



PARTIAL RELINQUISHMENT REPORT

EL29484

For Period Ending 16 April 2015

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3. Complete Tenement

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1 EXECUTIVE SUMMARY

Exploration Licences 29484 and 29510 of the Mountain Creek Project covers prospective ground around the Union Reef goldfield. The tenements are about 168 km from Darwin via the Stuart Highway. This is the relinquishment report for EL's 29484 and 29510 covering exploration activities in the first two years of operation.

The tenement area covers the Burrell Creek Formation with dominant lithologies of greywacke, siltstone and mudstone. Towards the north-west, minor rocks of the Mount Bonnie Formation (South Alligator Group) are also exposed. These lithologies have been intruded and thermally metamorphosed by the Tabletop, Allamber Springs and McKinlay Granites. The central part of the tenement is transected north-northwest to south-southeast by the Pine Creek Shear Zone, a grossly antiformal zone averaging 300m wide, characterised by phyllitic schist and tightly compressed folds. The axial zones on the principal anticlines have frequently failed within the PCSZ and predominant bedding and fabric attitudes are steeply dipping to the north east. Some parasitic folds have steep westerly dips. The PCSZ is the most mineralised structure with respect to gold in the region and host many gold deposits such as Union Reefs, Enterprise, International, Gandy's, Czarina, Spring Hill and many more prospects.

Exploration activities for the reporting period included a Project Ranking Exercise part of which covered the Mountain Creek Project area as well as some reconnaissance trips to site to inspect some potential targets and assess access.

2 COPYRIGHT

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Any information included in the report that originates from historical reports or other sources is listed in the "References" section at the end of the document.

This report may be released to open file as per Regulation 125(3)(b).

3 INTRODUCTION

Exploration Licences (EL) 29484 and 29510 are included with EL's 29670 and 29762 make up the Mountain Creek Project area which covers prospective ground around the Union Reef goldfield. The Mountain Creek tenements were granted to Crocodile Gold in 2013 for a period of 6 years. This is the first relinquishment report for this tenement group and is included in the group report number GR323. This relinquishment report covers the exploration activities from 17th April 2013 to 16th April 2015.

4 LOCATION AND ACCESS

The Mountain Creek project area is situated 165km SE of Darwin NT and 20km north-west of Pine Creek. Access to the central portion of the tenement group may be obtained via Mt Wells road from Union Reefs mine complex north-westwards, or alternatively by turning NE off the Stuart

Highway on the Spring Hill Road, some 20km north of Pine Creek. The Darwin-Adelaide railway crosses the eastern boundary and north eastern sectors of the tenement and in addition, the Darwin-Palm Springs gas pipeline easement crosses the same sectors. For reasons of public safety there are statutory restrictions relating to exploring in the vicinity of these easements.

The tenement group covers part of the McKinlay River and its tributaries. These have excised the area and created a terrain that is undulating and marked by north-west trending ridges. It is also within the Mary River West Pastoral Lease

5 TENEMENT DETAILS

EL29484 and EL29510 of the Mountain Creek Project area were granted to Crocodile Gold in 2013 and will expire in 2019. Table 1 below, lists the Mountain Creek tenement details. Substitute Exploration Licence (SEL) 10341 expired in September 2011 and was replaced with EL29672.

Underlying cadastre is the Northern Territory Portions 00649 and 01631 which include Perpetual Pastoral Lease 1134 Mary River Wildlife Ranch Pty Ltd.

Tenement	Area (km2)	Grant Date	Expiry Date
EL29484	30.04	17-Apr-13	16-Apr-19
EL29510	46.73	17-Apr-13	16-Apr-19

[Table 1: Mountain Creek Project Tenement Details](#)

6 GEOLOGICAL SETTING

6.1 REGIONAL GEOLOGY

The Mountain Creek project is situated within the Pine Creek Orogen, a tightly folded sequence of Lower Proterozoic rocks, 10km to 14km in thickness, laid down on a rifted granitic Archaean basement during the interval ~2.2-1.87Ga. The sequence is dominated by pelitic and psammitic (continental shelf shallow marine) sediments with locally significant inter-layered cherty tuff units. Pre-orogenic mafic sills of the Zamu Dolerite event (~1.87Ga) intruded the lower formations of the South Alligator Group (Ahmad et al 1993).

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 batholith into the sequence in the period ~1.84-1.1.78Ga. 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 Orogen lithologies. Recent scree deposits sometimes with proto-laterite cement occupy the lower hill slopes while fluvial 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 Finnis River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies.

Gold mineralisation appears to be related to the I-type members of the Cullen Batholith, formed as a result of fractionation and differentiation processes during magma emplacement. That ultimately led to the evolution of hydrothermal fluids responsible for gold mineralisation in the adjacent meta-sediments (Bajwah, 1994).

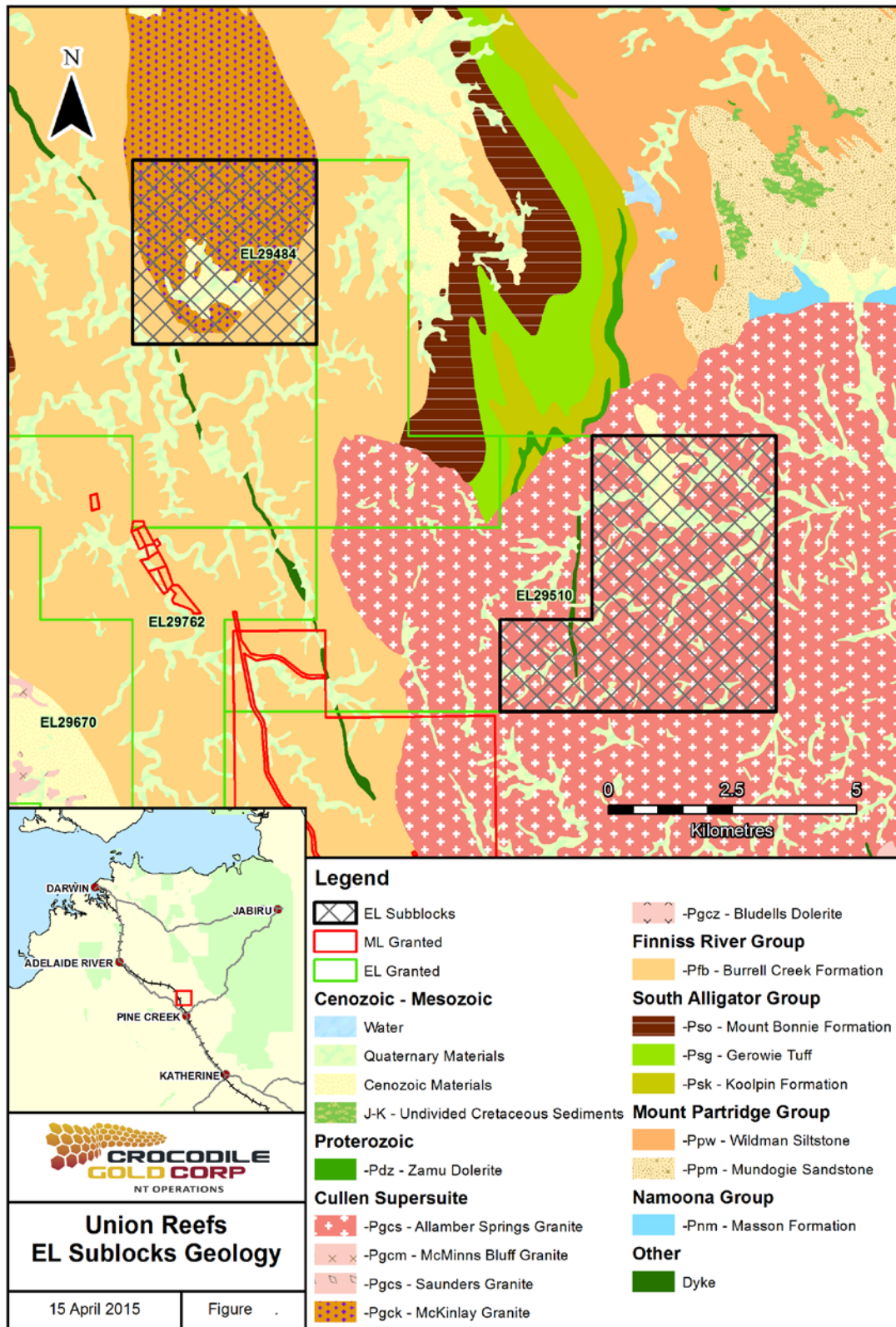


Figure 2. Regional Geology of Mountain Creek Project

6.2 LOCAL GEOLOGY

The tenement area covers the Burrell Creek Formation with dominant lithologies of greywacke, siltstone and mudstone. Towards the north-west and north-east, rocks of the Mount Bonnie Formation (South Alligator Group), Gerowie Tuff and Zamu Dolerite are also exposed. These lithologies have been intruded and thermally metamorphosed by the Tabletop, Allamber Springs and McKinlay Granites.

The central part of the tenement area is transected north-northwest to south-southeast by the Pine Creek Shear Zone, a grossly antiformal zone averaging 300m wide, characterised by phyllitic schist and tightly compressed folds. The axial zones on the principal anticlines have frequently failed within the PCSZ and predominant bedding and fabric attitudes are steeply dipping to the north east. Some parasitic folds have steep westerly dips. The PCSZ is the most mineralised structure with respect to gold in the region and host many gold deposits such as Union Reefs, Elizabeth, Enterprise, International, Gandy's, Czarina, Spring Hill and may more prospects.

7 PREVIOUS EXPLORATION

EL29762 (previously SEL10341) has been explored by various companies since SEL10341 was first granted in 2003. In the first year of tenure no work was reported by AngloGold as they were preparing the project for sale following closure of the Union Reefs mill.

Upon acquisition of the tenement during the 2004 to 2005 reporting year, the Burnside Joint Venture carried out a remote sensing study based upon satellite SPOT imagery and AGSO geological mapping.

Exploration activities from September 2005 to September 2006, conducted by GBS Gold Australia included a desktop review and reconnaissance field mapping.

During the 2006 to 2007 reporting year, exploration activities included a desktop review, data validation and reconnaissance field mapping. The desktop review highlighted some anomalous zones and a series of drill holes were planned.

During the 2007 to 2008 reporting year, anomalies identified in the previous desk top review were tested with a campaign of RC drilling. GBS Gold drilled a total of 6 RC holes for 591 metres. A total of 614 samples were retrieved and analysed for Au, As, Cu, Pb and Zn. Logging of the RC chips showed that rocks generally belong to the Burrell Creek Formation with some evidence of hydrothermal alteration. Assaying of chip samples provided disappointing results with most samples showing very low concentrations of gold, generally below the detection limit. Au values range from 0.1 to 0.20 ppm with an average of 0.02 ppm which were much below the expectation. These values were mirrored in As values. Cu values were moderately higher ranging from 1 to 292 ppm with an average of 32.43 ppm. Pb and Zn concentrations are anomalously higher. This could be due to the presence of galena-zinc mineralisation in the tenement (e.g., Flora Bella). Pb values varied from 5 to 7269 ppm with an average of 132 ppm whereas Zn has the highest concentration of 8040 ppm. Other activities included a review of the results, data compilation and reconnaissance visits.

In September 2008, GBS Gold Australia went into voluntary administration and hence exploration activities for the 2008 to 2009 year were confined to a desktop review and reconnaissance visits.

Crocodile Gold obtained SEL10341 in November 2009. Exploration activities carried out for the 2009 to 2010 period included a review of the tenement and reconnaissance mapping. From September 2010 to the expiry date of 29 September 2011, Crocodile Gold conducted a review of satellite imagery, purchased new satellite images and conducted field reconnaissance mapping.

8 EXPLORATION ACTIVITIES YEAR ENDING 16 APRIL 2015

8.1 PROJECT RANKING PROCESS

8.1.1 Introduction

During the reporting period, Crocodile Gold geologists went through a project ranking exercise whereby each CGAO project was ranked, according to select criteria, to determine which projects are of higher priority for the company business plan.

A first attempt at Project Ranking in 2011 used the following criteria: Distance to Mill, Mine Type (OP/UG), Resource Type (res or conceptual), Size, Grade, Time to Permit, with each one then one ranked on Margin, Permit and Size. There was no consideration for start-up capital. Polymetallics, Maud Creek and Cosmo were the highest ranked targets in 2011.

Following on from this with additional resource drilling, geophysical data and document review database, the projects were re-ranked in 2013. The projects were ranked based on the selection criteria below:

- Type of deposit (relate to existing deposits like Cosmo)
- Size of deposit/potential
- Metallurgy
- Time required to explore and develop
- Time to permit
- Distance to mill
- Deposit type (UG/OP)
- Resource to Reserve conversion
- Risk - Look at type of deposit Greenfields = higher risk, reserve = lower risk
- NPV - Use site based cost inputs for mining, milling, recovery and transport
- Liabilities
- Capital requirements

Each ranking criteria is detailed below with tables showing the ranking description and corresponding project/deposit as an example (Table 1 – Table 12).

8.1.2 Ranking Criteria

Type of deposit - This criterion takes into consideration the tonnes and grade of the deposit to determine the type of mine it would produce i.e. underground or open pit.

- Cosmo/ Phoenix type ranked highest (Large Tonnes, Highish Grade) – Large to Medium scaled underground style deposits
- Bon's Rush/Esmeralda Second Highest ranked (large tonnes, medium grade_ - Large scale open pit

- Prospect style middle ranked (low tonnes but high grade) – low scale underground deposits
- International/Western Arm second lowest ranked (high tonnes but low grade) – large scale open pit
- Glencoe/North Point style deposits lowest Ranked (low tonnes and low grade) – smaller scale open pit

Ranking	Examples
1 Large Tonnes, Higher Grade UG	Cosmo
2 Large Tonnes, Med Grade OP	Esmeralda/Bons Rush
3 Small Tonnes, High Grade UG	Prospect/Elizabeth
4 High Tonnes, Low Grade OP/UG	International/ Western Arm
5 Small Tonnes, Low Grade OP	North Point/Glencoe

[Table 1: Type of Deposit with prospect ranking](#)

Size of deposit

- Large size ounces (>500,000 ounces)
- Large-Medium size ounces (100,000 to 500,000 ounces)
- Medium size ounces (50,000 to 100,000 ounces)
- Small to medium size ounces (10,000 to 50,000 ounces)
- Small size ounces (<10,000 ounces)

Ranking	Examples
1 Large Ounces (>500k)	Cosmo/Maud Creek
2 Large-Medium Ounces (100k - 500k)	Howley/Western Arm
3 Medium Ounces (50k – 100k)	Esmeralda/Bons Rush
4 Small-Medium Ounces (10k – 50k)	South Enterprise/Kazi
5 Small Ounces (<10k)	Lady Alice/Orinoco

[Table 2: Size of Deposit with prospect ranking](#)

Metallurgy

- Oxide/Good Recovery (>95%)
- Good Recovery (90% - 95%)
- Medium Recovery (85% - 90%)
- Poor Recovery (75% - 85%)
- Refractory/Poor Recovery (<75%)

Ranking	Examples
1 Oxide (>95%)	North Point
2 Good Recovery (90% – 95%)	Glencoe Oxide
3 Medium Recovery (85% - 90%)	International/Howley
4 Poor Recovery (75% - 85%)	Historic Tailings
5 Refractory (<75%)	Maud Creek/Moline

[Table 3: Metallurgy with prospect ranking](#)

Time Required - This criteria covers the time required to develop the project.

- No time required/in production (available now)
- Quick to develop and start (available soon, within the year)
- Could be developed and started relatively quickly (take around 1 year to start)
- Take around 1-2 years to develop
- Longer term prospect, with feasibility and EIS's required

Ranking	Examples
1 Now	Cosmo/North Point
2 <1 year	Prospect/Spring Hill
3 ~1 year	International/Gandys
4 1-2 years	Fountainhead/Tally Ho
5 >2 years	Maud Creek

[Table 4: Time required with prospect ranking](#)

Permits and Approvals - The permits and approvals criteria covers the time taken to get regulatory approval to mine;

- Approval granted, mining currently (now)
- Permit process started and timeframe for completion known, on Mineral Lease
- Permitting Process understood but not started, use criteria to get approval quickly on Mineral Lease
- Permitting Process not understood or not started but on Mineral Lease
- Permitting process understood and EIS required or not on Mineral Lease

Ranking	Examples
1 Permitted	Cosmo/North Point
2 Permitting taking place	International
3 Permitting possible	Glencoe
4 Permitting not understood	Fountainhead
5 EIS to be complete	Maud Creek/Western Arm

[Table 5: Permits and Approvals with prospect ranking](#)

Distance to Mill - This criterion covers the travel distance to deliver ore to crusher;

- On site or in direct trucking distance, no double handling of ore (<5km from crusher)
- In Close proximity to mill, some double handling required (5-15km from crusher)
- Road haulage required to crusher (15-50km from crusher)
- Longer haul to mill (50-100km from Crusher)
- Long haul (>100km from Crusher)

Ranking	Examples
1 Onsite (<5km)	Prospect
2 Close (5 – 15km)	Esmeralda
3 Medium (15 – 50km)	International
4 Medium Long (50 – 100km)	Western Arm/Cosmo
5 Long (>100km)	Maud Creek

[Table 6: Distance to Mill with prospect ranking](#)

Mining Type - Either reserves or potential

- Combination of Open Pit and Underground, several years mine life (+500,000tpa for more than 2 years)
- Underground only, larger scale, bulk mining (+500,000tpa for more than 2 years)
- Open Pit with more than one years mine life (+500,000tpa for more than 1 year)
- Small scale underground, low tonnage (<500,000tpa)
- Open Pit with less than one years mine life (<500,000tpa for 1 year or less)

Ranking	Examples
1 OP/UG	Maud Creek
2 LUG	Cosmo
3 OP	Western Arm
4 SUG	Prospect
5 SOP	Glencoe

[Table 7: Mining Type with prospect ranking](#)

Risk - converting Resources/Potential into ounces produced

- Current Mine (Very Low Risk)
- Current reserve, not being mined (Low Risk)
- Indicated Resource, non-reserve (Medium Risk)
- Brown Field target/inferred resource, historic mining in close proximity (High Risk)
- Greenfield target, soil geochem or geophysical target (Very High Risk)

Ranking	Examples
1 Very Low Risk-Mine (100% factor)	Cosmo
2 Low Risk- Reserve (85% factor)	International/Glencoe
3 Med Risk- Meas/Ind Resource (75% factor)	Howley/Crosscourse/Orinoco
4 High Risk- Inferred (50% factor)	Bons Rush/Bridge Creek
5 Very High Risk- Greenfields (25% factor)	VTEM Targets

[Table 8: Risk with prospect ranking](#)

Liabilities - This assesses both new mine generated liabilities and legacy issues that may be invoked when mining re-commences.

- Limited liabilities or no-liabilities due to mining type (Oxide only)
- Either potential to generate liabilities or some legacy issues to be fixed post mining
- Liabilities recognised as potential or legacy
- Liabilities are significant but can be managed within mining process
- Significant legacy issues and potential for more

Ranking	Examples
1 Low Liabilities	Spring Hill/Glencoe
2 Some Liabilities	Fountainhead
3 Liabilities	Maud Creek (UG only)
4 Manageable liabilities	Moline
5 Significant liabilities	Woolwonga/Brocks Creek

[Table 9: Liability with prospect ranking](#)

Capital Required - Both infrastructure and mining capital required to develop the project

- Very Low Capital, most infrastructure is in place (<\$500,000)
- Low Capital, some infrastructure require to commence operations (\$500,000 to \$1 million)
- Medium Capital, significant support required to start (\$1 million to \$2.5 million)

- High Capital, significant project with significant funds required to start (\$2.5million to \$5million)
- Significant Capital required to start an operation (>\$5 million)

Ranking	Examples
1 Very Low Capital (\$500K)	Glencoe
2 Low Capital (\$500k - \$1M)	
3 Medium Capital (\$1M – 2.5M)	
4 High Capital (\$2.5M- \$5M)	
5 Very High Capital (>\$5M)	Maud Creek

[Table 10: Capital required with prospect ranking](#)

Mine Life - This is included in other criteria but is also required for NPV calculations

- Very long mine life with Mineral Reserves to support, greater than 5 years
- Long mine life, this is relative to Crocodile Gold but something in order of 3-5 years
- Medium Mine life, may be when combining deposits but in order of 2-3 years
- Short mine life looking at deposits with just over 1 years mine life (1-2 years)
- Very Short mine lives looks at deposits less than 1 year in operation

Ranking	Examples
1 Very Long Mine Life (>5 years)	None
2 Long Mine Life (3 – 5 years)	Cosmo/Phoenix
3 Medium Mine Life (2 – 3 Years)	Pine Creek deposits combined
4 Short Mine Life (1 – 2 years)	International
5 Very Short Mine Life (<1year)	North Point/Princess Louise

[Table 11: Mine Life with prospect ranking](#)

NPV - NPV or total potential value of a project/deposit, use reserves, resource or potential, use site costs and ounces in reserve/resource/potential to determine value

- Large deposit with great value to company (+\$100 million)
- Medium deposit with some value to the company (\$50 to \$100 million)
- Medium to low value to the company, shorter mine life (\$10 to \$50 million)
- Some value to the company in short to long term (\$0 to \$10 million)
- On current information will make a loss (<\$0)

Ranking	Examples
1 High Value (+\$100M)	Cosmo
2 Medium Value (\$50M - \$100M)	Gandy's (potential)
3 Low to Medium Value (\$10M - \$50M)	Esmeralda
4 Low Value (\$0 - \$10M)	South Enterprise
5 Negative Value (<\$0)	Bridge Creek

[Table 12: NPV with prospect ranking](#)

8.1.3 Grouping

Each project was then categorised into one of the four groups outlined below;

- Need it now (Cosmo)
- Need it soon (UR and Pine Creek)
- The future (Crosscourse, Tally Ho)
- Blue Sky (Goodall, discovery)

Need it Now – These are the highest ranked projects, but require the most funding to ensure success in current mine plans. It is also vital to have information far enough ahead to ensure plans are robust. Projects include:

- Cosmo Deeps
- Cosmo West Lodes
- International – integrate mining plan with Gandy's
- Gandy's – needs infill drilling
- Stockpiles – Golden Dyke, Millars

Need it soon – These are the second highest ranked projects and targets with potential to bring on line within 1 to 3 years. These deposits require funding to ensure successful inclusion in future mine plans. Projects include:

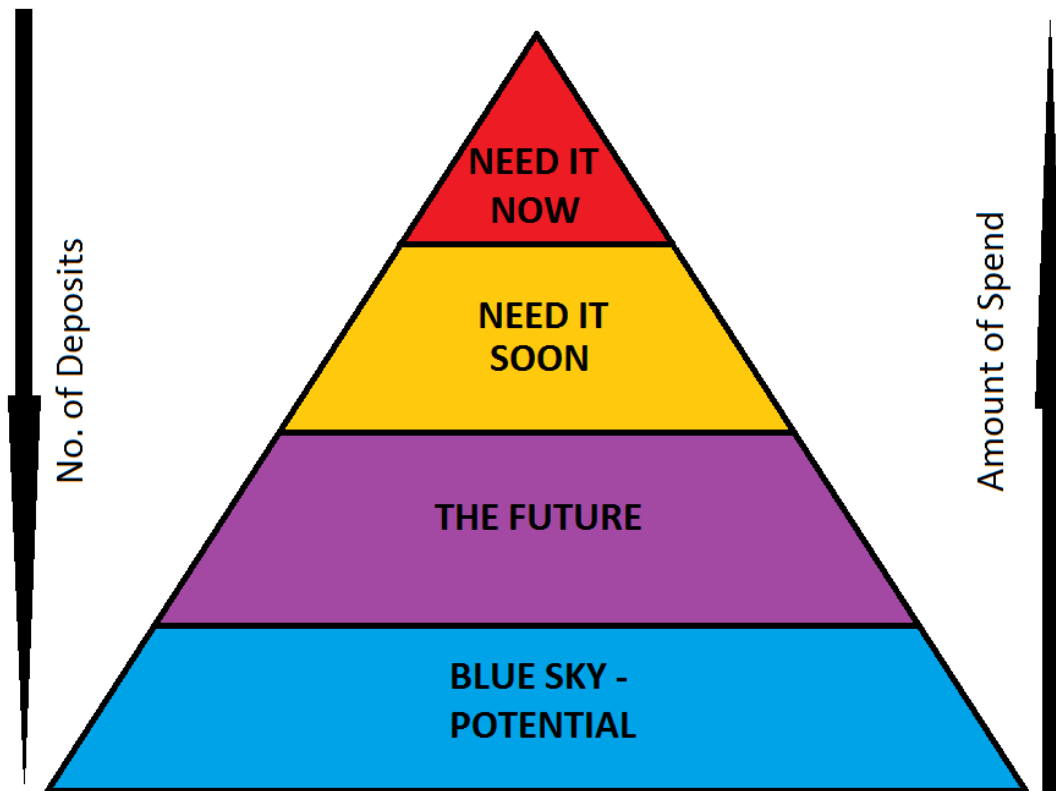
- Prospect (UR) – underground exploration needed
- Maud Creek – needs feasibility study
- South Enterprise (Pine Creek) – needs additional drilling
- Cox/Kohinoor (Pine Creek) – need definitive mine plan
- Esmeralda (UR) – permitting and additional drilling
- Bon's Rush – needs additional drilling, upgrade resources

The Future – These are projects that will lead to long term production but require more time to develop/permit. They are good solid projects that need more work (such as drilling) to include in Mine Plan. Projects include:

- Crosscourse (UR) – access from Prospect ramp
- Union South, Union North, Crosscourse South/Millars (UR) – underground, Prospect scenario, narrow vein
- Tally Ho (Burnside) – underground
- Golden Dyke (Burnside) – Cosmo look-a-like - underground
- Kazi (Burnside) – synergies with Bon's Rush - open pit and underground

Blue Sky Potential – These are projects that will change and develop over time but are long term. Significant work is required to get these into a solid Mine Plan. Projects include:

- Enterprise (Pine Creek) – underground concept
- Woolwonga/Snakebite (Burnside) - drilling
- Elizabeth (UR) – needs limited initial drilling
- Goodall – research, drilling
- Red Queen/Chessman (Maud Creek) – needs drilling
- DISCOVERY from VTEM target follow-up
- DISCOVERY from soil geochemical follow-up, Cosmo West



[Figure 2: Grouping Model](#)

8.1.4 Conclusion

Future exploration will concentrate on the highest and second highest ranked deposits in terms of “Need it Now” and “Need it Soon” grouped projects. These are the highest priority for the CGAO business plan. While there are some historic mineral prospects within the Mountain Creek tenement package, there was insufficient data in regards to resource size and grade and therefore were not included in the ranking exercise.

There is still some work to be done however projects that are not a medium to long term project, may be divested in much the same way as the Mt Bundy project were divested in the recent past. A number of tenements may also be reduced to a more manageable number, through relinquishment or consolidation.

9 RECOMMENDATIONS AND CONCLUSIONS

Crocodile Gold geologist will review all available geophysical and geochemical data to determine areas for site reconnaissance work. This work will included uploading of historic data into the new Crocodile Gold Document Review Database. Field reconnaissance will also include visits to known prospects, looking at historic workings, pits and tailings with mapping and sampling.

10 REFERENCES

Edwards, M. 2012, Crocodile Gold – Project Ranking Exercise. Internal company presentation.

Ferenczi, P.A., and Sweet, I.P., 2005. 1:250 000 Geological Map Series Explanatory Notes, Mount Evelyn SD 53-05. *Northern Territory Geological Survey.*

Stuart-Smith, P.G., Bagas, L., and Needham, R.S., 1988. 1:100 000 Geological Map Commentary Ranford Hill Northern Territory. *Bureau of Mineral Resources, Geology and Geophysics,* Australian Govt Publishing Service, Canberra.

Stuart-Smith, P.G., Needham, R.S., Page R.W., and Wyborn L.A.I., 1993. Geology and mineral deposits of the Cullen Mineral Field. *Bureau of Mineral Resources Australia, Bulletin 229.*

Watson, M., 2011. Final Report Substitute Exploration Licence 10341, Union Reefs Project, Year Ending 29 September 2011. Crocodile Gold Australia Operations Pty Ltd to Department of Mines and Energy, Darwin NT