silver and gold credits plus a separate lead and zinc concentrate with silver and gold credits.
Resource	26.6 Mt @ 1.47% Cu & 24.7 g/t Ag (containing 390,600 tonnes Cu & 21.1 Moz Ag)
Mine Life	12 years plus (optimisation studies are continuing)
Approvals	Environmental - EIS submitted in Oct 2018. Supplement to EIS submitted July 2019. NT EPA recommendations for Project to proceed received 30 September 2019. Mining – Mining Management Plan currently being finalised for approval in Q2 2020.
Proposed Schedule	Construction – H2 2020 Production – H2 2021
Jobs	Construction – Peaking at about 360 Production – Peaking at about 300
Capex	Initial Capex of \$189.5M

Mine Name	NATHAN RIVER MINE
Company	NRR Mining Pty Ltd
Contact	Stefan Murphy – CEO NRR Mining Pty Ltd Email: <a href="mailto:stefan.murphy@nathan-river.com">stefan.murphy@nathan-river.com</a>
Location	Approx 530 kms southeast of Darwin.
Description	Reopen the Roper Bar mine. Open pit mining operations with onsite crushing and screening of DSO and DSM material. No chemical processing or treatment will occur. Ore will be trucked via purpose built private haul road to Bing Bong Port and barged to freighters for export overseas. Stage 1 reserve case production at 1.5-1.8 Mtpa over 3 years and Stage 1 expansion case of 1.8-2.0 Mtpa over 5 years. Stage 2 includes installation of beneficiation capacity to produce 4-5Mtpa over an initial 10 year mine life.
Product	Iron ore lump and fines product @ 60% Fe.
Resource	466 Mt @ 40.0% Fe
Reserves	5 Mt @ 60% Fe.
Mine Life	Initial mine life of 13-15 yrs. Resources underpin longer term mine life.
Approvals	Environmental – 2012 Mining – MMP approval expected Q1 2020
Proposed Schedule	Recommission – Q2 2020 Production – Q3 2020
Jobs	Recommission – 50 Production – 250
Capex	\$25M (Stage 1)

Potential Mining Developments in the Northern Territory

Mine Name	TOMS GULLY	
Company	Primary Gold Pty Ltd, a wholly owned subsidiary of Hanking Australia Investment Pty Ltd	
Contact	Dr Mark Qiu – Managing Director & CEO Phone: 0424288016 Email: <a href="mailto:giuym@hanking.com.au">giuym@hanking.com.au</a>	
Location	Approx 90 kms east of Darwin	
Description	The company recently received the final assessment report of its EIS on the Tom's Gully Gold Project. The company is currently focused on the Mine Management Plan (MMP) for re-start of the Tom's Gully Underground Mine. Construction is scheduled to start in the second half of 2020. The company continues doing regional exploration programs and is reviewing all past studies to update to today's economics and gold price. Subject to MMP approval, the company plans to commence underground development and refurbishment operations in H2 2020 and production in 2021.	
Product	Gold	
Resource	Global Resource 54 Mt @ 1.03g/t Au (1.8Moz gold) Ore Reserve 775,000 tonnes at 6.9g/t Au (175koz gold)	
Mine Life	4 years	
Approvals	Final Assessment and recommendations received from NT EPA in March 2020. Mining approvals expected in H2 2020.	
Proposed Schedule	Construction – H2 2020	Production – H2 2021
Jobs	Construction – 150	Production – 120
Capex	\$45M	

Mine Name	MOUNT PEAKE	
Company	TNG Limited	
Contact	Paul Burton – Managing Director Phone: (08) 9327 0900 Email: <a href="mailto:peb@tngltd.com.au">peb@tngltd.com.au</a>	
Location	235 kms north of Alice Springs	
Description	Open pit mining & onsite processing to produce a magnetite concentrate. Concentrate railed to processing site near Darwin to produce high purity iron, vanadium and titanium products. New processing technology developed. Definitive Feasibility Study completed July 2015 and updated in November 2017. Optimised delivery strategy released September 2019.	
Product	High purity Vanadium (99% V2O5), Titanium Pigment & Iron oxide product.	
Resource	160Mt @ 0.3% V2O5, 5% TiO2, 23% Fe (120Mt Measured JORC)	
Mine Life	Approx 37 years	
Approvals	Environmental Assessment Report and Recommendations issued by NT EPA in January 2018. Federal EPBC environmental approval issued by DoEE in May 2018. All Mineral Leases and Access Authorities for the Mt Peake Mine and infrastructure were granted in November 2018. Mining Management Plan submitted Oct 2019. EIS submitted for Darwin processing Facility in October 2019.	
Proposed Schedule	Construction (Mine) – H2 2020	Production (Mine) – H2 2022
Jobs	Construction (Mine) – up to 350	Production (Mine) – 175 to 250
Capex	\$824M for mine and refinery (from Optimisation Strategy Sept 2019)	

## Potential Mine Developments – Next 13-60 months

Mine Name	WONARAH/ARRUWURRA (STAGE 1)
Company	Avenira Limited (Minemakers Australia Pty Ltd)
Contact	Brett Clark – Chairman Phone: (08) 9264 7000 Email: <a href="mailto:bclark@avenira.com">bclark@avenira.com</a>
Location	250 kms east of Tennant Creek
Description	Proposed open cut mine with processing on-site using improved hard process (IHP) to produce super phosphoric acid (SPA) @ 70% P <sub>2</sub> O <sub>5</sub> . Phased development with the first production train producing 181,000 t P <sub>2</sub> O <sub>5</sub> per annum, progressively increasing to 0.9 Mt per annum over six year period.
Product	Super phosphoric acid (SPA)
Resource	842 Mt @ 18.1% P <sub>2</sub> O <sub>5</sub> (10% cut-off ); 1,406 Mt @ 13.5% P <sub>2</sub> O <sub>5</sub> (5% cut-off )
Mine Life	>30 years
Approvals	Environmental: June 2013 Mining – pending validation of IHP technology
Proposed Schedule	Development schedule dependent on successful validation of IHP technology. March 2018 new demonstration plant completed. August 2018, successful production of super-phosphoric acid from low quality rock phosphate. Further upgrade the commercial demonstration plant for on-demand sustained operations. During 2019, Novaphos (formerly JDC) made additional improvements to its technology, further enhancing the efficiency and reliability and has initiated a process of engagement with major phosphate producers and engineering companies to fully commercialise the Novaphos (IHP) technology.
Jobs	Construction – 50 to 200 Production – 110 rising to 350 at full production
Capex	Estimated initial capital \$350M (stage 1) increasing to \$1.2B over 6 years.

Mine Name	CHARLEY CREEK
Company	Crossland Strategic Metals Limited
Contact	Eric Vesel – CEO/Executive Director Phone: +60199887931 (KL) Email: <a href="mailto:contact@crosslandstrategic.com">contact@crosslandstrategic.com</a> +61419802839 (Aust)
Location	Approx. 95 km WNW of Alice Springs
Description	Potential new mine. Open cut mining & processing through a wet and dry mineral concentrator to produce a high grade (40%+) TREO concentrate with further plans to refine to produce rare-earth group products.
Product	Rare earths carbonate, zircon and possibly other heavy mineral by-products.
Resource	2004 JORC compliant resource study released in 2013. Indicated 387Mt containing 114,050 tonnes TREO & 195,000 tonnes zircon. Inferred 418Mt containing 121,100 tonnes TREO & 220,000 tonnes zircon.
Mine Life	Scoping Study released in 2013 based on 20 years + (additional potential)
Approvals	Development proposals yet to be submitted.
Proposed Schedule	Drilling program completed in March 2019. Resource estimate expected to be complete in H1 2020. Further process plant recovery test work using drill samples commenced Nov 2019. Scoping Study and economic appraisal update in H2 2020. Pre-Feasibility Study due to start in 2020 (subject to finance).
Jobs	150
Capex	\$250M

Mine Name	UNION REEFS UNDERGROUND	
Company	Kirkland Lake Gold – NT Mining Operations Pty Ltd	
Contact	Mark Edwards – Project Director, NT Operations Phone: (08) 8982 4444 Email: <a href="mailto:MEdwards@klgold.com.au">MEdwards@klgold.com.au</a>	
Location	Approx 175 kms south-east of Darwin and 20 kms north of Pine Creek.	
Description	Proposed underground mining operation with onsite processing at existing Union Reefs processing plant. Mining of mineralised trends below the previously mined Union North, Prospect, Lady Alice and Crosscourse Pits. Underground operations will be accessed via a portal and decline from within the existing Prospect Pit. Ore will be processed at existing Union Reefs processing plant.	
Product	Gold dore.	
Ore Reserve	Initially 276,089 tonnes containing 39,232 ozs gold.	
Mine Life	Initially 2 years	
Approvals	Environmental – Notice of Intent submitted to EPA in April 2019. EPA determined an EIS was required on 7 August 2019. The referral to Federal DoEE determined the proposal to be a “Controlled Action” on 20 August 2019. The EIS was submitted on 25 November 2019 and advertised for public review from 30 November 2019 until 17 January 2020. Supplement to EIS expected by mid 2020.  Mining – subject to environmental and mining approvals.	
Proposed Schedule	Construction – 2021	Production – 2021
Jobs	Construction – TBA	Production – TBA
Capex	TBA	

Mine Name	WINCHESTER	
Company	Korab Resources Limited	
Contact	Andrej Karpinski – Executive Chairman Phone: (08) 9474 6166 Email: <a href="mailto:akk@korab.com.au">akk@korab.com.au</a>	
Location	Approx 70 kms south of Darwin and 2 kms east of Batchelor.	
Description	Potential shallow open pit mining operation with on-site processing through simple crushing, screening and sorting. Ore will be trucked to Darwin port for export. Results of the Feasibility Study released in January 2015 and updated in March 2018, September 2018 and April 2019.	
Product	Magnesite (Magnesium Carbonate) DSO rock	
Resource	16.6 Mt @ 43.2% MgO	
Mine Life	Pre-Feasibility Study (PFS) based on up to 12 years at variable mining rates.  Current Mine Plan based on 300,000tpa for 10 yrs or 600,000 tpa for 5 yrs.	
Approvals	Development proposals to be submitted in early 2020.	
Proposed Schedule	Construction – 2020/21	Production – 2020/21
Jobs	Construction – TBA	Production – Up to 36
Capex	\$2.5M (from Pre-Feasibility Study).	

Mine Name		ROPER VALLEY IRON ORE
Company	Northern Territory Iron Ore Pty Ltd	
Contact	Bill Mackenzie – Managing Director Email: <a href="mailto:bill.mackenzie@ntio.com.au">bill.mackenzie@ntio.com.au</a>	
Location	420 kms south-east of Darwin and 150 kms east of Mataranka.	
Description	Conventional open pit mining from Deposits C, W and X. On-site processing will involve conventional crushing and screening, to produce 2-6 Mtpa of saleable iron ore. Ore will be transported by public roads to a purpose built Barge Loading Facility located near the mouth of the Roper River, from where it will be transhipped by barges to Ocean Going Vessels moored offshore in the Gulf of Carpentaria.	
Product	Iron Ore (2-6 Mtpa)	
Resource	>490 Mt @ 42% Fe, including >40 Mt @ 58% Fe.	
Mine Life	>20 years	
Approvals	Environmental – Notice of Intent submitted to NTEPA in March 2017. In July 2017 the EPA required an EIS and issued Terms of Reference in Nov 2017. EPBC Act referral – determined the project a “controlled action” on 29 June 2017. EIS now expected in 2020.  Mining – pending NT EPA assessment and EPBC approvals.	
Proposed Schedule	Construction – Pending approvals	Production – Pending approvals
Jobs	Construction – 200-400	Production – 150-300
Capex	To Be Advised	

Mine Name		HAYES CREEK PROJECT (IRON BLOW & MT BONNIE)
Company	PNX Metals Limited	
Contact	James Fox – Managing Director & CEO Phone: (08) 8364 3188 Email: <a href="mailto:james.fox@pnxmetals.com.au">james.fox@pnxmetals.com.au</a>	
Location	Approx 170 kms SSE of Darwin	
Description	Re-open the historic Iron Blow and Mt Bonnie mines to establish open cut and underground mining operations and a regional 450,000 tpa processing plant at Fountain Head mine site. Scoping Study completed Mar 2016 & Preliminary Feasibility Study completed in July 2017. Definitive Feasibility Study commenced and due in 2020.	
Product	Zinc in concentrate, Precious Metals in concentrate	
Resource	4.15Mt @ 4.4% zinc, 2.03 g/t gold, 128 g/t silver, 1% lead and 0.3% copper for contained metals of 182Kt zinc, 271Koz gold, 17.1Moz silver, 41Kt lead & 12Kt copper.	
Mine Life	8 years	
Approvals	Development proposals (NOI) submitted to NT EPA in August 2018. In Dec 2018, NT EPA determine EIS required. Terms of Reference for EIS issued by EPA on 2 August 2019 and Draft EIS scheduled for submission in Q2 2020. EPBC referral submitted in Feb 2019 and determined as “Not a Controlled Action”. NOI submitted to NT EPA in Dec 2019 for priority development of open pit mining and gold processing at Fountain Head.  Mining approvals dependent on environmental approvals.	
Proposed Schedule	Construction – 2021	Production – 2022
Jobs	Construction – 150	Production - 130
Capex	Approximately \$58M (from PFS)	



Mine Name	GEMCO – EASTERN LEASES	
Company	South 32 Pty Ltd (GEMCO)	
Contact	Danny de Vries – Study Manager Email: <a href="mailto:danny.deVries@south32.net">danny.deVries@south32.net</a>	
Location	Approx 650 kms SE of Darwin	
Description	Develop a number of additional quarries on the Eastern Leases, approx. 2 kms east of the existing mine. Ore will be trucked to the existing GEMCO mine facilities for processing and exported from the existing Milner Bay port.	
Product	Manganese (Grade ~43% Mn)	
Resource	23.5 Mt of manganese ore (dry tonnes)	
Mine Life	Eastern Leases will extend the current operational mine life to FY31.	
Approvals	NT Environmental Assessment completed in March 2016. Commonwealth EPBC approvals obtained in June 2016. ALRA Mining Agreement obtained in May 2016. Mineral Leases granted in August 2016. NT Aboriginal Sacred Sites Act Authority Certificate obtained in November 2016. Pre-Feasibility Study is currently being undertaken. Feasibility planned in 2020. Mining approvals in 2021.	
Proposed Schedule	Construction – 2023	Production – 2024
Jobs	Construction – 90	Production – Existing Workforce
Capex	\$160M (Pre-Feasibility Study)	

Mine Name	THE CHANDLER FACILITY	
Company	Tellus Holdings Ltd	<a href="http://www.tellusholdings.com.au">www.tellusholdings.com.au</a>
Contact	Duncan van der Merwe – Group Managing Director Phone: (02) 8257 3395 Email: <a href="mailto:info@tellusholdings.com.au">info@tellusholdings.com.au</a>	
Location	Approx 120 kms south of Alice Springs	
Description	New mine. Development of an underground rock salt mine for industrial and edible salt and using the voids resulting from mining for secure storage of equipment and archives recovery of valuable materials and permanent isolation of difficult to manage wastes including hazardous chemical wastes as listed under the NT Schedule 2 of the Waste Management Pollution Control Regulations. A surface storage and transfer facility will support operations at the Chandler Facility. Surface facilities include dry salt processing plant, offices, workshops, utilities services and an onsite accommodation. PFS (FEL2) completed in Q3 CY2016. Subject to Board approval in Dec 2019, the BFS (FEL3) planning, field work (to address requirements in the NT EPA Assessment Report) and final engineering to commence in Q3 CY2020.	
Product	Industrial and edible salts; Storage of equipment and archives; and Long term storage, recovery and permanent isolation of difficult to manage chemical wastes.	
Resource	309 Mt Halite (NaCl) JORC Measured Resource = 525 year mine life at an average of 500,000 tonnes per annum.	
Mine Life	Minimum 25 years with potential to exceed 100 years	
Approvals	Environmental – NT environmental assessment process completed on 30 November 2017. Federal EPBC Act approvals issued 11 September 2018. Mining – Pending all environmental approvals, FEL 3 & Mining Management Plan.	
Proposed Schedule	Construction (Chandler Mine) – H2 CY2022; Temporary storage at Chandler mine site – H2 CY2022 (subject to approval);	Production – H1 CY2026 (as above)
Jobs	Construction – 270 to 540	Production – 150 to 180
Capex	\$676M (including financing costs)	

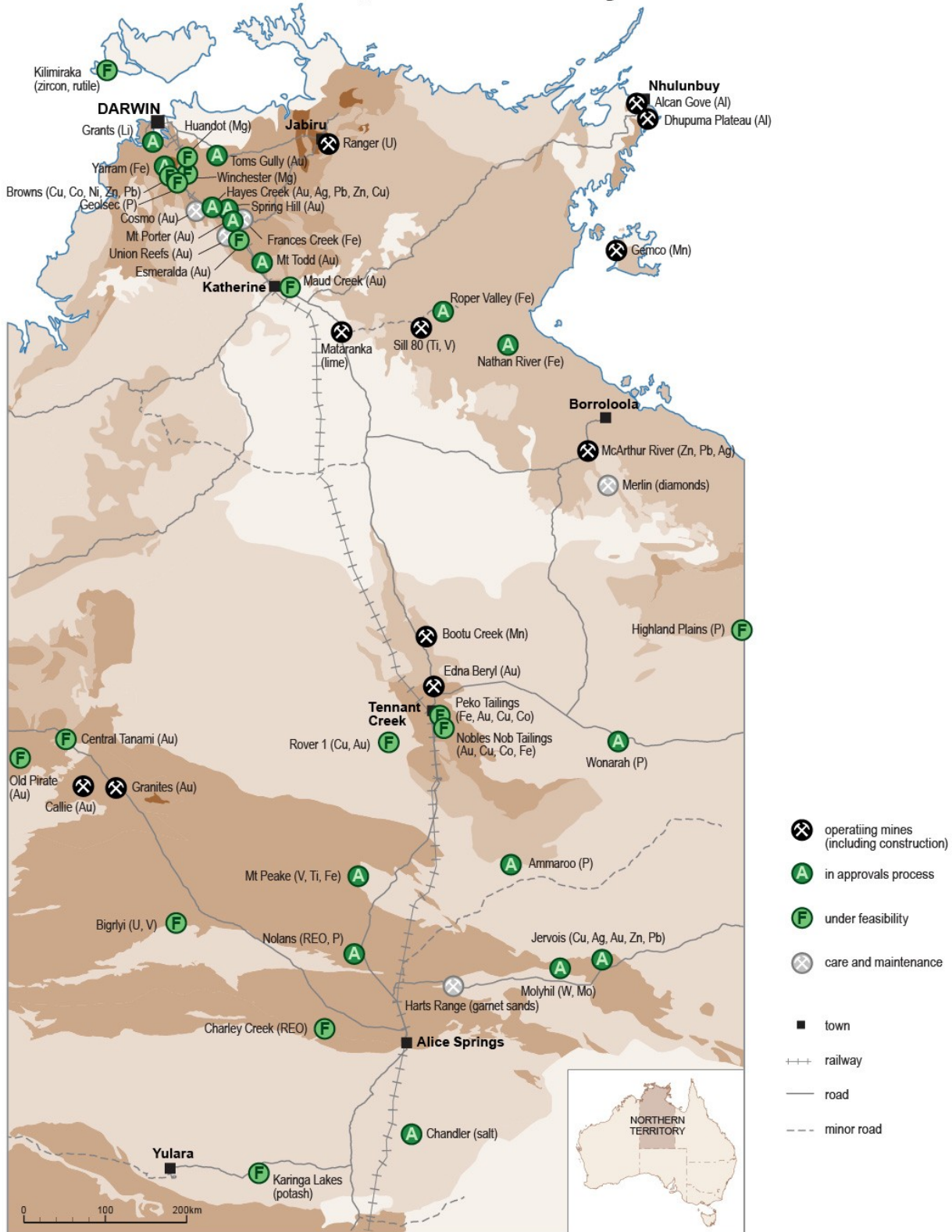
Mine Name		MOLYHIL
Company	Thor Mining PLC	
Contact	Mick Billing – Chairman Phone: (08) 7324 1935    Email: <a href="mailto:corporate@thormining.com">corporate@thormining.com</a>	
Location	240 kms northeast of Alice Springs	
Description	Proposed open pit mining operation with on-site processing by flotation to produce W and Mo concentrate. Definitive Feasibility Study upgrade completed in August 2018. Letter of Intent signed for tungsten offtake. Development subject to finance. Additional drilling being undertaken to increase resource and mine life.	
Product	Tungsten (scheelite) and Molybdenum concentrates.	
Resource	4.7Mt at 0.28% WO <sub>3</sub> and 0.13% Mo (indicated and inferred) Plus Bonya Tungsten deposits (740,000T @ 0.21% WO <sub>3</sub> and 0.09% Cu) Bonya Copper deposit (230,000t @ 2%Cu – Inferred) (40% Thor)	
Reserve	Open cut Ore Reserve of 3.5 Mt at 0.29% WO <sub>3</sub> and 0.12% Mo (probable)	
Mine Life	Initially 7 year as open pit, with substantial upside potential from subsequent underground potential and from nearby outcropping Bonya tungsten resources, and copper resource at Bonya).	
Approvals	Environmental – Nov 2011 Mining – pending approval of MMP	
Proposed Schedule	Development subject to obtaining project finance and securing the balance of concentrate off-take agreements.	
	Construction – 2021/22	Production – Early 2023
Jobs	Construction – 60	Production – 70
Capex	\$69M	

Mine Name		AMMAROO
Company	Verdant Minerals Ltd	
Contact	Chris Tziolis – Managing Director Phone: (08) 8942 0385    Email: <a href="mailto:ctziolis@verdantminerals.com.au">ctziolis@verdantminerals.com.au</a>	
Location	220 kms SE of Tennant Creek	
Description	New mine – open cut strip mining operations with crushing and screening to produce Phosphate Rock Concentrate for export or conversion to phosphoric acid for export or further conversion to ammonium phosphate fertilizers. Bankable Feasibility Study was completed in May 2018. Takeover by CD Capital in June 2019 & company privatised – currently assessing phosphoric acid production.	
Product	Rock phosphate concentrate.	
Resource	Global Resource of 1.145 billion tonnes @ 14% P <sub>2</sub> O <sub>5</sub> (10% cut-off) or 338 Mt @ 18% P <sub>2</sub> O <sub>5</sub> (15% cut-off) Measured Resource of 138 Mt @ 15.7% P <sub>2</sub> O <sub>5</sub> (10% cut-off)	
Mine Life	25 years plus (Potentially as much as 100 years)	
Approvals	Environmental – Oct 2018 (NT) & June 2018 (Federal). Mining – pending grant of Mineral Leases & approval of Mining Management Plan.	
Proposed Schedule	Construction – 2021/22	Production – 2023
Jobs	Construction – Up to 350	Production – Up to 165
Capex	Estimates for initial capex \$368M for 1Mtpa (DSO Stage 1) then \$200M for Stage 2 (an additional 1Mtpa) – (From BFS).	

Mine Name		MT TODD
Company	Vista Gold Australia Pty Ltd	
Contact	Brent Murdoch – Director & General Manager Australia Phone: (08) 8941 9105 Email: <a href="mailto:bmurdoch@mttodd.com.au">bmurdoch@mttodd.com.au</a>	
Location	250 kms south of Darwin and 55 kms north of Katherine	
Description	Reopen the Mt Todd Gold Mine. Conventional open pit mining extracting up to 17.8 million tonnes per annum of ore for onsite processing through newly constructed CIL Plant. Prefeasibility Study and NT Environmental Impact Statement completed. Federal approval under the EPBC Act was granted in Jan 2018. An update of the Prefeasibility Study was completed in Jan 2018. The Mt Todd Agreement between the NT Government and Vista Gold has been extended until 2023. A further update of the Pre-Feasibility Study released in Sept 2019.	
Product	Gold dore (370,000 ozs pa)	
Resource	7.4 million ozs of measured and indicated and 1.7 million ozs of inferred	
Mine Life	19 years (including 2 years construction plus 5 years closure/reclamation)	
Approvals	Environmental – June 2014 (NT), Federal EPBC approvals issued Jan 2018. Mining – Draft MMP submitted for review. Mining approvals & finance in 2020.	
Proposed Schedule	Construction – 2021	Production – 2023
Jobs	Construction – 400-450	Production – 350-400
Capex	\$1.19B (US\$839)	

Mine Name		YARRAM IRON ORE PROJECT
Company	Yarram Iron Ore Pty Ltd	
Contact	Yuzheng Xie – CEO Yarram Iron Ore Pty Ltd Phone: (08) 8919 4658 Email: <a href="mailto:yuzheng@goldvalley.com.au">yuzheng@goldvalley.com.au</a>	
Location	Approx 61 kms south of Darwin and 7 kms north-west of Batchelor.	
Description	Potential open pit mining operation with on-site processing through simple crushing and screening. The mine will operate 24 hours per day for 5 days a week (Monday to Friday). Site infrastructure will include office and administration buildings, crib facilities, diesel generators, haul roads, open cut pit, ROM pad, crushing and screening plant, high grade and low grade ore stockpiles, waste rock dumps and mine water dam. Ore will be trucked to Darwin port for export.	
Product	Iron Ore circa 61% Fe	
Resource	0.8 Mt @ 61% Fe, including 0.23 Mt @ 48.3% Fe	
Mine Life	3 years	
Approvals	Previously, Territory Resources Limited submitted a Notice of Intent (NOI) on 8 May 2018 for a combined iron ore project over several tenements (circa 15.5 Mt of resource). On 28 August 2018, the EPA determined an EIS was required. Yarram Iron has reviewed the Territory Resources NOI and propose to withdraw this NOI and submit a new NOI for the development of an iron ore mine on a single tenement MLN1163. The new NOI will address the issues raised by the EPA, but for the reduced scope of MLN1163 only. NOI to be submitted in early 2020.	
Proposed Schedule	Construction – 2021	Production – 2021/22
Jobs	Construction – 25 to 35	Production – 48 direct + indirect
Capex	< \$5M	

# Northern Territory Mineral Projects



A20-073a.ai

- Mesozoic–Cenozoic
- Neoproterozoic–Palaeozoic
- Palaeo–Mesoproterozoic basins
- Palaeo–Mesoproterozoic orogens
- Archaean

March 2020