ANNUAL TECHNICAL REPORT

GR356 MOLINE MINING GROUP

MLN41, MLN1059, ML24173

Mount Evelyn: 1:250, 000
Ranford Hill: 1:100,000

16 August 2017 to 15 August 2018

Distribution:-

1. DME Darwin, NT
2. Newmarket Gold, Darwin
3. PNX Metals, Adelaide
4. Rockland Resources, Brisbane

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October 2018

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1 EXECUTIVE SUMMARY

This is the third annual technical report combining the Moline mineral leases MLN1059, MLN41 and ML24173. Theses leases held jointly by Newmarket Gold NT Holdings Pty Ltd (49%) and PNX Metals Ltd (51%) and are being explored for gold and base metals by PNX, while Rockland Resources have the rights to uranium.

The Moline mineral leases are located about 240 km SE of Darwin. They cover the Moline Goldfield (including the Hercules, School, Moline and Tumbling Dice deposits) as well as numerous small gold and base metal occurrences and historical workings in the area.

The tenements encompass a suite of meta-sedimentary rocks which belong to the Burrell Creek and Mt Bonnie Formations. Locally these rocks are isoclinally folded with fold axes plunging at shallow angles to the south east. Mineralisation is found in zones of pyrite, quartz, and brecciated country rock with minor veinlets of sphalerite, tetrahedrite, arsenopyrite, chalcopyrite and carbonates.

PNX undertook a significant exploration program during the reporting period, including surface soil and rock chip sampling, and RC drilling.

11 reverse circulation holes for 1206 metres were drilled targeting potential mineralisation extensions beneath Moline, Trig and Tumbling Dice and Swan historical pits. Drilling encountered a high-grade shoot of gold mineralisation at Tumbling Dice, the highlight of which was MORC039 - 1m @ 8.89 g/t Au (from 115m) which is open at depth. At Moline, gold and zinc mineralisation was encountered below the existing pits and is also largely open at depth, the highlight of which was 2m @ 2.16 g/t Au from 63m in MORC038 and 6m @ 1.53 g/t Au from 69m in MORC038

Three blocks were chosen for initial IP gradient array tests which are either partially or wholly within MLN24173 and MLN1059. The data was collected by Zonge in frequency domain with 3-point coupling, 50m Rx dipoles, NE-SW orientation, 100m line spacing at 0.125Hz. Results were modelled by consultant geophysicists at Terra Resources. Three targets areas, Swan and waterhole were identified for further RC drilling.

In addition, Uber-air conducted a high-resolution aerial survey to create digital terrain modelling (DTM) over two large 2 x 4 km blocks partially in ML24713 and MLN1059.

Finally, 375 portable XRF sieved soil measurements were taken and 3 rock chips were collected for laboratory analysis in this reporting period.

2 COPYRIGHT

3 INTRODUCTION

The Moline Project consists of numerous abandoned gold mines which were last worked in 1990's. PNX are actively exploring the Moline Project with the aim of either restarting stand-alone mining operation, or identifying supplementary feed for the Hayes Creek Zn-Au-Ag Project located about 60km to the north. This report describes exploration activity undertaken during the reporting period ending 15 August 2018 and is the fourth of the amalgamated annual technical reports, incorporating MLN41, MLN1059 and ML24173.

4 LOCATION AND ACCESS

The Moline Goldfields are located about 250km SE of Darwin. Access is from Pine Creek (220km SE of Darwin) along the Kakadu Highway (approximately 45km east of Pine Creek). Access within the tenements access is possible by well-established haul roads, mining tracks and station tracks (Figure 1).

Topography consists of low hills and ridges, usually with good rock outcrop, which drain into the Mary River via Bowerbird, Evelyn, Eureka and O'Neil Creeks. Vegetation consists of open savannah woodlands.

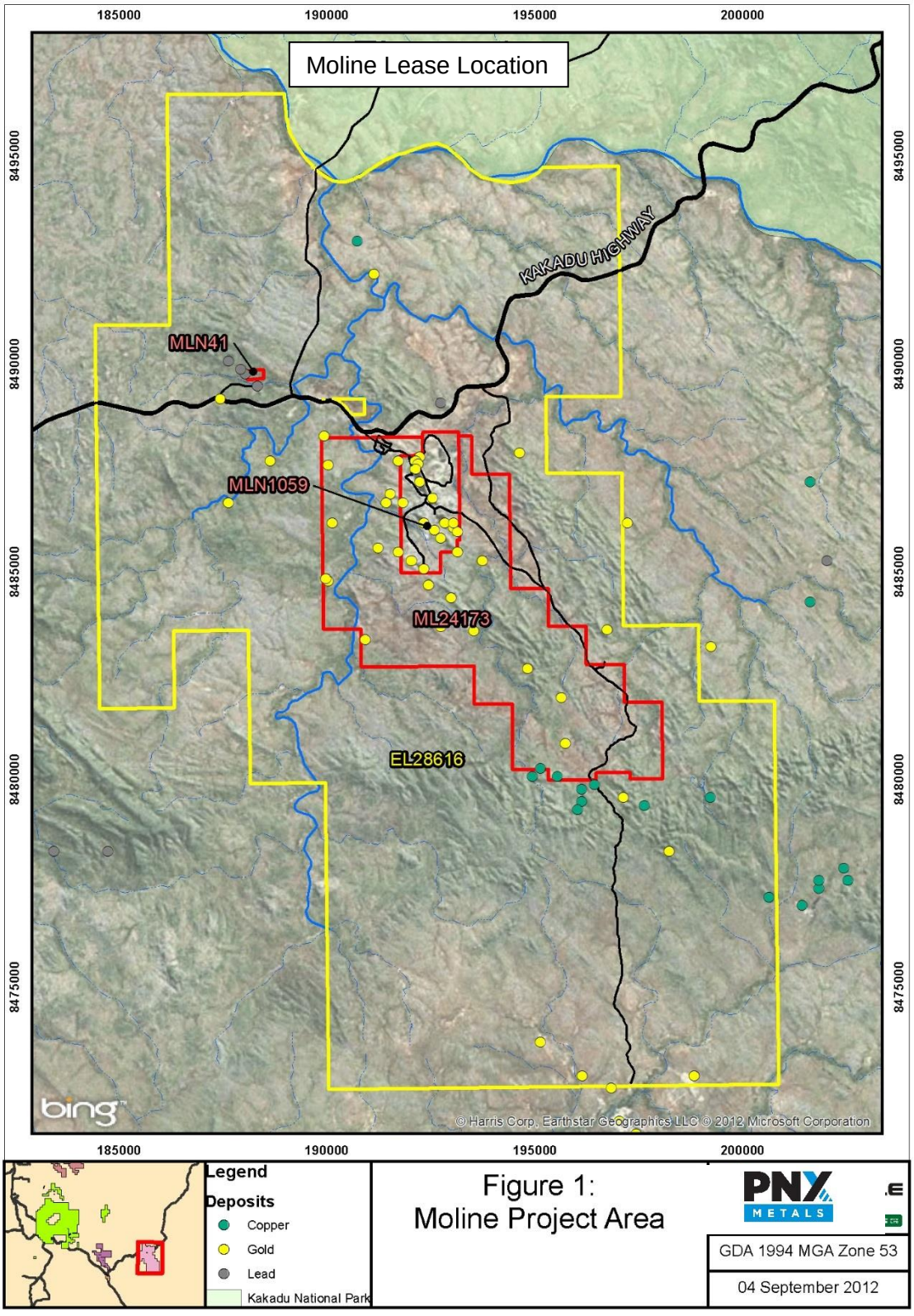

Figure 1: Moline Mining Title locations and prospects

5 TENEMENT DETAILS

MLN41, MLN1059 and ML24174 are held jointly by PNX Metals Ltd (51%) and Newmarket Gold NT Holdings Pty Ltd (49). PNX Metals Ltd ("PNX") can earn up to 90% through further expenditure commitments. Newmarket Gold NT Holdings Pty Ltd is a subsidiary of Kirkland Lake Gold Ltd ("KL Gold"). The tenement group is being explored as part a three-way joint venture, with Rockland Resources having exploration rights for uranium and PNX (formerly Phoenix Copper) having exploration rights for other minerals. A tenement summary is provided in Table 1.

MLN41 covers the North Evelyn base metal prospect and was first granted in 1969. It was held by Michael Teelow until August 2011, when it was transferred to KL Gold. The last renewal was granted on 22nd April 2013.

MLN1059 was first granted on 16 August 1990 and expired on 15 August 2015. It was last granted renewed on 23/9/2015 until 15/8/2020. An option agreement dated 30 October 2003 and a Deed of Variation dated 12 November 2004 gave Terra Gold Mining Pty Ltd (a subsidiary of GBS Gold Australia) rights to explore and purchase the tenement. CGAO acquired the optional rights over MLN1059 on 9 November 2009, after purchasing liquidated assets held by GBS. Title was transferred to CGAO (now KL Gold) in August 2011.

ML24173 was first granted to Terra Gold Mining Pty Ltd, a subsidiary of GBS Mining, in 2004 and was also purchased by CGAO as part of the sale of the assets from GBS in 2009.

During August 2014, KL Gold entered into a farm-in agreement which allows PNX to earn up to 90% stake in the Moline Project (excluding uranium) by spending $4 Million in four years within various Pine Creek tenure. Newmarket retains a claw back option on some deposits and a royalty stream if available.

Underlying the tenement group is the Mary River Wildlife Ranch Pty Ltd (No. 1631), except for a small portion of Crown Lease (CLP1617) held by the Moline Golf Club (Inc).

Table 1: Moline Mining Tenement Details

Title No.	Registered Holder	Area (Ha)	Grant Date	Expiry Date
MLN41	Newmarket Gold NT Holdings Pty Ltd	8.9	5/12/1969	22/05/2022
MLN1059	Newmarket Gold NT Holdings Pty Ltd	418.7	16/08/1990	15/08/2020
ML24173	Newmarket Gold NT Holdings Pty Ltd	3126	23/05/2012	31/12/2021

6 GEOLOGICAL SETTING

6.1 REGIONAL GEOLOGY

The Moline Goldfields are situated within the Pine Creek Orogen, a tightly folded sequence of Lower Proterozoic rocks, up to 14km in thickness, laid down on a rifted granitic Archaean basement during the interval ~2.2-1.87Ga. Geology of the area has been described by Stuart-Smith et al. (1987) and Ahmad et al. (1993). The sequence is dominated by pelitic and psammitic (continental shelf shallow marine) sediments with locally significant inter-layered tuff units. Pre-orogenic mafic sills of the Zamu Dolerite event (~1.87Ga) intruded the lower formations of the South Alligator Group.

During the Top End Orogeny (Nimbuwah Event ~1.87-1.85Ga) the sequence was tightly folded, faulted and pervasively altered with metamorphic grade averaging greenschist facies with phyllite in sheared zones.

The Cullen intrusive event introduced a suite of fractionated calc-alkaline granitic batholiths into the sequence in the period ~1.84-1.74Ga. These high temperature I-type intrusives induced strong contact metamorphic aureoles ranging up to (garnet) amphibolite facies, and created regionally extensive biotite and andalusite hornfels facies.

Less deformed Middle and Late Proterozoic clastic rocks and volcanics have an unconformable relationship to the older sequences. Flat lying Palaeozoic and Mesozoic strata along with Cainozoic sediments and proto-laterite cementation overlie parts of the Pine Creek Geosyncline lithologies. Recent scree deposits occupy the lower hill slopes while fluviatile sands, gravels and black soil deposits mask the river/creek flats areas.

There is a tendency for gold mineralisation to be focused in anticlinal settings within strata of the South Alligator Group and lower parts of the Finniss River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies. Some of the gold mineralisation appears to be related to the I-type members of Cullen Batholith, formed during the evolution of hydrothermal fluids as a result of fractionation and differentiation processes (Bajwah, 1994).

6.2 LOCAL GEOLOGY

The Moline Goldfields are dominated by two main sequences of meta-sediments of the South Alligator Group and Finniss River Group (Figure 2). An upper sequence of thickly bedded greywackes and siltstones of the Burrell Creek Formation and a lower sequence of thinly bedded cherty shale and carbonaceous shales of the Mt Bonnie Formation. Mineralisation is found within both units, although mostly within the Mt Bonnie Formation.

Meta-sediments are isoclinally folded about axes plunging at low angles towards the southeast. These folds are intersected by west dipping shear zones trending between NW-SE to N-S which control the ore shoots hosting pyrite, gold and base metal mineralisation. Steeply dipping, northwest trending shears, parallel to fold axial planes, are common. Some steep northeast trending cross faults are also present which postdate the mineralisation.

Most gold deposits occur in sulfiditic quartz-carbonate veins (pyrite-pyrrhotite and lesser arsenopyrite, galena, sphalerite) that are approximately conformable to bedding. They have been previously interpreted as syngenetic exhalative deposits, but are now considered epigenetic.

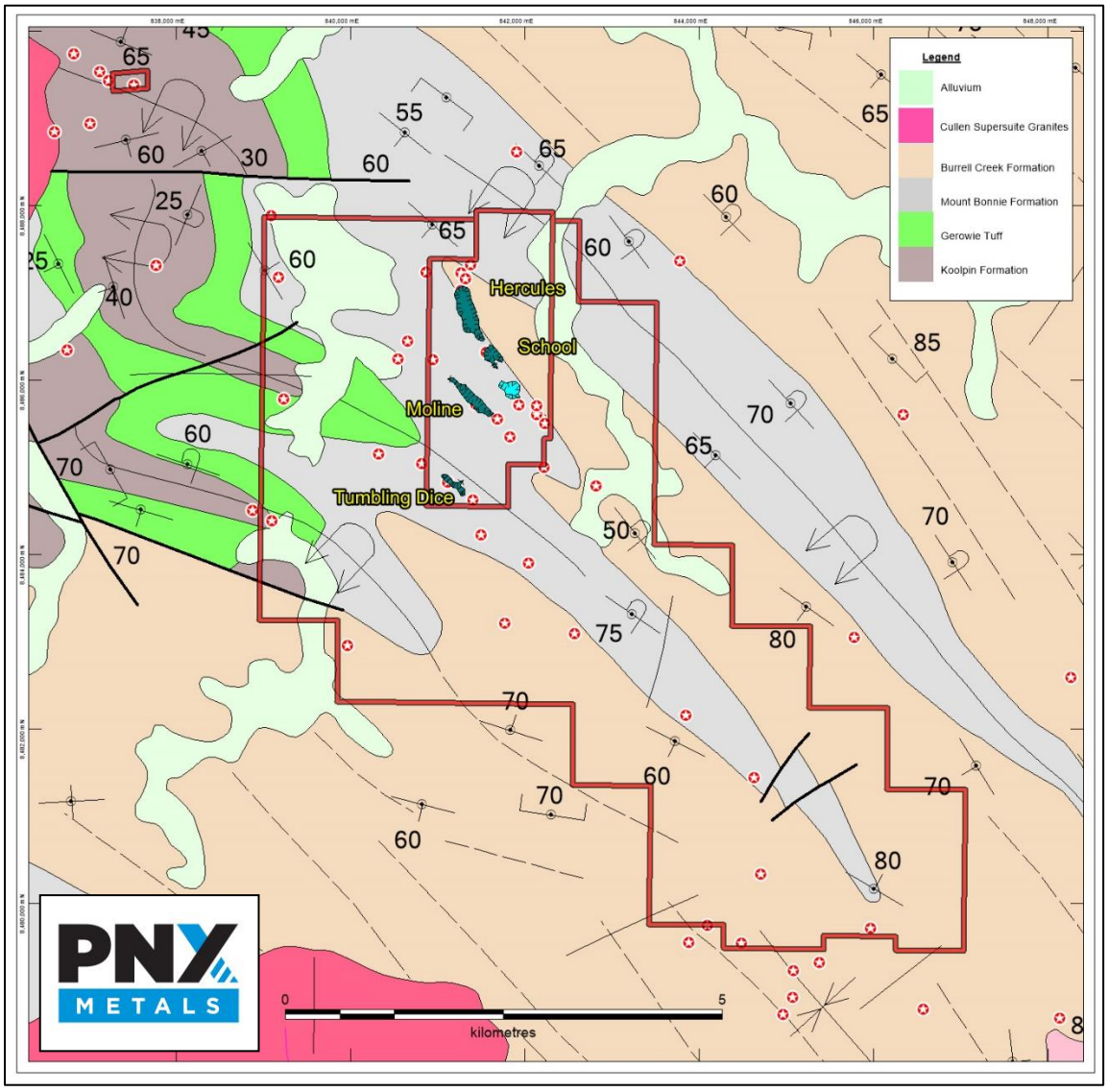

Figure 2: Geology and main pits and mineral occurrences within Moline Goldfields

The Hercules deposit (the largest) is somewhat different, being discordant with stratigraphy. Ore trends 345 magnetic in the north of the pit, but swings to trend 315 magnetic (sub parallel to

stratigraphy and locally known as the Carolina Reef) in the south of the pit and continues through School Pit. This structure is mineralised over 3km strike length and dips steeply (average 65 degrees) to the west. Ore shoots pinch and swell both down dip and along strike. There are at least two sub parallel but weaker mineralised shears in the hanging wall.

Mineralisation in the Hercules Reef is in dilational breccia zones filled with pyrite, quartz, country rock fragments and variable veinlets of sphalerite, tetrahedrite, arsenopyrite, chalcopyrite and carbonates. Gold occurs as fine particles (1-25 microns) within micro-fractures in pyrite and within grains of sphalerite, pyrite and galena. High copper is associated with higher gold values.

7 PREVIOUS EXPLORATION

7.1 MOLINE AREA

Previous exploration activities have been closely related to historical mining activities which are outlined below. Below is extracted from Mattinson and Orridge, 2005.

*Gold was first reported at Moline in the **1880's** as Housechildt's Rush. It was initially worked by the Chinese in small open pits, and selected ore was crushed by hand. Extensive Chinese diggings formerly extended along the three reef lines at Northern Hercules, as a warren of diggings over the ridges later developed as Moline and Tumbling Dice pits, and as less intensive workings at many other sites, including Dingo, High Chinese and Low Chinese. The two latter prospects were notable for widespread workings of alluvial gold.*

*Between **1891** and **1900** the Northern Hercules eastern reef was worked underground down to 218 feet(66m). Cyanidation of the tailings was commenced in **1898**. By **1900** it was found that the pyritic ore in the deeper levels could not be satisfactorily treated and the mine was closed. Recorded production in this period was 21,547 oz of bullion from 10,341 tons of ore (possibly incomplete record) including cyanidation.*

*Underground mining was resumed in 1**934-37**, and again in 1954 when driving and detailed sampling of backs extended to the 300ft (92m) and 400ft (122m) levels. Production from **1954 - 1957** was 27,374 tons yielding 11,266oz of gold.*

*Between **1981** and **1989** a consortium, including Greenbushes, Amoco and Cyprus, undertook extensive exploration for gold in the region centred on Moline. Work included regional geological mapping, aeromagnetic surveys, extensive rock chip sampling and wide-spaced reconnaissance soil sample traversing, This work quickly led to the identification of all the presently known ore bodies and prospects, most of which had easily recognized surface expressions of siliceous scorodite-stained gossans, commonly forming ridge features, and often with old diggings dating back to the 1800's, Prospects were subjected to detailed follow up of soil sampling, ground magnetics, trenching and RC drilling. Airtrack drilling and ditchwitch trenching were commonly employed to delineate reserves in the oxide zone. About thirty prospects were developed to the drilling stage, and twenty two were brought into production. Open pit mining started in **February 1989** and the mine closed in **February 1992** having produced approximately 1.6 million tonnes of*

ore with an average recovery grade of 2.14 g/t Au. The bulk of the ore came from four main pits, namely Northern Hercules, Moline, School and Tumbling Dice, Small tonnages were taken from eighteen other pits. Northern Hercules, Moline and School were mined to the upper part of the sulphide zone, about 50-60m below the original surface; the remaining pits were worked only in the oxide zone.

After mining ceased, exploration of the properties was carried out by a number of Companies under joint venture or option agreements.

*Newmont Mining in **1992/93**, carried out detailed ground magnetic survey of some 22 square kilometres surrounding the main mines and prospects, and additional regional mapping. Evaluations of a number of selected magnetic anomalies failed to identify any new drilling targets. Three deep core holes were drilled beneath open pits at Moline and Tumbling Dice to test stratigraphy and magnetic anomalism.*

*Aztec in **1993/94** concentrated on base metal potential in the northwest, and undertook additional regional mapping and compilations of previous geochemical data, and drilled two RC holes at Cowbell base metal prospect.*

*In **1995** Compass Resources reviewed previous exploration and mining, and followed up with BLEG gold geochemistry of peripheral drainage areas, detailed soil sampling in selected areas of shallow soil cover, and RC drilling at High Chinese, Paw Paw and Strongbow prospects. Broad intervals of low gold values (0.1-1.0g/t) were met with in drilling all three prospects, and two intercepts of potentially economic grade (viz. 2m@ 33.5g/t and 8m@ 4.05g/t) were made at High Chinese.*

Between **1996** and **2001** Northern Gold digitised and recompiled previous data and carried out extensive regional and local soil geochemical surveys. RC drilling at Low Chinese and Moline North (base metal) prospects failed to make economic intercepts.

During **2005** the tenement was managed by GBS and the work consisted of a preliminary review of previous work, which focussed on the gold mineralisation and drill results. During the second year of tenure, the work consisted of a further review of previous work, compilation of a geochemical database, drill hole planning and field mapping.

During **2006,** four diamond drill holes were completed and assayed. Significant assay results are given below:

- In RC pre-collars best results are MEX003 2m@3.26g/t Au from surface and MEX001 2m@3.2g/t Au from 8m.
- In HQ Diamond Core best results are MEX004 0.86m@6.53g/t Au from 70m and 0.97m@8.45g/t Au from 88.3m, in MEX003 2.09m@1.12g/t Au and 1.98m@4.45g/t Au from 194 and 203m respectively.

During **2006-08**, a total of 8 soil samples were collected from the tenements and analysed for Au, Cu, Pb, Zn and As. These samples came from the south-eastern corner of MLN1059. Au ranges

from 22 ppb to 90 ppb. Sample EX2410 showed the highest concentration of Au, As, Cu, Pb and Zn indicating a close association of base metals with gold mineralisation.

During **2008-09** the project was visited, reviewed and a valuation of the tenements was undertaken. The Moline tenements ranked highly due to significant potential it has for gold mineralisation. In April 2009, CGAO acquired all assets held by GBS Gold Australia (liquidated).

No work was completed between **2009** and early **2010**.

During **2011** a series of sampling campaigns were completed within the Moline tenements, resulting in previously mined material being identified as ore grade material suitable for processing through the Union Reefs plant. 521 samples were collected over a low grade stockpile located near the old mill site on MLN1059. These samples were used to estimate the grade of the stockpile at around 0.74g/t. From this sampling 11 composite samples were sent to NAL in Pine Creek for bottle roll test-work. This was designed to determine the estimated recovery of this material, while the individual samples ranged from 12% to 94%, however the lower recovery samples were excluded due to the sample type, this gave an average recovery of around 77%. Ore stockpiles was rehandled from the Moline ROM to the Union Reefs processing plant. A total of around 22,000 tonnes of material was rehandled and processed at an average grade of around 1.10g/t.

In **August 2011,** a VTEM survey was flown over the Moline Project (Figure 3), including the surrounding exploration licences. A total of around 138 square kilometres were flown. Southern Geoscience reviewed the data and reported several VTEM anomalies that required further work.

A total of 32 rock chip samples were collected around the lease, these samples were taken to test mineralised potential around several VTEM targets plus outcrops around the lease.

During **2012,** a consultant geologist was employed to review the Moline Project to report on the exploration potential for the area. This report (Cruickshank, 2012) commenced in mid-2012 and was completed by the end of the year. This report identified that many deposits were mined only to the base of oxidisation. This suggests mineralisation still remains beneath many deposits, and has identified numerous open drilling intersections that require follow up.

7.2 EVELYN AREA

Previous exploration activities at Evelyn mostly relate to historical mining activities which are outlined below. Below is extracted from Butler 1994.

The Evelyn Ag-Pb-Zn mine was first worked in the 1880's (Ellis, 1926) and was intermittently operated until 1966 when total recorded production was approximately 2,200 tonnes with 600

tonnes of lead and 89,000 ozs of silver (Walpole, 1968). Most of the early production was form the oxidised zone of nine separate outcropping lodes.

The main shaft was reported to be 35m deep with north and south drives (35m and 43m long respectively) and an eastern cross cut (blocked at 18m) at the 10rn level (Ellis, 1926). The lode was stoped at the 10rn level where it was reportedly 5.5m wide (Ellis, 1926). The remaining lodes have been worked by surface cuts or shallow shafts.

The Aerial Geological and Geophysical Survey of Northern Australian conducted both potential ratio and self potential surveys over the area which indicated zones of high conductivity north-west of the mine (AGGSNA, Bulletin No.26).

In 1956, the BMR carried out a geophysical survey utilising electromagnetic, magnetic and self potential methods (BMR Record 1957/101). Six electromagnetic anomalies were located, three of which were considered to be significant. Trenching and some drilling was recommended, however it is not known whether they were carried out.

There appeared to be no spatial relationship between the electromagnetic results and the lodes, while weak self potential anomalies were found to be associated with, but limited to the known sulphide lodes.

Between 1966 and 1970, United Uranium NL mined and treated 82,889 tonnes of ore from the Evelyn Mine at an average grade of 260.2 g/t Ag, 5.8% Pb and 6.1% Zn, from a combination of underground and open cut workings. The underground workings comprised a main shaft and 3 levels at 30m, 67m and 104m over a strike length of approximately 110m.

In September 1970, three diamond drill holes were drilled from the 104m level to determine the feasibility of further development (Cox, 1970). The mineralisation intersections are summarised in Table 1. Total ore reserves were calculated to be 7,420 tonnes with an average grade of 11.2 oz/ton Ag, 6.7% Pb and 3.7% Zn. It was concluded that the tonnage and grade of ore was insufficient to influence plans to phase out production at the Evelyn Mine (Cox, 1970).

DRILL HOLE INTERSECTIONS			ASSAY RESULTS				
Hole No.	From-To	True Width	Au (g/t)	Ag (g/t)	Pb%	Zn%	Cu%
94	24.89m-25.4m	0.24m	0.58	465	8.1	7.5	0.85
	24.89m-26.85m	0.98m	0.46	228.8	3.2	5.1	0.42
95	25.3m-25.8m	0.24m	0.31	2297.1	49.6	*9.5*	0.79
	23.47m-26.09m	1.31m	0.23	527	9.49	3.25	0.27
96	33.35m-33.83m	0.26m	15.61	765.7	12.4	6.1	2.36
	32.79m-34.14m	0.67m	5.66	434	6.6	6.0	1.07

At the time of closure, stated reserves indicated by diamond drilling were 7,420 tonnes @ 342.9g/t Ag, 6.7% Pb and 3.7% Zn (source: "United Uranium NL, Summary of Holdings").

8 WORK COMPLETED BY PNX METALS LTD (Current Licence Term)

8.1 YEAR 1: 2014-2015

In **2014** PNX entered into the farm-in agreement and gained access to KL Gold's vast geochemical and drilling database. Evaluation and compilation began.

A consultant geophysicst was engaged to review the VTEM and magnetic data, (which includes surrounding EL28616). There were five "Priority 1" and ten "Priority 2" target areas identified (Figure 3).

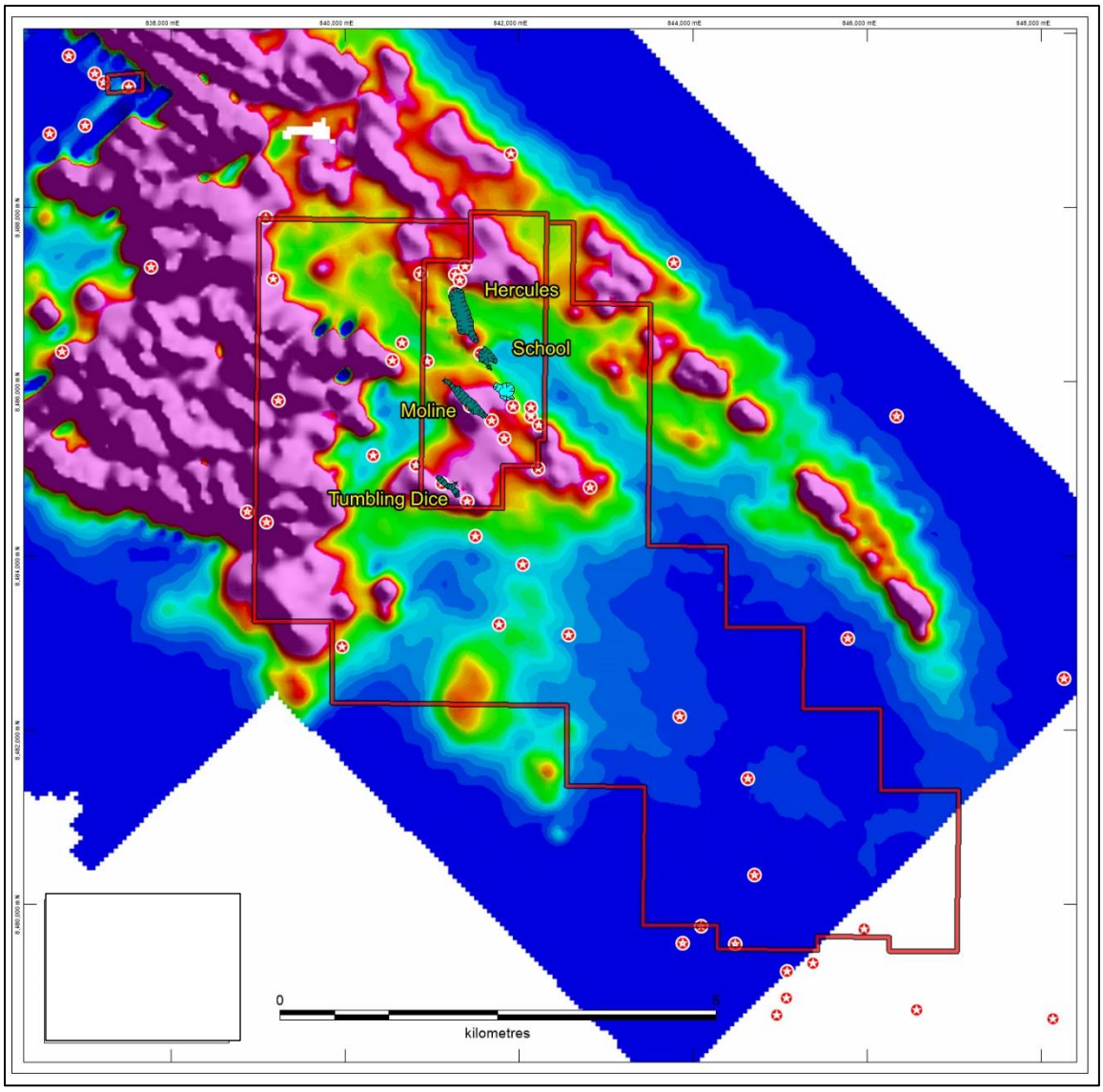

Figure 3: VTEM survey bfieldz25 image

8.2 YEAR 2: 2015-2016

In **2015 – 2016,** PNX identified sulfide targets for both gold and base metals that were considered worthy of drill testing. An initial drilling program was designed to investigate mineralisation below the existing open pits at Hercules, Moline, Tumbling Dice and School in conjunction with mapping, and a geochemical soil and rock chip survey.

8.3 YEAR 3: 2016-2017

A total of 28 reverse circulation holes, were completed comprising an initial 12-hole, 1497m reverse circulation program in November 2016 and a follow-up 16 hole, 1609m RC programme which was completed in 2017. Drilling returned numerous high-grade gold and base metals intercepts including:

<u>Moline prospect</u>

- 2m @ 4.66 g/t Au, 177g/t Ag, 4.95 Zn and 4.41% Pb from 92m in MORC003,
- 9m @ 2.57 g/t Au from 92m in MORC006, and
- 3m @ 2.5 g/t Au from 71m, 9m @ 1.55 g/t Au from 96m, and 1m @ 2.7g/t Au, 2.5% Zn, 1.5% Pb and 107g/t Ag from 81m in MORC028

<u>Tumbling Dice prospect</u>

- 10m @ 1.67g/t Au and 0.97% Zn from 57m in MORC009
- 30m @ 2.29g/t Au and 0.70% Zn from 78m in MORC010

IN **2016 – 2017** 395 pXRF soil geochemical samples and 47 rockchip samples were also collected over Eureka Creek and Simple Dreams prospects to the south and southwest of the historic pits.

8.4 YEAR4: 2017-2018

PNX undertook a significant exploration program during the reporting period, including surface soil and rock chip sampling, and RC drilling. A total of 12 reverse circulation holes, 1290m were completed comprising an initial, 84m reverse circulation hole in December 2017 to test an IP and base metal anomaly at Swan (MORC031), furthermore a follow-up 11 hole, 1206m programme testing mineralisation extent to known Au and base metal resources below Moline, Trig, and Tumbling Dice historical pits was completed.

In addition, collection of 375 pXRF and 3 rockchip geochemical samples were collected to investigate arsenic and base metal anomalism.

Geological maps at 1:250,000 were used a reference for local data collection, and prospect scale maps were created using additional data collected digitally using a Trimble PDA with MapInfo/Discover software.

All data submitted with this report is appended in the standard reporting templates, and summarised in the digital file verification listing.

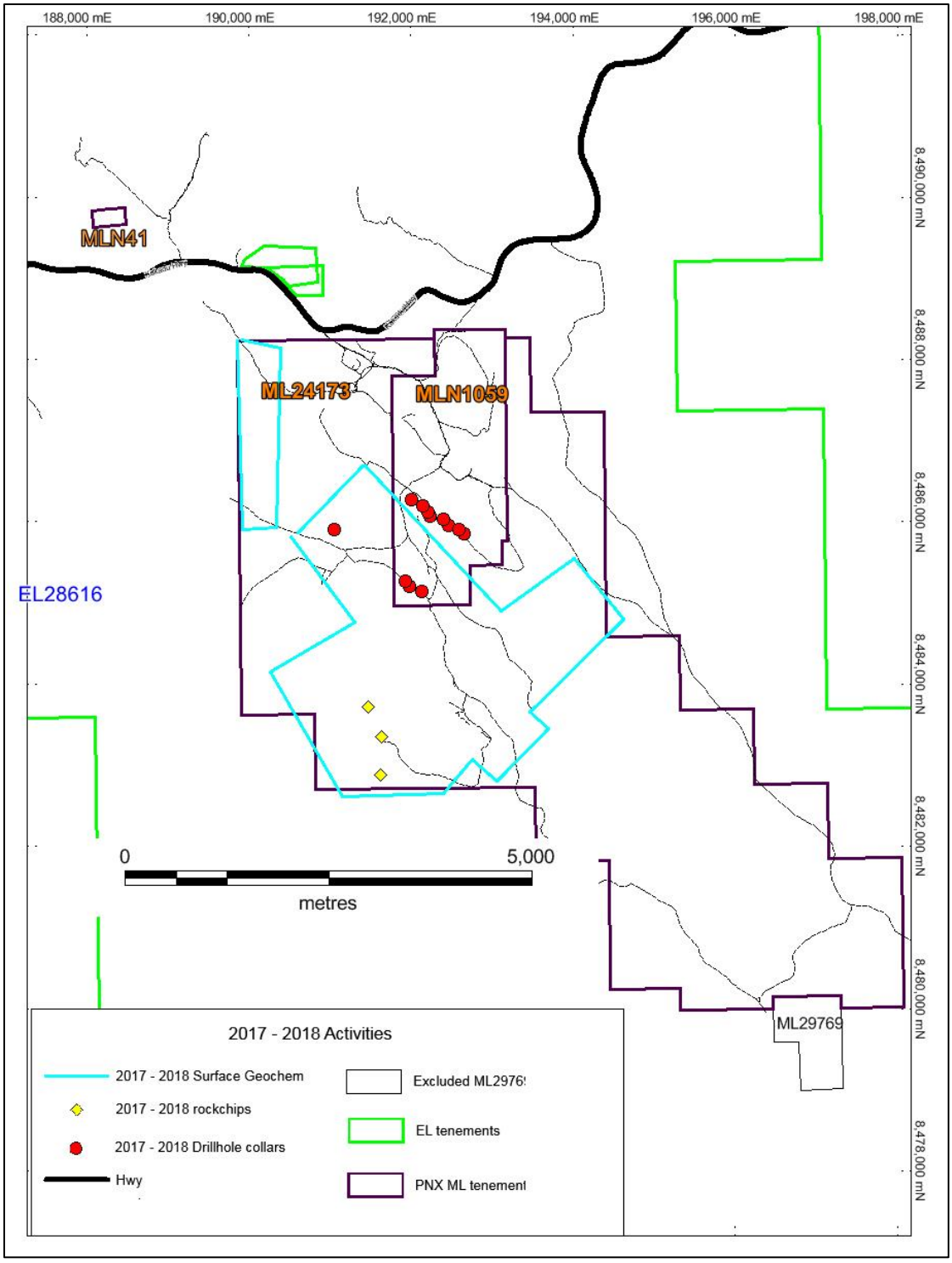

Figure 4: Exploration Index Map GR356

8.4.1 Geochemistry

The methodology involved collecting soil samples sieved though a 60-mesh screen at approximately 200x50m spacing over targets defined by structure, stratigraphy, and historic geochemical data. Sieved soil was "zapped" directly using a portable Niton Xl3t device ("pXRF") for a 50 second reading time. Calibrations to certified reference material were performed each day and repeat readings were taken approximately every 50 measurements. Anomalous areas and historical soils were infilled to 100x50m or 100x25m as the surveying progressed. Arsenic was used as an indicator element for gold, given the association of known mineralisation with arsenopyrite, or scorodite. Results displaying images of the arsenic and zinc are displayed in Figure 5 and 6 respectively. Geological maps at 1:250,000 were used a reference for local data collection, with data collected digitally using a Trimble PDA with MapInfo/Discover software.

Three rock chip samples were collected from Waterhole on quartz veins or blows and ferruginous siltstones and mudstones for Au and base metal analysis (Pb, Zn, Cu, and Ag). No significant Au or base metals were indicated from results.

Table 2 Rockchip Summary

Prospect	Lease ID	SampleID	Easting_MGA94_53	Northing_MGA94_53	Lith	Au ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Ag ppm
Waterhole	ML24173	MRK00061	191479	8483718	qz outcrop	0.01	-	-	-	-	-
Waterhole	ML24173	MRK00062	191637	8483350	hem siltstone	0.06	270	454	357	1578	L
Waterhole	ML24173	MRK00064	191626	8482882	bull qz	0.01	-	-	-	-	-

8.4.1.1 Stockyard (Au + Base Metals)

Stockyard prospect lies over folded Gerowie Tuff and Koolpin Fm stratigraphy and is under explored. Historic drilling data and costean sampling data indicated base metal potential at Stockyard prospect. Historic drillholes included PDH04 – 5ft @ 3.73 g/t Au, 11 oz/t Ag and 0.85% Cu; and PDH02 – 15ft @ 1.79% Zn and 0.4 oz/t Ag. A historic rockchip sample from costean tailings was noted at 77% Pb.

Geo referencing of 1960s United Uranium soil maps (CR19710097) defines a Cu, Pb Zn anomaly over the Stockyard area and 20 pXRF samples were collected on to delineate the extent of the base metal surface footprint. Unfortunately, base metal anomalism truncates due to flooding and mineral dispersion from proximal creek line topography.

8.4.1.2 Swan (Au + Base Metals)

The Swan prospect occurs mainly in the PNX mineral leases, and mineralisation is concentrated in the mineral lease to the SE (figure 5). 105 pXRF samples were collected in MLN24173 and ML1059, delineating the 800m x 700m extent of As and base metal anomalism, which occurs along the Gerowie Tuff contact trending NW from the historic Swan Pit.

The base metal geochemical anomalism was followed up with ground IP gradient array survey and pole- dipole surveying to define two RC drilling targets, with results discussed in IP section below.

8.4.1.3 Waterhole (Au + Base Metals)

Historic rockchip and drilling data suggest Waterhole highly prospective. Observed quartz veining with limonite trending E - W, with observed shallow to deep dipping bedding striking ENE – WNW indicating stratigraphy is tightly folded (Figure 5). North - South lines of pXRF readings were collected and delineation of a strong zinc anomaly +500ppm was achieved. The lithology appeared to be steep dipping laminated greywackes and shales becoming shallower to the SW.

The base metal geochemical anomalism was followed up with ground IP gradient array survey and pole- dipole surveying to define two RC drilling targets, with results discussed in IP section below.

Three quartz vein and ferruginous metaseds rockchip samples were collected however results showed very weak Au and base metal mineralisation.

8.4.1.4 Cornwall 2 (Au)

Cornwall Historic surface pit occurs along the Tumbling Dice trend to the South. Cornwall belongs to quartz-minor sulphide mineralisation style and is similar to the Hercules striking 345°. All drilling carries open minerlisation to depth and data suggest that the mineralised zone may continue to the North into Cornwall 2.

125 pXRF readings were collected indicating a small narrow zone of weak As defining the possible Northern extent of 150m of Cornwall mineralisation.

Cornwall 2 justifies further investigation for RC drilling down dip from historic drillholes and drillholes targeting geochemical footprint and structural setting to the North.

8.4.1.5 Otherside (Au + Base metals)

A regional survey of 185 pXRF readings delineated a patchy moderate zinc anomaly 300m wide and 700m long associated with NW trending residual soils of Burrell Creek formation shales and greywackes (Figure 6).

The zinc anomaly is closed off by bordering creek lines, thus the Zn geochemical anomalism should be followed up with ground geophysics (IP or SAM) to identify new drilling targets. In addition, locating and compiling historical drilling data is required.

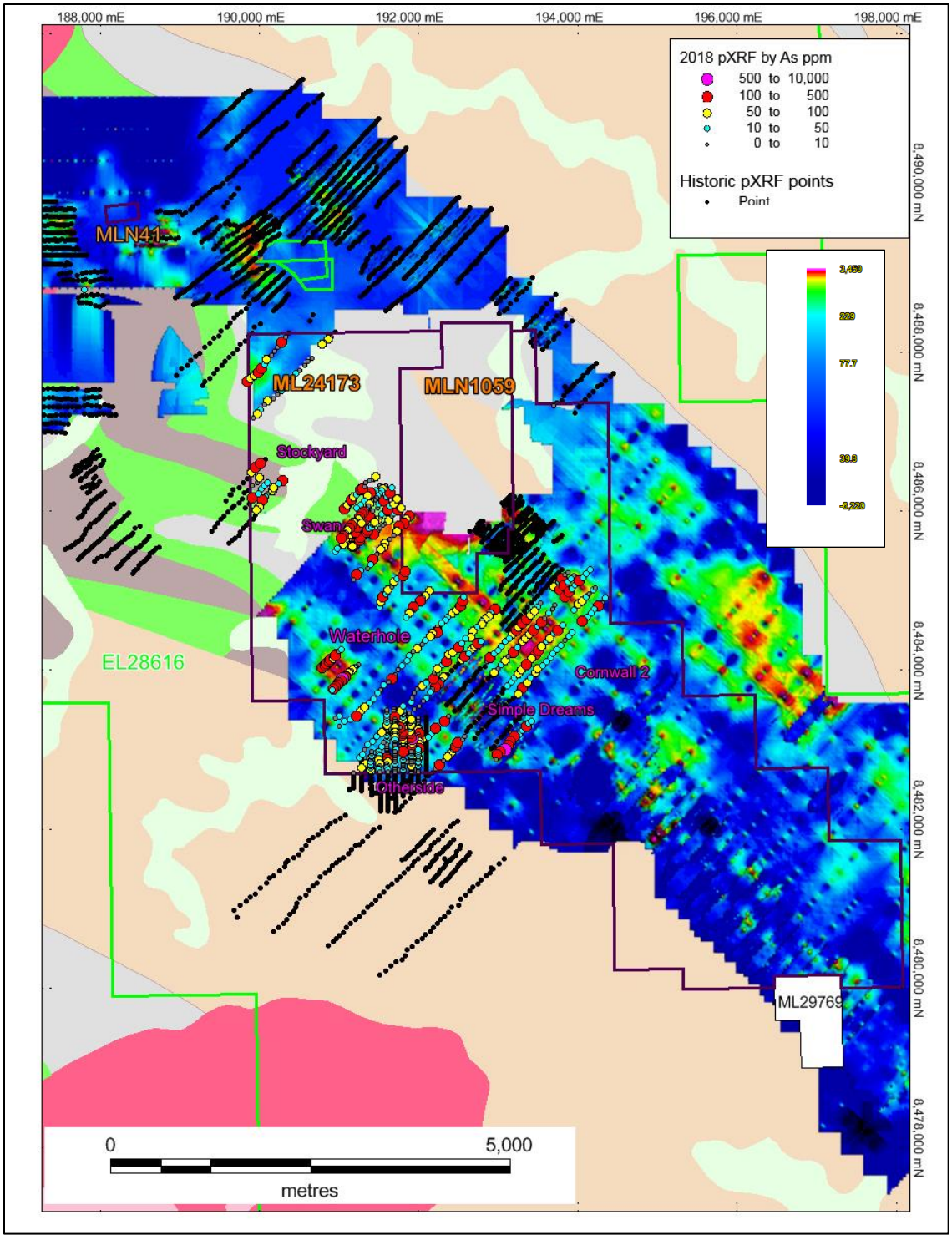

Figure 5: Geochemical gridded display of arsenic (ppm) from pXRF on 250k Geology

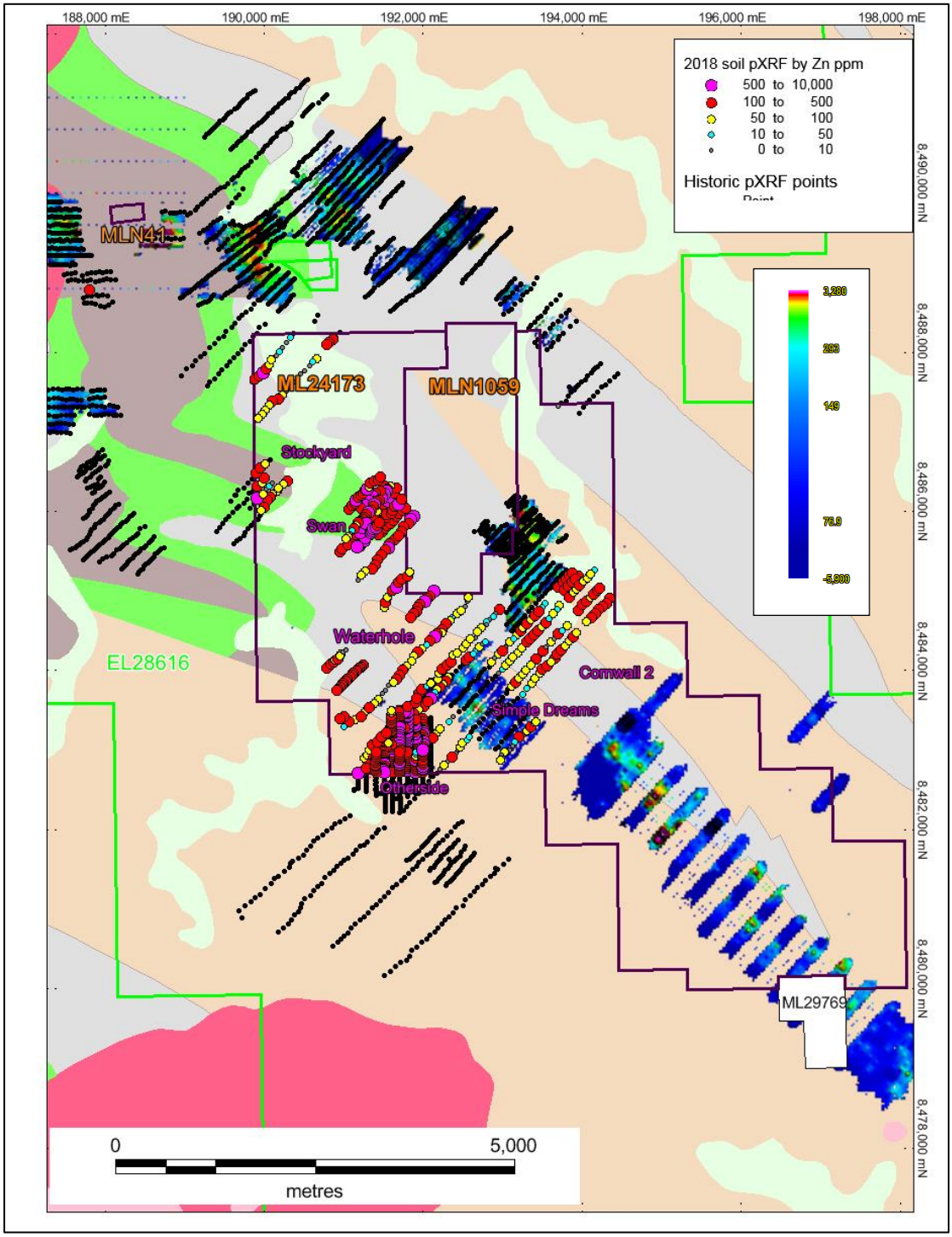

Figure 6: Geochemical gridded display of Zn (ppm) from pXRF on 250k Geology

8.4.2 Drilling

A total of 12 reverse circulation holes, 1290m (Figure 4) was completed during the reporting period designed to investigate gold and base metal mineralised structures under the existing historical open pits at Moline, Trig, and Tumbling Dice, as well as an IP anomaly with coincident

base metal anomalism in regolith from historic drilling at Swan prospect. Drilling summarised in table 2.

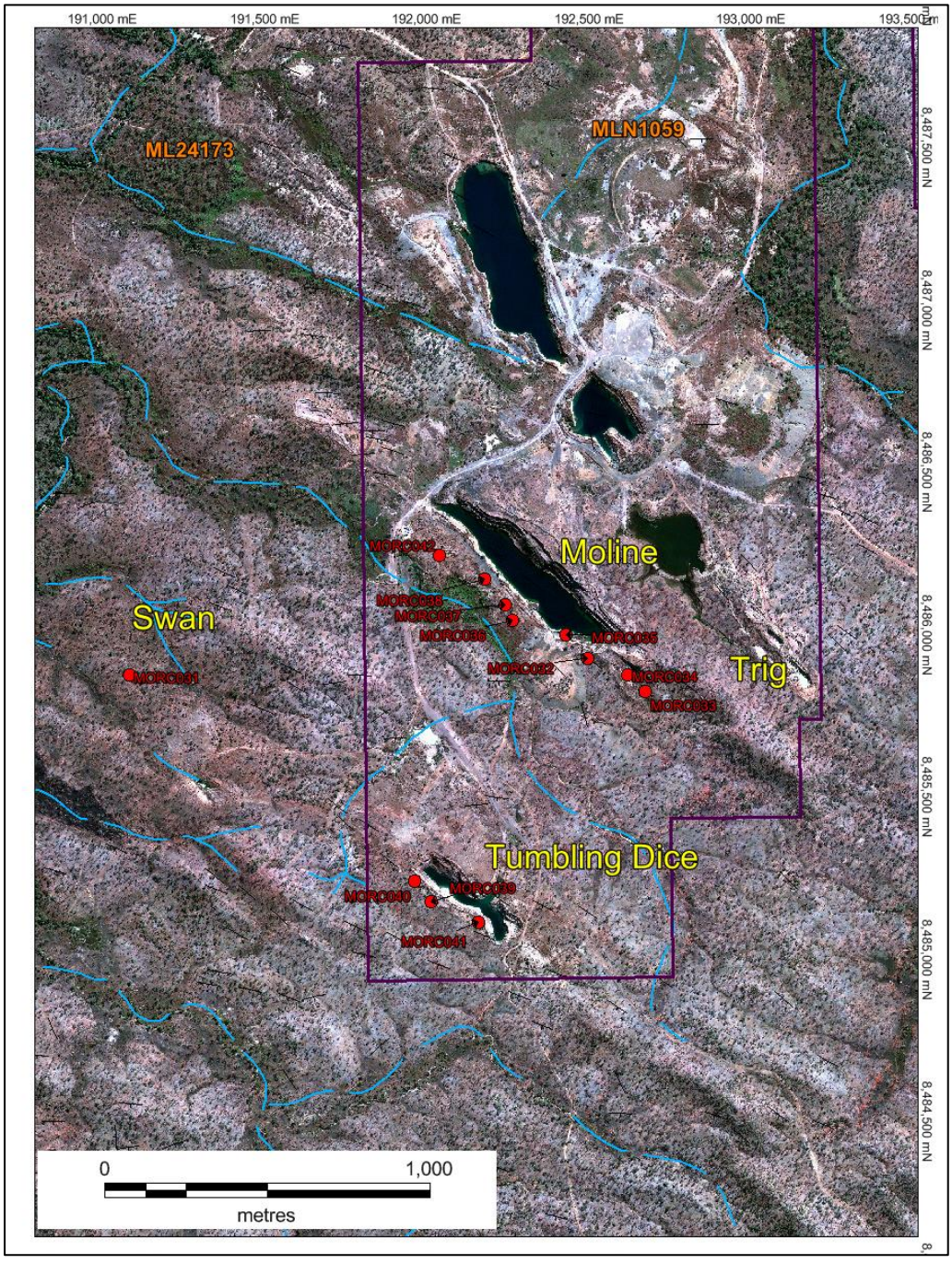

Figure 7: Drill hole collar plan on aerial photo

Table 3: Drilling Summary

Hole_ID	Hole_ Type	EOH Deph	Orig_Grid_ID	Orig_East	Orig_North	Orig_RL	Collar_Azi muth_Mag	Collar_Azi muth_Grid	Collar_Dip	Lease_ID	Prospect
MORC031	RC	84	MGA94_53	191055	8485905		41	45	-60	ML24173	Swan
MORC032	RC	133	MGA94_53	192468	8485958	135.9	38	42.88	-60	MLN1059	Moline
MORC033	RC	43	MGA94_53	192648	8485857	149	38	42.88	-60	MLN1059	Trig
MORC034	RC	103	MGA94_53	192591	8485907	149.5	38	42.88	-60	MLN1059	Trig
MORC035	RC	133	MGA94_53	192403	8486031	129	0	0	-90	MLN1059	Moline
MORC036	RC	120	MGA94_53	192237	8486074	125.1	38	42.88	-60	MLN1059	Moline
MORC037	RC	151	MGA94_53	192213	8486124	128.1	38	42.88	-60	MLN1059	Moline
MORC038	RC	133	MGA94_53	192150	8486201	124.5	38	42.88	-60	MLN1059	Moline
MORC039	RC	113	MGA94_53	191985	8485207	137.9	38	42.88	-60	MLN1059	Tumbling Dice
MORC040	RC	85	MGA94_53	191936	8485272	144.9	38	42.88	-60	MLN1059	Tumbling Dice
MORC041	RC	107	MGA94_53	192131	8485145	136.7	38	42.88	-60	MLN1059	Tumbling Dice
MORC042	RC	85	MGA94_53	192012	8486275	126.6	38	42.88	-60	MLN1059	Moline

Both programs were carried out by Geodrilling contractors using a 450 Schramm. One metre samples were collected from a cone splitter mounted at the base of the cyclone, with samples geologically logged, pXRF tested and submitted to the NAL facility for analysis in Pine Creek. Where no visible sign of mineralisation was observed, composite samples at typically 4m intervals were collected from the residual sample spoils using a spear. All holes were surveyed using a single shot camera at typically 30m downhole intervals. Drill collars in 2016 were accurately located using differential GPS. Drill collars in 2018 have yet to be picked up, with standard non-differential coordinates only available. All data is provided in the digital appendices.

Results from drilling at Moline and Tumbling Dice/Lay confirmed mineralisation extended below the historic pits, however Trig results indicated no significant gold minerlisation' in addition results indicated no gold or base metal mineralisation at Swan prospect. Significant results achieved in the **2018** drilling campaign included:

Table 4 summarises the significant results, and further discussion by prospect is provided below.

Table 4: Significant Drilling Intersections

HoleID	Type	Primary Purpose	East	North	RL	Dip	Azi	EOH		From	To	Interval	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)
MORC031	RC	Test chargable IP anomaly	191055	8485905	134.6	-60	45	84	NSI								
MORC032	RC	Moline pit southern extension	192468	8485958	135.9	-60	42	133	NSI								
MORC033	RC	Moline pit southern extension	192648	8485857	149	-60	42	43		17	18	1	0.02				
MORC034	RC	Moline pit depth extension	192591	8485907	149.5	-60	42	103		72	73	1	0.09				
MORC035	RC	Moline pit depth extension	192403	8486031	129	-90	0	133		71	74	3	0.67		0.64		
MORC036	RC	Moline pit depth extension	192237	8486074	125.1	-60	42	120		18	19	1	1.24				
										104	109	5	1.79		0.82		
MORC037	RC	Moline pit depth extension	192213	8486124	128.1	-60	42	151		85	86	1	2.95				
										92	93	1	1.40				
										117	121	4	1.25		0.89		
										125	126	1	1.22				
MORC038	RC	Moline pit depth extension	192150	8486201	124.5	-60	42	133		63	65	2	2.30				
										99	105	5	1.56				
										110	111	1	1.87				
MORC039	RC	Tumbling Dice depth extension	191985	8485207	137.9	-60	42	113		69	70	1	8.65				
MORC040	RC	Tumbling Dice depth extension	191936	8485272	144.9	-60	42	85		53	54	1	0.02				
										81	83	2	0.03		1.61		
MORC041	RC	Tumbling Dice depth extension	192131	8485145	136.7	-60	42	107		53	55	2	0.65		0.97		
										57	61	4	0.74		0.22		
										91	93	2	0.01		1.12		
MORC042	RC	Moline pit depth extension	192012	8486275	126.6	-60	42	85	NSI								

8.4.2.1 Moline

At the Moline prospect, mineralisation is hosted in silicified shales with ± pyrrhotite with quartz veining. Mineralisation is Zn-Ag rich in places, and is probably continuous over a 350m strike length below the limit of the historical Moline pit. A typical cross section is shown in Figure 8.

Moline Trend – strike extent of >1.5km with upside potential at depth and along strike

- **2m @ 2.16 g/t Au from 63m in MORC038**
- **6m @ 1.53 g/t Au from 69m in MORC038**

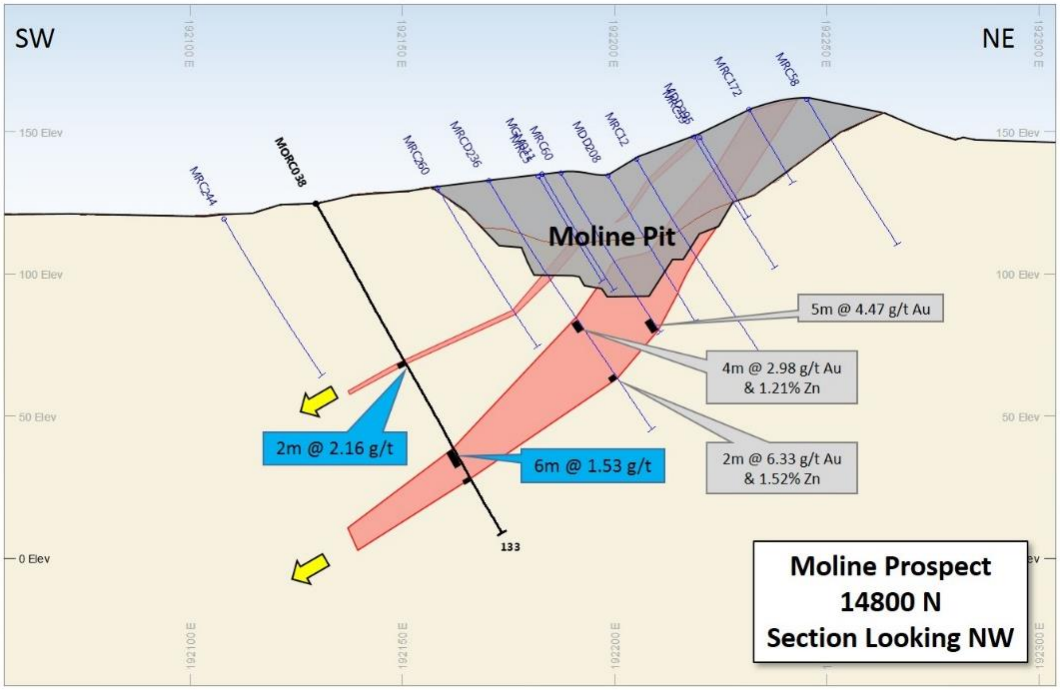

Figure 8: Moline Cross Section showing MORC038

8.4.2.2 Tumbling Dice

Historical drilling and two RC drillholes completed in **2018** defined a continuous zone of gold and base metals mineralisation over an approximate strike of 300 metres and contains a steeply plunging high-grade gold shoot controlled by cross structures intersecting the main lines of lode. Mineralisation remains open down-dip to the south-east. A typical cross section is shown in Figure 9.

Tumbling Dice Trend – strike extent of >300m and remains open

- **1m @ 8.37 g/t Au from 69m in MORC039**

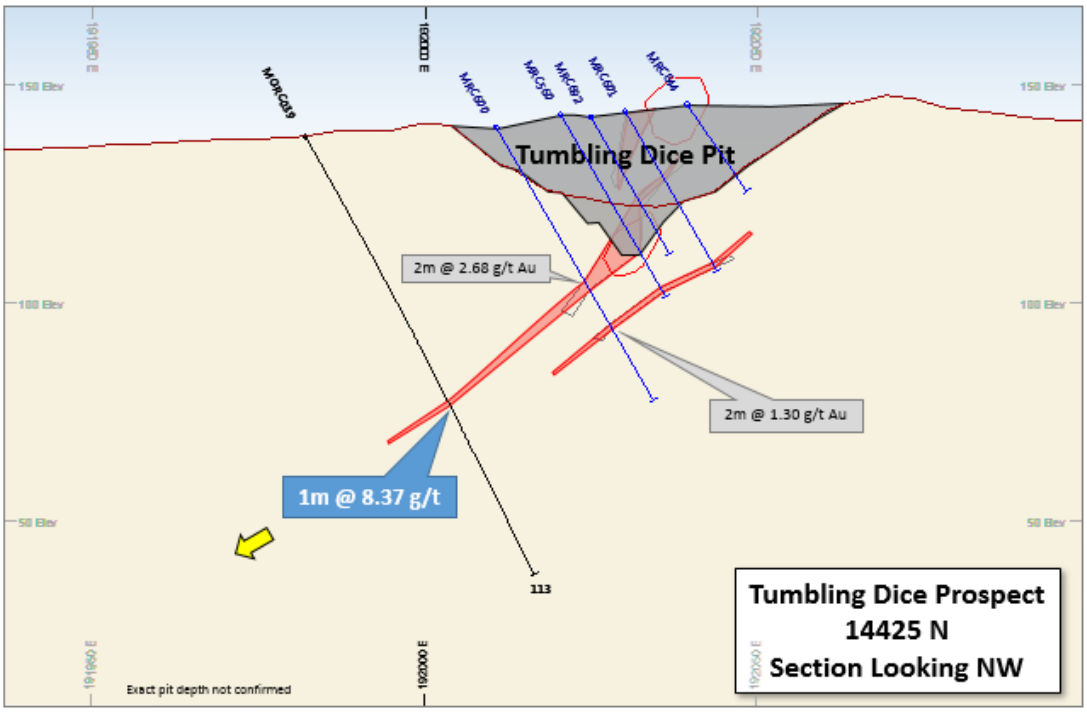

Figure 9: Tumbling Dice Cross Section showing MORC039

8.4.2.3 Trig

Two RC drill holes (MORC033 and MORC034) were completed at Trig, samples for gold analysis (FA50) were sent to NAL laboratories in Pine Creek however results indicated no significant gold mineralisation.

8.4.2.4 Swan

A single drill hole (MORC031) was completed at Swan testing an IP chargeability anomaly, despite some weak base metal anomalism in the regolith, there were no significant base metal results, and the chargeability is attributed to carbonaceous shales. Samples for gold analysis (FA50) were also sent to NAL laboratories in Pine Creek however results indicated no significant gold mineralisation.

8.4.3 DTM

Uber-air completed a high-resolution aerial survey to create a DTM dataset and GSD ~50mm aerial image. Datasets were rendered, accuracy verified from reference points, and point cloud classified including vegetation removal. DTM images interpretation can recognise the style of geological structures, fold axes identification and inclination of the layers or faults zones and create greater accuracy in resource estimation, as well as create accurate drilling target locations and depths.

Two large blocks (red) were selected over a 2 x 4 km area which partially covers MLN24137 and MLN1059 (figure 10).

A bathymetric surveys to create DTMs of pit depths would be usefull in confirming what depths were actually mined at Moline

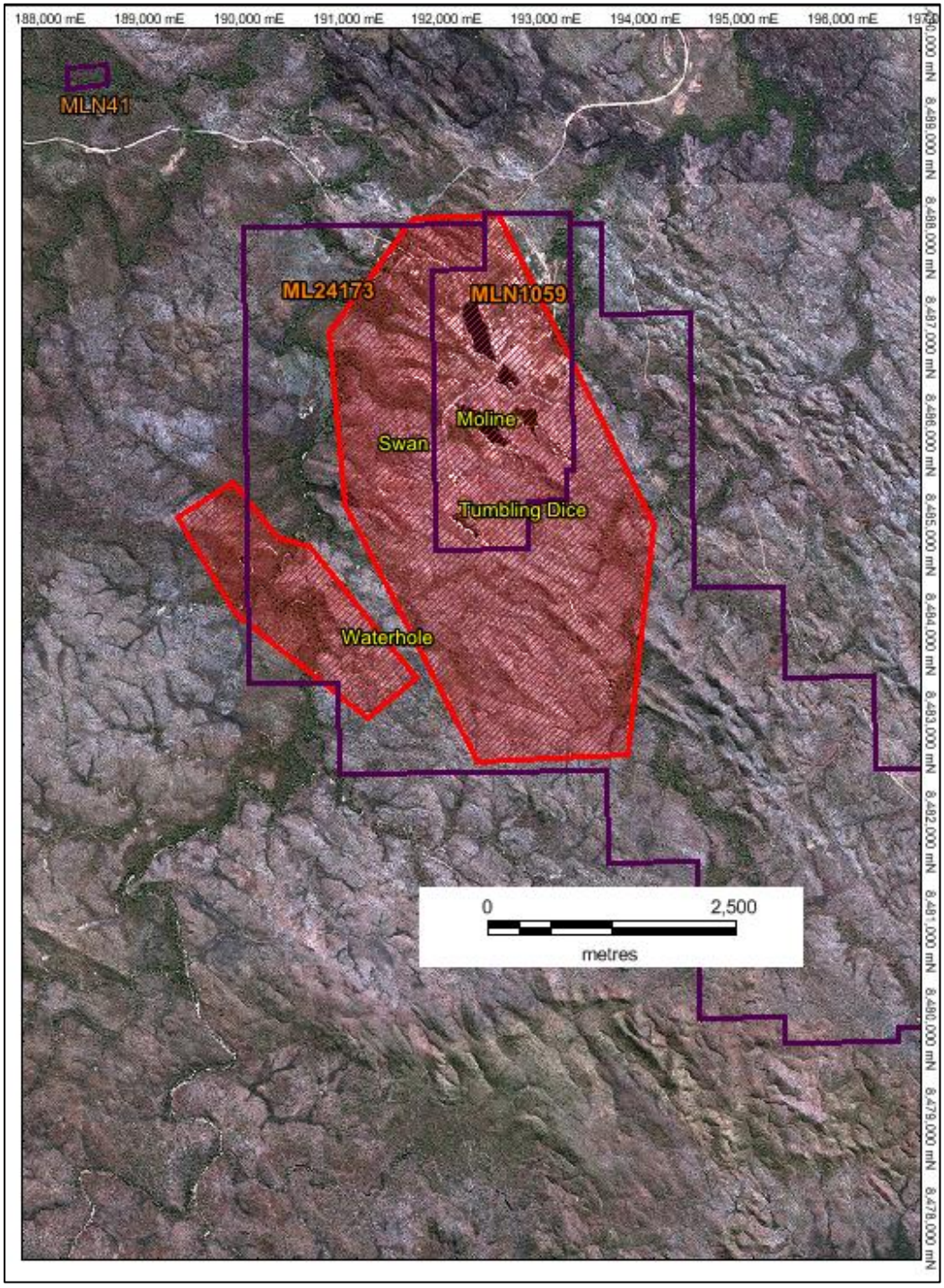

Figure 10: DTM aerial survey location map

8.4.4 Gradient Array IP

Based on the geochemical and mapping results, a number of targets were identified for follow-up Induced Polarisation surveying, to test whether chargeable features may be causing the geochemical anomalism. Three blocks were chosen for initial gradient array tests (Figure 11), two of which are either partially or wholly within MLN431 and ML1059 over Swan prospect and partial waterhole prospect).

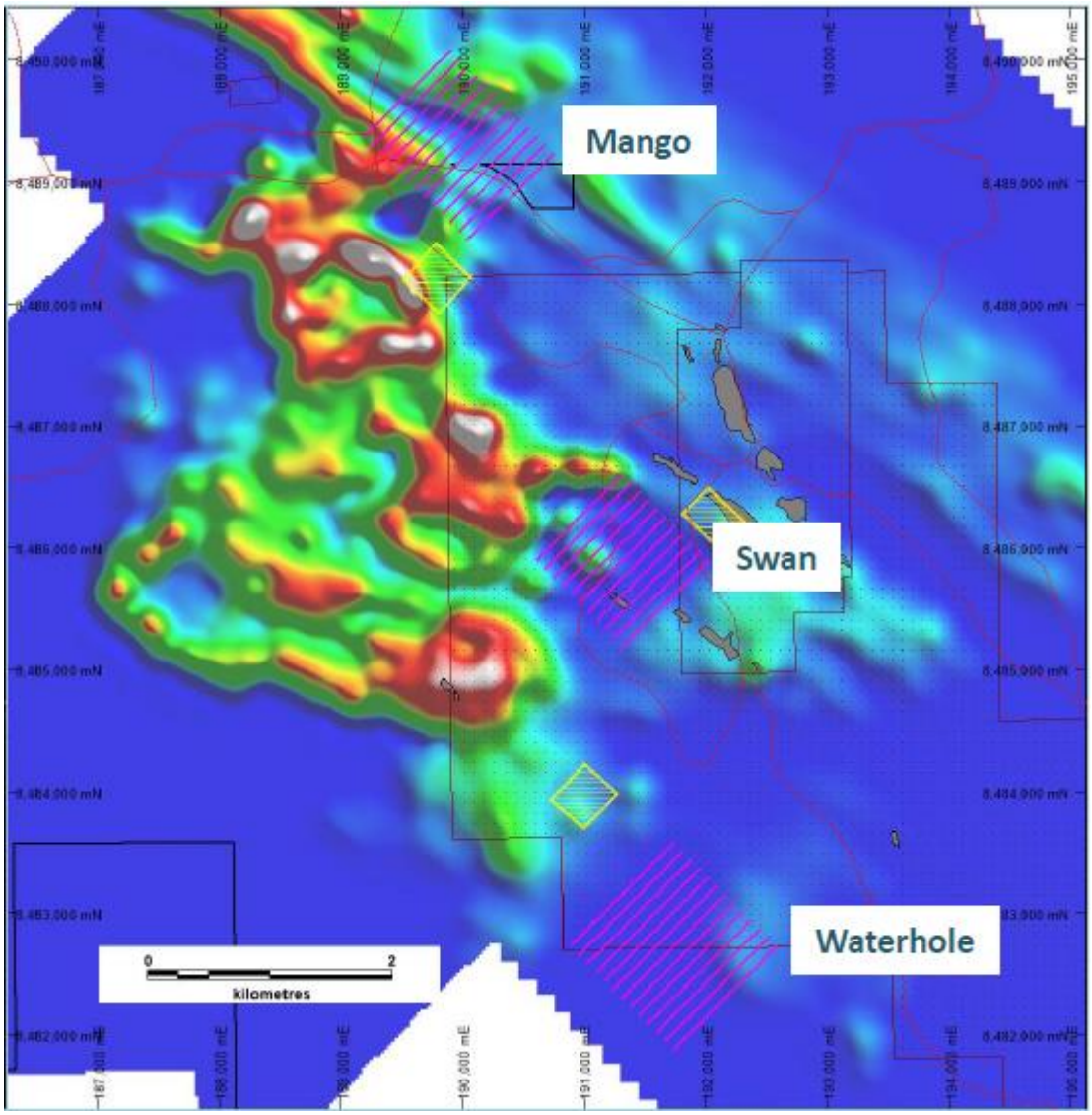

Figure 11: Three blocks chosen for initial gradient array tests

The data was collected by Zonge in frequency domain with 3-point coupling, 50m Rx dipoles, NE-SW orientation, 100m line spacing at 0.125Hz.

8.4.5 Pole-Dipole IP

All gradient array surveys detected highly chargeable features, which were then followed up with selected 2D pole-dipole (PDIP) lines (Figure 12), which were again collected by Zonge in time domain, NE-SW orientation, 50m Rx dipoles and 0.125Hz. Results were modelled by consultant geophysicists at Terra Resources and results are shown in Figures 12 and 13. Two drill holes were recommended at each target based on the results.

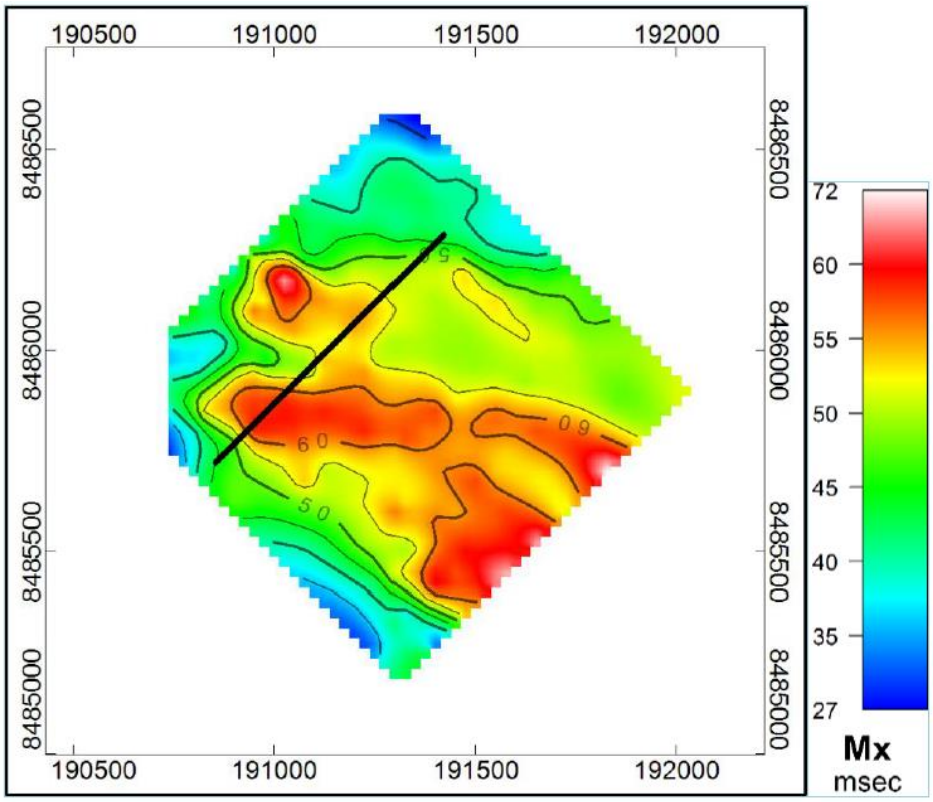

Figure 12: Swan Chargeability showing PDIP lines

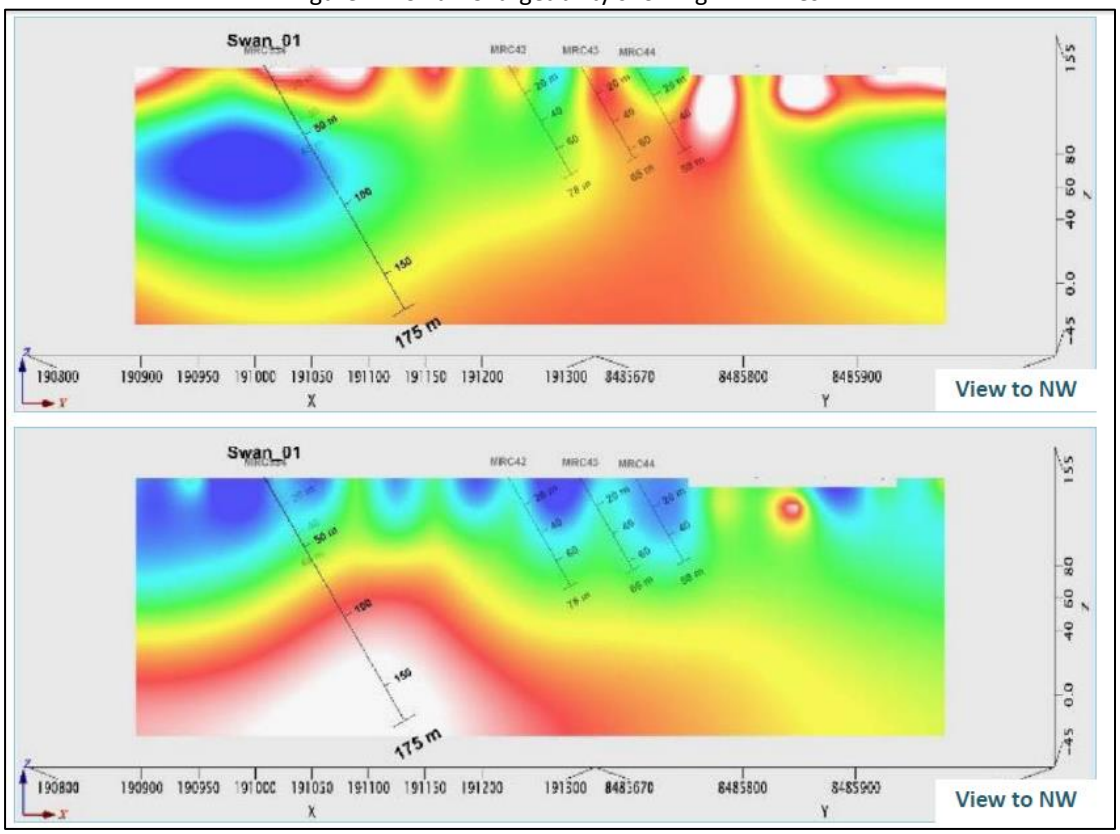

Figure 13: Swan PDIP resistivity and chargeability models showing one of the two recommended drillholes SW01.

8.4.6 Magnetic Image Processing

The regional open file magnetic data was merged with the 2011 VTEM-derived magnetic data to produce new merged images covering the whole Moline project.

9 RECOMMENDATIONS AND CONCLUSIONS

There is sufficient data to undertake a mineral resource estimate at many of the prospects and the resource estimate will benefit from the accurate DTM completed, however bathymetric surveys of pit depths to confirm what depths were actually mined prior to the sudden shut down of the operation in the 1990's would be advantageous.

Ore grade mineralisation remains in deeper zones in unoxidised rocks in Moline, and Tumbling Dice. The potential for discovery of primary mineralisation is therefore considered to be very high. Diamond drilling is planned to commence at Moline and Tumbling Dice to extend three of the holes drilled that did not reach target depth, and to obtain samples for further metallurgical flotation testwork.

The area around Swan and Waterhole is of interest, not only due to high Zn values in historical and PNX soil sampling, albeit Swan drillhole MORC031 indicating no base metal mineralisation. Swan and Waterhole IP drillhole targets has MMP approval for further works to be completed during the next reporting period.

The zinc mineralisation is of particular interest to PNX due to likely synergies with the Hayes Creek Project (Mt Bonnie and Iron Blow deposits). IP surveys have been effective in the past, with a strong response recorded at Moline, so will be considered as a technique to define drill targets in areas with coincident geochemical anomalism.

Compilation and validation of historical data also needs to continue. Targets such as Swan and Trig are relegated to a lower priority, however historical data may identify further potential to these prospects as well as generate new target areas.

Geochemistry and possibly geophysics will also focus on areas such as Cornwall 2, Simple Dreams and Otherside where strong geochemical anomalies remain untested or drilled and/or mined only to shallow depths.

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