SECOND ANNUAL REPORT ON ALICE SPRINGS PROJECT

HARTS RANGE MINERAL FIELD, NORTHERN TERRITORY



Alice Springs Project

Exploration Licence: 24817

BY

P. Kastellorizos

May 2008

DISTRIBUTION

1. Northern Territory Department of Minerals & Energy

2. Genesis Exploration Pty Limited

GENESIS RESOURCES LTD SECOND ANNUAL REPORT ON EXPLORATION ACTIVITIES OVER EL24817

Base-Metals, Uranium, Cobalt and Rare Earths

PROJECT NAME:	ALICE SPRINGS		
TENEMENTS:	Exploration Licences 24	817	
MINERAL FIELD:	Harts Range Mineral Fie	eld	
LOCATION:	ALICE SPRINGS	SF5314	1:250 000
	Riddoch	5851	1:100 000

COMMODITIES:

TABLE OF CONTENTS

1.0 ALICE SPRINGS PROJECT	4
2.0 INTRODUCTION	4
4.0 TENEMENTS	4
5.0 INFRASTRUCTURE	5
6.0 TOPOGRAPHY, VEGETATION AND CLIMATE	6
7.0 REGIONAL GEOLOGY & MINERALISATION	6
8.0 REGIONAL MINERALISATION	7
9.0 PREVIOUS MINING AND EXPLORATION	10
10.0 WORK COMPLETED AND DISCUSSION	16
11.0 EXPLORATION POTENTIAL	18
12.0 PROPOSED EXPLORATION	19
13.0 EL24817 - EXPEDITURE STATEMENT	19
14.0 EL24817 – PROSPOSED EXPEDITURE	20

LIST OF FIGURES

Figure 1: Alice Springs Project – Topographic Map5	
Figure 2: Alice Springs Project – Regional Geology with Prospect Location Map9	
Figure 3: Alice Springs Project – Surface Geochemical Map showing high grade copper assay completed by Clarence River Finance Group Pty Ltd in 199112	
Figure 4: Alice Springs Project – TMI Image showing Regional Prospects and Target area defined by Historical Explorers15	
Figure 5: Alice Springs Project – Regional Re-Interpretation TMI showing potential exploration targets15	
Figure 6: Alice Springs Project – Regional uranium equivalent (ppm) showing potential exploration targets16	

LIST OF TABLES

Table 1: Alice Springs Project - Tenement Summary	4
Table 2 – Characteristics of Palaeoproterozoic Zn-Cu-Pb-Ag-Au deposits in the eastern Arunta	7
Table 4 - Genesis exploration targets (Magnetic/Radiometric derived)1	4
Table 3 - Historical exploration activity1	0
Table 4 - Uranium mineralisation types – PNC definitions (1979)1	3

1.0 ALICE SPRINGS PROJECT

2.0 INTRODUCTION

The Alice Springs Project consists of one granted Exploration Licence (EL24817) covering 770.5 square kilometres approximately 155 kilometres north east of Alice Springs in the Northern Territory (Figure 1). The tenement area is situated approximately 80 road kilometres along the Plenty Highway in the poly-metallic Harts Range Mineral Field.

This report describes the results of literature research and target generation based on reinterpretation of magnetic/radiometric data carried out during the first year of the Licence.

The Alice Springs tenement is in an area where low level historical mining has occurred and where there are analogous regional examples of uranium, base and precious metals mineralisation.

During the second year of tenure SRK Exploration Services Ltd was employed to conduct the Independent Geologist Report as part of the Genesis Resources Ltd prospectus. SRK concluded despite several phase of historical reconnaissance exploration, the EL24817 has yet to be systematically explored with the full suite of modern day exploration tools which include remote sensing, GIS and geophysics along side traditional field exploration techniques. Several areas of interest exist within the licence including areas of anomalous REE, uranium, copper and base metals. Known deposits within these anomalous areas have in places been subjected to sub-surface exploration but in the majority of cases these areas are open in all directions.

3.0 LOCATION AND ACCESS

Exploration License 24817 includes 244 graticular blocks with a total area of 770.5 square kilometers. It is situated some 155 kilometers by road from Alice Springs via the Stuart Highway and then turn onto the Plenty Highway. As a consequence the area is strategically placed in major infrastructure such as the Stuart Highway, regional townships and the Alice Springs-Darwin railway.

The Alice Springs area is subject to monsoonal rains between November and March, during which ground work is impossible. Fine "dry season" conditions prevail throughout the rest of the year. During the wet season a number of southeast flowing creeks offer significant barriers to cross country vehicular progress. The major portion of the area is covered by flat sandy spinifex and sparse scrub plains.

4.0 TENEMENTS

The project is comprised of one granted exploration licence (EL) with the tenement details summarised in Table 1 and their locations are shown in Figures 1 and 2.

Project	Tenement Number	Status	Current Area Blocks (sq km)		a Current g km) Holder	
Alice Springs	EL24817	Granted	244	770.5 km ²	Genesis Resources Pty Ltd	\$40,400

Table 1: Alice Springs Project - Tenement Summary



Figure 1: Alice Springs Project – Topographic Map

5.0 INFRASTRUCTURE

There are many tracks across the tenement, largely present to support local agriculture and stock farming. Settlements are limited to a few small farmsteads with a very low overall population density. Communications are limited to radio and satellite links with no immediate mobile telephone services. Electricity, water and sanitation are all present at the local farmsteads with power being generator derived. Fuel is held at farmsteads only. There are airstrips scattered across the region, mainly adjacent farmsteads. There are no known security problems in the tenement area.

During the visit the Authors were accommodated at the Ross River Resort which has its own fuel supply, numerous accommodation chalets, an airfield and messing facilities. This establishment has been used in recent times by several other mineral companies operating in the immediate vicinity as an exploration and logistical camp.

6.0 TOPOGRAPHY, VEGETATION AND CLIMATE

The Alice Springs tenement topography is generally rugged hill country with steep creeks and escarpments but transitions to low lying river flood plains and grassland in the south and to the east of the tenement. The area is subject to monsoonal rains between November and March, during which ground work is extremely difficult. During the wet season a number of southeast flowing creeks offer significant obstacles to cross country vehicular progress. Extensive flooding can occur and should be regarded as a potential hazard during this period. Fine "dry season" conditions prevail throughout the rest of the year. The major portion of the area is covered by flat sandy spinifex, sparse scrub plains and denser, hilly scrub thickets.

7.0 REGIONAL GEOLOGY & MINERALISATION

The greater part of the tenement is formed by the supracrustal package in the eastern Arunta region, the **Ongeva package**. This comprises the lower part of the Strangways Metamorphic Complex (Lower and Middle SMC only, but excludes the Cadney Metamorphics) and Bonya Schist, Deep Bore Metamorphics, Cacklebery Metamorphics, Kanandra Granulite and Mount Bleechmore Granulite further to the east. Geochronological data from the Strangways Metamorphic Complex, Bonya Schist and Deep Bore Metamorphics indicate ages between 1810 and 1800 Ma for this package. Lithologically, the Ongeva package consists of metapelitic and metapsammitic rocks with subordinate calcsilicate, marble, and felsic and mafic orthogneiss (Huston *et al*, 2006).

The **Cadney package** (Upper SMC), which includes marbles and calc-silicates of the Cadney Metamorphics, has been interpreted to have an age of 1780-1760 Ma. However, the age of this unit is poorly known, with its age constrained between ~1800 and ~1730 Ma by the underlying Strangways Metamorphic Complex and the overprinting ~1730 Ma Strangways metamorphic event. It is possible that the Cadney package may have been deposited shortly after the Ongeva package, with a depositional age of ~1800 Ma.

The ~1770-1730 Ma **Ledan package** includes pelitic and psammitic metasediments that uncomformably overlie the Strangways Metamorphic Complex (Scrimgeour, 2003; Maidment et al., 2005). This package is interpreted to contain the **Oonagalabi assemblage**, which hosts the Oonagalabi deposit. Recent geochronological studies identified a single zircon population age of 1765 \pm 4 Ma (Hussey et al., 2005), which was interpreted as a significant volcaniclastic component, implying that this age closely approximates the depositional age of the Oonagalagi assemblage.

The **Harts Range Group** comprises a complex assemblage of granite gneiss, marble, calcsilicate, amphibolite, psammites and pelites that have been metamorphosed to upper amphibolite- to granulite-facies. Detrital zircon data from these rocks indicate that they are the high-grade metamorphic equivalents of sedimentary rocks in the adjacent Amadeus and Georgina basins (Maidment, 2005). Comparison of detrital zircon data from the high-grade metamorphic and unmetamorphosed successions indicates that the Harts Range Group was deposited between ~850 Ma and ~500 Ma.

8.0 REGIONAL MINERALISATION

Mineral deposits in the Arunta region vary in commodity, style and age. Although base-metal and gold deposits in the Arunta are relatively widespread and geologically interesting, these deposits have been generally deemed as being economically insignificant although several abandoned mines are shown on mapping to exist to the north of the tenement area.

The economically most important deposits are industrial minerals: vermiculite associated with the weathered rocks in the Mud Tank carbonatite complex, and garnet-amphibole-rich sands concentrated by aeolian and alluvial processes to the north of the Harts Ranges.

The oldest deposits in the eastern Arunta are base-metal and gold deposits hosted by the Strangways Metamorphic Complex, Bonya Schist and Cadney Metamorphics.

Historically, these deposits have been classed as 'Oonagalabi-type' and were Volcanic-Hosted Massive Sulphide (VHMS) in origin. However, more recent work (Hussey *et al*, 2005; Huston *et al*, 2006) has identified systematic differences and has divided the know deposits into three sub-types: (1) the Utnalanama-type, which we interpret as VHMS deposits, (2) the Johnnies-type, which we interpret as IOCG deposits, and (3) the re-defined Oonagalabi-type, which we interpret as either carbonate-replacement or VHMS deposits. Table summarises the characteristics that distinguish these three groups.

Туре	Metal assemblage	Other elements	Host Alteration assemblages		Interpreted age (Ma)	
	Mineralised	Mineralised	Marble and calc-	Quartz-cordierite±	1810-1800	
ama	marble: Zn-Pb-	marble: Bi-Cd	silicate after carbonate rocks.	er orthopyroxene rock > (ag rocks. massive amphibole±		
lana	Cu(Ag-Au)	Calc-silicate:		spinel±clinopyroxene rock.	calc-silicate	
Utna	Calc-silicate: Pb-Zn	Sn, HFSE, REE		Both are concentrated in the footwall to mineralised marble lens.	may be younger	
ie's	Lode rock: Cu- Pb(Zn- Ag-Au)	Lode rock: Mn-Ca- HFSE-REE	Lode rock: magnetite diopside-amphibole± quartz rock (after marble).	Quartz-biotite-garnet gneiss in structural footwall to lode rock.	1795-1770 (Pb isotope model age)	
Johnn	Footwall Garnetiferous zone: Au(Cu)	Footwall garnetiferous zone: Bi±Mo	Footwall garnetiferous zone: Quartz- biotitegarnet±magneit e gneiss.			
ag bi	Zn-Cu-Pb	Bi	Marble \rightarrow calc-	Quartz-garnet rock	1765 (?)	
Oon alal	(Ag- Au)		silicate→ massive anthophyllite schist.	symmetrically developed about host marble lens.	(age of host)	

Characteristics of Palaeoprotero	zoic Zn-Cu-Pb-Ag-Au	u deposits in the	eastern Arunta
----------------------------------	---------------------	-------------------	----------------

Utnalanama-type deposits are Zn-Pb-Cu-(Ag-Au) and constitute the majority of known Palaeoproterzoic deposits in the Strangways Metamorphic Complex, are characterised by

the extensive development of asymmetric alteration zones dominated by quartz-cordierite \pm orthopyroxene \pm biotite \pm orthoamphibole \pm garnet gneiss. Feldspar is typically absent in these rock types. Despite localised magnetite rich zones occurring, magnetite is not a major component of the ores or alteration assemblage and most of the quartz-cordierite rocks have a very low magnetic susceptibility.

Johnnies-type deposits, which include Johnnies Reward and Gumtree in the Strangways Metamorphic Complex and the base-metal-Au deposits of the Jervois district in the Bonya Schist further to the east, are Cu-Au-(Pb-Zn-Ag) deposits characterised by a close association with abundant magnetite, and an asymmetric quartz-biotite-garnet ± feldspar alteration assemblage. These deposits are closely associated with magnetite, either in a magnetite-diopside ± amphibole skarn assemblage (e.g. Johnnies Reward) or in an iron formation (amphibole-quartz-magnetite rocks, e.g. Gumtree). Although base-metals are most concentrated in magnetite-rich zones, Au is concentrated in the structural footwall of these deposits. Gold values are typically one or two orders of magnitude higher in the Johnnies-type than the Utnalanama-type. Moreover, at Johnnies Reward, Mn and some high field strength elements (HFSE) and REE are highly enriched in places within the lode. Based on these characteristics, Johnnies-type deposits are more likely to be equivalent to IOCG deposits rather than VHMS deposits (Hussey *et al.*, 2005).

Oonagalabi-type deposits, which are represented by the Oonagalabi deposit and two nearby prospects, are hosted by the ~1765 Ma Oonagalabi assemblage of the Ledan package. Like the Utnalanama-type deposits, Oonagalabi-type deposits are not associated with abundant magnetite and are characterised by a Zn-Cu-Pb-(Ag-Au) metal assemblage. However, unlike the Utnalanama-type deposits, the main alteration assemblage outside of the host marble is a quartz-garnet-feldspar rock: quartz-cordierite gneiss is rare. Carbonate in the ore host is progressive replaced by calc-silicate and then massive anthophyllite rock. All three rock types are mineralised. These characteristics are most consistent with a carbonate replacement origin, although a VHMS origin cannot be ruled out (Hussey *et al.*, 2005).

The Mordor Igneous Complex (1132 \pm 5 Ma) hosts orthomagmatic PGE-Au-Cu-Ni prospects associated with ultramafic rocks in this alkaline igneous suite. These prospects are the only known deposits of this type in the Arunta region. The Mud Tank carbonatite, which has been dated at 732 \pm 5 Ma, hosts gem quality zircon. However, vermiculite deposits, which formed from the weathering of biotite, are economically the most important deposits in the eastern Arunta, with 69,693 tonnes of open-pit vermiculite products sold between 1995 and December 2003, with an estimated value of A\$18-25M. The international operators, the Imerys Group, anticipate another 20 years production and be realised from the existing pit and adjacent areas.

Garnet-rich para-amphibolites of the Harts Range Group are the source of the other major industrial mineral deposit in the eastern Arunta region. Olympia Resources Limited plan to

commence mining in 2008 on the Harts Range Abrasives Project. The Project is based on resources of industrial garnet and alumino magnesio hornblende (AMH) with proven and probable reserves of approximately 2.3 Mt of recoverable garnet and approximately 6.2 Mt of recoverable AMH making the Harts Range deposit one of the largest abrasive deposits in the world. AMH, although lower in hardness and SG than garnet, when mixed with a proportion of garnet produces results similar to garnet in applications such as blast cleaning. Olympia intends to sell AMH in a product called Garnetblende consisting of approximately 80% AMH and 20% garnet (Olympia Resources website, Nov 2007).



Figure 2: Alice Springs Project – Regional Geology with Prospect Location Map

9.0 PREVIOUS MINING AND EXPLORATION

Several programmes of work have been undertaken at the licence. These are summarised in Table and then followed by more detailed descriptions.

Period	Company	Interest	Methodologies employed
Unknown	NT Mines Department	Non- specific	Review/research on existing mines
Unknown	Arsarco	Base metals	Stream sediment sampling
Unknown	Stockdale Prospecting	Diamonds	Unknown
Unknown	Kawanee Australia Pty Ltd	Cu-Pb-Zn	Stream sediment sampling
1979	Alcoa Australia Ltd	U	RAB drilling
1988 to 1992	G.K. Bogie (EL6013 – Cattlewater Pass)	Cu/Co (Fe), REE, U	Stream sediment sampling, rock chips, panning, scintellometer
1988- 1989	J.R. Bruce & J.H. Mules in JV with Pancontinental Mining Limited (EL6105)	Unknown	Unknown
1991- 1992	Clarance River Finance Group Pty Ltd (EL6940 + EL6941)	Cu	Soil, rock chips
1996	PNC Exploration Australia	U	Gridding, rock chips, mapping and costeaning

Table 3 - Historical exploration activity

NT Mines Department & Arsarco

The NT Mines Department conducted research on the mines (unknown year), with Arsarco performed stream sediment sampling for base metal.

Stockdale Prospecting

Stockdale Prospecting were searching for diamond.

Kawanee Australia Pty Ltd

Kawanee Australia Pty Ltd was looking for Cu-Pb-Zn in stream sediments. They suggest that a copper anomaly exists in the area corresponding to the southwest corner of the tenement.

Alcoa Australia Ltd

In 1979, Alcoa Australia Ltd commenced exploration for sandstone uranium roll front deposits in the Garden Sub-Basin (southern portion of EL24817) with reconnaissance RAB drilling. Results from the drilling programme were favourable, outlining both oxidised and unoxidised sand units with a transitional zone containing anomalous uranium (excised from the current tenure area).

A follow up exploration program was initiated to appraise the uranium potential throughout the transitional zone utilising aerial photography, ground resistivity surveying and rotary mud drilling. Sample selection for assaying of drill samples was based on gamma logs and lithology. Initially uranium was the only element analysed for, with samples being selected from; a) intersections of high background or anomalous radiation and b) coarse unconsolidated sand horizons. Results did identify two anomalous horizons within unconsolidated sand units but both returned economically insignificant uranium mineralisation. An oxidation front associated with anomalous uranium was outlined in the lower confined sand horizon. It is possible that the drilling and sampling methods led to a downgrade in the assay results, however this is unsubstantiated.

G.K. Bogie

In 1989, during the first year of tenure, Bogie undertook reconnaissance stream sediment sampling, prospecting, rock chip sampling and panning in the centre of the current tenure area. Two magnetite-bearing units were identified: "Magnetite Hill" and "Camp Hill Copper Mine" which also demonstrated Cu and Co enrichment. An area of rare earth enrichment (Ce, Nb and Zr) was also identified close to Magnetite Hill.

Year 2 has largely spent following up anomalies generated in the stream sediment sampling program. Scintillation counter work around the prominent granite northeast of Cattlewater Pass located a high number of lanthanum-niobium anomalies in the order of 10 to 20 times the background readings. Heavy mineral concentrations in the drainages and inspection of those catchments revealed surface accumulations of radioactive minerals mainly monazite and biotite associated with small zones of bleaching and post-tectonic muscovite formation and small radioactive areas associated with allanite and monazite enrichment in granite and pegmatite.



Figure 3: Alice Springs Project – Surface Geochemical Map showing high grade copper assay completed by Clarence River Finance Group Pty Ltd in 1991

Clarance River Finance Group Pty Ltd

In 1991, Clarence River Finance Group Pty Ltd conducted soil and rock chip sampling targeting copper mineralization. Their priority target was the previously discovered Camp Hill Copper Mine prospect which consists of a number of small mineralized quartz veins which were generally associated with a basic intrusive and two narrow zones containing quartz and gossans. Malachite and azurite trace mineralisation was evident around several costeans.

Rock chip (25m by 25m) and soil sampling (150m by 100m) programs were conducted over the Camp Hill Copper Mine prospect giving anomalously high values for copper.

Numerous additional copper prospects, similar to Camp Hill were found along with evidence of historical attempts at mining.

The Mount Johnstone Dam pegmatite prospect known as the U, Th, Nb, Ta, Sn, Be Ciccones Radioactive Find was located within an old mica mine where the REE samarskite is associated with the mica. The pegmatite outcrop is approximately 24 m by 10 m in size with some evidence of historical small-scale open cut mining.

PNC Exploration Australia

In 1996, PNC Exploration Australia conducted uranium exploration over the eastern portion of the tenement. Work included surface gridding, rock chip sampling, geological mapping and costeaning. Numerous uranium anomalies were defined with rock chip samples ranging from 32 to 590 ppm U. Their exploration model was based on the Yambla Type which is defined by the presence of primary macroscopic uraninite mineralisation. The uraninite occurs most frequently as mm-cm sized crystals, crystals aggregates and intergrown with xenotine. This style is identified at the Ryoma and Casper prospects located to the east on the southern end of EL24735 (Thor Mining Ltd ground). PNC Australia defined four distinctive styles of mineralisation that could potentially be found in the tenement area, see Table .

Туре	Definition
Yambla	Primary macroscopic uraninite mineralisation. The uraninite occurs most frequently as mm-cm sized crystals, crystals aggregates and intergrown with xenotine. This style is identified at the Ryoma and Casper prospects.
Pegmatite	Primary multiple uranium bearing rare earth oxides present in Entia Pegmatites, prospects include the SNAF and Kelly. All known occurrences are in predominantly east west trending pegmatites in the Entia gneiss.
Moondyne	Intense epidote alteration along calc-silicate horizons within gneiss. This style is identified at the Haddock prospect which occurs along the outer margins of the Entia Dome as a series of disjointed epidosite belts.
Garnet	Garnet (+/- biotite) alteration in pegmatites with a uranium bearing Y/Nb oxide mineralisation present at the Garnet prospect. The amount of uranium is proportional to the amount of garnet. All known occurrences are below the Bruna Gneiss in Entia Gneiss.

 Table 4 - Uranium mineralisation types – PNC definitions (1979)

Genesis Resources – 2006 to date

During the first year of the Licence, Genesis work was restricted to a study of open files available at the Northern Territories Department of Mines & Energy. The open file study demonstrated that there was some significant potential for copper, cobalt, uranium and gold in the area. In December 2006 Kastellco Geological Consultancy Ltd (KGC) was contracted by Genesis to conduct a desktop study over the area and to make recommendations on a follow-up exploration programme for the following year.

During the month of January 2007, a review of re-processed and re-interpretation of magnetic and radiometric data from the Northern Territory Geological Survey Database was undertaken. The geophysical images were processed by Asis International Pty Ltd for use in identifying exploration targets for iron ore, base metals, gold and uranium. Several first-order and second-order magnetic and radiometric targets were identified which had not been previously examined by historical field programmes.

Historical regional data was also reviewed to determine the effectiveness of previous exploration and evaluate remaining potential.

A summary of the targets identified is presented in and illustrated in for magnetic and radiometric targets respectively.

Order	Quantity	Anomaly length (km)	Anomaly width (km)	Geological Setting	Mineralisation model		
	Magnetic Anomalies						
First Order	10	Min - 0.72 km Max - 5.80 km	Min - 0.52 km Max - 1.55 km	Strongly metamorphosed units of the Cadney Metamorphics	Poly-metallic vein style & massive stratiform sulphides		
Second Order	2	Min - 4.25 km Max - 5.14 km	Min - 1.10 km Max - 2.20 km	Ongeva Granulite	Poly-metallic, vein-style & massive stratiform sulphides		
		Radio	ometric Anoma	lies			
First Order	3	Min - 0.60 km Max - 6.14 km	Min - 0.57 km Max - 1.41 km	Gough Dam Schist Zone & Cadney Metamorphics	Pegmatite/vein hosted related uranium deposit/ PNC Classification		
Second Order	4	Min - 0.67 km Max - 1.57 km	Min - 0.52 km tMax - 2.81 km	Strongly metamorphosed units	Pegmatite/vein hosted related uranium deposit/ PNC Classification		
Third Order	1	Max - 0.63 km	Max - 0.38 km	Quaternary Sediments	Pegmatite/vein hosted related uranium deposit/ PNC Classification		

 Table 5 - Genesis exploration targets (Magnetic/Radiometric derived)

GENESIS RESOURCES LTD SECOND ANNUAL REPORT ON EXPLORATION ACTIVITIES OVER EL24817



Figure 4: Alice Springs Project – TMI Image showing Regional Prospects and Target area defined by Historical Explorers



Figure 5: Alice Springs Project – Regional Re-Interpretation TMI showing potential exploration targets

GENESIS RESOURCES LTD SECOND ANNUAL REPORT ON EXPLORATION ACTIVITIES OVER EL24817



Figure 6: Alice Springs Project – Regional uranium equivalent (ppm) showing potential exploration targets

10.0 WORK COMPLETED AND DISCUSSION

In November 2007, the SRK Exploration Services Ltd visited the Alice Springs tenement on two occasions. Access was made from the south, via the historical Arltunga reserve and Genesis Arltunga tenement.

On the first visit the authors travelled to the northern boundary of the tenement to the north of Cattlewater pass via the tourist 4x4 trails. Due to the limited access and time constraints it was only possible to make general observations along the route.

The 4x4 trail was found to be in reasonable condition. There were several sections of the track that were in poor condition but this was due to the track intermittently following creek beds. Aside from this track there was no other obvious vehicular access and therefore fieldwork in the area would have to be conducted on foot or possibly on horseback from strategically positioned campsites. Should drilling be required on some of the identified target areas, track access will have to be opened up, the cost of which at this time is unknown.

The second visit to the tenement concentrated on the south-eastern zone. Access to this area was possible via the track leading north from the Claraville farmstead. It was possible to follow the good quality track to the eastern boundary of the tenement near track crossing of Florence Creek.

Much of the terrain in the south-eastern zone is arable pasture for cattle and it therefore easily accessible. Higher ground exists in the south east and around the northern edge of this part of the tenement which would only be accessible by foot. The only notable obstacle might be Tug Creek which would most likely be a river crossing during the height of any wet period.





11.0 EXPLORATION POTENTIAL

The Alice Springs Exploration tenement is situated in an area that is known to host a variety of mineral deposits. Aside from the current and planned mining activity, there has only been small scale, isolated and low-tech historical mining throughout the area. Several phases of exploration have been completed over the past 20 years but none have succeeded in identifying mineral deposits large enough to sustain an economically viable mine. In addition, the harder times in the exploration industry around the turn of the century contributed to this and many other prospective areas being devoid of investment and activity. However, the current boom in the mining economy and advanced modern techniques in the fields of geochemistry, geophysics and remote sensing GIS based target generation may yet provide a new lease of life to this region.

<u>Uranium</u>

Historical prospecting and exploration has identified several areas that are prospective for uranium mineralisation and have demonstrated stratigraphic and structural similarities with the Harts Range Uranium Field located approximately 32 km east of the tenement. However, a lack of any systematic exploration has not fully tested the mineralisation potential over the area. For example, no regional gravity surveys have been conducted to explore for Tertiary paleo-channel uranium targets.

Potential does however exist for following up on the limited success of the 1979 Alcoa exploration in delineating uranium roll front deposits in the southern portion of the exploration licence area provided a more suitable drilling methodology can be utilised.

Additional uranium occurrences in the area may be associated with anomalous magnetic linear trends identified by the regional wide spaced aeromagnetic-radiometric survey flown by the Northern Territory. It is believed that the radiometric anomalies are associated with the favourable lithologies which have hosted uranium deposits in the Pine Creek region.

The magnetic trends are possible hosts for redox gradient boundaries which may include disseminated pyrite.

Base metals, silver and gold

The project area also has the potential to host gold mineralisation as most eastern portion of EL24817 is hosted within the Cadney Metamorphics similar to that which hosts the Mount Chapman vein camp goldfields (hosted by gneiss, schist and calc-silicate rocks). Mount Chapman located about 8.5 kilometres south of the southern portion of EL24817 as part of the Arltunga Goldfields. There are many old workings in the area with 3 being significant gold producers; the most important is the Wheal Fortune and Magdale mines.

12.0 PROPOSED EXPLORATION

As a result of work completed during 2007/08, Kastellco Geological Consultancy recommended that Genesis should design exploration programmes to test the tenement for gold, base metal and uranium targets.

- Conduct extensive rock chip and soil sampling over previously identified mineralised prospect areas.
- Carry out ground EM surveys over high-grade base metal anomalies generated by the surface sampling programme in order to assess the potential for massive sulphide drilling targets.
- Conduct a HoistEM survey over the southern portion of the tenement to identify any palaeo-channels which may host significant carbonaceous matter and may therefore be an indication of the presence of 'Roll Front' uranium mineralisation.
- Carry out ground radiometric survey traverses over the U anomalies and correlate these with reconnaissance geological mapping.
- Undertake detailed regional structural interpretation with a strong emphasis on identifying untested structural trends that may host mineralisation.
- Compile a detailed structural map and correlate this with the radiometric anomalies to determine the controls and disposition of any uranium mineralisation potential.
- Carry out PIMA (Portable Infrared Mineral Analyser) sandstone sampling over outcrops to delineate if any chlorite alteration is present, as it is closely associated with unconformity style uranium deposits).
- Carries out a first-pass soil/rock chip programmes to determine the extent, width, and tenor of any near-surface uranium mineralisation.

13.0 EL24817 - EXPEDITURE STATEMENT

Kastellco Geological Consultancy Drafting Reporting SRK Exploration Services Pty Ltd Administration/Overheads/Management	\$1,100.00 \$1,100.00 \$7,171.90 \$2,530.00
TOTAL	\$11,901.90

14.0 EL24817 – PROSPOSED EXPEDITURE

Exploration Budget for Alice Springs Project for 2007-2008			
Project: Alice Springs Exploration Program			Total AUD\$
Heavy Earth Moving Equipment Hire			
Clearing of Vegetation for Access	\$1,000.00		\$1,000.00
Sub-total		\$1,000.00	
Rock chip/Soil Sampling Program			
Between 1000-1500 surface geochemical samples	\$10,000.00		\$10,000.00
Sub-total		\$10,000.00	
Assay Laboratories Analysis			
Geochemistry for Rock Chip/Soil Samples (\$20/sample for 1,500)	\$35,000.00		\$35,000.00
Sub-total		\$35,000.00	
Professionals			
Kastellco Geological Consultancy	\$4,000.00		\$4,000.00
Sub-total		\$4,000.00	
Total	\$50,000.00	\$50,000.00	\$50,000.00

15.0 REFERENCES

Ahmad, M, Wygralak, A.S, Ferenczi, P.A., 1999, Gold Deposits of the Northern Territory, Northern Territory Geological Survey Report 11.

Burton M., Geoffery Kenneth Bogie., 1989 – Report on EL 6013 Cattlewater Pass Region, Exploration Activities from the 01/07/1988 to 30/06/1989, Open File Report, DME CR1989/0546.

Burton M., John Robert Bruce & John Hawers Mules & Pancontinental Mining Ltd., 1989 – Report on EL 6105 Cattlewater Pass Region, Exploration Activities from the 30/08/1988 to 29/08/1989, Open File Report, DME CR1989/0585.

Burton M., Geoffery Kenneth Bogie., 1989 – Report on EL 6013 Cattlewater Pass Region, Exploration Activities from the 01/07/1988 to 30/06/1989, Open File Report, DME CR1990/0492.

Clarence River Finance Group Pty Ltd., 1992 –Report on Exploration Licence 6941, harts Range Northern Territory, Open File Report, DME CR1985/0253.

Chuck, R.G., Alcoa of Australia Ltd., 1984 – Annual/Final Report on Exploration Licence 3026 for the period 25/5/1984 to 24/5/1985, Open File Report, DME CR1985/0253.

Wakelin-King G.A., Walelin Exploration Contractors., 1992 – Annual Report on EL 6013 Cattlewater Pass Region, Open File Report, DME CR1992/0157.