FINAL REPORT FOR EXPLORATION LICENCE 30739 LAKE MACKAY PROJECT

From 13th of October 2017 to 23rd of September 2022

Holder	Prodigy Gold NL
Operator	IGO Limited
ABN:	46 092 786 304
Author	M McGloin
Date	7th October 2022
Email	matt.mcgloin@igo.com.au
Target Commodities	Copper, Gold, Zinc, Lead, Nickel, Cobalt
Datum/Zone	GDA94/ MGA Zone 52
250,000 map sheet	Mount Doreen (SF52-12)
100,000 map sheet	Gurner (5052)

Distribution:	NT DITT – Digital
	Prodigy Gold NL – Digital
	Central Land Council – Digital
	IGO Limited – Digital

Contents

List of Figures

List of Tables

Appendices

Acknowledgement and warranty

1. Subject to 2, the tenure holder acknowledges that this Report, including the material, information anddata incorporated in it, has been made under the direction or control of the Northern Territory (the NT) within the meaning of section 176 of the Copyright Act 1968.

2. To the extent that copyright in any material included in this Report is not owned by the NT, the tenureholder warrants that it has the full legal right and authority to grant, and hereby does grant, to the NT, subjectto any confidentiality obligation undertaken by the NT, the right to do (including to authorise any other personto do) any act in the copyright, including to:

- use;
- reproduce;
- publish; and
- communicate in electronic form to the public, such material, including any data and informationincluded in the material.

3. Without limiting the scope of 1 and 2 above, the tenure holder warrants that all relevant authorisations and consents have been obtained for all acts referred to in 1 and 2 above, to ensure that the doing of any of the acts is not unauthorised within the meaning of section 29(6) of the Copyright Act.

1 Abstract

This report covers exploration activities completed on the remaining ground in surrendered tenement EL30739 over the life of the tenure (13/10/2017 to 23/09/2022). EL30739 comprised part of Group Report GR485.

Tenement EL30739 is located approximately 330 km northwest of Alice Springs in the western Aileron Province of central Australia. Tenement EL30739 forms part of the Lake Mackay joint venture between IGO Limited (IGO) and Prodigy Gold NL (PRX). Since May 2022, ownership of the Lake Mackay project has been split 70:30. IGO hold the majority share of tenements (including EL30739) with potential for base metal mineralisation, and PRX hold the majority share of tenements with potential for gold mineralisation.

Previously portions of EL30739 were partially relinquished in 2019 and 2021. This report covers exploration work completed by IGO and PRX between 13/10/2017 and 23/09/2022 on the remaining ground surrendered in September 2022.

Surface geochemistry work comprised 48 reconnaissance BLEG soil samples. Geophysical activities included airborne magnetic, radiometric, and electromagnetic surveys, and 1 ground electromagnetic survey (9 stations total). Tenement EL30739 was subject to a site heritage clearance by the Central Land Council (CLC). Temporary tracks were also constructed for drilling access into historical tenements EL30733 and EL30740. All this work was part of wider exploration across the Lake Mackay project area.

Tenement EL30739 has been voluntarily surrendered for four main reasons. Targets generated from geophysical or geochemical surveys were fully tested, elsewhere no anomalous targets were generated, areas were considered unexplorable because of significant depth of cover, or areas were excluded from exploration by heritage sites. No further work is recommended on the surrendered ground.

2 Location, Title History, Physiography and Access

The northwestern boundary of tenement EL30739 is located approximately 23 km southeast of Nyirripi and is approximately 340 km northwest of Alice Springs in the Northern Territory (**Figure 1**).

The tenement was granted on the 13th of October 2017 for a period of six years. EL30739 formed part of the Lake Mackay Project joint venture with Prodigy Gold NL (PRX). Since May 2022, ownership of the project has been split 70:30. IGO hold the majority share of tenements (including EL30739) with potential for base metal mineralisation, and PRX hold the majority share of tenements with potential for gold mineralisation.

Tenement EL30739 was part of an amalgamated reporting arrangement (GR485) with several other Lake Mackay project tenements (ELs 24915, 25146, 30730, 30731 and 30733). EL30739 underwent reductions in tenement area (partial relinquishment of 168 and 42 blocks) in 2019 and 2021 respectively, pursuant to the Mineral Titles Act, on the second- and fourth-year anniversaries of the tenement being granted (McGloin 2019, McGloin 2021a).

EL30739 is located on Aboriginal Freehold Land of the Yunkanjini Aboriginal Land Trust. Negotiations with the Land Trust are overseen and managed by the Central Land Council. The tenement has also been subject to a site heritage clearance organised by the Central Land Council.

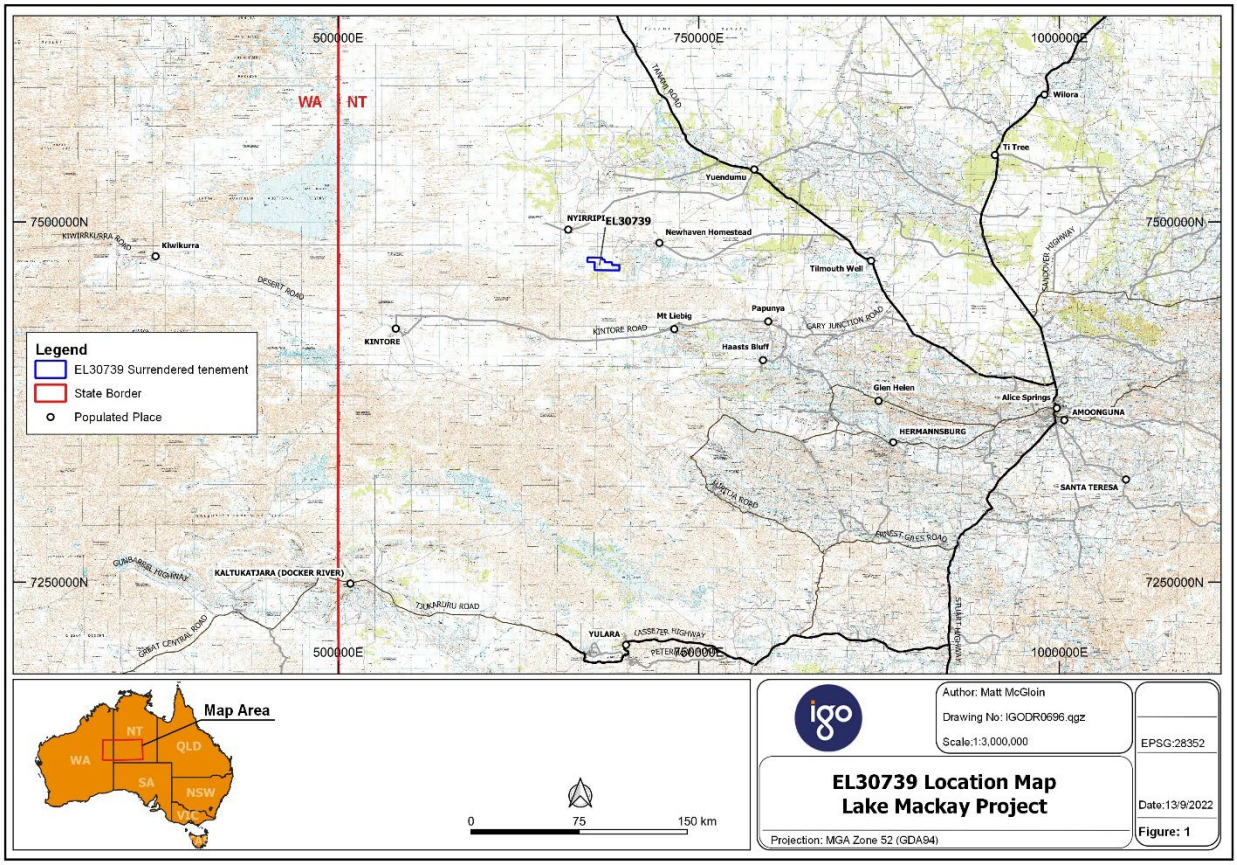

Figure 1: Location map of EL30739.

The terrain is typically aeolian sand cover and spinifex plains, with occasional low hills and subcrop. Stands of scrubby mulga occur in areas with shallow sand cover.

The tenement can be accessed from Alice Springs north via the Stuart Highway, then west on the Tanami Road, before heading west along the well-maintained Newhaven Reserve track (dirt) towards Nyirripi. The tenement can then be reached using access tracks within Newhaven Nature Reserve, followed by temporary cross-country tracks after leaving the Nature Reserve.

3 Geological setting, exploration history and exploration rationale

3.1 Regional and local geology and mineralisation

The Lake Mackay Project is located at the southern margin of the Paleoproterozoic North Australian Craton, straddling the Warumpi Province to the south, and the Aileron Province to the north. These provinces are separated by the Central Australian Suture, a major deep crustal-scale structure comprising a series of east–west trending major faults and shear zones (Shaw et al 1992, Scrimgeour et al 2005a, Selway et al 2009, Joly et al 2013).

Outcropping geology across the project area is typically sparse. The terrain comprises low hills of poorly exposed Paleoproterozoic metasedimentary rocks and intrusions, commonly covered by aeolian sand plains and dunes (Close et al 2005). In some locations, Paleoproterozoic rocks are overlain by Neoproterozoic and Paleozoic sedimentary rocks of the Amadeus and Ngalia basins.

Polymetallic base metal and gold mineralisation at Grapple and Bumblebee (Winzar 2016, Reno et al 2018, McGloin et al 2019), and more recently at the Phreaker, Scuba and Raw prospects (Prodigy Gold, ASX Releases, 17 July 2019 and 18 January and 26 May 2021), is located in the western Aileron Province. The ore-forming processes for these prospects remain poorly understood (Reno et al 2018, McGloin et al 2019, McGloin 2021b, McGloin et al 2022). Nonetheless the observation of weakly magnetic pyrrhotite directly associated with base metal sulfides and gold (Cu-Au-Ag-Co-Zn-Pb), and anomalous enrichment in several trace elements (As, Bi, Te, Sn, Cd, Se, Sb) provides empirical geophysical and geochemical pathfinders that can be used to explore for similar mineralisation regionally.

The host rocks to the sulfide and gold mineralisation are ca 1.84–1.81 Ga metamudstone and metasandstone of the Lander Rock Formation, interpreted as a turbidite sequence (Close et al 2004, Close et al 2005a, Hollis et al 2013, McGloin et al 2019, Kositcin et al 2019). These siliciclastic metasedimentary rocks are strongly deformed and variably metamorphosed and interpreted to be lateral equivalents of similar metasedimentary rocks in the Tanami, Warramunga and Davenport Provinces (e.g., Claoué-Long et al 2008). A regional lithostratigraphy is not established between these provinces however because of a lack of continuous outcrop, few marker horizons, and the high metamorphic grade and deformation of these rocks in many locations.

Between ca 1.84–1.70 Ga, metasedimentary rocks of the Lander Rock Formation were intruded and metamorphosed by several phases of magmatism (Scrimgeour 2013, Hollis et al 2013, Kositcin et al 2019). Such intrusions include phases of the loosely defined ca 1.81–1.77 Ga felsic Carrington Suite and the ca 1.8 Ga Du Faur mafic Suite (Close et al 2005, Edgoose et al 2008, Kirkland et al 2009, Scrimgeour 2013, Hollis et al 2013).

The Du Faur Suite encompasses metadolerite and metapyroxenite sills (typically recrystallised to hornblende amphibolite; Close et al 2005). The Du Faur Suite are low-K tholeiites; this chemistry is interpreted as evidence for their emplacement in an extensional tectonic setting (Close et al 2005, Scrimgeour 2013). The precise timing of emplacement remains unknown due to difficulties sampling mafic rocks for chronology (Beyer et al in prep); nonetheless these sills preserve the same folded regional fabric as the enclosing metasedimentary succession, dated at ca 1.67 Ga at the Grapple prospect (Reno et al 2018), providing a minimum crystallisation age.

The Warumpi Province records a ca 1.69–1.60 Ga history of voluminous, dominantly granitic felsic magmatism, crustal thickening, and high-thermal-gradient metamorphism along the southern margin of the Aileron Province (Scrimgeour et al 2005a,b). Felsic and lesser mafic rocks of the Argilke Igneous Event were emplaced between ca 1.69–1.66 Ga (Close et al 2005, Scrimgeour et al 2005a, Kirkland et al 2009, Hollis et al 2013). Interpreted metasedimentary rocks with minimum ages of ca 1.66–1.64 Ga and 1.64–1.60 Ga (e.g., Yaya Metamorphic Complex) occur adjacent to these older igneous rocks (Scrimgeour 2005a-b, Close et al 2003, Scrimgeour et al 2005b, Hollis et al 2013).

Further felsic and mafic magmatism occurred in the Warumpi Province, and locally in the Aileron Province on Mount Rennie and Mount Doreen map sheets (e.g., Andrew Young Igneous Complex, Walungurru Volcanics, Waluwiya Suite) at ca 1.64–1.63 Ga contemporaneous with high-thermal gradient metamorphism (Wyborn et al 1998, Cross et al 2005, Scrimgeour et al 2005a, Hollis et al 2013, Kositcin et al 2019). The Andrew Young Igneous Complex in particular, is dominated by ultramafic and mafic intrusions, but also contains subordinate biotite-bearing granite and pegmatites (Close et al 2005, Scrimgeour 2013). The mafic and intermediate intrusions include coarse augite-bearing norite, porphyritic micro-crystalline norite, olivine and K-feldspar-bearing norite, biotite-bearing olivine gabbronorite, quartz-bearing microdiorite, anorthosite, and plagioclase-andradite- clinopyroxene rock.

The origin of the Warumpi Province remains a focus of study; one model based on U–Pb zircon chronology interprets the province as an exotic terrain that collided obliquely with the Aileron Province at ca 1.64 Ga (Close

et al 2005b, Scrimgeour et al 2005b). An alternative model based on isotopic and chronological evidence for mantle-derived magmas and crustal inheritance proposes that the Warumpi Province represents a rifted piece of the Aileron Province that was re-attached at some point (Hollis et al 2013, Wong et al 2015). Morrissey et al (2011) and Wong et al (2015) propose that the Warumpi Province was the upper plate to the Aileron Province during the Paleoproterozoic, and that the province was emplaced along the Central Australian Suture at ca 1.1 Ga during the Grenvillian Orogeny. The timing of development for the Suture remains uncertain (Scrimgeour et al 2005) however it may have formed around the time of (or after) the so-called Liebig Orogeny (ca 1.67–1.63 Ma) and have been re-activated several times since.

Along with the hydrothermal polymetallic sulfide mineralisation, the project area is also considered prospective for both nickel-cobalt-manganese and gold mineralisation.

Ultramafic intrusions of the ca 1.64 Ga Andrew Young Igneous Complex represent a potential economic target for magmatic and lateritic nickel and cobalt mineralisation (Gregory et al 2004, Hoatson et al 2005, Prodigy Gold ASX Releases 26 July 2018, 30 May and 17 July 2019, 18 January 2021). Shallow zones of lateritic nickel-cobalt-manganese mineralisation have been confirmed in duricrust at the Grimlock and Swoop prospects through reverse circulation (RC) and aircore drilling. Further outcrops of weathered ultramafic remain untested in the Warumpi Province, providing additional viable exploration targets.

Orogenic gold has also actively become a valid exploration target across the project area, following the successful greenfields gold discoveries at the Arcee and Goldbug gold prospects in EL31234 and EL31794, respectively. The Arcee gold prospect was discovered in September 2019 (Cornwell 2019). RC drill hole 19LMRC072 tested a coherent gold anomaly (>50 ppb Au) from regional soil sampling. The drill hole intersected a broad zone of gold mineralisation (12 m at 3.6 g/t Au from 112 m) in the centre of an orthoamphibolite sill of the Du Faur Suite, that intrudes metasedimentary rocks of the Lander Rock Formation. The Goldbug prospect was discovered in October 2020. The best intercepts from the discovery hole 20LMRC039 were 16 m at 1.15 g/t Au, 4 m at 0.78 g/t Au and 4 m at 1.54 g/t Au, from 48 m depth, hosted within orthoamphibolite of the Du Faur Suite (Prodigy Gold ASX Release 18 January 2021).

3.2 Historical regional exploration and exploration rationale

Before the discovery of mineralisation at the Bumblebee prospect in 2015, the project area was largely untested for mineral potential using modern exploration methods. The exploration rationale for the Lake Mackay Project is now however largely based on empirical observations from systematic fieldwork and the recent discovery of base metal and gold mineralisation in the area.

Previous theoretical studies have considered the broader Lake Mackay area prospective for nickel mineralisation (Hoatson et al 2005), orogenic and intrusion-related gold, sediment-hosted base metal deposits and uranium mineralisation (Joly et al 2013), and hydrothermal copper-gold mineralisation including IOCG deposits (Skirrow et al 2019).

IGO initially targeted the project for orogenic gold. The area was considered to have the key constituents identified by Joly et al (2013) in the Western Australian part of the Aileron Province. These included ca 1.80–1.70 Ga and 1.64 Ga intrusions that show evidence for local gold enrichment (potential sources), major deep crustal structures (fluid conduits) and potential physico-chemical boundaries (depositional traps). The trends of west-northwest gold anomalism from regional sampling in Western Australia occur parallel to D_1 structures, and the Central Australian Suture, and continue into Lake Mackay JV tenements in the Northern Territory.

Limited historical exploration in the 2000s by BHP Billiton on the nearby tenement EL24915 targeted orthomagmatic nickel mineralisation associated with ultramafic and mafic rocks of the Andrew Young Igneous Complex (Gregory et al 2004). In 2003, two RC drill holes testing electromagnetic anomalies intercepted minor

sulfide mineralisation (one of these drill holes was located 3.6 km west of IGO's subsequent Bumblebee discovery). The BHP drilling was never followed-up despite intercepting minor pyrite, pyrrhotite and trace chalcopyrite in tourmaline-bearing quartz veins within a shear zone that cut metasedimentary rocks and hydrothermally altered mafic intrusions.

Between 2002 and 2012, a joint-venture between Teck Australia Pty and Kajeena Mining Company carried out preliminary exploration, including work on historical tenement EL10383 (now part of EL29748), about 300 metres north of the Grapple and Bumblebee prospects (Kalma and Cawood 2009, Lee 2012). This work included field visits to collect rock chips, portable XRF measurements, and spinifex and soil samples; weakly anomalous gold, copper and zinc results were obtained. The Leg Gully anomaly, an east-west trending ironstone within mica schist, returned portable XRF readings of ≤1404 ppm Cu and rock chip assays of 323 ppm Cu. With hindsight, these reports from BHP, Kajeena Mining Company and Teck match the setting and observed mineralisation now discovered at Phreaker, Bumblebee and Grapple.

The Bumblebee prospect was discovered by IGO in 2015 after drilling of soil geochemical anomalies (Winzar 2016). The soil sampling program was designed to test for both gold and base metal anomalism using a -50 µm soil sampling method developed specifically for the project. This involved a 10 g cyanide leach for gold and silver and a 0.5 g Aqua Regia digestion for other base metal and pathfinder elements.

Additional soil sampling, along with airborne and ground electromagnetic surveys and geological mapping between 2016 and 2021 enabled discovery of several further polymetallic sulfide and gold prospects (e.g., Grapple, Phreaker, Raw, Scuba, Arcee, Goldbug). Additionally, rock chip sampling and drilling of ultramafic duricrust from the Andrew Young Igneous Complex at the Grimlock and Swoop prospects led to discovery of lateritic Co-Ni-Mn mineralisation (Prodigy Gold ASX Releases 26 July 2018, 30 May and 17 July 2019, 18 January 2021).

The exploration concept for the Lake Mackay project is to target geochemical anomalies and/or electromagnetic conductors that likely relate to:

1. "Phreaker-Grapple-style" pyrrhotite and associated base and precious metal mineralisation hosted in the Lander Rock Formation; and
2. Orthomagmatic or lateritic Ni-Co-Cu mineralisation hosted within ultramafic intrusions of the Andrew Young Igneous Complex.
3. Orogenic gold mineralisation hosted within structures associated with metamafic sills of the Du Faur Suite that intrude metasedimentary rocks of the Lander Rock Formation.

All three mineralisation styles are of interest because deposits of this nature should be readily detectable using both modern airborne and follow-up ground electromagnetic surveys, and geochemical methods, even under shallow cover, and thus could provide economically viable deposits despite the remote location. The Bumblebee and Grapple prospects produced strong geochemical anomalies using soil sampling, and along with the Phreaker prospect, strong electromagnetic conductors using airborne and ground surveys, providing empirical methods to target further mineralisation. Consequently, IGO applied both soil geochemistry and airborne (AEM) and ground (MLEM) geophysical surveys as a way to delineate additional mineralisation across the project (Winzar 2016, Whitford 2019).

These methods successfully generated multiple drilling targets and led to the discovery of the Phreaker, Scuba, Raw, Arcee and Goldbug prospects (Prodigy Gold ASX Releases 26 July 2018, 30 May 2019, 18 January and 26 May 2021). The discovery of these mineralised bodies confirms the mineral potential, and the applicability of these exploration methods, across the project area.

4 Surrender details

A voluntary surrender of EL30739 was completed before the fifth-year anniversary of the tenement being granted. Eighty-four blocks (265.7 km^2) were surrendered in entirety.

5 Exploration Index Map

The Exploration Index Map (**Appendix 1**) shows the exploration activities completed on the 84 blocks of EL30739 surrendered. Airborne geophysical data previously reported in Winzar (2018) and Cornwell (2019) are not included. Exploration activities and data completed on historical relinquished areas of EL30739 are not reported again (see McGloin (2019) and McGloin (2021b)).

6 Work Completed on Relinquished Ground

Exploration during the tenure period for the 84 blocks surrendered consisted of collection of surface geochemistry, collection of airborne magnetic, radiometric, and electromagnetic (AEM) data as part of regional surveys, and a follow-up ground-based moving loop electromagnetic survey (MLEM). Details have previously been outlined in Annual Reporting (see Winzar (2018), Winzar and Whitford (2019), Cornwell (2019), and McGloin (2020))**.** Prior to undertaking on-ground activities, a sacred site clearance survey was conducted by the Central Land Council.

6.1 Surface Geochemistry

Between 2017 and 2021, regional reconnaissance soil and rock sampling was undertaken over poorly explored areas of the Lake Mackay Project (Winzar 2018, Cornwell 2019). For the surrendered ground in EL30739, 48 soil samples were collected in August and September 2018 (**Appendices 1-2**).

6.1.1 Soil sampling

Areas suitable for soil sampling were selected from radiometric imagery that identified a bedrock response. The sampled areas were commonly limited due to a lack of outcrop. Reconnaissance soil sampling was completed on a 400 m (north-south) x 800 m (east-west) grid over areas with bedrock or shallow cover (Winzar 2018). The details of the method for this Bulk Leach Extractable Gold (BLEG) soil sampling survey were outlined in Winzar (2018) and in a previous open file relinquishment report for EL30739 (McGloin 2019).

Sampling was conducted by teams of two people, using all-terrain vehicles, from mobile camps that were established at several locations throughout the project area along temporary access tracks. The samples were collected from a depth of 0 to 20 cm after scraping the surface to remove any organic matter. Duplicate samples were collected every 50 samples. Samples were screened on site to -0.4 mm for an approximate 2 kg of fine material. The samples were then submitted to Intertek in Alice Springs for additional screening to -50 µm. Company standards were also added every 50 samples. All samples were then dispatched to Perth for analysis.

The BLEG technique was used for Au and Ag with a 10 g aliquot of -50 µm material. A 0.5 g aqua regia digest was used for Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr. Additional duplicates, standards and blanks were also undertaken by the laboratory as part of their standard in house quality control procedures.

The results of this soil sampling (and associated standards and duplicates) are reported in **Appendix 2**. These data were previously reported in the closed file reports of Winzar (2018) and Cornwell (2019).

Table 1: Peak -50 µm BLEG soil sampling results for surrendered ground in EL30739 (GDA94 MGA Zone 52).

Element	Sample Number	MGA East (m)	MGA North (m)	Value	Peak	Mean	Median	Standard Deviation
Ag	LM05219	692799	7468800	ppm	0.023	0.01	0.01	0.0
As	LM05106	694396	7469189	ppm	3.4	2.3	2.4	0.5
Au	LM05203	693607	7466812	ppb	1.6	0.68	0.6	0.3
Bi	LM05107	694408	7469605	ppm	0.3	0.3	0.3	0.0
Co	LM05197	693591	7468792	ppm	25.5	6.9	5.6	4.3
Cu	LM05197	693591	7468792	ppm	36.9	17.1	16.6	4.5
Mn	LM05104	694401	7468400	ppm	875.2	302.5	252.5	191.5
Ni	LM05197	693591	7468792	ppm	34.9	9.7	8.5	4.6
Pb	LM05107	694408	7469605	ppm	17.0	12.1	12.3	1.6
Zn	LM05197	693591	7468792	ppm	51.5	21.7	19.2	7.0

The reconnaissance soil sampling failed to generate any coherent geochemical anomalies within the surrendered ground, with a highest individual sample yielding 1.6 ppb Au (see **Table 1** and **Appendix 2**).

6.2 Geophysics

6.2.1 Aeromagnetic and radiometric survey

An aeromagnetic and radiometric survey was flown over parts of EL30739 prior to granting as part of an NTG co-funded project-wide survey. The details of the survey were outlined in Winzar (2018) and Cornwell (2019). The survey flew as 200 m spaced flight lines oriented north-south. The mean terrain clearance was 35m.

6.2.2 Airborne electromagnetic survey

Between 2018 to 2019, 990.6-line kms of SPECTREM airborne electromagnetic surveying were completed over EL30739, including parts of the surrendered ground in this report (Cornwell (2019) and Winzar and Whitford (2019)). This survey was flown on a 300 m line spacing with north-south lines and 90 m mean terrain clearance.

Figure 2 shows airborne EM coverage within EL30739. Further details can be found in Winzar (2019), Winzar and Whitford (2019), McGloin (2019) and Cornwell (2019). Two anomalies identified on consecutive AEM lines had late time exponential decays in the X component only (see Cornwell 2019). Consequently a follow-up ground electromagnetic survey was designed for the Profile target.

6.2.3 Ground electromagnetic survey

For the surrendered ground, a total of 9 moving-loop stations were positioned in early 2019 using a 100 m grid spacing in a north-south oriented line. Survey configurations are outlined in **Table 2**. This comprised the western line of two 9 station lines that were 650 m apart. The two lines of MLEM were designed to test the anomalous AEM conductors using 200 m x 200 m loops in a Slingram configuration (**Appendix 1**). The MLEM data for the Profile target were reported in Cornwell (2019). Further details on MLEM surveys were provided in Winzar (2018), McGloin (2019) and Cornwell (2019).

The two lines of MLEM failed to identify a mid to late time response and as such the AEM response was not considered significant. No further work was completed.

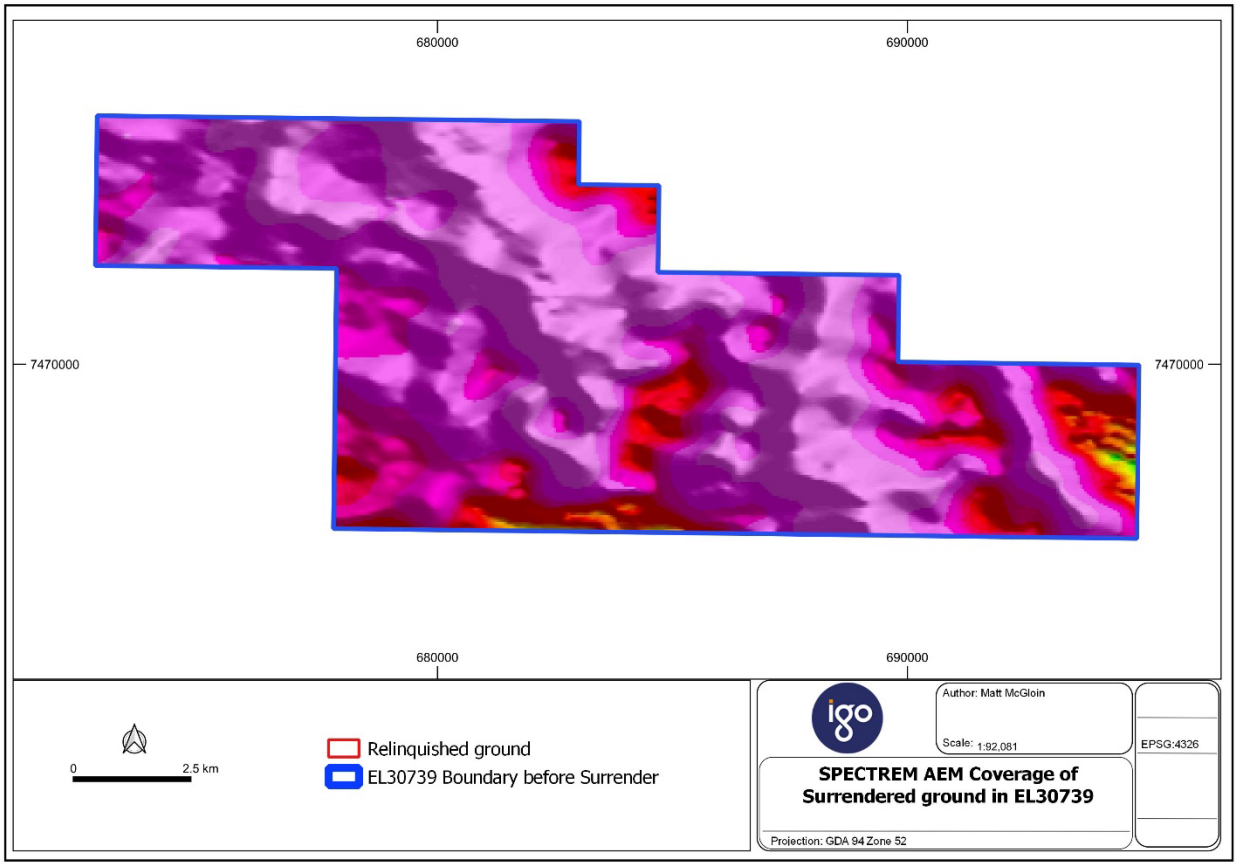

Figure 2. Map showing SPECTREM airborne EM coverage within surrendered tenement EL30739.

Table 2: Configuration for 2019 MLEM survey.

Configuration	Slingram
Loop size	200 m
Line spacing	200 m
Station spacing	100 m
Receiver system	Smartem24 EMIT Fluxgate – Bz (up), Bx (east), By (north)
Sensor location	200 m east or north (or in front) of loop centre
Transmitter	Transmitter Technologies TTX-1
Effective current	~60-80 A
Frequency	1 Hz

7 Reasons for Surrender

The remaining ground in EL30739 has been surrendered for 4 main reasons. These are:

- No conductive anomalies generated that warranted further exploration after completion of appropriate airborne and/or ground EM surveys.
- No coherent geochemical anomalies generated to warrant further exploration after the completion of appropriate reconnaissance BLEG soil surveys.
- Areas unexplorable based on exclusion or restricted zones defined by the Central Land Council.
- Areas considered unexplorable because of significant depth of cover to targeted basement rocks. This includes a prominent but conceptual magmatic nickel target evident in magnetic and gravity imagery (interpreted as an intrusive Feeder structure within the Andrew Young Igneous Complex (see **Figure 3** and Hoatson et al 2005)). IGO considered this conceptual target too deep undercover to justify a ground EM survey (inhibiting the effective depth of the EM survey with current technologies and budget constraints).

No further work is recommended on the surrendered ground.

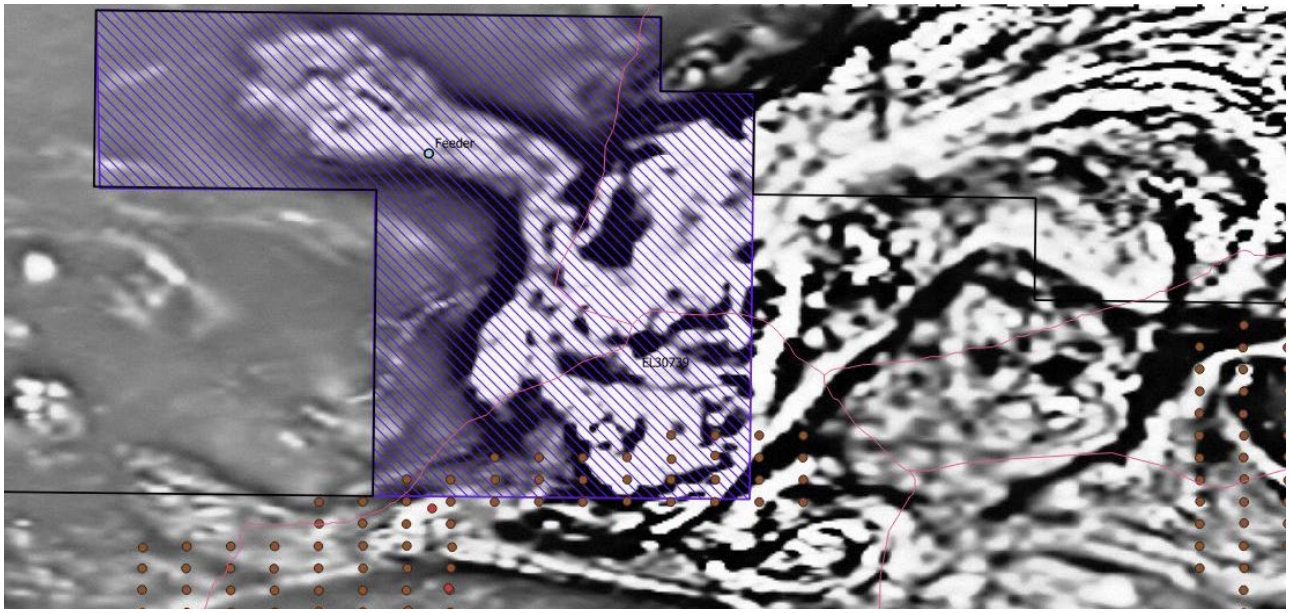

Figure 3. Schematic map of aeromagnetic imagery with a prominent structure – the conceptual Feeder target, in the Andrew Young Igneous Complex within the northwest of EL30739. Targeted area indicated by the purple polygon, north to top of image. The maximum width of the purple polygon is about 13 km. Brown dots represent surface geochemical sample sites with pink lines indicating temporary access tracks to tenements EL30733 and EL30740 during the exploration program.

8 References

Beyer EE, McGloin MV, Thompson JL and Meffre S, in prep. Constraints On timing of mafic magmatism at the Grapple Cu–Au–Ag–Zn Prospect, Central Australia: In-situ LA–ICP–MS zircon geochronology of a new Proterozoic greenfields discovery. Northern Territory Geological Survey, Record.

Close DF, Scrimgeour I, Edgoose C, Cross A, Claoué Long J, Kinny P and Meixner T, 2003. Redefining the Warumpi Province. in: 'Annual Geoscience Exploration Seminar (AGES) 2003. Record of Abstracts'. Northern Territory Geological Survey, Record 2003–2011.

Close DF, Scrimgeour IR and Edgoose CJ, 2004. Mount Rennie, Northern Territory (Second Edition). 1: 250 000 geological map series, SF 52-15. Northern Territory Geological Survey.

Close DF, Scrimgeour IR, Edgoose CJ, Wingate MTD and Selway K, 2005. Late Paleoproterozoic oblique accretion of a 1690–1660 Ma magmatic arc onto the North Australian Craton: Geological Society of Australia, Abstracts 81, 36.

Cornwell S, 2019. Group Annual Report for GR485, Lake Mackay Project. From 13 October 2018 to 12 October 2019, Independence Group NL, Closed File Company Report, Northern Territory Geological Survey.

Cross A, Claoué-Long JC, Scrimgeour IR, Close DF and Edgoose CJ, 2005. Summary of results. Joint NTGS–GA geochronology project: southern Arunta Region. Northern Territory Geological Survey Record 2004-003.

Edgoose CJ, Close DF and Scrimgeour, IR 2008. Lake Mackay, Northern Territory (2nd Edition), 1:250 000 geological map series, SF 52–11. Northern Territory Geological Survey, Darwin.

Gregory P, Merrillees J and Christensen A, 2004. Combined annual report for EL 9520, EL 9521, EL 9522, EL 9523 and EL 954 for the year ended 17 July 2004, BHP Billiton Minerals, Southern Tanami Exploration, Northern Territory Geological Survey, Open File Company Report, CR2004-0461.

Hoatson, D, Shen-su and Claoué-Long J, 2005. Proterozoic mafic–ultramafic intrusions in the Arunta Region, central Australia: Part 1: Geological setting and mineral potential. Precambrian Research, 142, 93–133.

Hollis JA, Kirkland CL, Spaggiari CV, Tyler IM, Haines PW, Wingate MTD, Phillips C, Sheppard S, Belousova E and Murphy RC, 2013. Zircon U–Pb–Hf isotope evidence for links between the Warumpi and Aileron Provinces West Arunta Region. Geological Survey of Western Australia, Record 2013/9.

Joly A, Denith MC, Porwal A, Spaggiari CV, Tyler IM, and McCuaig TC, 2013. An integrated geological and geophysical study of the west Arunta orogen and its mineral prospectivity. Perth: Geological Survey of Western Australia.

Kalma AJ and Cawood MJ, 2009. Kajeena Mining Company. Combined annual report for the period ending 1 September 2009. Northern Territory Geological Survey, Open File Company Report, CR2009-0805.

Kirkland CL, Wingate MTD, Tyler IM and Spaggiari CV 2009. 184367: metagranodiorite, Dwarf Well; Geological Survey of Western Australia, Geochronology Record 846.

Kositcin N, McGloin MV, Reno BL and Beyer EE, 2019. Summary of results. Joint NTGS–GA geochronology project: Cu-Au-Ag-Zn mineralisation on MOUNT RENNIE, Aileron Province, March–September 2018, Northern Territory Geological Survey, Record 2019-011.

Lee A, 2012. Kajeena Mining Company. Annual and final report, 2 September 2008 to 20 September 2012. Northern Territory Geological Survey, Open File Company Report, CR2012-0881.

McGloin MV, Reno BL, Kositcin N, Cornwell S, Winzar D, Beyer EE, Huston D, Champion DC, and Crawford A, 2019. The greenfield Grapple and Bumblebee discoveries of the western Aileron Province: First constraints on sulfide mineralising processes: in 'Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory, 19–20 March 2019'. Northern Territory Geological Survey, Darwin.

McGloin M, 2019. Partial Relinquishment Report for EL30739. 13 October 2017 to 12 October 2019. Independence Group NL. Open File Company Report, CR2019-0549.

McGloin M, 2020. Group Annual Report for GR485, Lake Mackay Project. From 13 October 2019 to 12 October 2020, IGO Limited, Closed File Company Report, Northern Territory Geological Survey.

McGloin M, 2021a. Group Annual Report 485 for Exploration Licences 24915, 25146, 30730, 30731 and 30739, Lake Mackay Project. From 13 October 2021 to 12 October 2022, IGO Limited, Closed File Company Report, Northern Territory Geological Survey.

McGloin M, 2021b. Partial Relinquishment Report for Exploration Licence 30739, Lake Mackay Project. From 13th October 2017 to 21st October 2021, IGO Limited, Open File Company Report, Northern Territory Geological Survey.

McGloin M, Lindsey D, Keys E, 2022. Group Annual Report 485 for Exploration Licences 24915, 25146, 30730, 30731 and 30739, Lake Mackay Project. From 13 October 2021 to 12 October 2022, IGO Limited, Closed File Company Report, Northern Territory Geological Survey.

Morrissey L, Payne JL, Kelsey, DE, and Hand M, 2011. Grenvillian-aged reworking in the North Australian Craton, central Australia: Constraints from geochronology and modelled phase equilibria. Precambrian Research 191, 141–165.

Prodigy Gold NL, ASX Announcement. Lake Mackay JV Exploration Update, 26th July 2018.

Prodigy Gold NL, ASX Announcement. High grade cobalt intersected at Grimlock, 30 May 2019.

Prodigy Gold NL, ASX Announcement. More copper and cobalt intersected at Lake Mackay and promising new prospect identified, 17th July 2019.

Prodigy Gold NL, ASX Announcement. First bedrock gold intersected at Goldbug Prospect, 18th January 2021.

Prodigy Gold NL, ASX Announcement. Exceptional high grade copper intersections at the Phreaker Prospect within Lake Mackay JV, 26th May 2021.

Reno BL, McGloin MV and Meffre S, 2018. Constraints on The Timing of Sulfide Breccia Formation at The Grapple Cu–Au–Ag–Zn Prospect, Central Australia: In-situ LA–ICP–MS monazite geochronology of a new Proterozoic greenfields discovery. Northern Territory Geological Survey Record 2018-013.

Scrimgeour IR, 2013. Chapter 12. The Aileron Province: in Ahmad M and Munson TJ (compliers). 'Geology and mineral resources of the Northern Territory'. Northern Territory Geological Survey, Special Publication 5.

Scrimgeour IR, Close DF and Edgoose CJ, 2005a. Mount Liebig, Northern Territory. 1:250 000 geological map series explanatory notes, SF 52-16. Northern Territory Geological Survey.

Scrimgeour IR, Kinny PD, Close DF And Edgoose CJ, 2005b, High-T granulites and polymetamorphism in the southern Arunta Region, central Australia: Evidence for a 1.64 Ga accretional event. Precambrian Research, 142, 1–27.

Selway K, Hand M, Heinson G and Payne JL, 2009. Magnetotelluric constraints on subduction polarity: reversing reconstruction models for Proterozoic Australia. Geology 37, 799–802.

Shaw RD, Zeitler PK, McDougall I and Tingate PR 1992. The Palaeozoic history of an unusual intracratonic thrust belt in central Australia based on 40Ar–39Ar, K –Ar and fission track dating. Journal of the Geological Society of London 149, 937–954.

Skirrow RG, Murr J, Schofield A, Huston DL, van der Wielen S, Czarnota K, Coghlan R, Highet LM, Connolly D, Doublier M, Duan J, 2019. Mapping iron oxide Cu-Au (IOCG) mineral potential in Australia using a knowledge-driven mineral systems-based approach, Ore Geology Reviews, 113.

Whitford M, 2019. Application of electrical geophysics to exploration at the Lake Mackay Project: in 'Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory, 19–20 March 2019'. Northern Territory Geological Survey, Darwin.

Winzar D, 2016. Early indications of a copper-gold belt in the southwestern Aileron Province, Northern Territory: in 'Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 15–16 March 2016'. Northern Territory Geological Survey, Darwin.

Winzar D, 2018. Group Annual Report for GR485, Lake Mackay Project. From 13 October 2017 to 12 October 2018, Independence Group NL, Closed File Company Report, Northern Territory Geological Survey.

Winzar D and Whitford M, 2019. IGO Core Geophysics Collaboration Final Report Andrew Young Igneous Complex - Airborne Electromagnetic Survey Lake Mackay Project EL30733, EL30739, and EL30740, Independence Group NL, Open File Company Report, Northern Territory Geological Survey, CR2019-0033.

Wong BL, Morrissey LJ, Hand M, Fields CE, and Kelsey DE, 2015. Grenvillian-aged reworking of late Paleoproterozoic crust of the southern North Australian Craton, central Australia: Implications for the assembly of Mesoproterozoic Australia. Precambrian Research 270, 100–123.

Wyborn L, Hazell M, Page R, Idnurm M and Sun S, 1998. A newly discovered major Proterozoic granite-alteration system in the Mount Webb region, central Australia, and implications for Cu–Au mineralisation. AGSO Research Newsletter.

Suite 4, Level 5
85 South Perth Esplanade
South Perth WA 6151

PO Box 496
South Perth WA 6951
Western Australia

T. +61 8 9238 8300
F. +61 8 9238 8399
E. contact@igo.com.au

igo.com.au
Independence Group NL
ABN 46 092 786 304