ANNUAL EXPLORATION REPORT
EL23583
FOR PERIOD ENDING 15 JULY 2010
'PINE CREEK'
BURNSIDE PROJECT NT

Pine Creek SD5208 1:250,000
Pine Creek 5270 1:100,000

Title Holders: Crocodile Gold Australia Pty Ltd

Distribution:

- **DOR Darwin, NT**
- **Crocodile Gold Australia, Humpty Doo**
- **Crocodile Gold Australia, Brocks Creek**

GBS Report No: PC/BJV/10-26

Zia U. Bajwah
August 2010

SUMMARY

Exploration Licence (EL) 23583 is a strategic landing holding of 2 blocks, which is situated approximately 220 km SE of Darwin NT, and around 2 km south of the Pine Creek Township. The tenement was granted on 16 July 2003 to Buffalo Creek Mines Pty Ltd (50%) and Territory Goldfields NL (50%) which were the subsidiaries of GBS Gold Australia. On 6 November 2009, Crocodile Gold Australia acquired EL 23583 and other assets held by GBS Gold Australia (liquidated) in the Northern Territory.

The tenement overlies the Burrell Creek Formation of the Finniss River Group. The Mount Bonnie Formation sediments crop out further north of the Licence, but are constrained within a fold ('Enterprise fold') that plunges south through of EL 23583. Meta-sediments in the project area are intruded by the Table Top, Allamber Springs, and McCarthys Granites and are responsible for the development of contact aureole which contains most of the gold mineralisation.

During reporting year, EL 23583 was reviewed, ranked and valuated under the instructions from company administrators. Review of previous geochemical and drilling data indicates that the EL 23583 has significant potential for gold and base metal metals mineralisation, which new owner will pursue aggressively. Other exploration activities were reconnaissance visits of the area, data compilation, tenement management and annual exploration report preparation.

In 2010-11 reporting year, project area will be explored for gold and base metals mineralisation. For this purpose, selected parts of the tenement will undergo soil/rock chip sampling along with geological mapping. If encouraging results received, then some RAB/RC drilling may also take place.

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1.0 INTRODUCTION

EL 23583 is located south-west of the Pine Creek Township, and abuts with Pine Creek group of tenements which has produced significant quantities of gold in the past. Due to its similar geological setting to those gold deposits present in the immediate vicinity, it has significant potential to host similar type of gold mineralisation.

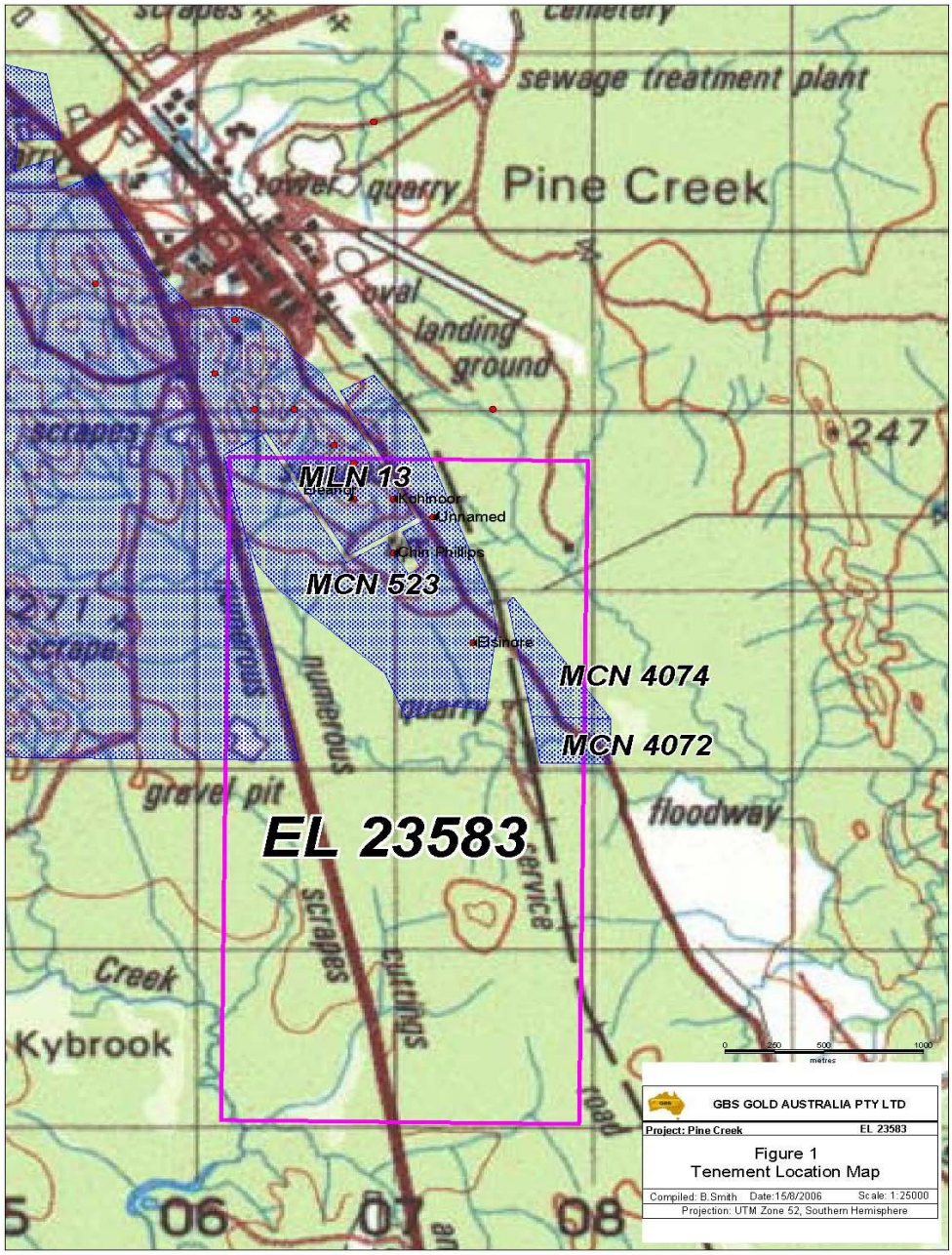
2.0 LOCATION AND ACCESS

EL 23583 is situated approximately 220 km SE of Darwin NT, and around 2 km south of the Pine Creek township. The Stuart Highway transects the tenement south of Pine Creek (Figure 1). Topography in the southern block of the EL is subdued and colluvial cover is extensive. Access to the tenement may be gained via Stuart Highway and then by four wheels tracks within the tenements. During wet season, access within the tenement is difficult due to inundation by creek system in the area.

3.0 TENEMENT STATUS AND OWNERSHIP

EL 23583 was granted on 16 July 2003 and expires on 15 July 2011. It comprises two blocks that cover approximately 6.67 km^2 (Figure 1). A waiver from reduction was requested in June 2006, partly because to relinquish the southern block would remove >50% of the licence area. Relinquishing the northern block would affect exploration on extensions to mineralisation in the surrounding MCN's. EL 23583 was granted in equal shares to Buffalo Creek Mines Pty Ltd (50%) and Territory Goldfields NL (50%), which were part of the Burnside JV. The Burnside JV was a JV between Harmony Gold (50%) and Northern Gold NL (50%). During 2005, GBS successfully made a takeover for Northern Gold NL, and reached an agreement to purchase Harmony's 50% share of the Burnside project.

Figure 1: Tenement Location Map



On 16 July 2009, EL 23583 was renewed for another two years and will expire on 15 July 2011.

On 15 September 2008, GBS Gold Australia went into voluntary administration and as a result of that all exploration and mining assets were placed under care and maintenance. Crocodile Gold Australia announced to purchase these assets in June 2009, and after meeting regulatory and statuary requirements, all these assets were transferred to Crocodile gold Australia on 6 November 2009.

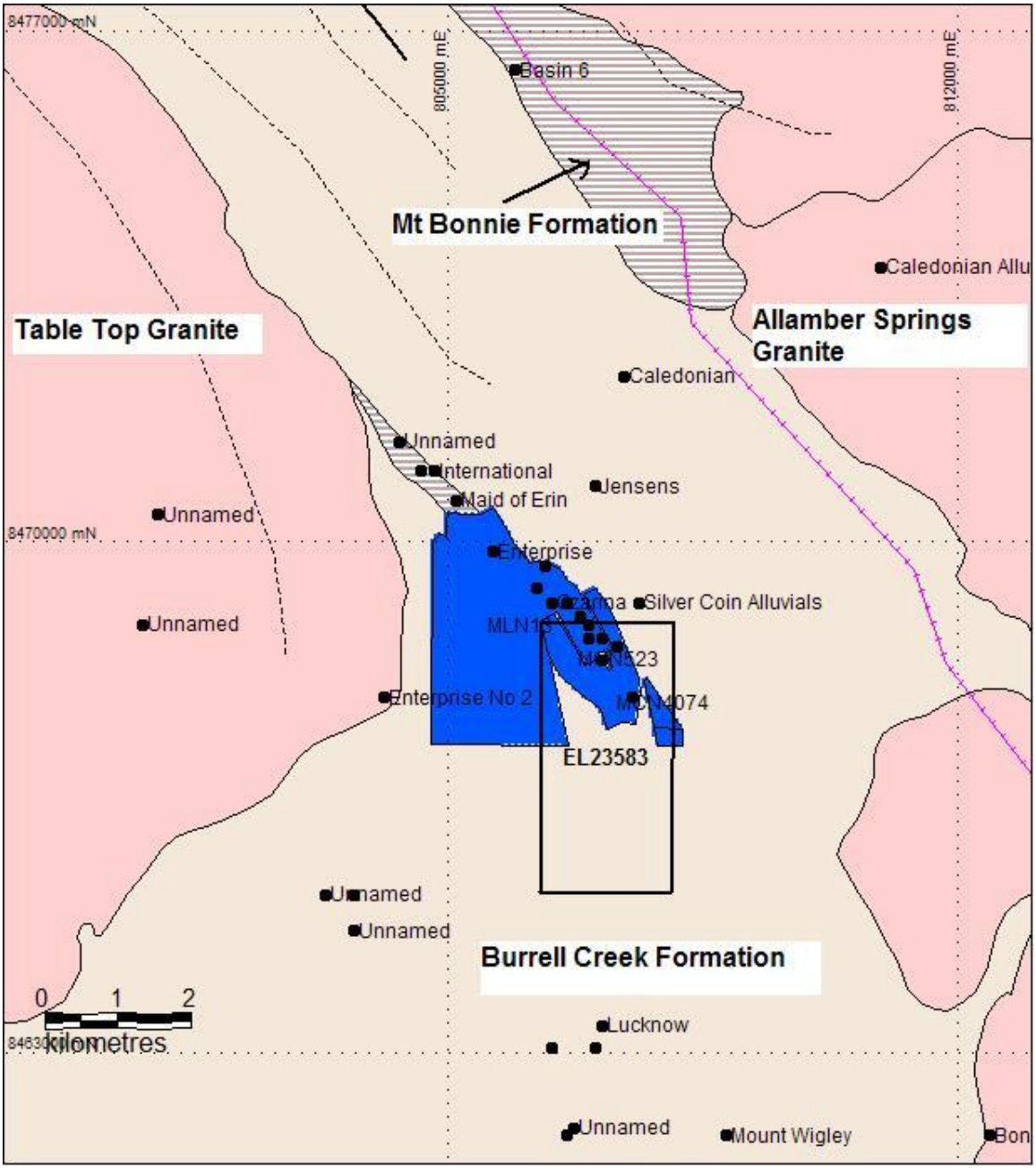
Underlying cadastre is mixed; the dominant landholder is Bonrook Station (Franz Weber; PPL 710), with smaller parcels of Crown Lease \ (Perpetual) around the Chin Phillips mineral occurrence, and a Crown Lease (Term) covering the railway corridor. The Pine Creek Mango Plantation P/L holds a pastoral lease (PL 5096) in the NE part of the licence.

4.0 GEOLOGICAL SETTING

Regional geology is outlined in many publications, notably Ahmad *et al*. (1994), and Needham, Needham and Stuart-Smith (1984), and Needham *et al.* (1988). The tenements are within the Pine Creek Orogen, a folded sequence of Palaeoproterozoic pelitic and psammitic sediments, with interlayered cherty tuff units. Mafic sills of the Zamu Dolerite (~1.87Ga) intruded lower formations of the South Alligator Group.

Geology of the project area is presented in Figure 2. The tenement overlies the Burrell Creek Formation of the Finniss River Group. The Mount Bonnie Formation sediments crop out further north of the Licence, but are constrained within a fold (‘Enterprise fold’) that plunges south through EL 23583. Meta-sediments in the project area are intruded by the Table Top, Allamber Springs, McCarthys Granites and are responsible for the development of contact aureole, which contains most of the gold mineralisation. During ascent and emplacement, granite magma experienced differentiation and fractionation which subsequently led to the emanation of hydrothermal fluids, responsible for gold and

Figure 2: Geological setting of the project area



other mineralisation in the adjacent meta-sediments Bajwah (1994). The Pine Creek shear zone also runs through the project area, known for its potential for gold mineralisation

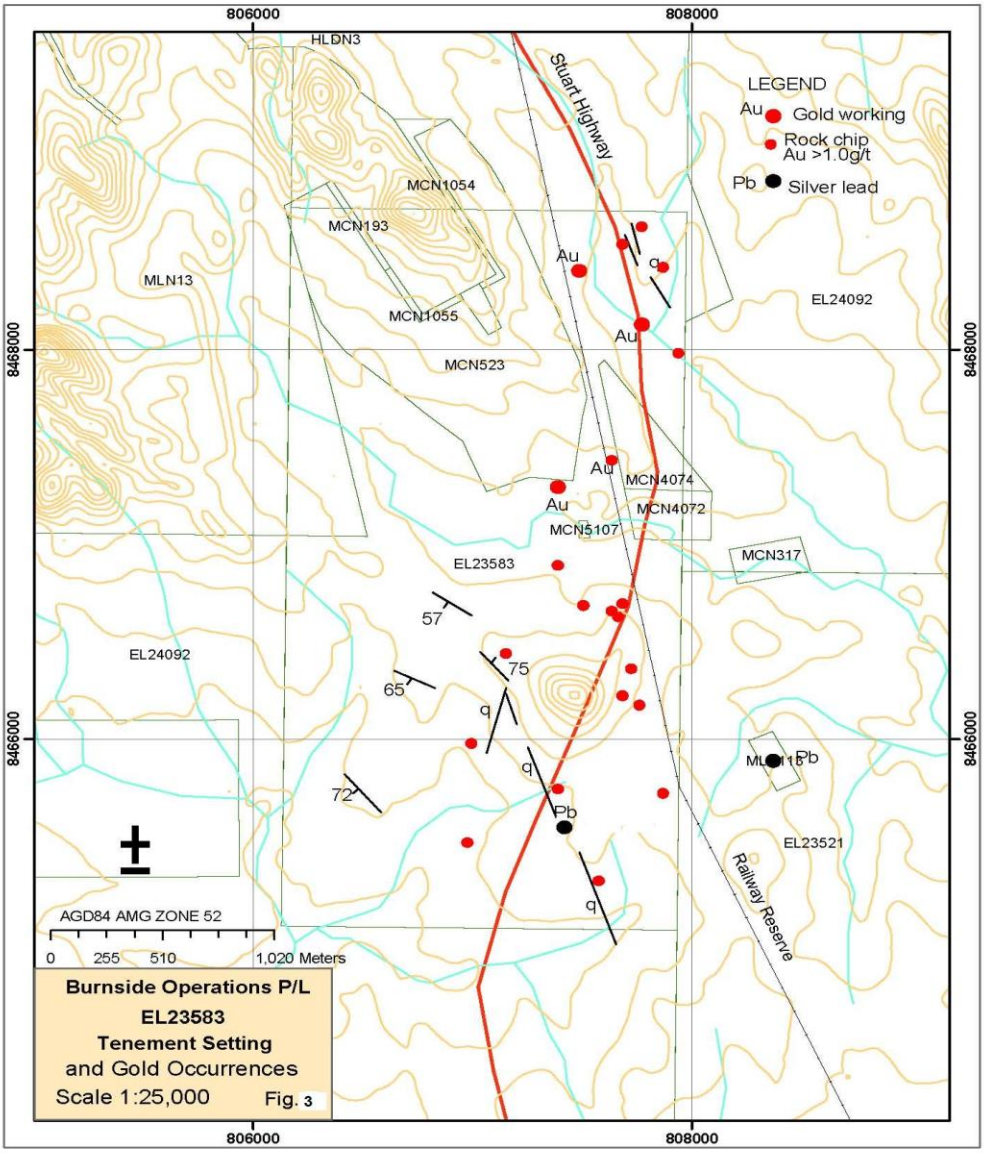
in the region. Unpublished gravity data by the Northern Territory Geological Survey show that meta-sediments are underlain by granite at a depth of 1-2 km.

At Koohinoor, 45° SW-dipping thrust faults have superimposed slices of western fold limbs over the eastern limbs, and have also been the focus of mineralisation. The more southerly block covers a sequence of Burrell Creek Formation sediments that dip south westwards at an average of 65 degrees. Quartz veining in the eastern half of the tenement, striking generally 340 degrees, is sporadically mineralised by either argentiferous galena or gold. The Lucknow Lead Mine is located outside the tenement towards south and is one of the more prominent prospects developed by shallow workings. Other small pits and shafts are on gold bearing sectors of quartz veins. Gold mineralisation within the area occurs within quartz-sulphide veins or their alteration haloes, either as free gold which accounts for 2% to 50% of the total gold content, or with sulphides. Sulphide minerals include pyrite, pyrrhotite, arsenopyrite, marcasite, chalcopyrite, galena, sphalerite, bismuthinite, tetrahedrite, and covellite, with rare native copper and bismuth. Veins are either radial (discordant), which includes ladder veins; north-trending sheeted veins that dip shallowly to the east at 35° - 45°, and later N-trending veins that are near vertical.

4.1 Gold Mineralisation and Potential

The project area contains geological setting such as the folded Burrell Creek Formation which is intruded by the Palaeoproterozoic I-type, fractionated granites. The Pine Creek Shear Zone transects the project area and this setting is known to host much of the gold mineralisation in the Pine Creek Orogen. Figure 2 also shows that surrounding area contains significant gold deposits such as Enterprise, International, Kohinoor, and Elsinore, indicating significant potential of the project area for gold. This is further supported by the presence south-plunging anticlinal fold, within the tenement, which

Figure 3: Rock chip samples within EL 23583



contains conspicuous quart vein systems, characterised by the presence of gold and/or base metals.

Figure 3 depicts the gold and base metal anomalies in the eastern part of the tenement, derived from previous exploration program. These results indicate that gold and base metals mineralisation present in many of the deposits/prospects located in the north, may well extend into EL 23583. However, due to the presence of Stuart Highway and Darwin-Adelaide Rail corridor (Figure 3) may impose some restriction in the eastern part of the tenement.

5.0 PREVIOUS EXPLORATION

Part of the work done on EL 23583 for this year is a literature review, and the results are in the section below. Historically, this area has been covered by mining leases (MLN's and MCN's) which do not usually have comprehensive records of exploration work carried out. In this review, results are limited to those found from historic exploration licences.

EL 4398 covered 30 blocks over the whole Pine Creek area, including both blocks of EL 23583. Circular Quay Holdings explored the ground for 2 years in the early 1980's. Gold exploration focussed on Copperfield workings (outside EL23583 area), with results 'generally disappointing' and also not thorough due to the short period of tenure.

EL 4907 was held by Pine Creek Goldfields for 4 years from 1988. The licence consisted of 6 blocks, of which the upper NW block covered the southern block of EL 23583. A ground magnetic survey in the first year was unsuccessful due to noise. Quartz veining was identified during mapping, and soil sampling delineated an anomaly corresponding to a NE-trending fault surrounded by quartz veining. Follow up costeaning intersected siltstones and greywackes with minimal quartz veining and numerous small faults. A maximum value of 3.22g/t Au came from costean sampling, but most of the assays were low. RAB and RC drilling did not highlight economic mineralisation.

Dominion Mining held **EL 8060** for 2 years from late 1993. EL 8060 consisted of 4 blocks, and the NW block of EL8060 covered the southern block of EL 23583. Dominion carried out data compilation, which outlined favourable structures associated with anomalous base metal values, and also carried out RAB drilling, which also intersected base metal anomalism (outside the area of EL23583). Dominion only carried out one year of exploration before divesting its NT assets during 1995. Northern Gold acquired EL 8060 from Dominion, and work was limited to acquisition of SPOT imagery over the area. A programme of deeper angled RAB drilling was planned to test the base metal geochemical anomalies but this was not carried out. Gold mineralisation was either below detection levels, or contaminated by alluvial workings.

During 2005-06, a literature survey of previous exploration programs was undertaken. Shaw (2004) gave an appraisal of EL 23583, noting that most of the gold and base metal anomalism as defined by previous rock chip sampling resides within the eastern half of the exploration licence (Figure 3). This anomalous eastern sector broadly coincides with the route of the Stuart Highway and its reserve and/or the railway reserve occupied by the new Darwin to Adelaide Railway. The Burnside JV focused work on the priority main mining centre at Pine Creek with proportionately less work extending onto the EL. The technical review indicated that the northern block is well placed to contain any economic extensions to mineralisation south of MCN523. The southern block of the EL is shown to contain anomalous quartz vein trends but many of these are inconveniently close to either the Stuart Highway or the Darwin-Adelaide railway. Future exploration in these areas is of a lower priority than the main mining centre to the north. Work done during Year 3 of tenure consisted of a historic data compilation. The results of previous work are outlined in the previous section ('Previous Work'). Work done included checking:

a) historic tenure in MapInfo, using a MapInfo file supplied by DPIFM (containing exploration tenure, but not mining tenure)
b) checking NTGS datasets, such as COREDAT, MODAT, Explorer 3
c) checking open file company reports submitted for previous tenure covering EL23583.

6.0 EXPLORATION ACTIVITY YEAR ENDING 15 JULY 2010

During part of the reporting period, the tenement remained under care and maintenance. Under the instructions from Several Administrators, a technical review, tenement ranking and valuation was undertaken in order to prepare assets for sale. In June 2009, Crocodile

Gold Australia announced to purchase all assets held by GBS Gold Australia (liquidated). After meeting all statuary and regulatory requirements, these assets included EL 9608 were transferred to new owner. Crocodile Gold Australia immediately commenced exploration, mining and processing activities in the region. Mining started from Brocks Creek underground and Chinese South (Extension) open pit; hauling ore to Union Reefs gold mill for treatment. Work is underway to re-commence mining and processing at Toms Gully gold project, which is expected to come on-line in August 2010. So far, over $100.00 million has been spent of which approximately $15.0 million has been directed towards drilling in order to prove up resource base, which is vital for mining and processing operations in the region.

Crocodile Gold regards EL 23583 highly due to its strategic significance in providing mill feed in the long run. The tenement has very prospective geology and may contain significant gold resources similar to that of adjacent gold deposits such as Enterprise, Czarina and Gandy's Hill. It is expected that similar style of gold mineralisation will continue in EL 23583, which surrounds the existing gold deposits. During the reporting period, only a peripheral review of the tenement was undertaken and work completed during the reporting period included:

- Reconnaissance visit
- Technical review of the tenement
- Planning for up-coming field season
- Report writing and tenement management activities.

This activity costed $ 10068.00 during the year 2009-10and details are given in Appendix 1.

7.0 PLANNED EXPLORATION FOR 2010-11

Crocodile Gold Australia values the tenement highly due to its close proximity to the Pine Creek goldfield located in the north. With further exploration, resource base could extend and will add value to the Pine Creek goldfield.

In 2010-11 reporting year, project area will be explored for gold and base metals mineralisation. For this purpose, area identified during this review will undergo soil/rock chip sampling along with geological mapping. If encouraging results received, some RAB/RC drilling may also take place. A minimum budget of $11 000.00 is proposed.

8.0 REFERENCES

Ahmad, M., Wygralak, A.S., Ferenczi, P.A., and Bajwah, Z.U. 1993. Explanatory Notes and Mineral Deposit Data Sheets. *1:250,000 Metallogenic Map Series, Department of Mines andEnergy, Northern Territory Geological Survey.*

Bajwah, Z.U, 1994. A contribution of geology, petrology and geochemistry to the Cullen Batholith and related hydrothermal activity responsible for mineralisation, Pine Creek Geosyncline, Northern Territory. Northern Territory Geological Survey Report 8.

Needham, R.S and Stuart-Smith, P.G., 1984. Geology of the Pine Creek Geosyncline, Northern Territory – 1:500,000 scale map. Bureau of Mineral Resources, Australia.

Needham, R.S., Stuart-Smith, P.G., and Page, R.W., 1988. Tectonic evolution of the Pine Creek Inlier, Northern Territory. *Precambrian Research 40/41, pp 543-564*.

Shaw, J., 2004. Annual Exploration Report Pine Creek Project Tenements Year Ending July 15th 2004. EL 23583, MLN13, 1130, MCN's 317, 523, 1054, 1055, 4072, 4074. Burnside Operations Pty Ltd (unpubl) Northern Territory Geological Survey Company Report CR2004-0382.

APPENDIX 1

NORTHERN TERRITORY EXPLORATION EXPENDITURE FOR MINERAL TENEMENT

Section 1. Tenement type, number and operation name: (One licence only per form even if combined reporting has been approved)	
Type	*Exploration Licence*
Number	*23583*
Operation Name (optional)	*Burnside Joint Venture*

Section 2. Period covered by this return:			
Twelve-month period:		**If Final Report:**	
From	*16 July 2009*	From	
To	*15 July 2010*	To	
Covenant for the reporting period:		$ **10 000.00**	

Section 3. Give title of accompanying technical report:	
Title of Technical Report	ANNUAL EXPLORATION REPORT EL23583 FOR PERIOD ENDING 15 JULY 2010 'PINE CREEK' BURNSIDE PROJECT NT
Author	*Zia U. Bajwah*

Section 4. Locality of operation:	
Geological Province	***Pine Creek Orogen***
Geographic Location	***Pine Creek***

Section 5. Work program for the next twelve months:			
Activities proposed (please mark with an "X"):		x	Drilling and/or costeaning
x	Literature review		Airborne geophysics
x	Geological mapping		Ground geophysics
x	Rock/soil/stream sediment sampling		Other:
	Estimated Cost:	$ **11 000.00**	

Section 6. Summary of operations and expenditure:		
Please include salaries, wages, consultants fees, field expenses, fuel and transport, administration and overheads under the appropriate headings below. Mark the work done for the appropriate subsections with an "X" or similar, except where indicated. Complete the right-hand columns to indicate the data supplied with the Technical Report.		
Do not include the following as expenditure (if relevant, these may be		
• Insurance	• Transfer costs	• Land Access Compensation
• Company Prospectus	• Title Search	• Meetings with Land Councils
• Rent & DepartmentFees	• Legal costs	• Payments to Traditional Owners
• Bond	• Advertising	• Fines

Exploration Work type	Work Done (mark with an "X" or provide details)		Expenditure	Data and Format Supplied in the Technical Report	
				Digital	Hard copy
Office Studies					
Literature search	**x**		2468.00		
Database compilation					
Computer modelling					
Reprocessing of data					
General research	**x**		2270.00	**x**	
Report preparation	**x**		1680.00	**x**	
Other (specify) Admin	x		780.00		
	Subtotal		$6998.00		
Airborne Exploration Surveys (state line kms)					
Aeromagnetics		kms			
Radiometrics		kms			
Electromagnetics		kms			
Gravity		kms			
Digital terrain modelling		kms			
Other (specify)		kms			
	Subtotal		$		
Remote Sensing					
Aerial photography					
LANDSAT					
SPOT					
MSS					
Other (specify)					
	Subtotal		$		
Ground Exploration Surveys					
Geological Mapping					
Regional					
Reconnaissance	**x**		2870.00		
Prospect					
Underground					
Costean					
Ground Geophysics					
Radiometrics					
Magnetics					
Gravity					
Digital terrain modelling					
Electromagnetics					

Exploration Work type	**Work Done** (mark with an "X" or provide details)	**Expenditure**		**Data and Format Supplied in the Technical Report**	
				Digital	Hard copy
SP/AP/EP					
IP					
AMT/CSAMT					
Resistivity					
Complex resistivity					
Seismic reflection					
Seismic refraction					
Well logging					
Geophysical interpretation					
Petrophysics					
Other (specify)					

Geochemical Surveying and Geochronology ***(state number of samples)***										
Drill (cuttings, core, etc.)										
Stream sediment										
Soil										
Rock chip										
Laterite										
Water										
Biogeochemistry										
Isotope										
Whole rock										
Mineral analysis										
Laboratory analysis (type)										
Petrology										
Other (specify)										
Ground Exploration Subtotal							$ **2870.00**			
Drilling (state number of holes & metres)										
Diamond		holes		metres						
Reverse circulation (RC)		holes		metres						
Rotary air blast (RAB)		holes		metres						
Air-core		holes		metres						
Auger		holes		metres						
Other (specify)		holes		metres						
	Subtotal						$			
Other Operations										
Costeaning/Trenching										
Bulk sampling										
Mill process testing										
Ore reserve estimation										
Underground development (describe)										
Mineral processing										
Other (specify)										
	Subtotal						$			
Access and Rehabilitation										
Track maintenance										
Rehabilitation										
Monitoring										

Other (specify)				
	Subtotal	$		
TOTAL EXPENDITURE		**$ 10068.00**		

Section 7. Comments on your exploration activities:

I certify that the information contained herein, is a true statement of the operations carried out and the monies expended on the above mentioned tenement during the period specified as required under the *Northern Territory Mining Act* and the Regulations thereunder.

☐ I have attached the Technical Report

1. Name:	Zia U. Bajwah	2. Name:	
Position:	Geologist	Position:	
Signature:		Signature:	
Date:	16-08-2010	Date:	